REPORTABLE DISEASE DESK REFERENCE

Division of Epidemiology and Health Planning
Department for Public Health
Commonwealth of Kentucky

April, 2006

ACKNOWLEDGMENTS

The staff of the Division of Epidemiology and Health Planning developed this desk reference to facilitate the reporting of diseases and conditions. Our intention is that it will be used regularly and that it will address many questions concerning reportable diseases. Questions and comments on this reference should be addressed to Peggy Ellis, David Jones or Lucille Roberts at 502-564-3418.

REPORT FORMS AND WORKSHEETS

This reference contains the most current versions for all disease report forms and worksheets. **All forms and worksheets are listed with each disease and should be photocopied from this reference book as needed**. (Exceptions as noted.)

Report of Verified Case of Tuberculosis (CDC 72.9 A and B) may be obtained by calling the Tuberculosis Control Program: 502-564-4276.

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Kentucky
UNBRIDLED SPIRIT

FOREWORD

In the United States, requirements for reporting diseases are mandated by state laws or regulations, and the list of reportable diseases in each state varies. The *Kentucky Disease Surveillance Administrative Regulation*s 902 KAR 2:020 require reporting of communicable disease, unusual disease outbreaks and clusters of diseases to the local health departments and the Kentucky Department for Public Health. Additionally, state health departments report cases of selected diseases to the Centers for Disease Control and Prevention (CDC) National Notifiable Disease Surveillance System (NNDSS), on a weekly basis. These data are published weekly in the *Morbidity Mortality Weekly Report* (MMWR). An updated final report is published annually in the *Summary of Notifiable Diseases*.

With the 2006 version of the desk reference, we have tried to adhere as closely as possible to the case definitions developed by the CDC and the Council of State and Territorial Epidemiologists (CSTE) published in "Case Definitions for Public Health Surveillance", MMWR 1997; 46:RR-10 and available on the CDC's Epidemiology Program Office website, http://www.cdc.gov/epo/dphsi/casedef/index.htm. As uniform case definitions are adopted by the states, the incidence of reported diseases in different geographic areas may be more meaningfully compared at the local, state, and national levels.

KYEPHRS AND THE DISEASE SURVEILLANCE MODULE

The Kentucky Electronic Public Health Record System (KY-EPHRS) provides the backbone of an integrated electronic health record, including disease surveillance. Disease Surveillance is one of several modules that make up KY-EPHRS. Hospitals and health departments will use this system for the initial notification of potential reportable diseases. The application contains patient demographic data, test results, symptoms, and lab results. The health department's staff then makes the determination if the disease needs further investigation. Upon the completion of the investigation, infection control investigators determine if the case should be forwarded to state officials for confirmation. If the case is confirmed, KY-EPHRS will electronically transmit the information to the CDC. For more information on filing electronically you may contact the Help Center by phone between the hours of 8:00 am - 4:30 pm EST, Monday through Friday. The office is closed on state approved holidays. The toll free number is 877-545-6175, for outside the Frankfort area. For calls within the local Frankfort area, call 564-9926 or 564-9971. You may contact the Help Center by email at any time. Help Center staff monitors this mailbox and will respond as soon as possible to your request. The address is CHFS.KYEPHRS@KY.GOV. This address is also listed in the state global directory under CHFS KYEPHRS. Additional information is available on the KY Department for Public Health website at: http://chfs.ky.gov/dph/ephrs/

INTRODUCTION

PURPOSE OF THIS MANUAL

The, Surveillance and Health Data Branch, Division of Epidemiology and Health Planning Department for Public Health (DPH), is the organizational unit charged with the responsibility of executing the statutory mandates regarding the reporting, surveillance and control of communicable diseases. These responsibilities are accomplished through the cooperative efforts of hospital infection control personnel, physicians, local health departments (LHD), the Kentucky Division of Laboratory Services (KDLS) and other health care providers.

Disease follow-up investigation forms are included in this manual and are a valuable tool for the investigator to interview a case or suspect case of disease. The follow-up investigation form outlines a minimum of demographic, clinical, epidemiologic and laboratory information needed to begin assessing public health implications of the case. Each follow-up report form provides a framework to determine the epidemiologic circumstances of the illness. Some follow-up forms have worksheets available to better assist the investigator.

All communicable disease case reports should be followed up for the purposes of prevention and control in a manner consistent with those methods listed in the current edition of *Control of Communicable Diseases Manual*, Chin, James, (ed), Washington, D.C.

The purpose of this manual is to provide a comprehensive resource document to assist local health departments and other health care providers in clarifying their responsibilities for disease reporting, epidemiologic surveillance and outbreak investigations. The manual should answer most of the procedural questions related to these activities. Questions beyond the scope of the desk reference should be directed to the attention of the State Epidemiologist or the Surveillance and Health Data Branch staff.

DEFINITION OF TERMS

Cabinet - is the Cabinet for Health Services (CHS)

Case - is an illness or condition determined to be a reportable disease or condition on the basis of clinical or laboratory criteria or both, often required to meet the Centers for Disease Control and Prevention (CDC) case definitions for public health surveillance.

Commissioner has the meaning prescribed in Kentucky Revised Statutes KRS 12.010 and KRS 12.040, and applies to the person as appointed by the Secretary.

Date of Onset - is the day on which a case or suspected case experienced the first sign or symptom of a communicable disease.

Department - is the Department for Public Health (DPH).

Sexually Transmitted Diseases (STD) – STDs reportable by statute are chancroid, chlamydia trachomatis, gonorrhea, syphilis, HIV and AIDS. STDs recommended but not legally required to be reported are genital herpes, genital warts, granuloma inquinale, and lymphogranuloma venereum.

State Epidemiologist - is the person designated by the Secretary of CHS as the person in charge of communicable disease control for the state.
Surveillance - is the systematic collection, reviewing, analysis, interpretation and dissemination of data regarding health conditions and events, for the purpose of promoting action to prevent diseases and injuries and to promote public health.

Suspected case - means a person thought to have a particular communicable disease on the basis of clinical or laboratory criteria or both.

MAJOR STATUTES OR REGULATIONS APPLICABLE TO COMMUNICABLE DISEASE

Kentucky Revised Statutes

KRS:211.090---Powers and duties of the Secretary.
KRS:211.180---Functions of cabinet in the regulation of certain health matters.
KRS:211.220---Powers of cabinet personnel in the conduct of investigations.
KRS:214.010---Physicians and heads of families to report diseases to local board of health.
KRS:216B---Licensure and regulation of health facilities and services.
KRS:258.065---Physicians to report persons bitten by dogs and other animals.
KRS:333.130---Reports of laboratories as to test results.

Health professionals licensed under the following statutes are subject to the notification guidelines in 902 KAR 2:020.
KRS:311---Physicians, Osteopaths and Podiatrists
KRS:312---Chiropractors
KRS:313---Dentists and Dental Specialists
KRS:314---Registered Nurses and Practical Nurses
KRS:321---Veterinarians

Kentucky Administrative Regulations

902 KAR 2:020---Disease Surveillance
902 KAR 2:065---Immunization requirements for long term care facilities.

KENTUCKY LOCAL HEALTH DEPARTMENTS
DISEASE SURVEILLANCE CONTACTS

Agency	Address1	Address	City	ZipCode	County	PhoneNumber	FaxNumber
Adair Co. Health Ctr.		801 Westlake Drive	Columbia	42728	ADAIR	(270) 384-2286	2703844800
Allen Co. HD	207 E. Locust	P.O. Box 129	Scottsville	42164	ALLEN	(270) 237-4423	2702374777
Anderson Co. HD		208 South Main Street	Lawrenceburg	40342	ANDERSON	(502) 839-4551	5028398099
Ballard Co. Health Ctr.	P.O. Box 357	111 West Kentucky Drive	LaCenter	42056	BALLARD	(270) 665-5432	2706659166
Barren Co. Health Ctr.	P.O. Box 1464	318 West Washington	Glasgow	42142	BARREN	(270) 651-8321 ext. 121	2706590062
Bath Co. Health Ctr.	56 Treadway	P.O. Box 537	Owingsville	40360	BATH	(606) 674-2731	6066749646
Bell Co. Health Ctr.		310 Cherry Street	Pineville	40977	BELL	(606) 337-7046	6063378321
Northern KY District HD		610 Medical Village Drive	Edgewood	41017	BOONE	(859) 363-2010	8595783689
Bourbon Co. HD		341 East Main Street	Paris	40361	BOURBON	(859) 987-1915	8599873230
Boyd Co. HD		2924 Holt Street	Ashland	411054069	BOYD	(606) 329-9444	6063245423
Boyle Co. HD	P.O. Box 398	448 South 3rd Street	Danville	404230398	BOYLE	(859) 236-2053	8592362863
Bracken Co. HD	P.O. Box 117	429 Frankfort Street	Brooksville	41004	BRACKEN	(606) 735-2157	6067352159
Breathitt Co. HD	359 Broadway	P.O. Box 730	Jackson	41339	BREATHITT	(606) 666-5274 or -7755	6066664601
Breckinridge Co. Health Ctr.	P.O. Box 456	Courthouse; Public Square	Hardinsburg	40143	BRECKINRIDGE	(270) 756-5121 or -2282	2707569090
Buffalo Trace District HD	P.O. Box 70	120 West 3rd Street	Maysville	41056	MASON	(606) 564-9447	6065644483
Bullitt Co. HD	P.O. Box 278	181 Lees Valley Road	Shepherdsville	40165	BULLITT	(502) 955-7837 L'ville or 543-2415 local	5025432998
Butler Co. Health Ctr.	P.O. Box 99	104 North Warren Street	Morgantown	42261	BUTLER	(270) 526-3221	2705266828
Caldwell Co. Health Ctr.	P.O. Box 327	310 Hawthorne Street	Princeton	42445	CALDWELL	(270) 365-6571	2703653145
Calloway Co. Health Ctr.		701 Olive Street	Murray	42071	CALLOWAY	(270) 753-3381	2707538455
Northern KY District HD		610 Medical Village Drive	Edgewood	41017	CAMPBELL	(859) 363-2010	8595783689
Carlisle Co. Health Ctr.	P.O. Box 96	79 East Court Street	Bardwell	42023	CARLISLE	(270) 628-5431	2706283811
Carroll Co. Health Ctr.		401 11th Street	Carrollton	410081465	CARROLL	(502) 732-6641	5027326642

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Agency	Address1	Address	City	ZipCode	County	PhoneNumber	FaxNumber
Carter Co. Health Ctr.	P.O. Box 919	U.S. 60 East	Grayson	41143	CARTER	(606) 474-5109 or -5100	6064744217
Casey Co. Health Ctr.	P.O. Box 778	199 Adams Street	Liberty	42539	CASEY	(606) 787-6911	6067872507
Christian Co. HD	P.O. Box 647	1700 Canton Street	Hopkinsville	42240	CHRISTIAN	(270) 887-4160	2708874165
Clark Co. HD		400 Professional Avenue	Winchester	40391	CLARK	(859) 744-4482	8597372426
Clay Co. Health Ctr.		100 South Court Street	Manchester	40962	CLAY	(606) 598-2425	6065984448
Clinton Co. Health Ctr.		201 Twin Lakes Medical Ctr.	Albany	42602	CLINTON	(606) 387-5711	6063877212
Crittenden Co. Health Ctr.		402 North Walker Street	Marion	42064	CRITTENDEN	(270) 965-5215	2709659078
Cumberland Co. Health Ctr.	P.O. Box 412	133 Lower River Street	Burkesville	42717	CUMBERLAND	(270) 864-2206	2708641232
Daviess Co. Health Ctr.		1600 Breckinridge Street	Owensboro	42303	DAVIESS	(270) 686-7744 ext. 5409 (or page)	2709268677
Edmonson Co. Health Ctr.		221 Mammoth Cave Road	Brownsville	42210	EDMONSON	(270) 597-2194	2705973326
Elliott Co. Health Ctr.	P.O. Box 762	Main Street	Sandy Hook	41171	ELLIOTT	(606) 738-5205 ext.108	6067386530
Estill Co. HD	P.O. Box 115	365 River Drive	Irvine	40336	ESTILL	(606) 723-5181 ext. 229	6067235254
Fleming Co. HD		194 Windsor Drive	Flemingsburg	41041	FLEMING	(606) 845-6511 ext. 229	6068450879
Floyd Co. HD		144 North Front Avenue	Prestonsburg	41653	FLOYD	(606) 886-2788 ext. 226	6068867989
Franklin Co. HD		100 Glenns Creek Road	Frankfort	40601	FRANKLIN	(502) 564-7647 ext. 119	5025649586
Fulton Co. Health Ctr.		350 Browder Street	Fulton	42041	FULTON-EAST	(270) 472-1982	2704722553
Gallatin Co. Health Ctr.	204 Franklin St.	P.O. Box 315	Warsaw	41095	GALLATIN	(859) 567-2844	8595672845
Garrard Co. HD		89 Farra Drive	Lancaster	40444	GARRARD	(859) 792-2153 ext. 113	8597924719
Northern KY District HD		610 Medical Village Drive	Edgewood	41017	GRANT	(859) 363-2010	8595783689
Graves Co. Health Ctr.		100 East Lochridge	Mayfield	42066	GRAVES	(270) 247-3553	2702470391
Grayson Co. Health Ctr.		124 East White Oak Street	Leitchfield	42754	GRAYSON	(270) 259-3141	2702595388
Green Co. Health Ctr.	P.O. Box 177	220 Industrial Park	Greensburg	42743	GREEN	(270) 932-4341	2709326016
Greenup - South Shore Office		P.O. Box 7	South Shore	41175	GREENUP	(606) 932-4546	6069323885

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Greenup Co. HD	P.O. Box 377	U.S. Hwy. 23	Greenup	41144	GREENUP	(606) 473-9838	6064736405
Hancock Co. Health Ctr.	P.O. Box 275	175 Harrison Street	Hawesville	42348	HANCOCK	(270) 927-8803	2709279467
Hardin Co.Health Ctr.		580 C. Westport Road	Elizabethtown	42701	HARDIN	(270) 765-6196 ext. 201 (only voice mail)	2707630397
Harlan Co. Health Ctr.		402 East Clover Street	Harlan	40831	HARLAN	(606) 573-4820 ext. 16	6065736128
Harrison Co. Health Ctr.		420 East Pleasant Street	Cynthiana	41031	HARRISON	(859) 234-2842	8592340393
Hart Co. Health Ctr.	P.O. Box 65	505 Fairground	Mumfordville	42765	HART	(270) 524-2511	2705245642
Henderson Co. Health Ctr.	P.O. Box 13	472 Klutey Park Plaza	Henderson	42420	HENDERSON	(270) 826-3951 ext. 1001	2708275527
Henry Co. Health Ctr.	P.O. Box 449	125 North Property Road	New Castle	40050	HENRY	(502) 845-2882 ext. 33	5028457997
Hickman Co. Health Ctr.		370 South Washington St.	Clinton	42031	HICKMAN	(270) 653-6110	2706536523
Hopkins Co. HD	P.O. Box 1266	412 North Kentucky Street	Madisonville	42431	HOPKINS	(270) 821-5242 (school yr -270-825-6130)	2708250138
Jackson Co. Health Ctr.	P.O. Box 250	Hwy. 421 South	McKee	40447	JACKSON	(606) 287-8421	6062874199
Jessamine Co. HD		215 East Maple Street	Nicholasville	40356	JESSAMINE	(859) 885-4149 ext. 1003	8598851863
Johnson Co. HD		630 James Trimble Blvd.	Paintsville	41240	JOHNSON	(606) 789-2590	6067898888
Northern KY District HD		610 Medical Village Drive	Edgewood	41017	KENTON	(859) 363-2010	8595783689
Knott Co. Health Ctr.	P.O. Box 530	West Main Street	Hindman	41822	KNOTT	(606) 785-3144 ext. 112	6067855512
Knox Co. HD	P.O. Box 1689	Liberty Street	Barbourville	40906	KNOX	(606) 546-3486	6065462168
Lake Cumberland District HD	P.O. Box 800	500 Bourne Avenue	Somerset	42502	RUSSELL	(606) 678-4761	6066782708
Larue Co. Health Ctr.		215 East Main Street	Hodgenville	42748	LARUE	(270) 358-3844	2703585816
Laurel Co. HD		310 West 3rd Street	London	40741	LAUREL	(606) 864-5244 ext. 23	6068648295
Lawrence Co. HD		1080 Meadowbrook Lane	Louisa	41230	LAWRENCE	(606) 638-4389	6066389500
Lee Co. Health Ctr.		45 East Center Street	Beattyville	41311	LEE	(606) 464-2492	6064645050
Leslie Co. Health Ctr.	P.O. Box 787	78 Maple Street	Hyden	41749	LESLIE	(606) 672-2393 or -2374	6066725006
Letcher Co. Health Ctr.		6 Broadway Street	Whitesburg	41858	LETCHER	(606) 633-2068 or -2945	6066330381

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Lewis Co. HD		905 Fairlane Drive	Vanceburg	41179	LEWIS	(606) 796-2632	6067969285
Lexington-Fayette Co. HD		650 Newtown Pike	Lexington	40508	FAYETTE	(859) 231-9791	8592319459
Lincoln Co. HD	P.O. Box 165	44 Health	Stanford	40484	LINCOLN	(606) 365-3106	6063651640
Livingston Co. Health Ctr.		124 State Street	Smithland	42081	LIVINGSTON	(270) 928-2193	2709282098
Logan Co. Health Ctr.		151 South Franklin Street	Russellville	42276	LOGAN	(270) 726-8341	2707268399
Louisville-Jefferson Co. HD	400 E. Gray St. - Ro	Communicable Disease	Louisville	40202	JEFFERSON	(502) 574-6677	5025745865
Lyon Co. Health Ctr.	P.O. Box 96	211 Fairview Avenue	Eddyville	42038	LYON	(270) 388-9763	2703885941
Madison Co. HD	P.O. Box 1208	214 Boggs Lane	Richmond	404761208	MADISON	(859) 623-7312	8596264298
Magoffin Co. HD		723 Parkway Drive	Salyersville	41465	MAGOFFIN	(606) 349-6212	6063496216
Marion Co. Health Ctr.		516 North Spalding	Lebanon	40033	MARION	(270) 692-3393	2706920045
Marshall Co. HD		307 East 12th Street	Benton	42025	MARSHALL	(270) 527-1496	2705275321
Martin Co. HD	P.O. Box 346	Main Street	Inez	41224	MARTIN	(606) 298-7752	6062980413
McCracken Co. Health Ctr.	P.O. Box 2597	916 Kentucky Avenue	Paducah	42001	McCRACKEN	(270) 444-9631	2704428769
McCreary Co. Health Ctr.	P.O. Box 208	119 Medical Lane	Whitley City	42653	McCREARY	(606) 376-2412	6063763815
McLean Co. Health Ctr.		200 Highway 81 North	Calhoun	42327	McLEAN	(270) 273-3062	2702739983
Meade Co. Health Ctr.		520 Fairway Drive	Brandenburg	40108	MEADE	(270) 422-3988	2704225699
Menifee Co. Health Ctr.	P.O. Box 106	49 Walnut Street	Frenchburg	40322	MENIFEE	(606) 768-2151	6067682153
Mercer Co. HD		900 North College	Harrodsburg	40330	MERCER	(859) 734-4522	8597340568
Metcalfe Co. Health Ctr.	P.O. Box 30	615 West Stockton Street	Edmonton	42129	METCALFE	(270) 432-3214	2704324000
Monroe Co. HD	452 E. 4th St.	P.O. Box 247	Tompkinsville	42167	MONROE	(270) 487-6782	2704875457
Montgomery Co. HD		117 Civic Center	Mt. Sterling	40353	MONTGOMERY	(859) 498-3808 ext. 235	8594989082
Morgan Co. Health Ctr.		493 Riverside Drive	West Liberty	41472	MORGAN	(606) 743-3744	6067433750
Muhlenberg Co. HD	P.O. Box 148	203 Legion Drive	Central City	42330	MUHLENBERG	(270) 754-3200	2707541947

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Nelson Co. Health Ctr.		325 South 3rd Street	Bardstown	40004	NELSON	(502) 348-3222	5023491557
Nicholas Co. Health Ctr.		2320 Concrete Road	Carlisle	40311	NICHOLAS	(859) 289-2188	8592892203
North Central DHD		25 Village Plaza	Shelbyville	40065	HENRY	(502) 633-1243	5026337658
Northern KY District HD		610 Medical Village Drive	Edgewood	41017	BOONE	(859) 363-2010	8595783689
Ohio Co. Health Ctr.		1336 Clay Street	Hartford	42347	OHIO	(270) 298-3663 ext. 245	2702984777
Oldham Co. HD		1786 Commerce Parkway	LaGrange	40031	OLDHAM	(502) 222-2304	5022220816
Owen Co. Health Ctr.		1005 Hwy. 22 East	Owenton	40359	OWEN	(502) 484-5736	5024845737
Owsley Co. Health Ctr.	P.O. Box 220	Hwy. 28	Booneville	41314	OWSLEY	(606) 593-5181	6065937438
Pendleton Co. Health Ctr.		329 Hwy. 330 West	Falmouth	41040	PENDLETON	(859) 654-6985	8596546986
Perry Co. Health Ctr.		239 Lovern Street	Hazard	41701	PERRY	(606) 436-2196	6064391813
Pike Co. HD		119 River Drive	Pikeville	41501	PIKE	(606) 437-5500 ext. 353 (ext. 317-clinic)	6064339690
Powell Co. HD	P.O. Box 460	376 North Main Street	Stanton	40380	POWELL	(606) 663-4360	6066639790
Pulaski Co. Health Ctr.		45 Roberts Street	Somerset	42502	PULASKI	(606) 679-4416	6066794419
Rockcastle Co. Health Ctr.	P.O. Box 840	120 Richmond Street	Mt. Vernon	40456	ROCKCASTLE	(606) 256-2242 ext. 126	6062565482
Rowan Co. Health Ctr.		555 West Sun Street	Morehead	40351	ROWAN	(606) 784-8954	6067831443
Scott Co. Health Ctr.		300 East Washington	Georgetown	40324	SCOTT	(502) 863-3971	5028633986
Shelby Co. Health Ctr.		419 Washington Street	Shelbyville	40065	SHELBY	(502) 633-1231 ext. 107	5026337814
Simpson Co. Health Ctr.		1131 South College Street	Franklin	42134	SIMPSON	(270) 586-8261	2705868264
Spencer Co. Health Ctr.		P.O. Box 175	Taylorsville	40071	SPENCER	(502) 477-8146	5024775624
Taylor Co. Health Ctr.		407 East First Street	Campbellsville	42718	TAYLOR	(270) 465-4191	2707893873
Todd Co. HD	P.O. Box 305	205 McReynolds	Elkton	42220	TODD	(270) 265-2362	2702650602
Trigg Co. Health Ctr.	P.O. Box 191	196 East Main Street	Cadiz	42211	TRIGG	(270) 522-8121	2705225384
Trimble Co. Health Ctr.	P.O. Box 250	138 Miller Lane	Bedford	40006	TRIMBLE	(502) 255-7701	5022553760

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Union Co. Health Ctr.	P.O. Box 88	218 West McElroy	Morganfield	42437	UNION	(270) 389-1230	2703899031
Warren Co. District HD	P.O. Box 1157	1109 State Street	Bowling Green	42102	WARREN	(270) 781- 8039	2707968946
Washington Co. Health Ctr.		302 East Main Street	Springfield	40069	WASHINGTON	(859) 336-3989	8593369162
Wayne Co. Health Ctr.		533 Albany Road	Monticello	42633	WAYNE	(606) 348-9349	6063487464
Webster Co. Health Ctr.	P.O. Box 109	80 Clayton Avenue	Dixon	42409	WEBSTER	(270) 639-9315	2706397866
West Carter Health Ctr.	P.O. Box 728	Hitchins Avenue	Olive Hill	41164	CARTER (West)	(606) 286-5588 or -6000	6062860182
Whitley Co. HD		114 North 2nd Street	Williamsburg	40769	WHITLEY	(606) 549-3380	6065498940
Wolfe Co. Health Ctr.	P.O. Box 98	145 Old Hwy. 15 West	Campton	41301	WOLFE	(606) 668-3185	6066686076
Woodford Co. HD		229 North Main Street	Versailles	40383	WOODFORD	(859) 873-4541	8598737238

Regional Epidemiologists by ADD

Region	Name		Agency	Address	City and ZIP	Phone, FAX
Barren River	Srihari	Seshadri	Barren River District Health Department	1109 State St., P.O. Box 1157	Bowling Green, KY 42102-1157	(270) 781-8039, ext 164 (270) 796-8946
Big Sandy	Lyle	Snider	Floyd County Health Department	144 North Front St.	Prestonsburg, KY 41653	(606) 436-8860 (606) 438-2758
Bluegrass 1	Judy	Collins	Madison County Health Department	P.O. Box 1208	Richmond, KY 40476-1208	(859) 626-4280 (859) 623-5910
Bluegrass 2	Andy	Waters	Lexington-Fayette County Health Department	333 Waller Ave, 4th Floor	Lexington, KY 40508	(859) 231-9791 ext: 238 (859) 231-9459
Bluegrass 3	Jennifer	Methvin	Jessamine County Health Dept.	215 East Maple Street	Nicholasville, KY 40356 1203	(859) 885 4149 ext 1020 (859) 885-1863
Buffalo Trace	Day	David	Buffalo Trace Health Department	120 W. Third St. P.O. Box 70	Maysville, KY 41056	(606) 564-9447 ext 203 (606) 564-7696
Cumberland Valley	Marion	Pennington	Cumberland Valley District Health Department	103 Cher-lyn Lane P.O. Box 1269	London, KY 40741	(606) 864-4764 ext 116 (606) 877-5490
Fivco	Kristy	Bolen	Ashland-Boyd County Health Department	2924 Holt Street P.O. Box 4069	Ashland, KY 41105-4069	(606) 329-9444 ext 2237 (606) 324-5423
Gateway	Sally	Trent	Gateway District Health Department	P.O. Box 555	Owingsville, KY 40360	(606) 674-6396 ext 23 (606) 674-3071
Green River	Janie	Cambron	Green River District Health Department	1501 Breckenridge Street	Owensboro, KY 42303	(270) 686-7747 ext 3067 (270) 926-9862
Kentucky River	David	Reese	Kentucky River District Health Department	441 Gorman Hollow Road	Hazard, KY 41701	(606) 439-2361 (606) 439-0870
Lake Cumberland	Jasie	Logsdon	Lake Cumberland District Health Department	500 Bourne Avenue P.O. Box 800	Somerset, KY 42702	(606) 678-4761, ext 154 (606) 678-2708
Lincoln Trail	Ashoka	Indukuri	Lincoln Trail Distict Health Department	1222 Woodland Drive	Elizabethtown, KY 42702	(270) 769-1601 (270) 765-7274
North Central (Shelbyville)	Vinay	Chiguluri	North Central District Health Department	1020 Henry Clay Street	Shelbyville, KY 40065	(502) 633-1243 (502) 633-7658
North Central (Jefferson)	Carl	Hall	Louisville Metro Health Department	400 East Gray St.	Louisville, KY 40201	(502) 574-5292 (502) 574-5865
Northern Kentucky	Scott	Bowden	Northern Kentucky District Health Department	610 Medical Village Drive	Edgewood, KY 41017	(859) 363-2066 (859) 578-3689
Pennyrile	Sri	Pasupulati	Christian County Health Department	1700 Canton St.	Hopkinsville, KY 42240-0647	(270) 887-4160, ext 188 (270) 887-4165
Purchase	Mary	Tooms	Purchase District Health Department	307 North 7th St.	Mayfield, KY42066	(270) 247-1490

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
APPALACHIAN REG HEALTHCARE	260 HOSPITAL DR	SO WILLIAMSON	41503-4099	(606) 237-1764	(606) 237-1701
ARH REGIONAL MEDICAL CENTER	100 MEDICAL CENTER DR	HAZARD	41701-7000	(606) 439-1331 EXT 6662	(606) 439-6701
BAPTIST HOSPITAL EAST	4000 KRESGE WAY	LOUISVILLE	40207	(502) 897-8834	(502) 896-7224
BAPTIST HOSPITAL EAST	4000 KRESGE WAY	LOUISVILLE	40207	(502) 897-8834	(502) 896-7224
BAPTIST HOSPITAL NORTH EAST	1025 NEW MOODY LANE	LAGRANGE	40031	(502) 222-3420	(502) 222-3842
BAPTIST REGIONAL MED CENTER	1 TRILLIUM WAY	CORBIN	40701	(606) 523-8662 DIRECT	(606) 523-8555
BEREA HOSPITAL	305 ESTILL ST	BEREA	40403	(859) 986-6443	(859) 986-6817
BLACKBURN CORRECTIONAL	3111 SPURR RD	LEXINGTON	40511	(859) 246-2370	(859) 246-2366
BLANCHFIELD ARMY COMM HOSP	2505 PREVENTIVE MEDICAL BLDG	FT. CAMPBELL	42223-1498	(270) 798-8309	(270) 956-0025
BLUEGRASS COMMUNITY	360 AMSDEN AVE	VERSAILLES	40383	(859) 879-2315	(859) 873-3254
BOURBON COMMUNITY	#9 LINVILLE DR	PARIS	40361	(859) 987-3600 EXT 1137	(859) 987-1008
BRECKINRIDGE MEM HOSPITAL	1011 OLD HWY 60	HARDINSBURG	40143	(270) 756-6554	(270) 756-6510
CALDWELL COUNTY HOSPITAL	101 HOSPITAL DR PO BOX 410	PRINCETON	42445	(270) 365-0409	(270) 365-0413
CARDINAL HILL REHAB HOSP	2050 VERSAILLES RD.	LEXINGTON	40504	(859) 254-5701 EXT 5521	(859) 367-7138
CARITAS MEDICAL CENTER	1850 BLUEGRASS AVE	LOUISVILLE	40215	(502) 361-6664	(502) 361-6751
CARROLL COUNTY HOSPITAL	309 11TH ST	CARROLLTON	41008	(502) 732-4321 EXT 243	(502) 732-3297
CASEY CO HOSP PRIMARY CARE	187 WOLFORD AVENUE	LIBERTY	42539	(270) 384-4753 EXT 144	(270) 384-0085
CAVERNA MEMORIAL	1501 S DIXIE ST	HORSE CAVE	42749	(270) 786-2191	(270) 786-2691
CENTRAL BAPTIST HOSPITAL	1740 NICHOLASVILLE RD	LEXINGTON	40503	(859) 260-6638 DIRECT	(859) 260-4255

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
CENTRAL STATE HOSPITAL	10510 LA GRANGE RD	LOUISVILLE	40223	(502) 253-7190	(502) 253-7134
CHS THREE RIVERS MED CTR	PO BOX 769 HWY 644	LOUISA	41230	(606) 638-9451 EXT 456	(606) 638-9494
CHS THREE RIVERS MED CTR	PO BOX 769	LOUISA	41230	(606) 638-9451 EXT 539	(606) 638-9494
CLARK REGIONAL MEDICAL CENTER	1107 W LEXINGTON AVE PO BOX 630	WINCHESTER	40392-0630	(859) 745-3500 EXT 3523	(859) 745-3517
CLINTON COUNTY HOSPITAL	723 BURKESVILLE RD PO BOX 387	ALBANY	42602	(606) 387-6421 EXT 276	(606) 387-8550
CRITTENDEN HEALTH SYSTEMS	PO BOX 386 HIGHWAY 60 SOUTH	MARION	42064	(270) 965-1014 DIRECT	(270) 965-1032
CUMBERLAND COUNTY HOSPITAL	PO BOX 280	BURKESVILLE	42717	(270) 864-2511 EXT 286	(270) 864-1305
EASTERN KY CORR COMPLEX	PO BOX 636	WEST LIBERTY	41472	(606) 743-2800 EXT 416	(606) 743-2811
EASTERN STATE HOSPITAL	627 WEST 4TH ST	LEXINGTON	40508	(859) 246-7226 DIRECT	(859) 246-7288
EPHRAIM MCDOWELL RMC	217 SOUTH THIRD ST	DANVILLE	40422	(859) 239-2346	(859) 239-6709
FCI ASHLAND	BOX 888 STATE RD 716	ASHLAND	41105	(606) 928-6414 EXT 143	(606) 928-2049
FCI MANCHESTER	805 FOX HOLLOW RD. PO BOX 3000	MANCHESTER	40962	(606) 598-1900 EXT 4490	(606) 599-4197
FLAGET MEMORIAL HOSPITAL	4305 NEW SHEPHERDSVILLE RD.	BARDSTOWN	40004	(502) 350-5052 DIRECT	(502) 350-5036
FLEMING COUNTY HOSPITAL	920 ELIZAVILLE AVE PO BOX 388	FLEMINGSBURG	41041	(606) 849-5000 EXT 5158	(606) 849-5005
FORT LOGAN HOSPITAL	124 PORTMAN AVE	STANFORD	40484	(606) 365-2187 EXT 4697	(606) 365-9574
FRANKFORT REG MED CTR	299 KING'S DAUGHTERS DR	FRANKFORT	40601	(502) 226-7896 DIRECT	(502) 226-7956
GARRARD COUNTY MEM HOSPITAL	308 WEST MAPLE AVE	LANCASTER	40444		
GEORGETOWN COM HOSPITAL	1140 LEXINGTON RD	GEORGETOWN	40324	(502) 570-3737	(502) 868-5607
GRAVES-GILBERT CLINIC	201 PARK ST	BOWLING GREEN	42102	(270) 781-5111	(270) 782-4263

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
GREEN RIVER CORR COMPLEX	1200 RIVER RD PO BOX 9300	CENTRAL CITY	42330	(270) 754-5415 EXT 274	(270) 754-5031
GREENVIEW REGIONAL HOSP.	1801 ASHLEY CIRCLE	BOWLING GREEN	42102-9024	(270) 793-2050	(270) 793-3018
GREENVIEW REGIONAL HOSP.	1801 ASHLEY CIR	BOWLING GREEN	42102-9024	(270) 793-2050 DIRECT	(270) 793-3018
HARDIN MEMORIAL HOSPITAL	913 N DIXIE AVE	ELIZABETHTOWN	42701	(270) 706-1722	(270) 706-1155
HARLAN APP REG HOSPITAL	81 BALL PARK RD	HARLAN	40831	(606) 573-8100 EXT 2660	(606) 573-8212
HARRISON MEMORIAL HOSP	1210 KENTUCKY HWY 36 EAST	CYNTHIANA	41031	(859) 235-3509 DIRECT	(859) 235-3699
HIGHLANDS REG MED CTR	5000 KENTUCKY RT 321	PRESTONSBURG	41653	(606) 886-7490 DIRECT	(606) 886-7684
IRELAND ARMY COMM HOSP	USMEDDAC, DEPT OF NURSING	FORT KNOX	40121 5520	(502) 624-0299	(502) 624-9526
JACKSON PURCHASE	1099 MEDICAL CENTER CIR	MAYFIELD	42066	(270) 251-4446 DIRECT	(270) 251-4178
JAMES B HAGGIN MEM HOSPITAL	464 LINDEN AVE	HARRODSBURG	40330	(859) 733-4820	(859) 733-4859
JANE TODD CRAWFORD MEM	PO BOX 220 202-206 MILBY ST	GREENSBURG	42743	(270) 932-4211 EXT 267	(270) 932-9296
JENKINS COMMUNITY	MAIN ST BOX 472	JENKINS	41537	(606) 832-2171 EXT 423	(606) 832-4849
JENNIE STUART MEDICAL CENTER	320 WEST 18TH ST, PO BOX 2400	HOPKINSVILLE	42240	(270) 887-0534	(270) 887-6848
JEWISH HOSPITAL LOUISVILLE	217 EAST CHESTNUT	LOUISVILLE	40202	(502) 587-4870	(502) 587-4553
JEWISH HOSPITAL SHELBYVILLE	727 HOSPITAL DR	SHELBYVILLE	40065	(502) 647-4167 DIRECT	(502) 633-1459
KENTUCKY RIVER MEDICAL CENTER	540 JETT DR	JACKSON	41339-9622	(606) 666-6663 DIRECT	(606) 666-6107
KINDRED HOSPITAL OF LOUISVILLE	1313 ST ANTHONY PLACE	LOUISVILLE	40204	(502) 627-1136	(502) 587-0600
KING'S DAUGHTERS MEDICAL CENTER	2201 LEXINGTON AVE	ASHLAND	41101	(606) 327-4700 DIRECT	(606) 327-7329
KNOX COUNTY HOSPITAL	1 HOSPITAL DRIVE	BARBOURVILLE	40906	(606) 546-4175 EXT 4516	(606) 645-5575

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
KOSAIR ALLIANT HEALTH SYSTEM	PO BOX 35070 231 E CHESTNUT 40212	LOUISVILLE	40232-5070	(502) 629-5769	(502) 629-4995
KOSAIR ALLIANT HEALTH SYSTEM	PO BOX 35070 231 E CHESTNUT 40212	LOUISVILLE	40232-5070	(502) 629-5876	(502) 629-4995
KY CORRECTIONAL INST FOR WOMEN	PO BOX 337 ASH AVE	PEWEE VALLEY	40056	(502) 241-8454 EXT 2225	(502) 241-3067
KY STATE PENITENTIARY HOS	PO BOX 5128 ROUTE 2	EDDYVILLE	42038	(270) 388-2211 EXT 327	(270) 388-7004
KY STATE REFORMATORY HO	3001 W HWY 146 PO BOX 188	LAGRANGE	40032	(502) 222-9441 EXT 4136	(502) 225-9545
LAKE CUMBERLAND REGIONAL	PO BOX 620 305 LANGDON ST	SOMERSET	42502	(606) 678-3235	(606) 678-3263
LEE ADJUSTMENT CTR MEDICAL	PO BOX 900	BEATTYVILLE	41311	(606) 464-2866 EXT 2230	(606) 464-2272
LEX FED MEDICAL CENTER	3301 LEESTOWN RD	LEXINGTON	40511	(859) 255-6812	
LIVINGSTON HOSP & HEALTHCARE	131 HOSPITAL DR	SALEM	42078	(270) 988-7267 DIRECT	(270) 988-4537
LOGAN MEMORIAL HOSPITAL	1625 SO NASHVILLE ROAD	RUSSELLVILLE	42276	(270) 725-4697	(270) 725-4866
LOURDES HOSPITAL	1530 LONE OAK RD PO BOX 7100	PADUCAH	42002-7100	(270) 444-2838 DIRECT	(270) 444-2942
LUTHER LUCKETT CORR.COMPLEX	DAWKINS RD PO BOX 6	LAGRANGE	40031	(502) 222-0365 EXT 4556	(502) 222-6049
MADISONVILLE RMC	900 HOSPITAL DRIVE	MADISONVILLE	42431	(270) 825-5239 DIRECT	(270) 825-5952
MARCUM AND WALLACE MEM	60 MERCY COURT PO BOX 504	IRVINE	40336-0504	(606) 726-2150	(606) 723-2951
MARSHALL COUNTY HOSPITAL	503 EAST NINTH ST	BENTON	42025	(270) 527-4830	(270) 527-4853
MARY BRECKINRIDGE	130 KATE IRELAND DR	HYDEN	41749	(606) 672-2901 EXT 1178	(606) 672-3626
MARY CHILES HOSPITAL	50 STERLING AVE PO BOX 7	MT STERLING	40353	(859) 497-7743	(859) 497-6288
MARYMOUNT HOSPITAL	310 EAST NINTH ST	LONDON	40741	(606) 877-3749	(606) 877-3834
EPHRAIM MCDOWELL RMC	BOX 247	MCDOWELL	41647-0247	(606) 377-3482	(606) 377-3465

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
MEADOWVIEW REG MED CTR	989 MEDICAL PARK DR	MAYSVILLE	41056	(606) 759-3104	(606) 759-5616
OTTER CREEK CORR MED CTR	PO BOX 500	WHEEL WRIGHT	41669	(606) 452-9700	(606) 452-9705
MEDICAL CENTER BOWLING GREEN	250 PARK ST. PO BOX 90010	BOWLING GREEN	42102	(270) 745-1145	(270) 745-1188
MEDICAL CENTER FRANKLIN	1100 BROOKHAVEN RD	FRANKLIN	42134-2742	(270) 598-4798	(270) 598-4881
MED CENTER BOWLING GREEN	250 PARK ST PO BOX 90010	BOWLING GREEN	42102	(270) 745-1167	(270) 745-1188
MED CENTER BOWLING GREEN	250 PARK ST PO BOX 90010	BOWLING GREEN	42102	(270) 745-1145	(270) 745-1188
MEDICAL CENTER OF SCOTTSVILLE	456 BURNLEY RD	SCOTTSVILLE	42164-6355	(270) 622-2826	(270) 622-2209
MANCHESTER MEMORIAL HOSP	210 MARIE LANGDON DR	MANCHESTER	40962	(606) 598-5104 EXT 3254	(606) 599-2516
METHODIST HOSPITAL	1305 N ELM ST-BOX 48-42419 (MAIL)	HENDERSON	42420	(270) 827-7435/827-7700	(270) 827-7359
MIDDLESBORO APP REG	3600 CUMBERLAND AVE	MIDDLESBORO	40965	(606) 242-1406	(606) 248-7545
MONROE COUNTY MEDICAL CENTER	529 CAPP HARLAN RD	TOMPKINSVILLE	42167	(270) 487-9231 EXT 1189	(270) 487-5405
MORGAN CO APP REG HEALTHCARE	PO BOX 579	WEST LIBERTY	41472-0579	(606) 743-3186 EXT 293	(606) 743-9604
MUHLENBERG COMMUNITY HOSP	440 HOPKINSVILLE ST PO BOX 387	GREENVILLE	42345	(270) 338-8360	(270) 338-8581
MURRAY CALLOWAY	803 POPLAR ST	MURRAY	42071	(270) 767-1427	(270) 767-3691
NEW HORIZONS MEDICAL CENTER	330 ROLAND AVE	OWENTON	40359	(502) 484-3663 EXT 2036	(502) 484-5745
NICHOLAS COUNTY HOSPITAL	2323 CONCRETE RD.	CARLISLE	40311	(859) 289-7181	(859) 289-7510
NORTON AUDUBON HOSPITAL	ONE AUDUBON PLAZA DRIVE	LOUISVILLE	40217	(502) 636-7320	(502) 636-7116
NORTON HEALTHCARE	235 EAST CHESTNUT N75-A	LOUISVILLE	40202	(502) 629-3024	(502) 629-7261
NORTON HEALTHCARE	235 EAST CHESTNUT N75-A	LOUISVILLE	40202	(502) 629-7423	(502) 629-6169

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
NORTON SOUTHWEST	9820 3RD STREET RD	LOUISVILLE	40272	(502) 933-8370	(502) 933-8196
NORTON SPRING VIEW	320 LORETTO RD	LEBANON	40033	(270) 692-5170	(270) 692-5178
NORTON SUBURBAN	4001 DUTCHMAN'S LANE	LOUISVILLE	40207	(502) 893-1267	(502) 899-6003
OHIO COUNTY HOSPITAL	1211 MAIN ST PO BOX 126	HARTFORD	42347	(270) 298-7411 EXT 226	(270) 298-5252
OUR LADY OF BELLEFONTE	ST CHRISTOPHER DR	ASHLAND	41101-0910	(606) 833-3266	(606) 833-3135
OUR LADY OF BELLEFONTE	ST CHRISTOPHER DRIVE	ASHLAND	41101-0910	(606) 833-3266	(606) 833-3135
OUR LADY OF THE WAY HOSPITAL	PO BOX 910	MARTIN	41649	(606) 285-5181 EXT 2190	(606) 285-6430
OWENSBORO MERCY	811 PARRISH AVENUE	OWENSBORO	42304-0007	(270) 688-2230	(270) 688-2874
OWENSBORO MERCY	811 PARRISH AVENUE	OWENSBORO	42303	(270) 688-2230	(270) 688-2874
PARKWAY REGIONAL	2000 HOLIDAY LANE	FULTON	42041	(270) 472-2522	(270) 472-6263
PATTIE A. CLAY REGIONAL	EASTERN BYPASS PO BOX 1600	RICHMOND	40476-2603	(859) 625-3548	(859) 625-3535
PAUL B HALL REG MED CTR	625 JAMES S TRIMBLE BLVD	PAINTSVILLE	41240	(606) 789-3511 EXT 1608	(606) 789-6486
PIKEVILLE METHODIST	911 SOUTH BYPASS RD	PIKEVILLE	41501	(606) 218-3966	(606) 218-4987
PIKEVILLE METHODIST	911 SOUTH BYPASS RD	PIKEVILLE	41501	(606) 218-3966	(606) 218-4987
PINEVILLE COMMUNITY	850 RIVERVIEW AVE	PINEVILLE	40977	(606) 337-3051 EXT 4293	(606) 337-4284
ROCKCASTLE HOSP & RESP.	145 NEWCOMB AVE PO BOX 1310	MT VERNON	40456	(606) 256-7762	(606) 256-3232
RUSSELL COUNTY HOSPITAL	DOWELL RD P O BOX 1610	RUSSELL SPRINGS	42642	(270) 866-4546	(270) 866-7082
SAMARITAN HOSPITAL	310 SOUTH LIMESTONE ST	LEXINGTON	40508	859-226-7174	(859) 226-7176
SHRINERS HOSPITAL	1900 RICHMOND ROAD	LEXINGTON	40502	(859) 268-5684	(859) 268-5636

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
ST CLAIRE MEDICAL CENTER	222 MEDICAL CIR	MOREHEAD	40351	(606) 783-6607	(606) 783-6368
ST ELIZABETH MED CENTER	1 MEDICAL VILLAGE DRIVE	EDGEWOOD	41017	(859) 344-2155	(859) 578-7262
ST ELIZABETH MED CTR	1 MEDICAL VILLAGE DR	EDGEWOOD	41017	(859) 344-2155	(859) 578-7262
ST ELIZABETH MED CTR	1 MEDICAL VILLAGE DR	EDGEWOOD	41017	(859) 344-2155	(859) 578-7262
ST LUKE HOSPITAL EAST	85 N GRAND AVE	FT THOMAS	41075	(859) 572-3688	(859) 572-2349
ST LUKE HOSPITAL WEST	7380 TURFWAY RD	FLORENCE	41042	(859) 572-3688	(859) 572-2349
ST.JOSEPH HOSPITAL	ONE SAINT JOSEPH DR	LEXINGTON	40504	(859) 313-4715	(859) 313-2004
T J SAMSON COMMUNITY HOSP	1301 NORTH RACE ST	GLASGOW	42141-3843	(270) 651-4463	(270) 651-4893
T J SAMSON COMMUNITY HOSP	1301 NORTH RACE ST	GLASGOW	42141-3483	(270) 651-4883	(270) 651-4246
TAYLOR REGIONAL HOSPITAL	1700 OLD LEBANON RD	CAMPBELLSVILLE	42718	(270) 789-5808	(270) 789-5891
TEN BROECK DUPONT	1405 BROWNS LANE	LOUISVILLE	40207	(502) 896-0495 EXT 453	(502) 896-1108
TEN BROECK HOSPITAL	8521 LA GRANGE RD	LOUISVILLE	40242	(502) 426-6380 EXT 3401	(502) 814-3720
TRIGG COUNTY HOSPITAL	HWY 68 EAST PO BOX 312	CADIZ	42211	(270) 522-3215 EXT.132	(270) 522-0559
TROVER CLINIC	200 CLINIC DRIVE	MADISONVILLE	42431	(270) 825-7360	(270) 825-7219
TWIN LAKES REGIONAL	910 WALLACE AVE	LEITCHFIELD	42754	(270) 259-1600	(270) 259-9524
UNION COUNTY METHODIST	4604 U S HWY 60 WEST	MORGANFIELD	42437-6537	(270) 389-5134	(270) 389-5094
UNIVERSITY OF KY CHANDLER	800 ROSE STREET- HG 608	LEXINGTON	40636-0293	(859) 323-6337	(859) 257-1483
UNIVERSITY OF KY CHANDLER	800 ROSE STREET -HG-608	LEXINGTON	40536-0293	(859) 323-6337	(859) 257-1483
UNIVERSITY OF KY CHANDLER	800 ROSE STREET -HG-608	LEXINGTON	40536-0293	(859) 323-6337	(859) 257-1483

Hospital Infection Control and Surveillance Contacts

HOSPITAL	ADDRESS	CITY	ZIP	PHONE	FAX NUMBER
U. OF LOUISVILLE HOSP	530 SOUTH JACKSON	LOUISVILLE	40202	(502) 562-4085	(502) 562-6807
U. OF LOUISVILLE HOSP	530 SOUTH JACKSON	LOUISVILLE	40202	(502) 562-3794	(502) 562-6807
LEX VETERANS MED CTR	1101 VETERANS DR	LEXINGTON	40502	(859) 381-5963	(869) 381-5840
LEX VETERANS MED CTR	1101 VETERANS DR	LEXINGTON	40502	(859) 233-4511, EX 4429	(859) 381-5840
LOUISVILLE VAMC	800 ZORN AVE	LOUISVILLE	40206	(502) 287-6937	(502) 287-6206
WAYNE COUNTY HOSPITAL	166 HOSPITAL ST	MONTICELLO	42633	(606) 340-3262 DIRECT	(606)340-3206
WESTERN BAPTIST HOSPITAL	2501 KENTUCKY AVE	PADUCAH	42003-3200	(270) 575-2506	(270) 575-8471
WESTERN KY CORR COMPLEX	374 NEW BETHEL RD	FREDONIA	42411	(270) 388-9781	(270) 388-4280
WESTERN STATE HOSPITAL	RUSSELLVILLE RD PO BOX 2200	HOPKINSVILLE	42240	(270) 889-6025 EXT 440	(270) 889-3768
WESTLAKE CUMBERLAND	100 WESTLAKE DR PO BOX 468	COLUMBIA	42728	(270) 384-4753 EXT 144	(270) 384-0085
WHITESBURG APP. REGIONAL	240 HOSPITAL RD	WHITESBURG	41858	(606) 633-3523	(606) 633-3629

Disease Surveillance:

Responsibilities & Procedures

DISEASE SURVEILLANCE PROCEDURES AND RESPONSIBILITIES

SURVEILLANCE PROCEDURES

Disease surveillance encompasses more than just reporting disease and is an essential element in any disease prevention and control program. The CHS commonly uses two approaches in disease surveillance:

- **Passive disease surveillance** relies upon physicians and others fulfilling their statutory disease reporting requirement.

- **Active disease surveillance** is a more aggressive and labor intensive approach to identifying cases of disease. It involves the daily, weekly or monthly contacting of physicians, hospitals, schools, or other agencies to "actively" search for cases. This type of surveillance has defined objectives, and usually continues for a relatively short period until the objectives are met. Active disease surveillance coincides with periods of high disease frequency and usually yields a much higher percentage of actual identified cases. It is also used during an outbreak to find additional cases of disease. For example, influenza surveillance is conducted during the active flu season - October through April.

Major Traditional Sources of Surveillance Data in Kentucky

- Electronic surveillance and morbidity information (DSM-KYEPHRS)
- Morbidity Reports (Kentucky Reportable Disease Form – EPID 200 – Rev Jan/03)
- Laboratory reports of infections
- Outbreak investigation reports
- Mortality reports (death certificates)
- Active surveillance for specific diseases
- Special surveys
- Absentee data from school or work for selected diseases

Because most surveillance data are based on clinical cases, it is important to keep in mind the chain of events that must occur before a clinical case is confirmed:

- Occurrence of clinical illness
- Sufficient severity to seek medical care
- Laboratory confirmation of diagnosis
- Reporting of the disease to the LHD
- Collection and analysis of data by LHD and/or DPH
- Reporting of the disease to the Division of Epidemiology and Health Planning: Physicians, clinics, hospitals, laboratories, or others aware of a person with an acute or communicable disease should notify the LHD using the KY-EPHRS DSM module or EPID–200 report form, adhering to the reporting time frames established by regulation.

The LHD should collect missing data, initiate a disease specific epidemiologic follow-up investigation, assure that adequate prevention and control measures are taken and notify the Division of Epidemiology and Health Planning in a timely manner.

For further information on the procedures for reporting, content of the report, urgency of the report, handling of reports by the local health department, and categories of disease to be reported please refer to either **Diseases Reportable at the State and National Level *or*** to the *Kentucky Disease Surveillance Administrative Regulation 902 KAR 2:020, Disease Surveillance*. (Appendix A)

SURVEILLANCE RESPONSIBILITIES

LOCAL HEALTH DEPARTMENT RESPONSIBILITIES:

LHD is expected to:

- Maintain a supply of *Kentucky Reportable Disease Forms - EPID 200 (Rev. Jan/03)* or camera ready copies for distribution to physicians, primary care practitioners, hospitals, clinics, schools, day care centers and/or others needing the forms.

- Receive, evaluate and transmit completed reports to the Division of Epidemiology and Health Planning.

- Investigate each reportable disease case to gather epidemiologic and laboratory data for local, state and national surveillance.

- Conduct a detailed follow-up to prevent future cases, identify the etiologic agent or agents, and identify the mode of transmission or risk factors associated with disease transmission.

- Consult with the state epidemiologist or DEHP staff whenever any unusual circumstances occur regarding the disease.

- Implement control measures for specific diseases consistent with section 9, Methods of Control, contained in the latest edition of *Control of Communicable Diseases Manual*, Chin, James (ed), or with specific measures issued by the state epidemiologist.

STATE EPIDEMIOLOGIST RESPONSIBILITIES:

The state epidemiologist has overall responsibility for state disease surveillance activities and is expected to:

- Provide consultation, technical assistance, and training regarding epidemiologic methods and disease control recommendations to LHDs.

- Provide guidelines consistent with state and national objectives, policies and current medical literature.

- Maintain a records system for receiving surveillance reports and for consolidation of the information into meaningful tables, graphs and charts, to analyze the data, prepare and disseminate summary reports.

- Act as liaison with the Centers for Disease Control and Prevention (CDC) and the Kentucky Division for Laboratory Services to assure rapid and accurate flow of information regarding disease control and specimen collection of communicable diseases throughout Kentucky.

- Assign appropriate state staff to perform epidemiologic investigations where surveillance data indicate a suspected disease outbreak, including activation of the Rapid Response Team when necessary.

- Assure that appropriate forms and information are supplied to LHDs as needed.

KENTUCKY REPORTABLE DISEASES AND CONDITIONS

✉AIDS**
▼ Animal bites
❶ Animal conditions known to be communicable to man
☠ ☎Anthrax
☎Arboviral Disease*
Neuro invasive
Non-neuro invasive
Asbestosis
☠ ☎Botulism, including infant
☠ ☎Brucellosis
☎Campylobacteriosis
✉Chancroid
✉Chlamydia trachomatis
☎Cholera
Coal workers' pneumoconiosis
☎Cryptosporidiosis
☎Diphtheria
☎*E. coli*, shiga toxin positive
✉Ehrlichiosis
❶ Foodborne outbreak/intoxication
✉Gonorrhea
✉Granuloma inguinale
☎Haemophilus influenzae invasive disease
☎Hansen's Disease
☎Hantavirus infection
☎Hepatitis A
❶ Hepatitis B, acute
❶ Hepatitis B, Perinatal
✉Hepatitis C, acute
✉Histoplasmosis
✉HIV infection**
Influenza virus isolates
☎ ILI's in long term care facilities
✉Lead poisoning
✉Legionellosis
☎Listeriosis
✉Lyme Disease
✉Lymphogranuloma venereum
✉Malaria
☎Measles
☎Meningococcal infection
❶ Mumps
☠ Mycotoxins-T2
☎Pertussis
☠ ☎Plague
☎Poliomyelitis
☎Psittacosis
☠ ☎Q fever
☎Rabies, animal
☎Rabies, human
✉Rabies post-exposure prophylaxis
☠ Ricin poisoning
✉Rocky Mountain spotted fever
☎Rubella
☎Rubella syndrome, congenital
☎Salmonellosis
☎Shigellosis
Silicosis
☠ Smallpox
☠ Staphylococcal enterotoxin B
❶ Streptococcal disease, invasive Group A
✉*Streptococcus pneumoniae*, drug-resistant invasive disease
☎Syphilis, primary, secondary arly latent or congenital
✉Syphilis, other than primary secondary, early latent or congenital
☎Tetanus
❶ Toxic shock syndrome
✉Toxoplasmosis
❶ Tuberculosis
☠ ☎Tularemia
☎Typhoid fever
☎*Vibrio parahaemolyticus*
☎*Vibrio vulnificus*
☠ Viral hemorrhagic fevers
❶ Waterborne outbreaks
☎Yellow fever

☠ POSSIBLE INDICATOR OF BIOTERRORISM—REPORT IMMEDIATELY

☎ REPORTING REQUIRED WITHIN 24 HOURS- by telephone or FAX, followed by written report.

❶ REPORTING REQUIRED WITHIN 1 BUSINESS DAY- by telephone or FAX, followed by written report.

✉ REPORTING REQUIRED WITHIN 5 BUSINESS DAYS

▼ Report animal bites within 12 hours to the local health department in accordance with KRS 258.065.

* Includes West Nile, California, Eastern Equine, St. Louis, Venezuelan Equine, Western Equine

To report HIV/AIDS or obtain report forms in Louisville area – (Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, Trimble counties) call the HIV/AIDS Louisville Jefferson County Surveillance Program at 502-574-6574. In all other Kentucky counties contact the HIV/AIDS Branch at 502-564-6539. **NEVER REPORT AN HIV/AIDS CASE BY FAX MACHINE OR ANSWERING MACHINE

Kentucky Reporting Required of Laboratories:

- Laboratory results shall be reported weekly for Influenza virus isolates.

- Upon request of the DPH, a clinical laboratory shall report antimicrobial resistance patterns for the following organisms:

  - Staphylococcus aureus
  - Enterococcus species
  - Other organism specified in a request

Kentucky Reporting Required of HIV and AIDS:

Health professionals licensed under Chapters 311 through 314, health facilities licensed under KRS Chapter 216B, and laboratories licensed under KRS Chapter 333, shall report HIV infections and AIDS diagnoses within **five (5)** business days on the **Adult HIV/AIDS Confidential Case Report** or the **Pediatric HIV/AIDS Confidential Case Report.**

  - Acquired Immune Deficiency Syndrome (AIDS) [1,2]
  - Human Immunodeficiency Virus (HIV) infection [2], pediatric [1,2]

Reports for residents of Jefferson, Henry, Oldham, Bullitt, Shelby, Spencer, and Trimble Counties shall be submitted to the HIV/AIDS Surveillance Program of the Jefferson County Health Department, telephone 502-574-6574.

Reports for residents of all other Kentucky counties shall be submitted to the HIV/AIDS Surveillance Program of the Kentucky Department for Public Health, or as directed by the HIV/AIDS project coordinator, telephone 502-564-6539.

Never report an HIV/AIDS case by fax machine or answering machine. Do not leave identifying information about HIV/AIDS patients on the call recorder.

Kentucky Reporting required within three months:

A provider shall submit name, address, birth date, and county of residence for persons diagnosed with the following to the DPH.

  - Asbestosis
  - Coal Worker's Pneumoconiosis
  - Silicosis

Epidemiology:

Investigation & Procedures

EPIDEMIOLOGIC INVESTIGATIONS

DISEASE OUTBREAKS

An outbreak is the occurrence, in a community or region, of individuals who are identified as cases of an illness in excess of what is normally expected. The number of cases in an outbreak will vary according to the infectious agent, the size of the population exposed, and the time and place of occurrence. The outbreak or epidemic is relative to the usual frequency of the disease in the same area among the specified population at the same time of the year. Defining an outbreak is directly related to the surveillance activities performed at the local, state and national levels.

PROCEDURE FOR EPIDEMIOLOGIC INVESTIGATIONS

Establish the Existence of an Outbreak or Epidemic

Establish the existence of an outbreak by comparing available information about new cases with the incidence of the disease in a comparable geographic region during a comparable time period in preceding years.

Verify Diagnosis

Analyze clinical histories of cases and have laboratory tests performed to confirm or refute the diagnosis and determine the type of etiologic agent associated with the illness (e.g., bacterial, viral, mycotic, chemical, or other). Establish a case definition with a standard set of criteria to determine whether a person should be classified as having the health condition of interest.

Relate the Outbreak to Time, Place and Person

Conduct a survey of known or selected cases and become familiar with the community situation. Interview these cases to determine their common experiences, such as when they became ill (time), where they became infected (place), and who they are (person). Make case counts and relate these to the appropriate population to determine those groups at risk. Contact those with information on the illness or environmental circumstances contributing to the outbreak. A pattern can often be recognized in the results of these procedures.

Formulate a Tentative Hypothesis

Formulate a tentative hypothesis to explain the most likely cause, source, and distribution of the cases. This hypothesis is based on data and facts that have been collected and can only be tentative; no conclusions can be reached at this point in the investigation. The tentative hypothesis directs the course of an investigation and is tested by data gathered during the investigation. Develop several hypotheses if necessary. A series of hypotheses may evolve during an investigation. First, facts are examined, broad hypotheses are formulated, then more facts are gathered, then a specific hypothesis is formulated. The case definition may need to be modified based on new data. Next, additional facts to test the acceptability of the hypothesis are gathered. The cycle is continued as necessary.

Plan a Detailed Epidemiologic Investigation

Determine from the collected data what additional information is needed and what resources are available to test the hypothesis. Develop or obtain interview forms, gather specimen collection kits, and alert and train people involved in the investigation.

Conduct the Investigation

Interview non-ill persons (controls) who are similar or who had similar time or place experiences to those ill; gather appropriate community and environmental information; investigate potential sources of the responsible agent and factors that contributed to the outbreak; and collect specimens and samples.

Analyze and Interpret Data

Conduct laboratory tests and summarize field investigations. Compare and interpret all information collected and results of tests conducted. Construct epidemic curves, calculate rates, develop appropriate tables and charts, apply statistical tests, and interpret the cumulative data.

Test Hypotheses and Formulate Conclusions

Accept or reject the hypothesis on the basis of the available data and appropriate calculations. For a hypothesis to be acceptable the patterns of disease in the host must fit the nature of the agent, its source, its mode of transmission, and the contributory factors that allowed the outbreak to occur. If the hypothesis is rejected, another hypothesis must be developed and additional information must be gathered to test this new hypothesis.

Put Control Measures into Operation

Devise effective control measures based upon the evidence uncovered. Use the information collected during the investigation for controlling not only the current situation but also for preventing future problems in the community. Initiate or intensify surveillance of the disease and agent. If imminent danger exists, control measures may be initiated after a tentative

hypothesis has been formed. If the hypothesis proves to be wrong, corrected measures can be taken at an appropriate point.

Prepare a Report of the Investigation

Investigations should be summarized as soon as completed and a report should be sent to the state epidemiologist. The report should include the types of information listed in the sample on the following pages.

REQUESTING OUTBREAK ASSISTANCE

There is no standard formula which will answer the question of when outbreak assistance should be requested.

As a general rule, the DPH does not provide on-site assistance to LHDs for routine communicable disease outbreaks. However, if an outbreak is suspected and the LHD needs technical, material or personnel assistance for an epidemiologic investigation, the health officer should contact the state epidemiologist, who may request that an "Epi" Rapid Response Team member assume the lead role. Team members will provide consultation and communicate with the state staff.

Consultation with the state epidemiologist should **always** be sought when: **(1) the pattern of illness appears to be unusual, (2) the etiology of an unusual disease occurrence is not known, or (3) severe disabling (hospitalization, death) consequences are occurring.**

LOCAL HEALTH DEPARTMENT RESPONSIBILITIES:

- Conduct the initial investigation of a suspected outbreak.

- **Notify the state epidemiologist of any suspect disease outbreak under investigation. Epidemiologic consultation by telephone should be sought early in the investigation**.

- Request assistance of the state epidemiologist if needed to control further spread of the outbreak.

- Assume local costs of the investigation. The DPH will cover expenses incurred by DPH staff when on-site.

- Obtain laboratory specimens and conduct interviews and other related investigation efforts as requested by the state epidemiologist.

- Prepare and submit an outbreak investigation report.

STATE EPIDEMIOLOGIST RESPONSIBILITIES:

- Provide consultation and technical assistance for local and state regional staff for the outbreak investigation.

- Provide guidelines for the investigation and control of the specific outbreak consistent with state and national objectives, current policy, and current medical literature.

- Determine whether a particular outbreak warrants further investigation and the nature and extent of additional information and laboratory data required.

- Identify and arrange additional staff and material resources from the DPH in the event an outbreak exceeds the staff and resource capacity of the LHD and the DEHP. DPH staff reassigned to assist in the outbreak investigation will report to the state epidemiologist until assistance is no longer needed.

- Provide vaccines in accordance with established protocol for hepatitis A and B, measles, mumps, rubella, diphtheria, tetanus, pertussis, polio, varicella, rabies and medications for treating and preventing tuberculosis and STDs. Also provide standard immune globulin in outbreaks of hepatitis A if the state epidemiologist approves the need.

- Initiate additional control measures in consultation with the LHD.

ROLE OF THE CENTERS FOR DISEASE CONTROL AND PREVENTION

CDC staff provides on-site assistance **only** upon the request of the DPH. In Kentucky the state epidemiologist makes the request. The CDC staffs serve as consultants to the state epidemiologist unless an alternative agreement is made. Occasionally, upon prior agreement with the state epidemiologist, CDC will conduct an independent investigation.

COMPONENTS OF AN OUTBREAK INVESTIGATION REPORT

1. **Reason for Investigation**

   Brief statement as to how the outbreak became known.

2. **Investigation**

   - Date investigation began and individuals interviewed.

   - Number of cases.

   In a smaller outbreak (25 or less), present these cases individually in the form of a table, line listing under the headings “name”, “sex”, “age”, “date and time of onset” (with exact hour in military time), “address” and such other headings as may be pertinent to the outbreak. **Arrange the cases according to date of onset**. If a table

of individual cases is included, incorporate the more important clinical and laboratory findings in the table. Maintain the confidentiality and privacy of the individual cases within this report.

If there are too many cases for such a table, give the information in numbers only; total number of cases, sex distribution, age distribution, and range of dates and time of onset.

- Compare prevalence of the disease in the outbreak with previous known prevalence in the population group involved.

- Clinical description of the symptoms and physical findings, with the results of laboratory examinations.

- Epidemiologic data.

    1) Provide pertinent information regarding the distribution of the cases that would indicate the source, such as confined to the customers of a certain dairy, inmates of a certain ward, etc.

    2) If an outbreak is localized to a group, such as in an institution or in connection with a dinner, give the total population at risk (total population potentially exposed).

    3) Present in tabular form the association of individual characteristics (e.g., age, history of previous attack, immunization, etc.), with the cases. Where possible, compare these case characteristics with “well” individuals.

    4) Present in tabular form, the association of cases with various environmental factors such as water, milk, foods, etc. Compare these cases with the general population when possible.

- Results of investigation of common food and drink supplies.

    1) If the outbreak requires data about the water or milk supply, summarize the reports or finding of the milk sanitarian, engineer, or veterinarian.

    2) Summarize the results of bacteriologic examination of suspected foods.

    3) Provide details of preparation, handling and storage of suspected foods, brands of these foods, and places where they were purchased.

- Provide information as to illnesses, family illness, or infections among food handlers.

3. Discussion as to Source

State reasons for suspecting or excluding milk, water, and each article of food or other possible vehicle of infection.

4. Conclusions

State your opinion as to:

a) Nature of illnesses.

b) Source of outbreak.

c) Method of transmission.

5. Summary of Control Measures

a) Immediate control.

b) Future prevention.

Sources for Investigations:

http://www.cdc.gov/excite/classroom/outbreak/steps.htm

Case Definitions:

A to Z

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) / HUMAN IMMUNODEFICIENCY VIRUS (HIV) INFECTION

IDENTIFICATION

CLINICAL DESCRIPTION:

Acquired immunodeficiency syndrome (AIDS) is a severe, life-threatening condition that was first recognized as a distinct syndrome in 1981. AIDS represents the late stage of infection with the human immunodeficiency virus (HIV) most often resulting in progressive deterioration of the immune system and development of opportunistic diseases and/or malignancies. Most people infected with HIV develop detectable antibodies within 1-3 months after infection but may remain free of signs or symptoms for several months to years. The severity of HIV-related illness is, in general, directly related to the degree of immune system deficiency.

The case definition for AIDS was most recently revised in 1993 to add pulmonary tuberculosis, recurrent pneumonia and invasive cervical cancer to the list of 23 opportunistic diseases that are AIDS defining in HIV-infected persons with a CD4+ T-lymphocyte cell count of <500/μL. In addition, the 1993 case definition included all HIV-infected persons with a CD4+ T-lymphocyte cell count of <200/μL or a CD4+ T-lymphocyte percentage of <14%, regardless of the presence of opportunistic infections, as AIDS cases.

CASE DEFINITION: (Effective 1/1/93).

CDC has expanded the acquired immunodeficiency syndrome (AIDS) surveillance case definition to include all human immunodeficiency virus (HIV)-infected adolescents and adults aged greater than or equal to 13 years who have either a) less than 200 CD4+ T-lymphocytes/uL; b) a CD4+ T-lymphocyte percentage of total lymphocytes of less than 14%; or c) any of the following three clinical conditions: pulmonary tuberculosis, recurrent pneumonia, or invasive cervical cancer. The expanded definition retains the 23 clinical conditions in the AIDS surveillance case definition published in 1987.
The AIDS surveillance case definition for children aged less than 13 years has not changed and retains the clinical conditions listed in the AIDS surveillance case definition published in 1987. However, definitions for HIV encephalopathy, HIV wasting syndrome, and HIV infection in children have been revised and the 1987 definition has been updated.

REPORTING CRITERIA:

- **AIDS**: Clinical diagnosis that meets the definitions of AIDS established in the “Adult HIV/AIDS Confidential Case Report Form” or the “Pediatric HIV/AIDS Confidential Case Report Form”.

- **HIV**: (a) **All positive test results for HIV infection including**: Elisa, Western Blot, PCR, HIV antigen or HIV culture; (b) **CD4+ assays** including absolute CD4+ cell counts and CD4+%; and (c) **HIV detectable Viral Load Assays**.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY HIV/AIDS DISEASE SURVEILLANCE REQUIRES:

Kentucky state regulation 902 KAR 2:020 Section 7 requires all AIDS cases and positive, validated HIV antibody test results be reported to the Department for Public Health **within 5 days of diagnosis**. These cases are reportable only to the HIV/AIDS Surveillance Coordinator and HIV/AIDS Surveillance Technician. HIV/AIDS cases should **NOT** be reported to the local health department.

EPIDEMIOLOGY REPORTS REQUESTED:

Use the same report forms for both HIV and AIDS.

- Adult HIV/AIDS Confidential Case Report – CDC 50.42A
  (Patients ≥ 13 years of age at time of diagnosis).
- Pediatric HIV/AIDS Confidential Case Report – CDC 50.42B
  (Patients < 13 years of age at time of diagnosis).

REPORTING PROCEDURE:

- When reporting by telephone, cases are to be reported **ONLY** to the HIV/AIDS Surveillance Technician or HIV/AIDS Surveillance Coordinator. Information should **NOT** be offered to the receptionist or any other personnel in the HIV/AIDS Branch office. **The HIV/AIDS surveillance staff prefers reporting by telephone**.

- When reporting by mail, patient identifying information must be mailed separately from HIV/AIDS-related case data. The information shall be mailed using double envelope packages, with both envelopes stamped "**Confidential, to be opened by Addressee Only"**, and addressed to the HIV/AIDS Surveillance Coordinator or Surveillance Technician.

- **Case providers should NOT fax cases nor should they leave case information on any answering machine.**

CONFIDENTIALITY:

The HIV/AIDS surveillance program follows strict confidentiality guidelines. The program security policy can be obtained from the HIV/AIDS office at: 502-564-0536 or Toll free at 866-510-0008.

CONTACTS FOR CONSULTATION

DIVISION OF EPIDEMIOLOGY AND HEALTH PLANNING, HIV/AIDS PROGRAM: (All counties except the ones below). **502-564-6539**.

LOUISVILLE AREA INCLUDING THE FOLLOWING COUNTIES: **502-574-6574**.

BULLITT	HENRY
JEFFERSON	OLDHAM
SHELBY	SPENCER
TRIMBLE	

RELATED REFERENCES

Heyman, David, ed. ACQUIRED IMMUNODEFICIENCY SYNDROME. Control of Communicable Diseases Manual. 18TH ed. Washington, DC: American Public Health Association, 2003:1-9.

CDC. Guidelines for National Human Immunodeficiency Virus Case Surveillance, Including Monitoring for Human Immunodeficiency Virus Infection and Acquired Immunodeficiency Syndrome; Appendix: Revised Surveillance Case Definition for HIV Infection. MMWR 1999; 48 (No. RR-13).

CDC.1993 Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMWR 1992; 41(No. RR-17).

CDC.1994 Revised classification system for human immunodeficiency virus infection in children less than 13 years of age. MMWR 1994; 43(No. RR-12).

What You Should Know About HIV/AIDS

HIV/AIDS Handout

Post Exposure Prophylaxis Guidelines

ANTHRAX

IDENTIFICATION

CLINICAL DESCRIPTION:

A bacterial illness caused by *Bacillus anthracis* with acute onset characterized by several distinct clinical forms including:

- **Cutaneous** (skin lesion evolving over 2-6 days from a papule, through a vesicular stage, to a depressed black eschar).
- **Inhalation** (a brief prodrome resembling a viral respiratory illness followed by development of hypoxia and dyspnea, with radiographic evidence of mediastinal widening).
- **Intestinal** (severe abdominal distress followed by fever and signs of septicemia).
- **Oropharyngeal** (mucosal lesion in the oral cavity or oropharynx, cervical adenopathy and edema, and fever).

CASE DEFINITION:

A clinically compatible illness that is laboratory confirmed

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Bacillus anthracis* from a clinical specimen, **OR**
- Anthrax electrophoretic immunotransblot (EITB) reaction to the protective antigen, **and/or** lethal factor bands in one or more serum samples obtained after onset of symptoms, **OR**
- Demonstration of *B. anthracis* in a clinical specimen by immunoflourescence.

REPORTING CRITERIA:

Clinical diagnosis or clinical suspicion of anthrax.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**. *B. anthracis* is classified as a Select Agent and should only be handled in a facility that contains a Biological Safety Level (BSL) 3 laboratory. The Division of Laboratory Services in Frankfort

has such a facility and can accept specimens on a 24 hr/ 7 day basis. The Division of Epidemiology must be consulted before using this service.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Laboratory test results

PREVENTION MEASURES:

Educate employees handling potentially contaminated articles about modes of transmission, care of abrasions, controlling dust, and ventilating hazardous industries, especially those that handle raw animal products.

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD for direct involvement. Search for history of exposure to infected animals or animal products and trace to place of origin.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, James, ed. ANTHRAX. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004:20-25.

Pickering LK, ed. Anthrax. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003:196-199.

BOTULISM, INFANT

IDENTIFICATION

CLINICAL CASE DEFINITION:

An illness of infants, characterized by constipation, poor feeding, and "failure to thrive" that may be followed by progressive weakness, impaired respiration, and death.

CASE DEFINITION:

Confirmed:

A clinically compatible case that is laboratory confirmed, occurring among children < 1 year of age.

LABORATORY CRITERIA FOR CONFIRMATION:

- Detection of botulinum toxin in stool or serum, **OR**
- Isolation of *Clostridium botulinum* from stool.

REPORTING CRITERIA:

Clinical diagnosis in an infant with subsequent laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Outbreak Investigation: Infant Botulism (CDC 52.73).

PUBLIC HEALTH INTERVENTION:

- *Clostridium botulinum* spores are ubiquitous. Identified sources such as honey and possibly dark and light corn syrup should not be fed to infants.
- Source investigation by LHD.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, FOOD SAFETY AND COSMETICS BRANCH: 502-564-7181.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, Daivid L., ed. INTESTINAL BOTULISM formerly INFANT BOTULISM. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 69-75.

Pickering LK, ed. Clostridial Infections: Botulism and Infant Botulism. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 243-246.

BOTULISM

IDENTIFICATION

CLINICAL DESCRIPTION:

Ingestion of botulinum toxin resulting in an illness of variable severity. Common symptoms are double vision, blurred vision, difficulty swallowing and dry mouth. Symmetric flaccid paralysis may progress rapidly.

CASE DEFINITION:

Confirmed :

A clinically compatible illness that is laboratory confirmed; or that occurs among persons who ate the same food as persons with laboratory-confirmed botulism.

Probable :

A clinically compatible case with an epidemiologic link (e.g., ingestion of a home-canned food within the previous 48 hours).

LABORATORY CRITERIA FOR CONFIRMATION:

- Detection of botulinum toxin in serum, stool or suspect food, **OR**
- Isolation of *Clostridium botulinum* from stool.

REPORTING CRITERIA:

Laboratory confirmation of botulism or a diagnosis without laboratory confirmation if the clinical and epidemiologic evidence is overwhelming.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Immediate treatment required for case patient. Contact the Communicable Disease Branch 502-564-3261 for protocol on receiving botulism antitoxin. **After hours, call 1-888-973-7678 for emergency contact numbers.**

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, FOOD SAFETY AND COSMETICS BRANCH: 502-564-7181.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Chin, James, ed. BOTULISM. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: 70-75.

Pickering LK, ed. Clostridial Infections. In: 2000 Red Book: Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2000: 212-214.

BRUCELLOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness characterized by acute or insidious onset of fever, night sweats, fatigue, anorexia, weight loss, headache, and arthralgia. The infection can also cause osteoarticular complications, endocarditis, and orchitis.

CASE DEFINITION:

Confirmed:

A clinically compatible illness that is laboratory confirmed.

Probable Case:

A clinically compatible case that is epidemiologically linked to a confirmed case or that has supportive serology (Brucella spp. agglutination titer of ≥ 160 in one or more serum specimens obtained after onset of symptoms.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Brucella* sp. from a clinical specimen, **OR**
- Fourfold or greater rise in *Brucella* agglutination titer between acute- and convalescent-phase serum specimens obtained ≥ 2 weeks apart and studied at the same laboratory, **OR**
- Demonstration of *Brucella* sp. in a clinical specimen by immunofluorescence.

REPORTING CRITERIA:

Clinical diagnosis with laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD. Search for history of exposure to infected animals or animal products (especially unpasteurized milk and cheese) and trace to place of origin. Multiple cases have been traced to clinical laboratory exposures.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, David L., MD, ed. BRUCELLOSIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 75-78.

Pickering LK, ed. Brucellosis. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: 222-224.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
Centers for Disease Control
Atlanta, Georgia 30333

BRUCELLOSIS CASE SURVEILLANCE REPORT

State

Case No.

Reported to State Health Dept

Month Day Year

PERSONAL DATA

FIRST FOUR LETTERS OF PATIENT'S NAME

AGE

SEX

ADDRESS (County/State)

CLINICAL ILLNESS AND THERAPY

Date of Current Onset:

This Onset was:
1 ☐ Acute
2 ☐ Insidious
9 ☐ Not Stated

Duration of Current Illness: _____ Weeks

Date of Original Onset if Recurrence:

This Onset was
1 ☐ Acute
2 ☐ Insidious
9 ☐ Not Stated

SYMPTOMS	DURATION OR SEVERITY
☐ Fever, Intermittent	
☐ Fever, Constant	
☐ Chills	
☐ Weight Loss	
☐ Sweating	
☐ Body Ache	
☐ Weakness	
☐ Headache	
☐ Malaise	
☐ Anorexia	
☐ Abscess (Bone, Joint, Muscle)	
☐ Other (specify)	

REMARKS:

THERAPY
Type, Duration and Route of Administration of:

☐ Tetracycline

☐ Streptomycin

☐ Sulfonamides

☐ Other (specify)

☐ Bed Rest (Duration)

REMARKS:

DIAGNOSTIC TESTS

Culture

Blood	Other Specimens (specify)	Date Collected	Date Examined	Isolation Results			Species Isolated	Culture Media	Laboratory
				Pos.	Neg.	Unsat.			
1)									
2)									
3)									
4)									

Serology

Std. Tube Agg.	Other Tests (specify)	Date Collected	Date Examined	Results (Titer, etc.)	Producer of Test Antigen	Laboratory
1)						
2)						
3)						
4)						
CDC – 7 3*						

Skin

Date Performed	Results		Degree of Reaction	Producer of Test Antigen	Laboratory
	Pos.	Neg.			

*Sera positive by tube agglutination may be sent to the CDC for mercaptoethanol-resistant agglutinins test.

CDC 52.25 (7. 4.153)
12/81

FORM APPROVED
OMB NO. 0920-0009

Type of Work or Activity at Onset:

Animal Contact within 6 Months Prior to Onset: 1 ☐ Yes 2 ☐ No 9 ☐ Unknown

If Yes, Place: Dates, From: _____ To _____

Brucellosis Status in Animal Contacts	Commercial Establishments*				Family Owned Animals			
	Cattle		Swine	Other (specify)	Cattle		Swine	Other (Specify)
	Beef	Dairy			Beef	Dairy		
Brucellosis: Present								
Not Present								
Status Unknown								
Under Investigation								
Abortions Noted								

*Includes stockyards, slaughterhouses, packinghouses, dairies, meathandlers, etc.

USE OF MILK OR MILK PRODUCTS

Type Of Product	Pasteurized			Date of Last Consumption Prior to Onset	Source of Milk
	Yes	No	Unk.		

Exposure to Brucella Vaccine: 1 ☐ Yes 2 ☐ No If Yes, Date and Type of Exposure: _____

County Under Control Program 1 ☐ Yes 2 ☐ No If Yes, check ☐ Modified Certified - Bovine) ☐ Certified Free (Bovine) ☐ Validated (Swine)

Additional information about recrudescent cases or those with insidious onset - type of work or activity, contact with animals, species and frequency, place of contact, dates:

_____

Signature

Title

CDC 82.25 (7, 4.183)
12/81

CAMPYLOBACTERIOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

An acute enteric illness of varying severity characterized by diarrhea, bloody diarrhea, abdominal pain, fever, and vomiting. The duration of illness is typically from 2-5 days.

CASE DEFINITION:

Confirmed:

A laboratory confirmed infection.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Campylobacter* from any clinical specimen.

REPORTING CRITERIA:

Laboratory diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Educate public about proper hand-washing after toileting or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
- Assess patient's activities for high-risk settings.
- Educate and advise high-risk patients and food handlers on enteric precautions.

- Exclude symptomatic patients from food handling, generally until asymptomatic. The LHD can require two negative stool cultures taken at least 24 hours apart if they deem the patient's personal hygiene to be inadequate.
- Source investigation by LHD.
- Contacts with animals or animal feces, especially puppies and kittens with diarrhea should be avoided. Stress hand-washing after animal contact.
- Determine if case is outbreak-related and notify the Communicable Disease Branch, 502-564-3261, or the Surveillance and Health Data Branch 502-564-3418 or Division of Epidemiology, 502-564-7243 or 1-888-973-7678.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, FOOD SAFETY AND COSMETICS BRANCH: 502-564-7181.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., MD, ed., CAMPYLOBACTER ENTERITIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 80-84.

Pickering LK, ed. *Campylobacter* Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003:227-229.

CHANCROID

IDENTIFICATION

CLINICAL DESCRIPTION:

A sexually transmitted disease (STD) characterized by painful genital ulceration and inflammatory inguinal adenopathy. The disease is caused by infection with *Haemophilus ducreyi*. Minimally symptomatic lesions may occur on the vaginal wall or cervix; asymptomatic infections may occur in women.

CASE DEFINITION:

Confirmed:

A clinically compatible illness that is laboratory confirmed.

Probable:

A clinically compatible case with both a) no evidence of *Treponema pallidum* infection by darkfield microscopic examination of ulcer exudate or by a serologic test for syphilis performed greater than or equal to 7 days after onset of ulcers and b) either a clinical presentation of the ulcer(s) not typical of disease caused by herpes simplex virus (HSV) or a culture negative for HSV.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Haemophilus ducreyi* from a clinical specimen.

REPORTING CRITERIA:

Laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case. Public health intervention expected.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Report Form – EPID 200 (Rev. Jan/03).
  Note: Section labeled “Additional Information for Sexually Transmitted Diseases Only” must be completed.

PUBLIC HEALTH INTERVENTIONS:

- Patients should be counseled for their risk of HIV and methods to reduce other STDs.

- Patients with genital ulcers should have a darkfield microscopic examination for syphilis. The darkfield examination must be done prior to giving the patient antibiotics.
- Perform serologic test for syphilis weekly until the lesions have resolved. Chancroid ulcers, like other genital ulcers, are associated with increased risk of HIV infection.
- Patients should be instructed that sexual contacts within two weeks before and after onset of symptoms should be referred for evaluation and treatment. Sexual contacts without signs or symptoms should receive prophylactic treatment. Patients should understand the importance of abstaining from having sex while any lesion is present. Women without visible signs may be carriers.

CONTACTS FOR CONSULTATION

DPH, STD CONTROL PROGRAM: 502-564-4804.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. CHANCROID. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 234-235.

2002 Guidelines for the Treatment of Sexually Transmitted Diseases, MMWR Vol. 51(RR-6).

CHLAMYDIA

IDENTIFICATION

CLINICAL DESCRIPTION:

A sexually transmitted disease (STD) caused by obligate intracellular bacteria, *Chlamydia trachomatis*. The disease is characterized by urethritis in males and mucopurulent cervicitis in females. However, males and females may be asymptomatic. Possible complications in males include epididymitis that can lead to sterility. Individuals who engage in receptive anorectal intercourse may develop chlamydia proctitis. Common complications in women include salpingitis and chronic infection of the endometrium and fallopian tubes. These complications can lead to infertility and ectopic pregnancies. Chlamydia can be spread perinatally to the eyes of a newborn. Babies born to infected mothers may also develop pneumonia within the first 3 months of life. Endocervical chlamydia infection has been associated with increased risk of HIV infection.

CASE DEFINITION:

Confirmed:

A laboratory confirmed infection.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *C. trachomatis* by culture, **OR**
- Demonstration of *C. trachomatis* in clinical specimens by detection of antigen or nucleic acid.

REPORTING CRITERIA:

Laboratory confirmation of *Chlamydia trachomatis* by cell culture or non-culture test.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING. REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case. Public health intervention is available on request of the reporting physician.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).
  Note: Section labeled "Additional Information for Sexually Transmitted Diseases Only" must be completed.

PUBLIC HEALTH INTERVENTIONS:

- Patients should be counseled for their risk of HIV and methods to reduce other STDs.
- Patients should also be tested and treated for gonorrhea.
- Patients should be advised to avoid sex until they and their partner(s) complete therapy.
- Source investigations by LHD will be done upon request of the patient or when the LHD deems appropriate. All sexual partners of women and asymptomatic men within 60 days prior to the patient's date of treatment should be examined and treated. For males with symptomatic chlamydia infection, the interview period is also 60 days prior to the onset of symptoms.
- All contacts should be screened for syphilis, gonorrhea and chlamydia and be offered HIV counseling and testing. They should receive immediate preventive treatment for chlamydia.
- Infection during pregnancy may result in conjunctival and pneumonic infection in the newborn. Prenatal screening can prevent chlamydia infections in neonates.
- All infants with conjunctivitis <30 days of age should be evaluated for chlamydia. Chlamydial pneumonia can occur one to three months after birth. These infants are at increased risk for abnormal pulmonary function later in childhood.

CONTACTS FOR CONSULTATION

DPH, STD CONTROL PROGRAM: 502-564-4804.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. CHLAMYDIAL INFECTIONS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 100-102.

2002 Guidelines for the Treatment of Sexually Transmitted diseases,MMWR Vol. 51(RR-6).

Recommendations for the Prevention and Management of *Chlamydia trachomatis* Infections, 1993, MMWR Vol. 42(RR-12).

CHOLERA

IDENTIFICATION

CLINICAL DESCRIPTION:

An acute bacterial disease of variable severity ranging from a mild diarrhea to profuse watery diarrhea, occasional vomiting, and if not treated, rapid dehydration.

CASE DEFINITION:

Confirmed :

A clinically compatible illness that is laboratory confirmed.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of toxigenic (e.g., cholera toxin-producing) *Vibrio cholerae* serogroup O1 or O139 from stool or vomitis, **OR**
- Serologic evidence of recent infection.

REPORTING CRITERIA:

Laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES:

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning **1-888-973-7678** (**1-888-9REPORT**).

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Cholera and Other Vibrio Illness Surveillance Report – CDC 52.79 (Rev. 11/98)

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD to include history of travel to and from endemic areas, dates, mode of transportation, and foods consumed.
    - Surveillance of contacts who shared food and drink for at least five days after exposure.
    - Educate public about proper hand washing after toileting or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
    - Assess patient's activities for high-risk settings.
    - Educate and advise high-risk patients and food handlers on enteric precautions.
    - Determine if case is outbreak-related and notify Communicable Disease Branch 502-564-3261, Surveillance and Health Data Branch, 502-564-3418, or Division of Epidemiology and Health Planning, 502-564-7243 or 1-888-973-7678.
    - Send all specimens to the Centers for Disease Control and Prevention (CDC) by way of the Kentucky State Public Health Laboratory (Division of Lab Services).

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEAES BRANCH: 502-564-3261.
DPH, FOOD SAFETY AND COSMETICS BRANCH: 502-564-7181.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. CHOLERA. In: Control of Communicable Diseases Manual. 18h ed. Washington, DC: American Public Health Association, 2004:103-114.

Pickering LK, ed. Cholera. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 686-688.

PATIENT'S NAME:	TEL.: Home ( ) Work ( )
ADDRESS: 56	
PHYSICIAN'S NAME:	TEL.: ( )

– PATIENT IDENTIFIERS NOT TRANSMITTED TO CDC –

SEND COMPLETED REPORT TO STATE INFECTION CONTROL

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

CHOLERA AND OTHER VIBRIO ILLNESS SURVEILLANCE REPORT

State will forward to: Centers for Disease Control and Prevention
Foodborne and Diarrheal Diseases Branch M/S A38
1600 Clifton Road
Atlanta, GA 30333

OMB 0920-0322 Exp. Date 12/31/2002

I. DEMOGRAPHIC AND ISOLATE INFORMATION

1. First three letters of patients first name: ☐☐☐ (1-3)

REPORTING HEALTH DEPARTMENT

State: ☐☐ (4-5)	City: (6-15)	County/Parish: (16-26)
State No.: (27-37)	CDC USE ONLY (38-48)	FDA No.: (49-57)

2. Date of birth: Mo. ☐☐ Day ☐☐ Yr. ☐☐ (58-63)

3. Age: Years ☐☐ Mos. ☐☐ (64-67)

4. Sex: (68) ☐ M (1) ☐ F (2) ☐ Unk. (9)

5. Race/Ethnicity: (69) ☐ White (not Hispanic) (1) ☐ Black (not Hispanic) (2) ☐ Hispanic (3) ☐ Asian/Pacific Islander (4) ☐ American Indian/ Alaska Native (5) ☐ Other: _____ (8) ☐ Unk. (9)

6. Occupation: (70-81) _____

7. *Vibrio* species isolated (check one or more):

Species	Stool	Blood	Wound	Other	Date specimen collected (If more than one specify earliest date) Mo. Day Yr.	If wound or other, specify site :
☐ *V. alginolyticus*	☐ (82)	☐ (83)	☐ (84)	☐ (85)	(86-91)	(92-103)
☐ *V. cholerae* O1	☐ (104)	☐ (105)	☐ (106)	☐ (107)	(108-113)	(114-125)
☐ *V. cholerae* O139	☐ (126)	☐ (127)	☐ (128)	☐ (129)	(130-135)	(136-147)
☐ *V. cholerae* ***non***-O1, ***non***-O139	☐ (148)	☐ (149)	☐ (150)	☐ (151)	(152-157)	(158-169)
☐ *V. cincinnatiensis*	☐ (170)	☐ (171)	☐ (172)	☐ (173)	(174-179)	(180-191)
☐ *V. damsela*	☐ (192)	☐ (193)	☐ (194)	☐ (195)	(196-201)	(202-213)
☐ *V. fluvialis*	☐ (214)	☐ (215)	☐ (216)	☐ (217)	(218-223)	(224-235)
☐ *V. furnissii*	☐ (236)	☐ (237)	☐ (238)	☐ (239)	(240-245)	(246-257)
☐ *V. hollisae*	☐ (258)	☐ (259)	☐ (260)	☐ (261)	(262-267)	(268-279)
☐ *V. metschnikovii*	☐ (280)	☐ (281)	☐ (282)	☐ (283)	(284-289)	(290-301)
☐ *V. mimicus*	☐ (302)	☐ (303)	☐ (304)	☐ (305)	(306-311)	(312-323)
☐ *V. parahaemolyticus*	☐ (324)	☐ (325)	☐ (326)	☐ (327)	(328-333)	(334-345)
☐ *V. vulnificus*	☐ (346)	☐ (347)	☐ (348)	☐ (349)	(350-355)	(356-367)
☐ *Vibrio* species - not identified	☐ (368)	☐ (369)	☐ (370)	☐ (371)	(372-377)	(378-389)
☐ Other (specify): _____ (390-405)	☐ (406)	☐ (407)	☐ (408)	☐ (409)	(410-415)	(416-427)

8. Were other organisms isolated from the same specimen that yielded *Vibrio*? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (428)

Specify organism(s): _____ (429-450)

9. Was the identification of the species of *Vibrio* (e.g., *vulnificus, fluvialis*) confirmed at the State Public Health Laboratory? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (451)

10. Complete the following information if the isolate is *Vibrio cholerae* O1 or O139:

Serotype (452) (check one)
☐ Inaba (1) ☐ Not Done (4)
☐ Ogawa (2) ☐ Unk. (9)
☐ Hikojima (3)

Biotype (453) (check one)
☐ El Tor (1) ☐ Not Done (3)
☐ Classical (2) ☐ Unk. (9)

Toxigenic? (454) (check one) Yes (1) ☐ No (2) ☐ Unk. (9) ☐

If YES, toxin positive by: (check all, that apply)
☐ ELISA (455)
☐ Latex agglutination (456)
☐ Other (specify): _____ (457-471)

Name of Hospital: _____

Address: _____

State: ____ Age: ____ Sex: ____

II. CLINICAL INFORMATION

Vibrio species: _____

1. Date and time of onset of first symptoms:

Mo. Day Yr. (472-7)

Hour Min. (478-9) (480-1) ☐ am (1) ☐ pm (2) (482)

2. Symptoms and signs:

max. temp. ____ • ____ (483-5) (486) (487) ☐ F (1) ☐ C (2) (488)

	Yes (1)	No (2)	Unk. (9)	
Fever	☐	☐	☐	(489)
Nausea	☐	☐	☐	(490)
Vomiting	☐	☐	☐	(491)
Diarrhea	☐	☐	☐	(492)
(max. no. stools/24 hours: _____) (493-494)				
Visible blood in stools	☐	☐	☐	(495)
Abdominal cramps	☐	☐	☐	(496)
Headache	☐	☐	☐	(497)
Muscle pain	☐	☐	☐	(498)
Cellulitis	☐	☐	☐	(499) Site: _____ (500-514)
Bullae	☐	☐	☐	(515) Site: _____ (516-530)
Shock (systolic BP <90)	☐	☐	☐	(531)
Other	☐	☐	☐	(532) (specify): _____ (533-549)

3. Total duration of illness: _____ (days) (550-552)

4. Admitted to a hospital for this illness? (553) ☐ Yes (1) ☐ No (2) ☐ Unk.(9)

	Mo.	Day	Yr.	
Admission date:				(554-559)
Discharge date:				(560-565)

5. Any sequelae? (e.g., amputation, skin graft) (566) ☐ Yes (1) ☐ No (2) ☐ Unk.(9)

If YES, describe: _____ (567-635)

6. Did patient die? (636) ☐ Yes (1) ☐ No (2) ☐ Unk.(9)

If YES, date of death: Mo. Day Yr. (637-642)

7. Did patient take an antibiotic as treatment for this illness? (643) Yes (1) ☐ No (2) ☐ Unk. (9) ☐

If YES, name(s) of antibiotic(s):

		Date began antibiotic: Mo. Day Yr.	Date ended antibiotic: Mo. Day Yr.
1.	(644-646)	(647-652)	(653-658)
2.	(659-661)	(662-667)	(668-673)
3.	(674-676)	(677-682)	(683-688)

8. Pre-existing conditions?

	Yes (1)	No (2)	Unk. (9)		
Alcoholism	☐	☐	☐	(689)	
Diabetes	☐	☐	☐	(690)	on insulin? ☐ ☐ ☐ (691)
Peptic ulcer	☐	☐	☐	(692)	
Gastric surgery	☐	☐	☐	(693)	type: _____ (694-709)
Heart disease	☐	☐	☐	(710)	Heart failure? ☐ ☐ ☐ (711)
Hematologic disease	☐	☐	☐	(712)	type: _____ (713-728)
	☐	☐	☐	(729)	type: _____ (730-745)
Immunodeficiency	☐	☐	☐	(746)	type: _____ (747-762)
Liver disease	☐	☐	☐	(763)	type: _____ (764-779)
Malignancy	☐	☐	☐	(780)	type: _____ (781-796)
Renal disease	☐	☐	☐	(797)	specify: _____ (798-810)
Other					

9. Was the patient receiving any of the following treatments or taking any of the following medications in the 30 days before this *Vibrio* illness began?

	Yes (1)	No (2)	Unk. (9)		If YES, specify treatment and dates:
Antibiotics	☐	☐	☐	(811)	_____ (812-830)
Chemotherapy	☐	☐	☐	(831)	_____ (832-850)
Radiotherapy	☐	☐	☐	(851)	_____ (852-870)
Systemic steroids	☐	☐	☐	(871)	_____ (872-890)
Immunosuppressants	☐	☐	☐	(891)	_____ (892-910)
Antacids	☐	☐	☐	(911)	_____ (912-930)
H_2-Blocker or other ulcer medication (e.g., Tagamet, Zantac, Omeprazole)	☐	☐	☐	(931)	_____ (932-950)

III. EPIDEMIOLOGIC INFORMATION

1. Did this case occur as part of an outbreak? (Two or more cases of *Vibrio* infection) Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (951) If YES, describe: _____ (952-970)

2. Did the patient travel outside his/her home state in the 7 days before illness began? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (973)

Patient home state: ____ (971-972)

If YES, list destination(s) and dates:

	City/State/Country	Date Entered Mo. Day Yr.	Date Left Mo. Day Yr.
1.	(974-1004)	(1005-1010)	(1011-1016)
2.	(1017-1047)	(1048-1053)	(1054-1059)
3.	(1060-1090)	(1091-1096)	(1097-1102)

3. Please specify which of the following seafoods were eaten by the patient in the 7 days before illness began: (If multiple times, most recent meal)

Type of seafood	Yes (1)	No (2)	Unk. (9)		Mo. Day Yr.		Any eaten raw? Yes (1)	No (2)	Unk. (9)	
Clams	☐	☐	☐	(1103)		(1104-1109)	☐	☐	☐	(1110)
Crab	☐	☐	☐	(1111)		(1112-1117)	☐	☐	☐	(1118)
Lobster	☐	☐	☐	(1119)		(1120-1125)	☐	☐	☐	(1126)
Mussels	☐	☐	☐	(1127)		(1128-1133)	☐	☐	☐	(1134)
Oysters	☐	☐	☐	(1135)		(1136-1141)	☐	☐	☐	(1142)
Shrimp	☐	☐	☐	(1143)		(1144-1149)	☐	☐	☐	(1150)
Crawfish	☐	☐	☐	(1151)		(1152-1157)	☐	☐	☐	(1158)
Other shellfish	☐	☐	☐	(1159)		(1160-1165)	☐	☐	☐	(1166)
(specify): _____										(1167-1191)
Fish	☐	☐	☐	(1192)		(1193-1198)	☐	☐	☐	(1199)
(specify): _____										(1200-1225)

State: Age: Sex:

III. EPIDEMIOLOGIC INFORMATION (CONT.)

Vibrio species: _____

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4. In the 7 days before illness began, was patient's skin exposed to any of the following?

	Yes (1)	No (2)	Unk. (9)	
A body of water (fresh, salt, or brackish water)	☐	☐	☐	(1226)
Drippings from raw or live seafood	☐	☐	☐	(1227)
Other contact with marine or freshwater life	☐	☐	☐	(1228)

If YES, specify body of water location: _____ (1229-1242)

Date of exposure: Mo. ☐☐ Day ☐☐ Yr. ☐☐ (1250-5)

Time of exposure: Hour ☐☐ (1256-7) Min. ☐☐ (1258-9) ☐ am (1) ☐ pm (2) (1260)

If YES to any of the above, answer each:

	Yes (1)	No (2)	Unk. (9)	
Handling/cleaning seafood	☐	☐	☐	(1243)
Swimming/diving/wading	☐	☐	☐	(1244)
Walking on beach/shore/ fell on rocks/shells	☐	☐	☐	(1245)
Boating/skiing/surfing	☐	☐	☐	(1246)
Construction/repairs	☐	☐	☐	(1247)
Bitten/stung	☐	☐	☐	(1248)
Other: (specify)	☐	☐	☐	(1249)

_____ (1261-1275)

- If skin was exposed to water, indicate type: (1276)

☐ Salt (1) ☐ Brackish (3) ☐ Unk. (9)
☐ Fresh (2) ☐ Other (8) (specify): _____ (1277-1284)

Additional comments:
_____
_____ (1285-1290)

- If skin was exposed, did the patient sustain a wound during this exposure, or have a pre-existing wound? (choose one): (1291)

☐ YES, sustained a wound. (1) ☐ YES, had a pre-existing wound. (2) ☐ YES, uncertain if wound new or old. (3) ☐ NO. (4) ☐ Unk . (9)

If YES, describe how wound occurred and site on body :
(Note: Skin bullae that appear as part of the acute illness should be recorded in section II, Clinical Information, only).

_____ (1292-1320)

If isolate is *Vibrio cholerae* O1or O139 please answer questions 5 - 8.

5. If patient was infected with *V. cholerae* O1 or O139, to which of the following risks was the patient exposed in the 4 days before illness began:

	Yes (1)	No (2)	Unk. (9)	
Raw seafood	☐	☐	☐	(1321)
Cooked seafood	☐	☐	☐	(1322)
Foreign travel	☐	☐	☐	(1323)
Other person(s) with cholera or cholera-like illness	☐	☐	☐	(1324)
Street-vended food	☐	☐	☐	(1325)
Other	☐	☐	☐	(1326)

(specify): _____ (1327-1350)

6. If answered "yes" to foreign travel (question III. 5), had the patient been educated in cholera prevention measures before travel? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1351)

If YES, check all source(s) of information received:

☐ Pre-travel clinic (1352) ☐ Friends (1355) ☐ Travel agency (1358)
☐ Airport (departure gate) (1353) ☐ Private physician (1356) ☐ CDC travelers' hotline (1359)
☐ Newspaper (1354) ☐ Health department (1357) ☐ Other (specify): (1360) _____ (1361-1400)

7. If answered "yes" to foreign travel (question III. 5), what was the patient's reason for travel? (check all that apply)

☐ To visit relatives/friends (1401)
☐ Business (1402)
☐ Tourism (1403)
☐ Military (1404)
☐ Other (specify): (1405) _____
_____ (1406-1426)
☐ Unk. (1427)

8. Has patient ever received a cholera vaccine? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1428)

(If YES, specify type most recently received):
☐ Oral (1429) ☐ Parenteral (1430)

Most recent date: Mo. ☐☐ Day ☐☐ Yr. ☐☐ (1431-1436)

If domestically acquired illness due to <u>any</u> *Vibrio* species is suspected to be related to seafood consumption, please complete section IV (Seafood Investigation).

ADDITIONAL INFORMATION or COMMENTS

_____
_____
_____
_____

CDC Use Only
Comment: (1444-1454)
Source: (1443) ☐
_____
_____
Syndrome: (1455) ☐
CDC Isolate No.
_____ (1456-1463)

Person completing section I - III: _____ **Date:** Mo. ☐☐ Day ☐☐ Yr. ☐☐ (1437-1442)

Title/Agency: _____ **Tel.:** ( ) _____

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Project Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA 30333, ATTN: PRA (0920-0322). Do not send the completed form to this address.

State: Age: Sex:

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IV. SEAFOOD INVESTIGATION SECTION

Vibrio species: _____

For each seafood ingestion investigated, please complete as many of the following questions as possible. (Include additional pages section IV if more than one seafood type was ingested and investigated.)

1. Type of seafood (e.g., clams): _____ (1464-1480)

Date consumed: Mo. Day Yr. (1481-1486)

Time consumed: Hour (1487-8) Min. (1489-90) ☐ am (1) ☐ pm (2) (1491)

Amount consumed: (1492-1512)

If patient ate multiple seafoods in the 7 days before onset of illness, please note why this seafood was investigated (e.g.,consumed raw, implicated in outbreak investigation):

_____

2. How was this fish or seafood prepared? (1513)

☐ Raw (1) ☐ Baked (2) ☐ Boiled (3) ☐ Broiled (4) ☐ Fried (5) ☐ Steamed (6) ☐ Unk. (9) ☐ Other (8) (specify): _____ (1514-1530)

3. Was seafood imported from another country? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1531) If YES, specify exporting country if known: _____ (1532-1554)

4. Was this fish or shellfish harvested by the patient or a friend of the patient? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1555) (If YES, go to question 12.)

5. Where was this seafood obtained? (1556) (Check one)

☐ Oyster bar or restaurant (1) ☐ Seafood market (4) ☐ Unk. (9)
☐ Truck or roadside vendor (2) ☐ Other (8)
☐ Food store (3) (specify): _____ (1557-1590)

6. Name of restaurant, oyster bar, or food store: _____

Tel.: ( )

Address:

7. If oysters, clams, or mussels were eaten, how were they distributed to the retail outlet? (1591)

☐ Shellstock (sold in the shell) (1) ☐ Shucked (2) ☐ Unk. (9) ☐ Other (8) (specify): _____ (1592-1610)

8. Date restaurant or food outlet received seafood: Mo. Day Yr. (1611-1616)

9. Was this restaurant or food outlet inspected as part of this investigation? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1617)

10. Are shipping tags available from the suspect lot? (1618) Yes (1) ☐ No (2) ☐ Unk. (9) ☐

(Attach copies if available)

11. Shippers who handled suspected seafood: (please include certification numbers if on tags)

_____

_____

12. Source(s) of seafood:

_____

_____

13. Harvest site:

_____ (1619-1639) **Date:** Mo. Day Yr. (1640-1645) **Status:** (1646) ☐ Approved (1) ☐ Prohibited (2) ☐ Conditional (3) ☐ Other (8) (specify): _____ (1647-1666)

_____ (1667-1687) Mo. Day Yr. (1688-1693) (1694) ☐ Approved (1) ☐ Prohibited (2) ☐ Conditional (3) ☐ Other (8) (specify): _____ (1695-1714)

14. Physical characteristics of harvest area as close as possible to harvest date:

		Result		Date Measured Mo. Day Yr.
Maximum ambient temp.	(1715-1718)		☐ F (1) ☐ C (2) (1719)	(1720-1725)
Surface water temp.	(1726-1727)		☐ F (1) ☐ C (2) (1728)	(1729-1734)
Salinity (ppt)	(1735-1736)			(1737-1742)
Total rainfall (inches in prev. 5 days)	(1743-1744)			(1745-1750)
Fecal coliform count	(1751-1755)			(1756-1761) (Attach copy of coliform data)

15. Was there evidence of improper storage, cross-contamination, or holding temperature at any point? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1762) If YES, specify deficiencies:

_____

_____

Person completing section IV: _____

Date: Mo. Day Yr. (1763-1768)

Title/Agency: _____

Tel.: ( )

CRYPTOSPORIDIOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness caused by the protozoan *Cryptosporidium parvum* and characterized by diarrhea, abdominal cramps, anorexia, low-grade fever, nausea and vomiting. Infected persons may be asymptomatic. The disease can be prolonged and life-threatening in severely immunocompromised persons.

CASE DEFINITION:

Confirmed:

Symptomatic and asymptomatic cases that are laboratory confirmed.

.LABORATORY CRITERIA FOR CONFIRMATION:

- Detection of *Cryptosporidium* oocysts in stool by microscopic examination, **OR**
- Detection of *Cryptosporidium* oocysts in small bowel biopsy specimens or intestinal fluid, **OR**
- Detection of *Cryptosporidium* oocyst or sporozoite antigens by immunodiagnostic methods, e.g., ELISA, **OR**
- Detection by PCR techniques when routinely available, **OR**
- Demonstration of reproductive stages in tissue preparations.

REPORTING CRITERIA:

Laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Assess case for association with high-risk setting (e.g., day care, food handling, or health care provider).
- Exclude symptomatic patients from food handling until asymptomatic, and from direct care of hospitalized and institutionalized patients until asymptomatic.
- Conduct cluster investigation if two or more cases occur in a close geographic or temporal setting or if cases share a common potential exposure (e.g., recreational water, community event, farm-animal-related exposure).

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, FOOD SAFETY AND COSMETICS BRANCH: 502-564-7181.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. CRYPTOSPORIDIOSIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 137-141.

Pickering LK, ed. Cryptosporidiosis. In: 2003 Red Book: Report of the Committee on Infectious diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 255-257.

DIPHTHERIA

IDENTIFICATION

CLINICAL DESCRIPTION:

An upper respiratory tract illness characterized by sore throat, low-grade fever, and an adherent membrane of the tonsils, pharynx, and/or nose.

CASE DEFINITION:

Confirmed:

A clinically compatible illness that is either laboratory confirmed or epidemiology linked to a laboratory-confirmed case.

Probable:

A clinically compatible case that is not lab confirmed and not epidemiologically linked to a laboratory confirmed case.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Corynebacterium diphtheriae* from clinical specimen.
- Histopathologic diagnosis of diphtheria.

REPORTING CRITERIA:

Clinical diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning, **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PREVENTION MEASURES:

- Diphtheria toxoid is routinely administered with tetanus toxoid and acellular pertussis vaccine at 2, 4, 6, 12-18 months of age and school entry (4-6 years of age). Maintain active protection among adults by administering a booster dose of Td every 10 years.
- Ensure that those at higher risk of patient exposure, such as health care workers, are fully immunized and receive a booster dose of Td every 10 years.

PUBLIC HEALTH INTERVENTIONS:

- Isolate case until two cultures taken not less than 24 hours apart and not less than 24 hours after cessation of antimicrobial therapy are negative. If cultures cannot be obtained, isolation may end after 14 days of appropriate treatment.
- Culture all close contacts and keep under surveillance for seven days.
- Identify contacts that handle food or milk or have contacts with unimmunized children. Exclude these contacts from high-risk occupations until negative cultures are obtained.
- Treat all contacts (a single dose of penicillin IM or a 7-10 day course of erythromycin PO) regardless of their immunization status.
- Give a booster dose of a preparation containing diphtheria toxoid to previouslimmunized contacts and a primary series to unimmunized contacts.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L,MD ed.DIPHTHERIA. In:Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004:171-176.

Pickering LK, ed. Diphtheria. In: 2000 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk GroveVillage, IL:American Academy of Pediatrics, 2003:263-266.

CDC Diphtheria Worksheet

Date of Request (Month Day Year)

Name (Last, First)

Birth Date (Month Day Year)

Age (Unk = 999)

Age Type
0 = 0-120 years
1 = 0-11 months
2 = 0-52 weeks
3 = 0-28 days
9 = Age unknown

Sex
M = Male
F = Female
U = Unknown

Pregnant?
Y = Yes
N = No
U = Unknown

Race
N = Native Amer./Alaskan Native
A = Asian/Pacific Islander
B = African American
W = White
O = Other
U = Unknown

Ethnicity
H = Hispanic
N = Not Hispanic
U = Unknown

Address (Street and No.)

County

State

Zip

Phone

Date Symptom Onset (Month Day Year)

Date First Diagnosis (Month Day Year)

Date Hospitalized (Month Day Year)

History of Immunization Against Diphtheria

Childhood Primary Series?
Y = Yes
N = No
U = Unknown

If < 18 Years Old, Number of Doses

Boosters as Adult?
Y = Yes
N = No
U = Unknown

Date of Last Dose (Month Day Year) OR U = Unk

Description of Clinical Picture

Outcome
N = Recovered, No Residua
R = Recovered, Residua
D = Died
U = Unknown

Enter Y = Yes, N = No, or U = Unknown in the Boxes Below Unless Otherwise Indicated

Symptoms

- Fever?
- Sore Throat?
- Difficulty Swallowing?
- Change in Voice?
- Shortness of Breath?
- Weakness?
- Fatigue?
- Other?

Signs

- Fever?
- If Yes, Temp ___ °C
- Membrane?
- If Yes, Site(s)
  - Tonsils
  - Soft Palate
  - Hard Palate
  - Larynx
  - Nares
  - Nasopharynx
  - Conjunctiva
  - Skin
- Soft Tissue Swelling? (Around Membrane)
- Neck Edema?
- If Yes
  - B = Bilateral
  - L = Left Side Only
  - R = Right Side Only
- If Yes, Extent
  - S = Submandibular Only
  - M = Midway to Clavicle
  - C = To Clavicle
  - B = Below Clavicle
- Stridor?
- Wheezing?
- Palatal Weakness?
- Tachycardia?
- EKG Abnormalities?

Complications

- Complications?
- Airway Obstruction?
- Date of Onset (Month Day Year)
- Intubation Required?
- Myocarditis?
- Date of Onset (Month Day Year)
- (Poly)neuritis?
- Date of Onset (Month Day Year)
- Other?
- Describe:

Specimen for Diphtheria Culture Obtained?
Y = Yes
N = No
U = Unknown

If Yes, Obtained on (Month Day Year) OR U = Unknown

Culture Result
P = Positive
N = Negative
U = Unknown

Specify Lab Performing Culture:

If Culture Positive, Biotype
M = Mitis
G = Gravis
I = Intermedius
B = Belfanti

If Culture Positive, Results of Toxigenicity Testing
X = Not Done
P = Positive
N = Negative
U = Unknown

Specimen Sent to CDC Diphtheria Lab for Confirmation/Molecular Typing?
Y = Yes
N = No
W = Will be Sent

Type of Specimen (Check All That Apply)
- Clinical Swab
- Piece of Membrane
- *C. diphtheria* Isolate

Serum Specimen for Diphtheria Antitoxin Antibodies Obtained?
Y = Yes
N = No
W = Will be Obtained Prior to DAT

PCR Result
P = Positive
N = Negative
U = Unknown
X = Not Done

Treated with Antibiotics?
Y = Yes
N = No

As an Outpatient

If Yes, Date Initiated (Month Day Year)

Antibiotic (See Codes Below)

Duration of Therapy (Days)

Antibiotic Therapy in Hospital?
Y = Yes
N = No

As an Inpatient

If Yes, Date Initiated (Month Day Year)

Antibiotic (See Codes Below)

Duration of Therapy (Days)

Were Antibiotics Given in the 24 Hours Before Culture?
Y = Yes
N = No
U = Unknown

Antibiotic Codes
1 = Erythromycin (incl. Pediazole, ilosone)
2 = Penicillin (Bicillin, Pfizerpen-AS, Wycillin)
3 = Amoxicillin/Ampicillin/Augmentin/Cecior/Cefixime
4 = Clarithromycin/azithromycin
5 = Cotrimoxazole (bactrim/septra)
6 = Tetracycline/Doxycycline
7 = Other
9 = Unknown

Note: This Form Has 2 Sides

Country of Residence
U = US
O = Other

If Other, Country Name:

Date of US Arrival
Month Day Year OR U = Unknown

History of International Travel?
(2 Weeks Prior to Onset)
Y = Yes
N = No
U = Unknown

Country(s) Visited | From (Month Day Year) | To (Month Day Year)

History of Interstate Travel?
(2 Weeks Prior to Onset)
Y = Yes
N = No
U = Unknown

State(s) Visited | From (Month Day Year) | To (Month Day Year)

Known Exposure to Diphtheria Case or Carrier?
Y = Yes
N = No
U = Unknown

Known Exposure to International Travelers?
Y = Yes
N = No
U = Unknown

Known Exposure to Immigrants?
Y = Yes
N = No
U = Unknown

Has This Suspected Case Been Reported to The State or Local Health Department?
Y = Yes
N = No
U = Unknown

Date Reported to State or Local Health Department
Month Day Year

Person Informed: Phone Fax

Reporting Physician: Phone Fax

Name

Institution

Street

City State Zip

Phone Fax

Name of Investigator Under the IND (if Different From Requesting Physician) Phone Fax

Name

Attn.

Institution

Street

City State Zip

Phone Fax

Amount of DAT Administered: , IU DAT

Final Diagnosis:

How Was the Final Diagnosis Confirmed?

Final Case Disposition
C = Confirmed
P = Probable
N = Not a Case

Information for Close Contacts*
Diphtheria

*Close Contact = Household members and others with a history of direct contact with a case-patient, and medical staff exposed to oral or respiratory secretions of a case-patient.

CONTACT INFORMATION

Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
☐ Y = Yes N = No U = Unknown	☐ U = Unknown L = < 3 Doses G = ≥ 3 Doses	☐ L = ≤ 5 Years Ago G = > 5 Years Ago	☐ Y = Yes N = No U = Unknown	☐ Y = Yes N = No U = Unknown	☐☐ ☐☐ ☐☐ Month Day Year	☐ P = Positive N = Negative U = Unknown	☐ See Codes Below

Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
☐ Y = Yes N = No U = Unknown	☐ U = Unknown L = < 3 Doses G = ≥ 3 Doses	☐ L = ≤ 5 Years Ago G = > 5 Years Ago	☐ Y = Yes N = No U = Unknown	☐ Y = Yes N = No U = Unknown	☐☐ ☐☐ ☐☐ Month Day Year	☐ P = Positive N = Negative U = Unknown	☐ See Codes Below

Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
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Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
☐ Y = Yes N = No U = Unknown	☐ U = Unknown L = < 3 Doses G = ≥ 3 Doses	☐ L = ≤ 5 Years Ago G = > 5 Years Ago	☐ Y = Yes N = No U = Unknown	☐ Y = Yes N = No U = Unknown	☐☐ ☐☐ ☐☐ Month Day Year	☐ P = Positive N = Negative U = Unknown	☐ See Codes Below

Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
☐ Y = Yes N = No U = Unknown	☐ U = Unknown L = < 3 Doses G = ≥ 3 Doses	☐ L = ≤ 5 Years Ago G = > 5 Years Ago	☐ Y = Yes N = No U = Unknown	☐ Y = Yes N = No U = Unknown	☐☐ ☐☐ ☐☐ Month Day Year	☐ P = Positive N = Negative U = Unknown	☐ See Codes Below

Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
☐ Y = Yes N = No U = Unknown	☐ U = Unknown L = < 3 Doses G = ≥ 3 Doses	☐ L = ≤ 5 Years Ago G = > 5 Years Ago	☐ Y = Yes N = No U = Unknown	☐ Y = Yes N = No U = Unknown	☐☐ ☐☐ ☐☐ Month Day Year	☐ P = Positive N = Negative U = Unknown	☐ See Codes Below

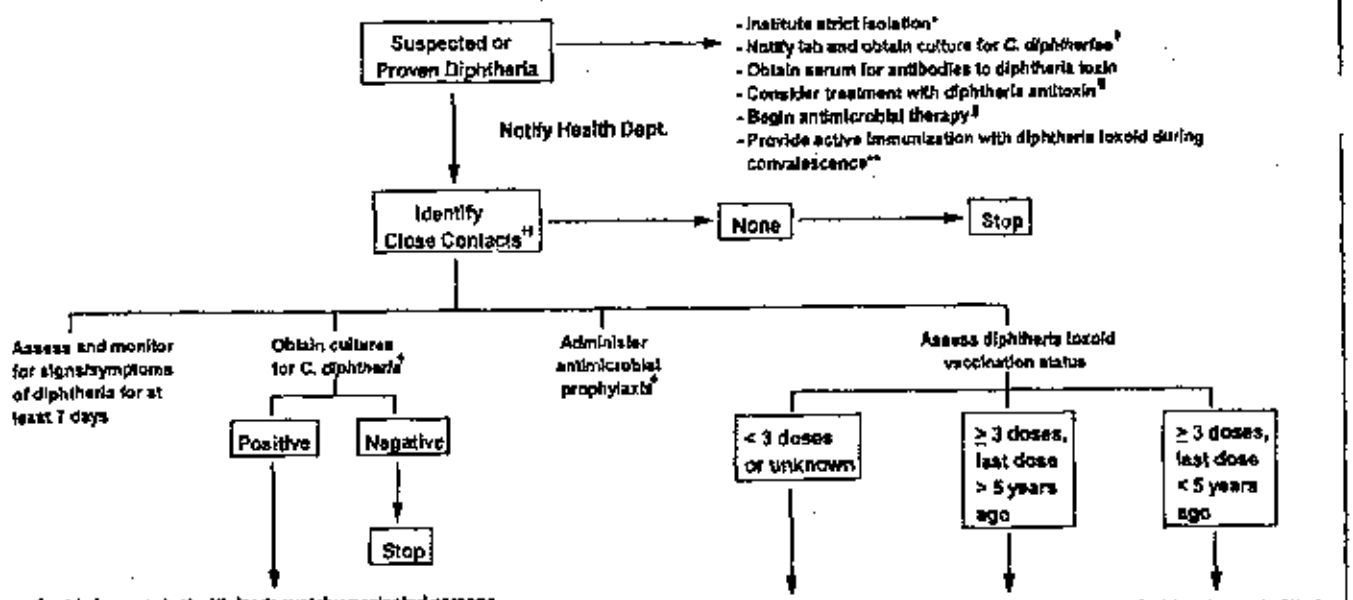
Name	Age	Relation to Case

Vaccinated?	If Vaccinated, Number of Lifetime Doses	If Vaccinated, Last Dose	Nasopharyngeal Culture Obtained?	Oropharyngeal (Throat) Culture Obtained?	Date of Culture	Results	Antibiotic Prophylaxis
☐ Y = Yes N = No U = Unknown	☐ U = Unknown L = < 3 Doses G = ≥ 3 Doses	☐ L = ≤ 5 Years Ago G = > 5 Years Ago	☐ Y = Yes N = No U = Unknown	☐ Y = Yes N = No U = Unknown	☐☐ ☐☐ ☐☐ Month Day Year	☐ P = Positive N = Negative U = Unknown	☐ See Codes Below

Antibiotic Codes

1 = Erythromycin (incl. Pediazole, Ilosone)
2 = Penicillin (Bicillin, Pfizerpen-AS, Wycillin)
3 = Amoxicillin/Ampicillin/Augmentin/Ceclor/Cefixime
4 = Clarithromycin/azithromycin
5 = Cotrimoxazole (bactrim/septra)
6 = Tetracycline/Doxycycline
7 = Other
9 = Unknown

Note: This Form has 2 Sides



*Maintain isolation until elimination of the organism is demonstrated by negative cultures of two samples obtained at least 24 hours apart after completion of antimicrobial therapy.

†Both nasal and pharyngeal swabs should be obtained for culture.

‡If equine diphtheria antitoxin is needed, contact your State Health Department. Before administration, patients should be tested for sensitivity to horse serum and, if necessary, desensitized. The recommended dosage and route of administration depend on the extent and duration of disease. Detailed recommendations can be obtained from the package insert and other publications.

§Antimicrobial therapy is not a substitute for antitoxin treatment. Intramuscular procaine penicillin G (25,000-50,000 units/[kg/d] for children and 1.2 million units/d for adults, in two divided doses) or parenteral erythromycin (40-50 mg/[kg/d], with a maximum of 2 g/d) has been recommended until the patient can swallow comfortably, at which point oral erythromycin in four divided doses or oral penicillin V (125-250 mg four times daily) may be substituted for a recommended total treatment period of 14 days.

**Vaccination is required because clinical diphtheria does not necessarily confer immunity.

††Close contacts include household members and other persons with a history of direct contact with a case-patient (e.g. caretakers, relatives, or friends who regularly visit the home) as well as medical staff exposed to oral or respiratory secretions of a case-patient.

‡‡A single dose of intramuscular benzathine penicillin G (600,000 units for persons < 6 years of age and 1.2 million units for persons ≥ 6 years of age) or a 7- to 10-day course of oral erythromycin (40mg/[kg/d] for children and 1 g/d for adults) has been recommended.

§§Preventative measures may be extended to close contacts of carriers but should be considered a lower priority than control measures for contacts of each case.

***Persons who continue to harbor the organism after treatment with either penicillin or erythromycin should receive an additional 10-day course of oral erythromycin and should submit samples for follow-up cultures.

***Refer to published recommendations for the schedule for routine administration of DTP.

Farizo KM, Strebel PM, Chen RT, et al. Fatal respiratory disease due to *Corynebacterium diphtheriae*: Case report and review of guidelines for management, investigation, and control. Clin Infect Dis 1993;16:59-68. Centers for Disease Control and Prevention. Manual for the Surveillance of Vaccine-Preventable Diseases 1996;2-9.

EHRLICHIOSIS

Clinical presentation

A tick-borne illness characterized by acute onset of fever and one or more of the following symptoms or signs: headache, myalgia, malaise, anemia, leukopenia, thrombocytopenia, or elevated hepatic transaminases. Nausea, vomiting, or rash may be present in some cases. Intracytoplasmic bacterial aggregates (morulae) may be visible in the leukocytes of some patients.

Clinical evidence

Any reported fever and one or more of the following: headache, myalgia, anemia, leukopenia, thrombocytopenia, or any hepatic transaminase elevation.

Laboratory evidence

For the purposes of surveillance,

1. ***Ehrlichia chaffeensis* infection** (formerly included in the category Human Monocytic Ehrlichiosis [HME]):

   Laboratory confirmed:

   - Serological evidence of a fourfold change in immunoglobulin G (IgG)-specific antibody titer to *E. chaffeensis* antigen by indirect immunofluorescence assay (IFA) between paired serum samples (one taken in first week of illness and a second 2-4 weeks later), **or**
   - Detection of *E. chaffeensis* DNA in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay, **or**
   - Demonstration of ehrlichial antigen in a biopsy or autopsy sample by immunohistochemical methods, **or**
   - Isolation of *E. chaffeensis* from a clinical specimen in cell culture.

   Laboratory supportive:

   - Serological evidence of elevated IgG or IgM antibody reactive with *E. chaffeensis* antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or assays in other formats (CDC uses an IFA IgG cutoff of ≥1:64 and does not use IgM test results independently as diagnostic support criteria.), **or**

- Identification of morulae in the cytoplasm of monocytes or macrophages by microscopic examination.

2. ***Ehrlichia ewingii*** infection (formerly included in the category Ehrlichiosis [unspecified, or other agent]):

   Laboratory confirmed:

   - Because the organism has never been cultured, antigens are not available. Thus, *Ehrlichia ewingii* infections may only be diagnosed by molecular detection methods: *E. ewingii* DNA detected in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay.

3. ***Anaplasma phagocytophilum* infection** (formerly included in the category Human Granulocytic Ehrlichiosis [HGE]):

   Laboratory confirmed:

   - Serological evidence of a fourfold change in IgG-specific antibody titer to *A. phagocytophilum* antigen by indirect immunofluorescence assay (IFA) in paired serum samples (one taken in first week of illness and a second 2-4 weeks later), **or**
   - Detection of *A. phagocytophilum* DNA in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay, **or**
   - Demonstration of anaplasmal antigen in a biopsy/autopsy sample by immunohistochemical methods, **or**
   - Isolation of *A. phagocytophilum* from a clinical specimen in cell culture.

   Laboratory supportive:

   - Serological evidence of elevated IgG or IgM antibody reactive with A. phagocytophilum antigen by IFA, enzyme-linked immunosorbent Assay (ELISA), dot-ELISA, or assays in other formats (CDC uses an IFA IgG cutoff of ≥1:64 and does not use IgM test results independently as diagnostic support criteria.), **or**
   - Identification of morulae in the cytoplasm of neutrophils or eosinophils by microscopic examination.

4. **Human ehrlichiosis/anaplasmosis – undetermined:**

   - See case classification

Exposure

Exposure is defined as having been in potential tick habitats within the past 14 days before onset of symptoms. A history of a tick bite is not required.

Case Classification

Confirmed: A clinically compatible case (meets clinical evidence criteria) that is laboratory confirmed.

Probable: A clinically compatible case (meets clinical evidence criteria) that has supportive laboratory results. For ehrlichiosis/anaplasmosis – an undetermined case can only be classified as probable. This occurs when a case has compatible clinical criteria with laboratory evidence to support ehrlichia/anaplasma infection, but not with sufficient clarity to definitively place it in one of the categories previously described. This may include the identification of morulae in white cells by microscopic examination in the absence of other supportive laboratory results.

Suspect: A case with laboratory evidence of past or present infection but no clinical information available (e.g. a laboratory report).

Comment

There are at least three species of bacteria, all intracellular, responsible for ehrlichiosis/ anaplasmosis in the United States: *Ehrlichia chaffeensis*, found primarily in monocytes, and *Anaplasma phagocytophilum* and *Ehrlichia ewingii*, found primarily in granulocytes. The clinical signs of disease that result from infection with these agents are similar, and the range distributions of the agents overlap, so testing for one or more species may be indicated. Serologic cross-reactions may occur among tests for these etiologic agents.

Four sub-categories of confirmed or probable ehrlichiosis/anaplasmosis should be reported: 1) human ehrlichiosis caused by *Ehrlichia chaffeensis*, 2) human ehrlichiosis caused by *E. ewingii*, 3) human anaplasmosis caused by *Anaplasma phagocytophilum*, or 4) human ehrlichiosis/anaplasmosis - undetermined. Cases reported in the fourth sub-category can only be reported as “probable” because the cases are only weakly supported by ambiguous laboratory test results.

Problem cases for which sera demonstrate elevated antibody IFA responses to more than a single infectious agent are usually resolvable by comparing the levels of the antibody responses, the greater antibody response generally being that directed at the actual agent involved. Tests of additional sera and further evaluation via the use of PCR, IHC, and isolation via cell culture may be needed for further clarification. Cases involving persons infected with more than a single etiologic agent, while possible, are extremely rare and every effort should be undertaken to resolve cases that appear as such (equivalent IFA antibody titers) via other explanations.

Current commercially available ELISA tests are not quantitative, cannot be used to evaluate changes in antibody titer, and hence are not useful for serological confirmation. Furthermore, IgM tests are not always specific and the IgM response may be persistent. Therefore, IgM tests are not strongly supported for use in serodiagnosis of acute disease.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE NOTIFICATION: Ehrilichiosis is reportable to the LOCAL OR STATE HEALTH DEPARTMENT within five (5) business days of diagnosis.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).
- Tick-Borne Rickettsial Disease Form – CDC 55.1 (Rev. 01/2001) see page 203.

PUBLIC HEALTH INTERVENTIONS:

- Patient education as needed to minimize future risk of exposure.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, David L., ed.EHRLICHIOSIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004:187-190.

Pickering LK, ed. Ehrlichiosis (Human). In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: 266-269.

WEST NILE AND OTHER ARBOVIRAL DISEASES
Neuroinvasive and Non-neuroinvasive

IDENTIFICATION

CLINICAL DESCRIPTION:
Arboviral infection may result in a febrile illness of variable severity associated with neurologic symptoms ranging from headache to aseptic meningitis or encephalitis. Arboviral encephalitis cannot be distinguished clinically from infection with other neurotropic viruses. Symptoms include headache, confusion or other alterations in sensorium, nausea, or vomiting. Signs may include evidence of elevated intercranial pressure, or meningeal irritation, cranial nerve palsies, paresis or paralysis, altered reflexes, or convulsions. Arboviruses causing encephalitis include the following:

- St. Louis encephalitis
- Western equine encephalitis
- Eastern equine encephalitis
- California encephalitis (includes La Crosse virus).
- Venezuelan equine encephalitis
- West Nile virus.

CASE DEFINITION:

Confirmed:

- A clinically compatible illness that is laboratory confirmed.

Probable:

- Stable (less that or equal to a two-fold change) but elevated titer of virus –specific serum antibodies, or
- Virus-specific IgM antibodies detected by antibody-capture EIA but with no available results of a confirmatory test for virus specific serum IgG antibodies in the same or a later specimen.

LABORATORY CRITERIA FOR CONFIRMATION:

- Fourfold or greater change in virus-specific serum antibody titer, **OR**
- Isolation of virus from or demonstration of specific viral antigen or genomic sequences in tissue, blood, cerebrospinal fluid (CSF), or other body fluid, **OR**
- Virus-specific immunoglobulin M (IgM) antibodies demonstrated in CSF by antibody-capture enzyme immunoassay (EIA), **OR**
- Virus-specific IgM antibodies demonstrated in serum by antibody-capture EIA and confirmed by demonstration of virus-specific serum immunoglobulin G (IgG) antibodies in the same or a later specimen by another serologic assay (e.g., neutralization or hemagglutination inhibition).

REPORTING CRITERIA:

Neuroinvasive (formerly encephalitis) – Fever plus at least one of the following:

- Acutely altered mental status (e.g.disorientation, obtundation, stupor or coma) **OR**
- Other acute signs of central or peripheral neurologic dysfunction (e.g. paresis or paralysis, nerve palsies, sensory deficits, abnormal reflexes, generalized convulsions) **OR**
- Pleocytosis (increased white blood cell concentration in cerebrospinal fluid) associated with illness clinically compatible with meningitis.

Non-neuroinvasive (formerly fever) - requires, at a minimum, the presence of documented fever, the absence of neuroinvasive disease, and the absence of a more likely clinical explanation for the illness.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD to identify mosquito breeding sites near the probable location of the exposure.
- Educate the public to the modes of spread and control.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Chin, James, ed. ARTHROPOD-BORNE VIRAL ENCEPHALITIS. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: 39-43.

Pickering LK, ed. Arboviruses. In: 2000 Red Book: Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL: 170-175.

ESCHERICHIA COLI (E. coli)
SHIGA TOXIN PRODUCING *(*STEC*)*

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness of variable severity characterized by diarrhea (often bloody) and abdominal cramps. Hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP) may complicate illness; asymptomatic infections may also occur and the organism may cause extra intestinal infections.

CASE DEFINITION:

Confirmed:

A case that is laboratory confirmed. When available, O and H antigen serotype characterization should be reported.

Probable:

- A case with isolation of E.coli 0157 from a clinical specimen without **confirmation** of H antigen or Shiga toxin production, **or**
- A clinically compatible case that is epidemiologically linked to a confirmed or probable case, **or**
- Identification of an elevated antibody titer to a known Shiga toxin-producing *E. coli* serotype from a clinically compatible case.

Suspect:

- A case of postdiarrheal HUS or TTP.
- Identification of Shiga toxin in a specimen from a clinically compatible case without the isolation of the Shiga toxin-producing E. *coli*.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of Shiga toxin-producing *E. coli* from a clinical specimen.
- *E. coli* 0157:H7 isolates may be assumed to be Shiga toxin-producing.
- For all other *E. coli* isolates, Shiga toxin production or the presence of Shiga toxin genes must be determined to be considered STEC.

REPORTING CRITERIA: Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Please indicate on this form (or subsequently if answer not yet available) whether a source was identified.

PUBLIC HEALTH INTERVENTIONS:

- If laboratory reports only *E. coli* O157, ask to have isolate sent to Kentucky Division of
  Laboratory Services to check for O and H antigen characterization.
- Conduct case control investigation if two or more cases occur in close geographic or temporal setting or if cases share a common potential exposure (e.g., food establishment, recreational water, community event, farm animal-related exposure).
- Assess case for association with high risk (e.g., day care, food handling, or health careprovider).
- Educate public about proper hand washing after toileting or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
- Exclude infected individuals from high risk settings (including foodhandling, patient care and day care work) until they are asymptomatic **AND** two consecutive negative stool cultures (collected at least 24 hours apart and obtained at least 48 hours after discontinuance of antimicrobial therapy) are obtained.
- Source investigation by LHD.
- Determine if case is outbreak-related and notify Communicable Disease Branch, 502-564-3261.

CONTACTS FOR CONSULTATION

DPH, **COMMUNICABLE DISEASE BRANCH**: 502-564-3261.
DPH, **FOOD SAFETY AND COSMETICS BRANCH**: 502-564-7181.
DPH, **DIV. OF LABORATORY SERVICES**: 502-564-4446.

RELATED REFERENCES

Heymann, James, ed. Diarrhea Caused by Enterohemorrhagic Strains (EHEC). In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 160-164.

Pickering LK, ed. *Escherichia coli* Diarrhea. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 275-280.

FOODBORNE DISEASE OUTBREAK

IDENTIFICATION

CLINICAL DESCRIPTION:

Occurrence of illness within a usually short, but variable, period of time (from a few hours to a few weeks) after consumption, among individuals who have consumed common foods.

REPORTING CRITERIA:

Suspicion of a foodborne outbreak caused by toxins elaborated by bacterial growth in the food before consumption (e.g *Staphyloccus aureus and Bacillus cereus)* or in the intestines (e.g.*Clostridium pergringens)*; illnesses caused by bacterial infections with short incubation periods (e.g.*Vibrio parahaemolyticus, V. vulnificus*); and a variety of illnesses caused by the contamination of food by microbial products accumulated in the food chain of fish.

OUTBREAK DEFINITION:

An incident in which two or more persons experience a similar illness after ingestion of a common food, and analysis of epidemiologic data implicates the food as the source of the illness.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES PRIORITY NOTIFICATION:

- Report to the local or state health department within one (1) business day of the identification of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUESTED:

- Enter information electronically through KYPHRS-DSM
- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).
- A suggested format for a Foodborne Disease Questionnaire is on page 101.

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD.
- Specific intervention dependent upon etiologic agent.
- Determine if case is outbreak-related and notify the Division of Epidemiology and Health Planning.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, FOOD SAFETY AND COSMETIC BRANCH: 502-564-7181
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418

RELATED REFERENCES

Heymann, David L., ed. FOODBORNE DISEASES. In: Control of Communicable Disease Manual. 18th ed. Washington, DC: American Public Health Association, 2004:211-221.

Pickering, LK, ed. 2000 Red Book: Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2000: See specific foodborne diseases.

Diagnosis and Management of Foodborne Illnesses: A Primer for Physicians. MMWR 2001; 50(No. RR-2): 1-67.

Surveillance for Foodborne-Disease Outbreaks – United States, 1988-1992. MMWR 1996, 45 (No. SS-5): 1-55.

FORM APPROVED
OMB NO.0920-0004

CDC USE ONLY
__ __-__ __ __ __ __ __

STATE USE ONLY
_____

INVESTIGATION OF A FOODBORNE OUTBREAK

This form is used to report foodborne disease outbreak investigations to CDC. A foodborne outbreak is defined as the occurrence of **two or more cases** of a similar illness resulting from the ingestion of a common food in the United States. This form has **two** parts: Part 1 asks for the minimum data needed and Part 2 asks for additional information. For this investigation to be counted in the CDC annual summary, Part 1 must be completed. **We encourage you to complete as much of Part 1 and Part 2 as you can.**

Part 1: Required Information

1. Location of Exposure:

State: ___ ___
☐ Multi-state exposure

County: _____
☐ Multi-county exposure

List other states/counties in Comments, bottom of this page

2. Dates:

Date first case became ill: ___ ___ / ___ ___ / ___ ___ ___ ___
Month Day Year

Date of first known exposure: ___ ___ / ___ ___ / ___ ___ ___ ___
Month Day Year

Date of last known exposure: ___ ___ / ___ ___ / ___ ___ ___ ___
Month Day Year

3. Numbers of Cases Exposed:

Lab-confirmed cases: _____ *(A)*

Probable cases: _____ *(B)*

Estimated total ill: _____
(If greater than sum of A+B)

4. Approximate Percentage of Total Cases in Each Age Group:

<1 year: _____%
1-4 yrs: _____%
5-19 yrs: _____%
20-49 yrs: _____%
≥ 50 yrs: _____%

5. Sex: (Estimated percent of total cases)

Male: _____ %

Female: _____ %

6. Investigation Methods: (Check all that apply)

☐ Interviews of cases only
☐ Case-control study
☐ Cohort study
☐ Food preparation review
☐ Food product traceback
☐ Investigation at factory or production plant
☐ Investigation at original source (farm, marine estuary, etc.)
☐ Environment / food sample cultures

7. Implicated Food(s): (based on Reasons listed in Item 15 on page 3)

_____
_____
_____
_____
_____

☐ Could not be determined

8. Etiology: (Name the bacteria, virus, parasite, or toxin. If available, include details such as phage type, virulence factors, molecular fingerprinting, antibiogram, metabolic profile.

Etiology	**Serotype** (if avail.)	**Other Characteristics** (if avail.)

☐ Confirmed*
☐ Suspected

☐ Unknown etiology
☐ Multiple etiologies (list in Comments)

Isolated/identified from (check all that apply)
☐ Patient specimen(s)
☐ Food specimen(s)
☐ Environment specimen(s)
☐ Food Worker specimen(s)

* see criteria at http://www.cdc.gov/ncidod/dbmd/outbreak/ or MMWR2000/Vol 49/SS-1/Appendix B

9. Contributing Factors: (See list on page 2, check all that apply)

☐ Contributing factors unknown

Contamination Factor:
☐ C1 ☐ C2 ☐ C3 ☐ C4 ☐ C5 ☐ C6 ☐ C7 ☐ C8 ☐ C9
☐ C10 ☐ C11 ☐ C12 ☐ C13 ☐ C14 ☐ C15 *(describe in Comments)* ☐ N/A

Proliferation/Amplification Factor (bacterial outbreaks only):
☐ P1 ☐ P2 ☐ P3 ☐ P4 ☐ P5 ☐ P6 ☐ P7 ☐ P8 ☐ P9
☐ P10 ☐ P11 ☐ P12 *(describe in Comments)* ☐ N/A

Survival Factor (microbial outbreaks only):
☐ S1 ☐ S2 ☐ S3 ☐ S4 ☐ S5 *(describe in Comments)* ☐ N/A

Was food-worker implicated as the source of contamination? ☐ Yes ☐ No
If yes, please check ***only one*** of following:
☐ laboratory *and* epidemiologic evidence
☐ epidemiologic evidence (w/o lab confirmation)
☐ lab evidence (w/o epidemiologic confirmation)
☐ prior experience makes this the likely source *(please explain in Comments)*

10. Agency reporting this outbreak:

_____

Contact Person:

NAME: _____
TITLE: _____
PHONE NO: _____
FAX NO: _____
E-MAIL: _____

Date of completion of this form:

___ ___ / ___ ___ / ___ ___ ___ ___
Month Day Year

☐ **Initial Report**
☐ **Updated Report**
☐ **Final Report**
☐ **Additional data suggests this is not a foodborne outbreak**

Comments: _____

This questionnaire is authorized by law (Public Health Service Act, 42 USC §241). Although response to the questions asked is voluntary, cooperation of the patient is necessary for the study and control of disease. Public reporting burden for this collection of information is estimated to average 15 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Rm 721-H, Humphrey Bg; 200 Independence Ave. SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

The following codes are to be used to fill out Part 1 (question 9) and Part 2 (question 15).

Contamination Factors:[1]

C1 - Toxic substance part of tissue (e.g., ciguatera)
C2 - Poisonous substance intentionally added (e.g., cyanide or phenolphthalein added to cause illness)
C3 - Poisonous or physical substance accidentally/incidentally added (e.g., sanitizer or cleaning compound)
C4 - Addition of excessive quantities of ingredients that are toxic under these situations (e.g., niacin poisoning in bread)
C5 - Toxic container or pipelines (e.g., galvanized containers with acid food, copper pipe with carbonated beverages)
C6 - Raw product/ingredient contaminated by pathogens from animal or environment (e.g., *Salmonella enteriditis* in egg, Norwalk in shellfish, *E. coli* in sprouts)
C7 - Ingestion of contaminated raw products (e.g., raw shellfish, produce, eggs)
C8 - Obtaining foods from polluted sources (e.g., shellfish)
C9 - Cross-contamination from raw ingredient of animal origin (e.g., raw poultry on the cutting board)
C10 - Bare-handed contact by handler/worker/preparer (e.g., with ready-to-eat food)
C11 - Glove-handed contact by handler/worker/preparer (e.g., with ready-to-eat food)
C12 - Handling by an infected person or carrier of pathogen (e.g., *Staphylococcus*, *Salmonella*, Norwalk agent)
C13 - Inadequate cleaning of processing/preparation equipment/utensils – leads to contamination of vehicle (e.g., cutting boards)
C14 - Storage in contaminated environment – leads to contamination of vehicle (e.g., store room, refrigerator)
C15 - Other source of contamination (*please describe in Comments*)

Proliferation/Amplification Factors:[1]

P1 - Allowing foods to remain at room or warm outdoor temperature for several hours (e.g., during preparation or holding for service)
P2 - Slow cooling (e.g., deep containers or large roasts)
P3 - Inadequate cold-holding temperatures (e.g., refrigerator inadequate/not working, iced holding inadequate)
P4 - Preparing foods a half day or more before serving (e.g., banquet preparation a day in advance)
P5 - Prolonged cold storage for several weeks (e.g., permits slow growth of psychrophilic pathogens)
P6 - Insufficient time and/or temperature during hot holding (e.g., malfunctioning equipment, too large a mass of food)
P7 - Insufficient acidification (e.g., home canned foods)
P8 - Insufficiently low water activity (e.g., smoked/salted fish)
P9 - Inadequate thawing of frozen products (e.g., room thawing)
P10 - Anaerobic packaging/Modified atmosphere (e.g., vacuum packed fish, salad in gas flushed bag)
P11 - Inadequate fermentation (e.g., processed meat, cheese)
P12 - Other situations that promote or allow microbial growth or toxic production (*please describe in Comments*)

Survival Factors:[1]

S1 - Insufficient time and/or temperature during initial cooking/heat processing (e.g., roasted meats/poultry, canned foods, pasteurization)
S2 - Insufficient time and/or temperature during reheating (e.g., sauces, roasts)
S3 - Inadequate acidification (e.g., mayonnaise, tomatoes canned)
S4 - Insufficient thawing, followed by insufficient cooking (e.g., frozen turkey)
S5 - Other process failures that permit the agent to survive (*please describe in Comments*)

Method of Preparation:[2]

M1 - Foods eaten raw or lightly cooked (e.g., hard shell clams, sunny side up eggs)
M2 - Solid masses of potentially hazardous foods (e.g., casseroles, lasagna, stuffing)
M3 - Multiple foods (e.g., smorgasbord, buffet)
M4 - Cook/serve foods (e.g., steak, fish fillet)
M5 - Natural toxicant (e.g., poisonous mushrooms, paralytic shellfish poisoning)
M6 - Roasted meat/poultry (e.g., roast beef, roast turkey)
M7 - Salads prepared with one or more cooked ingredients (e.g., macaroni, potato, tuna)
M8 - Liquid or semi-solid mixtures of potentially hazardous foods (e.g., gravy, chili, sauce)
M9 - Chemical contamination (e.g., heavy metal, pesticide)
M10 - Baked goods (e.g., pies, eclairs)
M11 - Commercially processed foods (e.g., canned fruits and vegetables, ice cream)
M12 - Sandwiches (e.g., hot dog, hamburger, Monte Cristo)
M13 - Beverages (e.g., carbonated and non-carbonated, milk)
M14 - Salads with raw ingredients (e.g., green salad, fruit salad)
M15 - Other, does not fit into above categories *(please describe in Comments)*
M16 - Unknown, vehicle was not identified

[1] Frank L. Bryan, John J. Guzewich, and Ewen C. D. Todd. Surveillance of Foodborne Disease III. Summary and Presentation of Data on Vehicles and Contributory Factors; Their Value and Limitations. Journal of Food Protection, 60; 6:701-714, 1997.
[2] Weingold, S. E., Guzewich JJ, and Fudala JK. Use of foodborne disease data for HACCP risk assessment. Journal of Food Protection, 57; 9:820-830, 1994.

Part 2: Additional Information (Please complete as much as possible)

11. Numbers of:

OUTCOME / SYMPTOM	**Cases** with **Outcome / Symptom**	**Total** cases for whom you have information available
Healthcare Provider Visit		
Hospitalization		
Death		
Vomiting		
Diarrhea		
Bloody stools		
Feverish		
Abdominal cramps		
*		
*		
*		
*		

12. Incubation Period:

(circle appropriate units)

Shortest: _____ (Hours, days)

Longest: _____ (Hours, days)

Median: _____ (Hours, days)

☐ Unknown

13. Duration of Acute Illness Among Those Who Recovered:

(circle appropriate units)

Shortest: _____ (Hours, days)

Longest: _____ (Hours, days)

Median: _____ (Hours, days)

☐ Unknown

* Use the following terms, if appropriate, to describe other common characteristics of cases:

anaphylaxis
arthralgia
bradycardia
bullous skin lesions
bradycardia
cough
coma
diplopia
descending paralysis
flushing
headache
hemolytic uremic syndrome (HUS)
hypotension
itching
jaundice
lethargy
myalgia
paresthesia
septicemia
sore throat
tachycardia
thromobocytopenia
temperature reversal
urticaria
wheezing

14. If Cohort Investigation Conducted:

Event-specific Attack Rate = _____ / _____ x 100 = _____ %

 # ill **total # of persons for whom you have illness info.**

15. Implicated Food(s): (Please provide known information.)

Name of Food	Main Ingredients	Contaminated Ingredient	Reason(s) Suspected (see below)	Method of Preparation (see list on page 2)
e.g., lasagna	*pasta, sauce, eggs, beef*	*eggs*	*4*	*M1*

☐ Food vehicle could not be determined

Reason Suspected (choose all that apply):

1 - Statistical evidence from epidemiological investigation
2 - Laboratory evidence (e.g., identification of agent in food)
3 - Compelling supportive information
4 - Other data (e.g., same phage type found on farm that supplied eggs)
5 - Specific evidence lacking but prior experience makes this likely source

16. Where was Food Prepared? (Check all that apply)

☐ Restaurant or deli
☐ Day care center
☐ School
☐ Church, temple, etc.
☐ Camp
☐ Caterer
☐ Grocery store
☐ Hospital
☐ Workplace cafeteria
☐ Nursing home
☐ Prison, jail
☐ Private home
☐ Picnic
☐ Fair, festival, other temporary/mobile service
☐ Contaminated food imported into U.S.
☐ Commercial product, served without further preparation
☐ Other (please describe)

_____

17. Where was Food Eaten? (Check all that apply)

☐ Restaurant or deli
☐ Day care center
☐ School
☐ Church, temple, etc.
☐ Camp
☐ Grocery Store
☐ Hospital
☐ Workplace cafeteria
☐ Nursing home
☐ Prison, jail
☐ Private home
☐ Picnic
☐ Fair, festival, or mobile location
☐ Other (please describe)

_____

18. Other Available Info:

☐ Unpublished agency report (please attach)
☐ Epi-Aid
☐ Publication (please reference)

_____

☐ Not available

19. Remarks: Briefly describe important aspects of the outbreak not covered above

(e.g., restaurant closure, product recall, immunoglobulin administration, economic impact, etc.)

_____
_____
_____
_____
_____

State Health Departments: Please FAX this document to Foodborne and Diarrheal Diseases, DBMD, CDC, at (404) 639-2205.

CDC 52.13 REV. 10/2000

GONORRHEA

IDENTIFICATION

CLINICAL DESCRIPTION:

A sexually transmitted bacterial disease (STD) caused by *Neisseria gonorrhoeae*. In males it is usually characterized by a purulent urethral discharge and dysuria. In females, initially, there is a urethritis or cervicitis often so mild it may pass unnoticed. Dependent upon sexual practices, pharyngeal and anorectal infections can occur. In males, the urethral infection is usually self-limiting; however, it may progress to epididymitis, and in rare cases, it can disseminate into an arthritis-dermatitis syndrome, endocarditis, and meningitis. Twenty percent of women infected with gonorrhea may progress to uterine infection which may lead to endometritis or salpingitis (PID) and the subsequent risk of infertility.

CASE DEFINITION:

Confirmed:

A laboratory confirmed infection

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of typical Gram-negative, oxidase-positive diplococci (presumptive *N. gonorrhoeae*) from clinical specimen, **OR**
- Demonstration of *N. gonorrhoeae* in a clinical specimen by detection of antigen or nucleic acid, **OR**
- Observation of Gram-negative intracellular diplococci in a urethral smear from a man.

REPORTING CRITERIA:

Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING. REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case. Public health intervention is available on request of the reporting physician.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).

Note: Section labeled "Additional Information for Sexually Transmitted Diseases Only" must be completed.

PUBLIC HEALTH INTERVENTIONS:

- Patients should be counseled on methods to reduce their risk for STDs, including HIV.
- Patients treated for gonorrhea should also be tested and treated for chlamydia and have a syphilis serology done.
- Treated patients and sex partners should be advised to avoid sex at least three days following the completion of treatment and until symptoms cease. Only patients whose symptoms persist after treatment need a test of cure.
- Patients with proven or suspected gonorrhea should be treated with one of the cephalosporin or quinolone regimens recommended in the 2002 STD Treatment Guidelines.
- Gonococcal infection may occur in newborns exposed to their mothers infected cervical exudate. The ophthalmia neonatorum caused by gonorrhea can lead to blindness and the infant may develop a disseminated infection. Instillation of prophylactic agent into the eyes of newborns is recommended to prevent gonococcal ophthalmia and is mandated by law. Gonococcal ophthalmia can lead to blindness and, if untreated, can progress to disseminated gonococcal infection.
- Patients should to be interviewed for all sexual partners in the 60 days prior to the onset of symptoms or positive test. Assistance in completing referral of contacts will be offered only when the patient requests of if the LHD deems it necessary.

CONTACTS FOR CONSULTATION

DPH, STD CONTROL PROGRAM: 502-564-4804.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann.DavidL., ed. GONOCOCCAL INFECTIONS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 232-236.

2001 Guidelines for the Treatment of Sexually Transmitted Diseases, MMWR Vol. 51 (RR-6).

GRANULOMA INGUINALE

IDENTIFICATION

CLINICAL DESCRIPTION:

A slowly progressive ulcerative disease of the skin and lymphatics of the genital and perianal area caused by infection with *Calymmatobacterium granulomatis*. A clinically compatible case would have one or more painless or minimally painful granulomatous lesions in the anogenital area.

CASE DEFINITION:

Confirmed:

A case that is laboratory confirmed

LABORATORY CRITERIA FOR CONFIRMATION:

Demonstration of intacytoplasmic Donovan bodies in Wright or Giemsa-stained smears or biopsies or granulation tissue.

REPORTING CRITERIA:

Clinical diagnosis initially; laboratory confirmation required to meet case definition.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case. Public health intervention is available on request of the reporting physician.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).

Note: Section labeled "Additional Information for Sexually Transmitted Diseases Only" must be completed.

PUBLIC HEALTH INTERVENTIONS

- Patients should be counseled on methods to reduce their risk for STDS, including HIV.

- Testing for syphilis, gonorrhea, *Chlamydia*, and HIV should be offered and encouraged.

CONTACTS FOR CONSULTATION

DPH, STD CONTROL PROGRAM: 502-564-4804.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. Granuloma Inguinale. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 238-239.

2002 Guidelines for the Treatment of Sexually Transmitted Diseases, MMWR Vol.51(RR-6).

HAEMOPHILUS INFLUENZAE
(Invasive Disease)

IDENTIFICATION

CLINICAL DESCRIPTION:

Invasive disease due to *Haemophilus influenzae* (H. influenzae) which may produce any of several clinical syndromes, including meningitis, bacteremia, epiglottitis, or pneumonia.

CASE DEFINITION:

Confirmed:

A clinically compatible illness that is laboratory confirmed.

Probable:

A clinically compatible case with detection of *H. influenzae* type b antigen in CSF

LABORATORY CRITERIA FOR DIAGNOSIS:

- Isolation of *Haemophilus influenzae* from a normally sterile site (blood, CSF, or less commonly, joint, pleural, or pericardial fluid).

Comment: Positive antigen test results from urine or serum samples are unreliable for diagnosis of *H. influenzae* disease.

REPORTING CRITERIA:

Clinical diagnosis or laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or a suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- National Bacterial Meningitis and Bacteremia Case Report - CDC 52.15N REV 02/93.

PUBLIC HEALTH INTERVENTIONS:

- Determine the serotype of *Haemophilus influenzae* isolated. Have isolate sent to state lab.
- Investigation of known and suspect contacts.
- Chemoprophylaxis and/or observation of contacts as indicated.
- Evaluate *Haemophilus influenzae* type b vaccine status of close contacts and update as appropriate.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. *HAEMOPHILUS* MENINGITIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 366-368.

Pickering, LK, ed. *Haemophilus influenzae Infections*. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2000: 293-301.

HANSEN'S DISEASE (LEPROSY)

IDENTIFICATION

CLINICAL DESCRIPTION:

A chronic bacterial infection caused by *Mycobacterium leprae*. Major forms of the disease are:

CASE DEFINITION:

A clinically compatible case that is laboratory confirmed.

- **Tuberculoid**: One or a few well-demarcated, hypopigmented, and anesthetic skin lesions, frequently with active, spreading edges and a clearing center. Peripheral nerve swelling or thickening may also occur. Cell mediated immune responses are intact.
- **Lepromatous**: A number of erythematous papules and nodules or an infiltration of the face, hands and feet with lesions in bilateral and symmetric distribution that progresses to thickening of the skin. Cell mediated immunity is greatly diminished.
- **Borderline** (Dimorphous): Skin lesions characteristic of both tuberculoid and lepromatous forms.
- **Indeterminate**: Early lesions, usually hypopigmented macules, without developed tuberculoid or lepromatous features.

LABORATORY CRITERIA FOR CONFIRMATION:

Demonstration of acid-fast bacilli in skin or dermal nerve, obtained from the full thickness skin biopsy of a lepromatous lesion.

REPORTING CRITERIA: Laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning, **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Leprosy Surveillance (CDC 52.18).

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD.
- Contacts of infectious patients should be examined at 12 month intervals for at least five years following the last exposure.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, David L., ed. LEPROSY (Hansen Disease). In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 302-306.

Pickering, LK, ed. Leprosy. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 401-403.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Center for Infectious Diseases
Atlanta, Georgia 30333

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Form Approved
OMB No. 0920-0

LEPROSY SURVEILLANCE

State (1-2)

Date of Report: Mo. (3-4) Day (5-6) Yr. (7-8)

CDC Case Number: (9-13)

PATIENT IDENTIFICATION

Patient Name: (Last) (14-23) (First) (24-29) (Middle) (30-33)

Present Address: Street _____ City _____

County _____ (34-36) State _____ (37-

Place of Birth: State _____ Country _____ (39-40)

Date of Birth: Mo. (41-42) Day (43-44) Yr. (45-46)

Sex: (47) 1 ☐ Male 2 ☐ Female

Race/Ethnicity: (48)
☐ 1 White, Not Hispanic
☐ 2 Black, Not Hispanic
☐ 3 Hispanic
☐ 4 Asian, Pacific Islander
☐ 5 American Indian, Alaska Native
☐ 6 Not Specified

Date Entered U.S. Mo. (49-50) Yr. (51-52)

Date of Onset of Symptoms of Leprosy: Mo. (53-54) Yr. (55-56)

Date Leprosy First Diagnosed by Doctor: Mo. (57-58) Yr. (59-60)

Type of Leprosy: (61)
1 ☐ Lepromatous
2 ☐ Dimorphous/Borderline
3 ☐ Tuberculoid
4 ☐ Indeterminate

Has Patient Ever Touched Armadillos? (62)
1 ☐ Yes 2 ☐ No 9 ☐ Unknown

Diagnosis of Disease:

Was Biopsy Performed? (63) 1 ☐ Yes 2 ☐ No
If Yes, Date _____

Acid Fast Stain of Smear or Section (64) 1 ☐ Yes 2 ☐ No

Bacilli Seen on Smear or Section (65) 1 ☐ Yes 2 ☐ No

Current Treatment For Leprosy:

Dapsone (66) 1 ☐ Yes 2 ☐ No 9 ☐ Unknown

Other Drugs (68) ☐ Yes ☐ No
_____ (Specify)

Rifampin (67) 1 ☐ Yes 2 ☐ No 9 ☐ Unknown

Regarding Household Contacts of Patient:

Have Any Been Examined? (69) 1 ☐ Yes 2 ☐ No 9 ☐ Unknown

Were Additional Cases Found? (70) 1 ☐ Yes 2 ☐ No 9 ☐ Unknown

Have Household Members Been Started on Prophylaxis? (71) 1 ☐ Yes 2 ☐ No 9 ☐ Unkno

Has Patient Ever Lived Outside U.S. (including Military Service Outside U.S.)? (72)
1 ☐ Yes 2 ☐ No 9 ☐ Unknown

PLEASE LIST RESIDENCE HISTORY ON REVERSE.

CDC USE ONLY: (73)

CONTACT HISTORY INCLUDED 1 ☐ Yes 2 ☐ N

CDC 52.18 REV. 6-83

The Centers for Disease control (CDC), an agency of the Department of Health and Human Services, is authorized to collect this information, including the Social Security number (if applicable), under provisions of the Public Health Service Act, Section 301 (42 U.S.C. 241). Supplying the information is voluntary and there is no penalty for not providing it. The data will be used to increase understanding of disease patterns, develop prevention and control programs, and communicate new knowledge to the health community. Data will become part of CDC Privacy Act system 09-20-0136, "Epidemiologic Studies and Surveillance of Disease Problems" and may be disclosed: to appropriate State or local public health departments and cooperating medical authorities to deal with conditions of public health significance; to private contractors assisting CDC in analyzing and refining records; to researchers under certain limited circumstances to conduct further investigations; to organizations to carry out audits and reviews on behalf of HHS; to the Department of Justice in the event of litigation, and to a congressional office assisting individuals in obtaining their records. An accounting of the disclosures that have been made by CDC will be made available to the subject individual upon request. Except for permissible disclosures expressly authorized by the Privacy Act, no other disclosure may be made without the subject individual's written consent. Public reporting burden for this collection of information is estimated to average 30 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; ATTN: PRA; Hubert H. Humphrey Bg, Rm 721-B; 200 Independence Ave., SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0009); Washington, DC 20503.

RESIDENCE IN USA, OR OTHER COUNTRIES, STARTING FROM PRESENT:

TOWN	COUNTY	STATE	COUNTRY	INCLUSIVE DATES	
				From Mo./Yr.	To Mo./Yr
1.	(74-76)	(77-78)			
2.	(79-81)	(82-83)			
3.	(84-86)	(87-88)			
4.	(89-91)	(92-93)			
5.	(94-96)	(97-98)			
6.	(99-101)	(102-103)			
7.	(104-106)	(107-108)			
8.	(109-111)	(112-113)			
9.	(114-116)	(117-118)			
10.	(119-121)	(122-123)			

List all known or suspected patients with leprosy who have had contact with patient.

Name*	Age	Sex	Relation to Patient	Full Address				Inclusive Contact Dates		Lived with Patient	
				No.	Street	City	State	From Mo./Yr.	To Mo./Yr.	Yes	No
1. ☐ (124) (125-139)	(140-141)	(142)						(143-146)	(147-150)		
2. ☐ (151) 152-166)	(167-168)	(169)						(170-173)	(174-177)		

*Check box if reported to CDC

NAME AND ADDRESS OF PHYSICIAN:

INVESTIGATED BY:

Please return completed forms to:

RESPIRATORY AND SPECIAL
PATHOGENS EPIDEMIOLOGY BRANCH
CENTERS FOR DISEASE CONTROL
AND PREVENTION
ATLANTA, GEORGIA 30333

List all LIVING members who have had a month or more of household contact with the patient. Include members who are not presently in the patient's household but who have had such contact in the past. Start with grandparents (paternal and maternal), parents, spouse, brothers, sisters (use married names), and children. Also include other household contacts if any. Use second sheet if necessary.

	Name	Age	Sex	Case*	Reported†	Relation to Patient	Full Address No.	Street	City	State	Inclusive Dates of Contact From Month/Year	To Month/Year	Date Entered U.S.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													

*Check box if known or suspected case of leprosy
†Check box if previously reported to CDC

HANTAVIRUS PULMONARY SYNDROME

IDENTIFICATION

CLINICAL DESCRIPTION:

Hantavirus pulmonary syndrome (HPS), commonly referred to as hantavirus disease, is a febrile illness characterized by bilateral interstitial pulmonary infiltrates and respiratory compromise usually requiring supplemental oxygen and clinically resembling acute respiratory disease syndrome (ARDS). The typical prodrome consists of fever, chills, myalgia, headache, and gastrointestinal symptoms. Typical clinical laboratory findings include hemoconcentration, left shift in the white blood cell count, neutrophilic leukocytosis, thrombocytopenia, and circulating immunoblasts.

CLINICAL CASE DEFINITION:

An illness characterized by one or more of the following clinical features:

- A febrile illness (i.e., temperature >101.0 F [>38.3 C]) characterized by bilateral diffuse interstitial edema that may radiographically resemble ARDS, with respiratory compromise requiring supplemental oxygen, developing within 72 hours of hospitalization, and occurring in a previously healthy person.
- An unexplained respiratory illness resulting in death, with an autopsy examination demonstrating noncardiogenic pulmonary edema without an identifiable cause.

CASE DEFINITION:

Confirmed :

A clinically compatible case that is laboratory confirmed.

LABORATORY CRITERIA FOR CONFIRMATION:

- Detection of hantavirus-specific immunoglobulin M or rising titers of hantavirus
- specific immunoglobulin G, or
- Detection of hantavirus-specific ribonucleic acid sequence by polymerase chain
- reaction in clinical specimens, or
- Detection of hantavirus antigen by immunohistochemistry

Comment: Laboratory testing should be performed or confirmed at a reference laboratory. Because the clinical illness is nonspecific and ARDS is common, a screening case definition can be used to determine which patients to test. In general, a predisposing medical condition (e.g. CPD, malignancy, trauma, burn, and surgery) is a more lkely cause of ARDS than HPS, and patients who have these underlying condition and ARDS need not be tested for hantavirus.

REPORTING CRITERIA:

Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION:REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or a suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning, **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Investigation to find source of exposure and other persons possibly exposed by the LHD and the EPI Rapid Response Team; Exterminate rodents in and around the household if feasible.
- Education by the LHD of the risk-reduction measures recommended by the CDC: MMWR: June 25, 1999 / 48(24);521-525.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, David L., ed. HANTAVIRUS PULMONARY SYNDROME. In Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 243-245.

CDC. Update: Hantavirus Pulmonary Syndrome-United States, 1999. MMWR 1999; 48(24):521-525.

Pickering, LK, ed. Hantavirus Cardiopulmonary Syndrome. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 301-304.

HEPATITIS A

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness caused by the hepatitis A virus characterized by abrupt onset of fever, malaise, nausea, abdominal discomfort and fatigue, followed within a few days by jaundice. Severity of illness is highly variable and can be milder or asymptomatic in young children. The clinical case definition is an acute illness with a) discrete onset of symptoms and b) jaundice or elevated serum aminotransferase levels.

CASE DEFINITION:

Confirmed:

A case that meets the clinical case definition and is laboratory confirmed

Or

A case that meets the clinical case definition and occurs in a person who has an epidemiologic link with a person who has laboratory-confirmed hepatitis A (i.e., household or sexual contact with an infected person during the 15-50 days before the onset of symptoms)

LABORATORY CRITERIA FOR CONFIRMATION:

- IgM anti-HAV positive serology.

REPORTING CRITERIA:

- Clinical diagnosis initially; laboratory confirmation required to meet case definition.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or a suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning, **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Confirm that a separate assay for IgM was performed and was positive.
- Conduct assessment of patient for high-risk activities (food handler, day care attendee/provider, health-care provider).
- Assess need for immune globulin (IG) for persons exposed by case-patient and educate case contacts regarding risk of hepatitis A virus transmission. Exposure means contact during the most infectious period, from 2 weeks before to one week after onset of jaundice (or other symptoms if no jaundice).
- Source investigation by LHD. (Search for history of exposure to other cases, travel outside U.S., raw shellfish ingestion, etc.).
- The form CDC 53.1 Rev.6-93, Viral Hepatitis Case Record, included in this reference, may be useful in investigating outbreaks, but is not required for case reporting.
- Advise persons to obtain the hepatitis A vaccine if they will be at increased risk of exposure in the future (e.g., international travelers, sexually active gay males).

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, IMMUNIZATION PROGRAM: 502-564-4478.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. HEPATITIS A. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 247-253.

Pickering, LK, ed. Hepatitis A. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 309-318.

CDC. Prevention of Hepatitis A Through Active or Passive Immunization. Recommendations of the Immunization Practices Advisory Committee (ACIP).MMWR 1999: 48 (RR-12): 1-30.

HEPATITIS B, ACUTE

IDENTIFICATION

CLINICAL CASE DESCRIPTION:

Acute hepatitis B is an acute illness with:

a) Discrete onset of symptoms and
b) Jaundice or elevated serum aminotransferase levels.

CASE DEFINITION:

Confirmed Case:

Meets the Clinical Case Definition and Laboratory Confirmation.

LABORATORY CRITERIA FOR CONFIRMATION:

- IgM antibody to hepatitis B core antigen (anti-HBc) positive (if done) or a positive test for hepatitis B surface antigen (HBsAg).
- IgM anti-HAV negative (if done).

REPORTING CRITERIA: Signs/symptoms and/or laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES WITHIN ONE (1) BUSINESS DAY OF THE IDENTIFICATION OF A CASE OR SUSPECTED CASE REPORT TO THE LOCAL OR STATE HEALTH. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Hepatitis B Infection in Pregnant Woman or Child- EPID 394 (01/03)

PREVENTION MEASURES:

- Hepatitis B vaccine recommended for all children 0, 1-2 and 6-18 months of age or, if not previously received, before entry to school or sixth grade entry.

- Hepatitis B vaccine is recommended for persons in the following high risk groups: Persons with occupational risk, clients and staff of institutions for the developmentally disabled; hemodialysis patients; recipients of certain blood products; household and
- sexual partners of HBsAg positive cases and carriers; certain international travelers; injecting drug users; sexually active persons with multiple partners; sexually active homosexual and bisexual men and inmates of long-term facilities.

PUBLIC HEALTH INTERVENTIONS:

- Educate patient on how to protect others from exposure to the hepatitis B virus (HBV).
- Identify sexual contacts. Recommend testing for susceptibility if testing does not delay treatment beyond 14 days of the last sexual exposure. If contact is susceptible, recommend:

  1) Hepatitis B immune globulin (HBIG), if it can be given within 14 days of the Last sexual exposure, **AND**
  2) Hepatitis B vaccine if prophylaxis can be started within 14 days of last sexual contact or if sexual contact with the infected person will continue.
  3) An alternate treatment for person who are not from a high-risk group for whom vaccine is routinely recommended and whose regular sex partners have acute HBV infection is to administer one dose of HBIG (without vaccine) and retest the sex partner for HbsAg 3 months later. No further treatment is necessary if the sex partner becomes HbsAg negative. If the sex partner remains HbsAg positive, a second dose of HBIG should be given and the hepatitis B vaccine series started.

- Identify household contacts.

  1) Recommend HBIG if the contact is an infant <12 months of age and is exposed to a primary caregiver who has acute hepatitis B.
  2) Prophylaxis with HBIG is not indicated for other household contacts of persons with acute HBV infection unless they have had an identifiable blood exposure to the case within the last 14 days. Individuals with identifiable blood exposures should be treated like sexual exposures.
  3) Recommend Hep B vaccine for all household contacts if the patient becomes a carrier.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, IMMUNIZATION PROGRAM: 502-564-4478.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. HEPATITIS B. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 253-261.

Pickering, LK, ed. Hepatitis B. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 318-336.

Hepatitis B Virus: A Comprehensive Strategy for Eliminating Transmission in the United States Through Universal Childhood Vaccination: Recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1991; 40 (No. RR-13): 1-25.

HEPATITIS B INFECTION IN A PREGNANT WOMAN OR A CHILD

IDENTIFICATION

CLINICAL CASE DESCRIPTION:

Perinatal hepatitis B in the newborn may range from asymptomatic to fulminant hepatitis. A positive test for hepatitis B surface antigen (HBsAg) in a pregnant woman is reportable and may be either acute or chronic.

CASE DEFINITION:

HBsAg positivist in any infant aged >1-24 months who was born in the United States or in U.S. territories to an HBsAg positive mother or a pregnant HBsAg pregnant woman.

LABORATORY CRITERIA FOR CONFIRMATION:

- Hepatitis B surface antigen (HBsAg) positive

REPORTING CRITERIA: Signs/Symptoms & Laboratory confirmation

COMMENT: Infants born to HBsAg-positive mothers should receive hepatitis B immune globulin (HBIG) and the first dose of hepatitis B vaccine within 12 hours of birth, followed by the second and third doses of vaccine at 1 and 6 months of age, respectively. Postvaccination testing for HBsAg and anti-HBs (antibody to HBsAg) is recommended from 3 to 6 months following completion of the vaccine series. If HBIG and the initial dose of vaccine are delayed for >1 month after birth, testing for HBsAg may determine if the infant is already infected.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES WITHIN ONE (1) BUSINESS DAY OF THE IDENTIFICATION OF A CASE OR SUSPECTED CASE REPORT TO THE LOCAL OR STATE HEALTH. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Hepatitis B Infection in Pregnant Woman or Child- EPID 394 (01/03)

PREVENTION MEASURES:

- Hepatitis B vaccine recommended for all children 0, 1-2 and 6-18 months of age or, if not previously received, before school or 6th grade entry.
- Infants born to hepatitis B-infected mothers should receive hepatitis B immune globulin or as soon as possible after birth along with the first dose of vaccine. The 2nd and 3rd vaccine doses should be given at 1 month and 6 months of age.
- Hepatitis B vaccine is recommended for persons in the following high risk groups: Persons with occupational risk, clients and staff of institutions for the developmentally disabled; hemodialysis patients; recipients of certain blood products; household and sexual partners of HBsAg positive cases and carriers; certain international travelers; injecting drug users; sexually active persons with multiple partners; sexually active homosexual and bisexual men and inmates of long-term facilities.

PUBLIC HEALTH INTERVENTIONS:

- Educate patient on how to protect others from exposure to the hepatitis B virus (HBV).
- Refer patient to a medical provider to monitor outcome or progress of infection.
- Determine pregnancy status if patient is a woman of child-bearing age. Report pregnant patient to the Immunization Branch for perinatal hepatitis B tracking.
- Persons who are not immune to HAV and who have liver disease should be vaccinated against Hepatitis A.
- Identify sexual contacts. Recommend testing for susceptibility if testing does not delay treatment beyond 14 days of the last sexual exposure. If contact is susceptible, recommend:

- Hepatitis B immune globulin (HBIG), if it can be given within 14 days of the last sexual exposure **AND**
- Hepatitis B vaccine for all exposed sexual contacts of persons with acute chronic HBV infection if it can be started within 14 days of last sexual contact or if contact will continue.

Identify household contacts.

- Recommend HBIG if the contact is an infant <12 months of age and if patient is the primary care giver.
- Prophylaxis with HBIG is not indicated for other household contacts of persons with acute HBV infection unless they have had an identifiable blood exposure to the case within the last 14 days. Individuals with identifiable blood exposures should be treated like sexual exposures.
- Recommend Hep B vaccine for all household contacts of chronic HBsAg carriers.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, IMMUNIZATION PROGRAM: 502-564-4478.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Heyman, David L., ed. HEPATITIS B. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2004: 253-261.

Pickering, LK, ed. Hepatitis B. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove: 318-336.

Hepatitis B Virus: A Comprehensive Strategy for Eliminating Transmission in the United States Through Universal Childhood Vaccination: Recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1991; 40 (No. RR-13): 1-25.

Kentucky Department for Public Health
Division of Epidemiology and Health Planning
275 East Main St., Mailstop HS1E-C
Frankfort, KY 40621-0001

Hepatitis B Infection in Pregnant Women or Child

Mail Form to Local Health Department

DEMOGRAPHIC DATA				
Patient's Last Name First M.I.	Date of Birth / /	Age	Gender ☐ M ☐ F ☐ Unk	
Address City State Zip			County of Residence	
Phone Number	Patient ID Number	Ethnic Origin ☐ His. ☐ Non-His.	Race ☐ W ☐ B ☐ A/PI ☐ Am.Ind ☐ Other	

Date of Onset / /	Describe Clinical Symptoms:	
Jaundice ☐ yes ☐ no		
Is patient pregnant? ☐ Yes ☐ No	Expected Date of Delivery / /	Name of hospital for delivery
Physician Provider:	Address:	Phone:

LABORATORY INFORMATION

Hepatitis Markers	Results	Date of Test	Name of Laboratory
HBsAg	☐ Pos ☐ Neg	/ /	
IgM anti-HBc	☐ Pos ☐ Neg	/ /	
IgM anti-HAV	☐ Pos ☐ Neg	/ /	
Anti-HCV	☐ Pos ☐ Neg	/ /	

Serum Aminotransferase Levels

Patient	Reference:	Date of Test	Name of Laboratory
AST (SGOT) U/L	U/L	/ /	
ALT (SGPT) U/L	U/L	/ /	

Person or Agency Completing form: Name: Agency:	**Return form to LHD or to the KDPH at the above address.**
Address:	
Phone: Date of Report: / /	

HEPATITIS C, ACUTE

IDENTIFICATION

CLINICAL DESCRIPTION:

Hepatitis C often produces an illness with insidious onset of symptoms, including fatigue, abdominal pain, nausea or loss of appetite, which might be followed by vomiting, diarrhea, and perhaps, dark urine or jaundice. Of those persons who test positive for antibody to Hepatitis C (anti-HCV), 80% may have no signs or symptoms. Chronic infection is common (55%-85% of infected persons) and can be symptomatic or asymptomatic.

CASE DEFINITION:

Confirmed:

A case that meets the clinical case definition, is laboratory confirmed, and is not known to have chronic hepatitis C.

Clinical case definition:

An acute illness with a discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., anorexia, abdominal discomfort, nausea, vomiting), **AND** either a) jaundice, or b) serum alanine aminotransferase (ALT) levels >400 IU/L.

LABORATORY CRITERIA FOR CONFIRMATION:

One or more of the following three criteria:

- Antibodies to hepatitis C virus (anti-HCV) screening-test-positive with a signal to cut-off ratio predictive of a true positive as determined for the particular assay as defined by CDC. (signal to cut-off ratios: http://www.cdc.gov/ncidod/diseases/hepatitis/c/sc_ratios.htm),**OR**
- Hepatitis C Virus Recombinant Immunoblot Assay (HCV RIBA) positive, **OR**
- Nucleic Acid Test (NAT) for HCV RNA positive.

AND, meets the following two criteria:

- IgM antibody to hepatitis A virus (IgM anti-HAV) negative, **AND**
- IgM antibody to hepatitis B core antigen (IgM anti-HBc) negative.

REPORTING CRITERIA:

Any confirmed case of acute hepatitis C.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES A REPORT TO THE LOCAL HEALTH DEPARTMENT OR STATE DEPARTMENT FOR PUBLIC HEALTH WITHIN **FIVE (5) BUSINESS DAYS** OF THE IDENTIFICATION OF A CASE OR SUSPECTED CASE. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by fax or mail.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Refer patient to a medical provider to monitor outcome or progress of infection.
- Advise minimizing use of alcohol and other substances known to be toxic to the liver.
- Educate patient on how to protect others from exposure to HCV infected blood and other body fluids with the practice of good hand washing, and by not sharing personal care items that might have blood on them (e.g. razors, toothbrushes).
- Recommend anti-HCV testing for exposed sexual partners and protecting partners from contact with blood, semen, vaginal secretions and other body fluids. Use of latex condoms may prevent HCV transmission.
- Testing of household contacts is not necessary unless they have had an identifiable blood exposure to the patient.
- Advise infected mothers of infants to practice good hand-washing after contact with blood, to cover skin lesions and to refrain from breast-feeding if their nipples are cracked or bleeding.
- HCV infected persons should be vaccinated against Hepatitis A, if not immune.
- HCV infected persons should not donate blood, organs, or tissue.

CONTACTS FOR CONSULTATION

DPH, Communicable Diseases Branch: 502-564-3261
DPH, Immunization Program: 502-564-4478
DPH, Division of Laboratory Services: 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. Hepatitis C. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 261-264.

Pickering, LK, ed. Hepatitis C. Red Book: 2006 Report of the Committee on Infectious Diseases. 27th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2006: 355-359.
CDC. Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease. MMWR 1998: 46 (RR-19): 1-39.

VIRAL HEPATITIS CASE RECORD
FOR REPORTING OF PATIENTS WITH SYMPTOMATIC ACUTE VIRAL HEPATITIS
(SEE CASE DEFINITION ON REVERSE)

STATE GEOGRAPHIC CODE 100

___ ___ ___ ___ ___
(1) (2) (3) (4) (5)

STATE CASE N0.
(8) (9) (10) (11)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
Centers for Disease Control and Prevention
Hepatitis Branch, (G37)
Atlanta, Georgia 30333

CDC CASE NO.
(8) (9) (10) (11)

PATIENT'S LAST NAME (please print clearly) (12-26) | FIRST AND MIDDLE NAME (or initials) | OCCUPATION

STREET ADDRESS | TOWN OR CITY | STATE (Zip Code) | COUNTY (27-36) | COUNTY FIPS CODE (37-40)

AGE (yrs) (41-42) ___ ___
00 = < 1yr
99 = Unk

DATE OF BIRTH (43-48) __ __ / __ __ / __ __ (Mo Day Yr)

SEX (49) 1 ☐ Male 2 ☐ Female 9 ☐ Unk

RACE (50) 1 ☐ American Indian or Alaskan Native 2 ☐ Asian or Pacific Islander 3 ☐ Black 5 ☐ White 9 ☐ Unk

ETHNICITY (51) 1 ☐ Hispanic 2 ☐ Non-Hispanic 9 ☐ Unk

Reporting physician's diagnosis (52-53) 1 ☐ Hepatitis A 2 ☐ Hepatitis B 3 ☐ Non-A, Non-B Hepatitis 4 ☐ Hepatitis D (Delta) 5 ☐ Hepatitis Unspecified

DO NOT REPORT CASES OF CHRONIC HEPATITIS OR CHRONIC CARRIERS!!

CLINICAL DATA

	Mo	Day	Yr
Date of first symptom (54-59)	___ ___ /	___ ___ /	___ ___
Date of diagnosis (60-65)	___ ___ /	___ ___ /	___ ___

Was the patient jaundiced? (66) 1 ☐ Yes 2 ☐ No
Was the patient hospitalized for hepatitis? (67) 1 ☐ Yes 2 ☐ No
Did the patient die from hepatitis? (68) 1 ☐ Yes 2 ☐ No

LABORATORY RESULTS

	Pos	Neg	Not Tested/Unk
IgM Hepatitis A antibody (IgM anti-HAV) (69)	1☐	2☐	9☐
Hepatitis B surface antigen (HBsAg) (70)	1☐	2☐	9☐
IgM Hepatitis B core antibody (IgM anti-HBc) (71)	1☐	2☐	9☐
Antibody to Delta (anti-HDV) (72)	1☐	2☐	9☐

For purposes of National Surveillance, ASK ALL OF THE FOLLOWING QUESTIONS FOR EVERY CASE OF HEPATITIS. These questions may help determine where the patient acquired his/her infection. Please refer to the work sheet on the back of the last page for additional questions.

During the 2-6 weeks prior to illness		Yes	No	Unk
1. was the patient a child or employee in a nursery, day care center, or preschool?	(73)	1☐	2☐	9☐
2. was the patient a household contact of a child or employee in a nursery, day care center, or preschool?	(74)	1☐	2☐	9☐
3. was the patient a contact of a confirmed or suspected hepatitis A case?	(75)	1☐	2☐	9☐
If yes, type of contact: (76) 1 ☐ Sexual 2 ☐ Household (non-sexual) 3 ☐ Other				
4. was the patient employed as a food handler?	(77)	1☐	2☐	9☐
5. did the patient eat raw shellfish?	(78)	1☐	2☐	9☐
6. was the patient suspected as being part of a common-source foodborne or waterborne outbreak?	(79)	1☐	2☐	9☐
7. did the patient travel outside of the U.S. or Canada?	(80)	1☐	2☐	9☐
If yes, where: (81) 1 ☐ So./Central America (including Mexico) 2 ☐ Africa 3 ☐ Caribbean 4 ☐ Middle East 5 ☐ Asia/So. Pacific 6 ☐ Australia/New Zealand 7 ☐ Other_____				
Duration of stay: (82) 1 ☐ 1-3 Days 2 ☐ 4-7 Days 3 ☐ More than 7 Days				
During the 6 weeks-6 months prior to illness				
8. was the patient a contact of a confirmed or suspected acute or chronic hepatitis B or non-A, non-B case?	(83)	1☐	2☐	9☐
If yes, type of contact: (84) 1 ☐ Sexual 2 ☐ Household (non-sexual) 3 ☐ Other				
9. was the patient employed in a medical, dental or other field involving contact with human blood?	(85)	1☐	2☐	9☐
If yes, degree of blood contact: (86) 1 ☐ Frequent (several times weekly) 2 ☐ Infrequent				
10. did the patient receive blood or blood products (transfusion)?	(87)	1☐	2☐	9☐
If yes, specify date(s) received: (88-93) From ___ ___/___ ___/___ ___ to ___ ___/___ ___/___ ___ (94-99)				
11. was the patient associated with a dialysis or kidney transplant unit?	(100)	1☐	2☐	9☐
If yes, (101) 1 ☐ Patient 2 ☐ Employee 3 ☐ Contact of patient or employee				
12. did the patient use needles for injection of street drugs?	(102)	1☐	2☐	9☐
13. what was the patient's sexual preference? (103) 1 ☐ Heterosexual 2 ☐ Homosexual 3 ☐ Bisexual 9 ☐ Unk				
14. how many different sexual partners did the patient have? (104) 1 ☐ None 2 ☐ One 3 ☐ 2-5 4 ☐ More than 5 9 ☐ Unk				
15. did the patient have				
dental work or oral surgery? (105) 1 ☐ Yes 2 ☐ No 9 ☐ Unk tattooing?	(108)	1☐	2☐	9☐
other surgery? (106) 1 ☐ Yes 2 ☐ No 9 ☐ Unk an accidental stick or puncture with a needle				
acupuncture? (107) 1 ☐ Yes 2 ☐ No 9 ☐ Unk or other object contaminated with blood?	(109)	1☐	2☐	9☐
Has this patient ever received the three dose series of Hepatitis B vaccine?	(110)	1☐	2☐	9☐
If yes, what year? (111-112) ___ ___ AND was the patient tested for antibody within 1-6 months after the last dose?	(113)	1☐	2☐	9☐
If yes, was the antibody test: (114) 1 ☐ Pos 2 ☐ Neg 3 ☐ Unknown				

Comments:

Investigator's Name

Date

This questionnaire is authorized by law (Public Health Service Act, 42 USC 241). Although response to the questions is voluntary, cooperation of the patient is necessary for the study and control of the disease. Public burden for this collection of information is estimated to average 25 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; ATTN: PRA; Hubert H. Humphrey Bg, Rm 721-H; 200 Independence Ave. SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0009); Washington, DC 20503.

Form Approved
OMB No. 0920-0009

WORK SHEET

CASE DEFINITION FOR REPORTING OF ACUTE VIRAL HEPATITIS

Illness with: 1) discrete onset of symptoms and
2) jaundice or elevated serum aminotransferase levels.

Hepatitis A: IgM anti-HAV positive.

Hepatitis B: IgM anti-HBc positive if done or HBsAg positive and IgM anti-HAV negative if done.

Non-A, Non-B Hepatitis: 1) IgM anti-HAV negative, and
2) IgM anti-HBc negative if done or HBsAg negative, and
3) serum aminotransferase levels greater than 2 1/2 times the upper limit of normal.

Delta Hepatitis: 1) HBsAg or IgM anti-HBc positive and
2) Anti-HDV positive.

FOR USE BY LOCAL HEALTH DEPARTMENTS TO DETERMINE THE PATIENT'S MOST PROBABLE SOURCE OF INFECTION

Patient's name_____ Home phone_____ Employed by_____ Work phone_____

Reporting physician's name, address, and phone #_____

_____

If patient was hospitalized for hepatitis, give name of hospital_____

Results of liver function tests: SGOT (AST)_____ SGPT (ALT)_____ Bilirubin_____

FURTHER INFORMATION FOR ADMITTED RISK FACTORS AND SOURCES LISTED ON FRONT PAGE

IF APPLICABLE:

1. Name, address, and phone # of child care center_____
2. Name and address of school, grade, classroom attended_____
3. Name, address, and phone # of restaurant where food handler worked **(HEPATITIS A ONLY)**_____
   _____
4. Food history of patient for the 2-6 wks prior to onset: **(HEPATITIS A ONLY)**
   a. name and location of restaurants_____
   b. name and location of food stores_____
   c. name and location of bakery_____
   d. group meals attended (e.g., reception, church, meeting, etc.)_____
   e. location raw shellfish purchased_____
5. Name, address, and phone # of known hepatitis A or hepatitis B contact_____
   _____ Relationship_____
6. **CONTACTS REQUIRING PROPHYLAXIS FOR HEPATITIS A OR HEPATITIS B**

Name	Age	Relationship to case	IG	HBIG	Vaccine

7. If transfused, **NOTIFY BLOOD CENTER!** Name of blood center_____
   a. number of units of whole blood, packed RBC or frozen RBC received_____
   b. specify type of blood product (e.g., albumin, fibrinogen, factor VIII, etc.)_____
8. **IF DONOR**, name, address, and phone # of donor or plasmapheresis center_____
   _____ Date_____
9. Name, address, and phone # of dialysis center_____
10. Name, address, and phone # of dentist or oral surgeon_____
11. If other surgery performed, name, address, and phone # of location_____
    _____
12. Name, address, and phone # of acupuncturist or tattoo parlor_____
13. Is patient currently pregnant?_____ If yes, give obstetrician's name, address and phone #_____
    _____
    a. estimated date and location of delivery_____

Comments:_____

_____

_____Investigator's Name and Title_____Date of Interview_____

HISTOPLASMOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

A systemic fungal infection of varying severity caused by *Histoplasma capsulatum*. Infection may be asymptomatic or take one of four clinical forms:

Acute benign respiratory - mild respiratory illness with general malaise, fever, chills, headache, myalgia, chest pains, nonproductive cough and scattered small calcifications of the lung.
Acute disseminated -debilitating fever, GI symptoms, bone marrow suppression, lymphadenopathy. Most frequent in children and immunosuppressed; fatal if not treated.
Chronic pulmonary - clinically and radiologically resembles chronic pulmonary tuberculosis with cavitations, usually in middle-aged and elderly persons with underlying emphysema
Chronic disseminated - low-grade fever, weight loss, weakness, liver and spleen enlargement, mucosal ulcers, subacute course with slow progression; fatal if not treated.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *H. capsulatum* from culture of bone marrow, sputum, or lesions, **OR**
- Histological demonstration of intracellular yeast cells from bone marrow or tissue biopsy, **OR**
- Detection of *H. capsulatum* polysaccharide antigen in urine or serum, **OR**
- Rise in CF titers to either histoplasmin or yeast-phase antigen.

COMMENT

Positive histoplasmin skin test **IS NOT** sufficient evidence.

REPORTING CRITERIA:

Signs/symptoms and/or laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES WITHIN ONE (1) BUSINESS DAY OF THE IDENTIFICATION OF A CASE OR SUSPECTED CASE REPORT TO THE LOCAL OR STATE HEALTH. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

Apr/06

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTION:

- Minimize exposure to dust in areas contaminated by bird droppings such as chicken or pigeon coops, bird or bat roosts and surrounding soil.
- Surfaces can be sprayed with water to reduce dust.
- Cleaning (using respiratory protection) and/or chemical decontamination requires specially trained personnel.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. Histoplasmosis. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 273-276.

Lenhart, Steven W., 2004 Histoplasmosis *Protecting Workers at Risk*. DHHS (NIOSH) Publication No. 2005–109. from http://www.cdc.gov/niosh/docs/2005-109/pdfs/2005-109.pdf.

Pickering, LK, ed. Histoplasmosis. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 353-356.

INFLUENZA

IDENTIFICATION

CLINICAL DESCRIPTION:

Influenza is an acute viral infection of the respiratory tract characterized by the sudden onset of fever, headache, myalgia, coryza, sore throat and a dry cough.

CASE DEFINITION:

Confirmed:

A case that is laboratory confirmed and meets clinical description.

LABORATORY CRITERIA FOR CONFIRMATION:

- Culture isolation of influenza viruses from pharyngeal or nasal secretions.

REPORTING CRITERIA: Positive influenza viral culture isolates are to be reported.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE NOTIFICATION:

Laboratories are to report influenza isolates on a weekly basis.

Kentucky 902 KAR 02:065 requires long term care facilities to report an outbreak (2 or more cases) of influenza-like illnesses (ILI) within 24 hours to the local health department or the KDPH.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PREVENTION MEASURES:

- Annual influenza vaccination is recommended for persons at high risk for influenza-associated complications and those in close contact with high-risk persons such as health-care providers and family members.
- Annual influenza vaccination is recommended for persons 50 years and older.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Centers for Disease Control and Prevention and the Council for State and Territorial Epidemiologists. Chapter 5, Influenza. Manual for the Surveillance of Vaccine-Preventable Disease. 1999, 1-9.

Heymann, David L., ed. INFLUENZA. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 281-286.

Pickering, LK, ed. INFLUENZA. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 382-390.

Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000; 49(No.RR-3): 1-27.

LEGIONELLOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness with acute onset, which can take two distinct forms:

Legionnaire disease, which is characterized by fever, cough, myalgia, and pneumonia. **OR**

Pontiac fever, a similar but milder illness without pneumonia.

CASE DEFINITION

Confirmed:

A clinically compatible case that meets at least one of the confirmatory laboratory criteria.

- Travel-associated: a case that has a history of spending at least one night away from home, either in the same country of residence or abroad, in the ten days before onset of illness.

Suspect:

A clinically compatible case that meets at least one of the presumptive (suspect) laboratory criteria.

- Travel-associated: a case that has a history of spending at least one night away from home, either in the same country of residence or abroad, in the ten days before onset of illness.

LABORATORY CRITERIA FOR CONFIRMATION:

Confirmed:

- By culture: isolation of any *Legionella* organism from respiratory secretions, lung tissue, pleural fluid, or other normally sterile fluid.
- By detection of *Legionella pneumophila* serogroup 1 antigen in urine using validated reagents.
- By seroconversion: fourfold or greater rise in specific serum antibody titer to *Legionella pneumophila* serogroup 1 using validated reagents.

Suspect:

- By seroconversion: fourfold or greater rise in antibody titer to specific species or serogroups of *Legionella* other than *L. pneumophila* serogroup 1.

- By seroconversion: fourfold or greater rise in antibody titer to multiple species of *Legionella* using pooled antigen and validated reagents.

- By the detection of specific *Legionella* antigen or staining of the organism in respiratory secretions, lung tissue, or pleural fluid by direct fluorescent antibody (DFA) staining, immunohistochemistry (IHC), or other similar method, using validated reagents.

- By detection of *Legionella* species by a validated nucleic acid assay.

REPORTING CRITERIA: Signs/symptoms and/or laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES WITHIN **FIVE (5) BUSINESS DAY** OF THE IDENTIFICATION OF A CASE OR SUSPECTED CASE REPORT TO THE LOCAL OR STATE HEALTH. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **OR**
- Legionellosis Case Report (CDC 52.56 Rev. 8/99).

PUBLIC HEALTH INTERVENTIONS:

- Attempts to culture the organism from clinical specimens prior to the initiation of antibiotic therapy are strongly encouraged.
- Source investigation by LHD. The completion of the Legionellosis Case Report Form (CDC 52.56) usually fulfills this requirement for sporadic cases
- Outbreaks require a search for potential exposures common to multiple case-patients.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. Legionellosis. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 292-295.

Pickering, LK, ed. Legionellosis. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 318-336.

Patient's Name: _____ (Last, First, M.I.) _____ (Telephone No.) Hospital: _____

Address: 115 _____ (Number, Street, Apt. No., City, State) _____ (Zip Code) Patient Chart No.: _____

-- Patient identifier information is not transmitted to CDC --

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention (CDC)
Atlanta, Georgia 30333

LEGIONELLOSIS CASE REPORT

(DISEASE CAUSED BY ANY LEGIONELLA SPECIES)

CDC SAFER • HEALTHIER • PEOPLE™

Form Approved OMB No. 0920-0009

– PATIENT INFORMATION –

1. State Health Dept. Case No. _____

2. Reporting State: ☐☐

3. (CDC Use Only) Case No. ☐☐☐☐☐☐☐

4. County of Residence _____

5. State of Residence ☐☐

6. Occupation: _____

7a. Date of Birth: Mo. ☐☐ Day ☐☐ Year ☐☐☐☐

7b. Age: ☐☐☐ 1☐ Days 2☐ Mos. 3☐ Years

8. Sex: 1☐ Male 2☐ Female

9. Race: 1☐ White 2☐ Black 3☐ American Indian/ Alaskan Native 4☐ Asian/Pacific Islander 8☐ Other 9☐ Unk

10. Ethnic Origin: 1☐ Hispanic/Latino 2☐ Not Hispanic/Latino 9☐ Unk

11. Possible sources of exposure:

IN THE TWO WEEKS BEFORE ONSET, DID PATIENT:

a) Travel or stay overnight somewhere other than usual residence? 1☐ Yes 2☐ No 9☐ Unk

If Yes, give cities and lodging where available:

CITY	LODGING
_____	_____
_____	_____
_____	_____

**** For suspected travel related cases, please contact CDC or pertinent state health departments immediately.***

b) Have dental work? 1☐ Yes 2☐ No 9☐ Unk **If Yes**, name of dental office: _____

c) Visit a hospital as an outpatient? 1☐ Yes 2☐ No 9☐ Unk **If Yes**, name of hospital: _____

d) Work in a hospital? 1☐ Yes 2☐ No 9☐ Unk **If Yes**, name of hospital: _____

12. Was case hospital related (nosocomial)?

2☐ Not nosocomial: No inpatient or outpatient hospital visits in the 10 days prior to onset of symptoms.

3☐ Possibly nosocomial: Patient hospitalized 2 - 9 days before onset of legionella infection.

9☐ Unk

1☐ Definitely nosocomial: Patient hospitalized continuously for ≥ 10 days before onset of legionella infection.

8☐ Other(Specify) _____

13. Was this patient's legionella infection: (check one)

1☐ Associated with outbreak (Specify location): _____

2☐ Sporadic case 9☐ Unk

– CLINICAL ILLNESS –

14. Diagnosis: (check one)

1☐ Legionnaires' Disease (Pneumonia, X-ray diagnosed)

2☐ Pontiac fever (fever, myalgia without pneumonia)

8☐ Other (Specify) _____

9☐ Unk

15. Date of symptom onset of Legionellosis Mo. ☐☐ Day ☐☐ Year ☐☐☐☐

16. Was patient hospitalized for Legionellosis? 1☐ Yes 2☐ No 9☐ Unk

Hospital name: _____

Hospital address: _____

17. Outcome of illness: 1☐ Survived 2☐ Died 9☐ Unk

– CASE DEFINITION –

Confirmed case has a compatible clinical history and meets at least one of the following criteria:

1) isolation of *Legionella* species from lung tissue, respiratory secretions, pleural fluid, blood or other sterile site

2) demonstration of *L. pneumophila*, serogroup 1, in lung tissue, respiratory secretions, or pleural fluid by direct fluorescent antibody testing

3) fourfold or greater rise in immunoflourescent antibody titer to *L. pneumophila*, serogroup 1, to 128 or greater

4) detection of *L. pneumophila* serogroup 1 antigen in urine

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Project Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA 30333, ATTN: PRA (0920-0009). Do not send the completed form to this address. While your response is voluntary your cooperation is necessary for the understanding and control of this disease.

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– METHOD OF DIAGNOSIS –

PLEASE CHECK ALL METHODS OF DIAGNOSIS WHICH APPLY

1 ☐ **Culture Positive: If Yes,**
Date: Mo. Day Year

Site: 1 ☐ lung biopsy 2 ☐ respiratory secretions 3 ☐ pleural fluid 4 ☐ blood 8 ☐ Other: (Specify) _____

Species: _____ **Serogroup:** _____

2 ☐ **DFA Positive: If Yes,**
Date: Mo. Day Year

Site: 1 ☐ lung biopsy 2 ☐ respiratory secretions 3 ☐ pleural fluid 4 ☐ blood 8 ☐ Other: (Specify) _____

Species: _____ **Serogroup:** _____

3 ☐ **Fourfold rise in antibody titer: If Yes,**

Date: Mo. Day Year

List Species and Serogroup in assay used:

Initial (acute) titer 1: _____ **Species:** _____ **Serogroup:** _____

Convalescent titer 1: _____ **Species:** _____ **Serogroup:** _____

4 ☐ **Urine Antigen Positive: If Yes,**
Date: Mo. Day Year

– INTERVIEWER IDENTIFICATION –

Interviewer's Name: _____

Affiliation: _____

Telephone No.: ___ ___ ___ - ___ ___ ___ - ___ ___ ___ ___

Date of Interview: Mo. Day Year

– CDC USE ONLY –

Local Health Dept. Please submit this document to:

State/DHS/SSS via your CD reporting clerk

State Health Dept. Return completed form to:

Respiratory Diseases Branch, Mailstop C23
National Center for Infectious Diseases
Centers for Disease Control and Prevention
1600 Clifton Rd. NE
Atlanta, GA 30333

Check the appropriate answer: Serogroup: _____

1 ☐ *L. pneumophila* 6 ☐ *L. feeleii*

2 ☐ *L. bozemanii* 7 ☐ *L. longbeachae*

3 ☐ *L. dumoffii* 8 ☐ Mixed: (specify)_____

4 ☐ *L. gormanii* 88 ☐ Other: (specify)_____

5 ☐ *L. micdadei* 99 ☐ Unk

– COMMENTS –

LISTERIOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

In adults, invasive disease caused by *Listeria monocytogenes* manifests most commonly as meningitis or bacteremia; infection during pregnancy may result in fetal loss through miscarriage or stillbirth, or neonatal meningitis or bacteremia. Other manifestations can also be observed.

CASE DEFINITION:

Confirmed:

A clinically compatible illness that is laboratory confirmed.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Listeria monocytogenes* from a normally sterile site (e.g., blood or cerebrospinal fluid or, less common, joint, pleural or pericardial fluid)
- In the setting of miscarriage or stillbirth, isolation of *L. monocytogenes* from placental or fetal tissue

REPORTING CRITERIA: Clinical diagnosis with laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION:
REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY**
upon recognition of a case or a suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning, **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **OR**
- National Bacterial Meningitis and Bacteremia Case Report - CDC 52.15 REV. 10-93.

PUBLIC HEALTH INTERVENTIONS:

- Cluster investigation if more than one case occurs in close geographic or temporal setting.

- Pregnant women and immunocompromised individuals should be instructed to eat only properly cooked meats and pasteurized dairy products and that they should avoid potentially infective materials such as aborted animal fetuses on farms.

CONTACTS FOR CONSULTATION

KYDPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
KYDPH, FOOD SAFETY AND COSMETICS BRANCH: 502-564-7181
KYDPH, DIV. OF LABORATORY SERVICES: 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. LISTERIOSIS. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 309-312.

Pickering, LK, ed. LISTERIOSIS. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003:405-407.

LYME DISEASE

This surveillance case definition was developed for national reporting of Lyme disease; it is not intended to be used in clinical diagnosis.

Clinical presentation

A systemic, tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients.

For purposes of surveillance, EM is defined as a skin lesion that typically begins as a red macule or papule and expands over a period of days to weeks to form a large round lesion, often with partial central clearing. A single primary lesion must reach greater than or equal to 5 cm in size across its largest diameter. Secondary lesions also may occur. Annular erythematous lesions occurring within several hours of a tick bite represent hypersensitivity reactions and do not qualify as EM. For most patients, the expanding EM lesion is accompanied by other acute symptoms, particularly fatigue, fever, headache, mildly stiff neck, arthralgia, or myalgia. These symptoms are typically intermittent. The diagnosis of EM must be made by a physician. Laboratory confirmation is recommended for persons with no known exposure.

For purposes of surveillance, late manifestations include any of the following when an alternate explanation is not found:

- *Musculoskeletal system.* Recurrent, brief attacks (weeks or months) of objective joint swelling in one or a few joints, sometimes followed by chronic arthritis in one or a few joints. Manifestations not considered as criteria for diagnosis include chronic progressive arthritis not preceded by brief attacks and chronic symmetrical polyarthritis. Additionally, arthralgia, myalgia, or fibromyalgia syndromes alone are not criteria for musculoskeletal involvement.

- *Nervous system.* Any of the following, alone or in combination: lymphocytic meningitis; cranial neuritis, particularly facial palsy (may be bilateral); radiculoneuropathy; or, rarely, encephalomyelitis. Encephalomyelitis must be confirmed by demonstration of antibody production against *Borrelia burgdorferi* in the cerebrospinal fluid (CSF), evidenced by a higher titer of antibody in CSF than in serum. Headache, fatigue, paresthesia, or mildly stiff neck alone, are not criteria for neurologic involvement.

- *Cardiovascular system.* Acute onset of high-grade (2nd-degree or 3rd-degree) atrioventricular conduction defects that resolve in days to weeks and are sometimes associated with myocarditis. Palpitations, bradycardia, bundle branch block, or myocarditis alone are not criteria for cardiovascular involvement.

Laboratory evidence

For the purposes of surveillance, the definition of a qualified laboratory assay is (1) a positive culture for *B. burgdorferi*, (2) two-tier testing interpreted using established criteria [1], or (3) single-tier IgG immunoblot seropositivity interpreted using established criteria [1-4].

Exposure

Exposure is defined as having been (less than or equal to 30 days before onset of EM) in wooded, brushy, or grassy areas (i.e., potential tick habitats) in a county in which Lyme disease is endemic. A history of tick bite is not required.

Disease endemic to county

A county in which Lyme disease is endemic is one in which at least two confirmed cases have been acquired in the county or in which established populations of a known tick vector are infected with *B. burgdorferi*.

Case classification

Confirmed: a) a case of EM with a known exposure (as defined above), or b) a case of EM with laboratory evidence of infection (as defined above) and without a known exposure or c) a case with at least one late manifestation that has laboratory evidence of infection.

Probable: any other case of physician-diagnosed Lyme disease that has laboratory evidence of infection (as defined above).

Suspected: a) a case of EM where there is no known exposure (as defined above) and no laboratory evidence of infection (as defined above), or b) a case with laboratory evidence of infection but no clinical information available (e.g. a laboratory report).

Lyme disease reports will not be considered cases if the medical provider specifically states this is not a case of Lyme disease, or the only symptom listed is "tick bite" or "insect bite."

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES WITHIN **FIVE (5) BUSINESS DAY** OF THE IDENTIFICATION OF A CASE OR SUSPECTED CASE REPORT TO THE LOCAL OR STATE HEALTH. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **OR**

- Lyme Disease Case Report Form - (CDC 52.60 REV. 1-91).

PUBLIC HEALTH INTERVENTIONS / FOLLOW-UP:

- Completion of the Lyme Case Disease Case Report Form to ascertain case status and to determine county of probable exposure.
- Patient education as needed to minimize future tick exposure.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.

RELATED REFERENCES

Heymann, David L., ed. Lyme Disease in Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 315-320.

Pickering, LK, ed. Malaria. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 407-411.

CDC. Nationally Notifiable Infectious Diseases, 2006
HTTP://WWW.CDC.GOV/EPO/DPHSI/CASEDEF/LYME_DISEASE_CURRENT.HTM

LYME DISEASE CASE REPORT FORM

Form Approved
OMB No. 0920-0009
Expiration Date
12-92

Patient's last name _____ First name _____ Tele.No. (___) _____

Address _____ City _____

Detach before sending to CDC

State _____ County _____ Zip _____

Age (yrs.) _____ Sex ___ M ___ F ___ Unspec.

Race ___ Amer. Indian/Eskimo ___ Asian/Pacific Isl. ___ Black ___ White ___ Unknown

Ethnicity ___ Hispanic ___ Non Hisp. ___ Unknown

SYMPTOMS AND SIGNS OF CURRENT EPISODE (PLEASE MARK EACH QUESTION):

DERMATOLOGIC:

Erythema migrans (**physician diagnosed EM at least 5 cm in diameter**)? ____ [Y] [N] [?]

RHEUMATOLOGIC:

Arthritis characterized by brief attacks of **joint swelling** ? ____ [Y] [N] [?]

NEUROLOGIC:

Bell's palsy or other cranial neuritis? ____ [Y] [N] [?]
Radiculoneuropathy? ____ [Y] [N] [?]
Lymphocytic meningitis? ____ [Y] [N] [?]
Encephalitis/Encephalomyelitis? ____ [Y] [N] [?]
CSF tested for antibodies to B. burgdorferi? ____ [Y] [N] [?]
Antibody to B. burgdorferi higher in CSF than serum? ____ [Y] [N] [?]

CARDIOLOGIC:

2nd or 3rd degree atrioventricular block? ____ [Y] [N] [?]

Other clinical: _____

Date of onset of first symptoms: __/__/__ (mo dy yr) Date of diagnosis: __/__/__ (mo dy yr) Date of report to health agency __/__/__ (mo dy yr)

OTHER HISTORY

Was the patient hospitalized for the current episode? ____ [Y] [N] [?]

Name of antibiotic(s) used this episode? _____ Use in days _____

Was the patient pregnant at the time of illness? ____ [Y] [N] [?]

Where was the patient most likely exposed? County _____ State _____

LABORATORY RESULTS

	Positive	Negative	Equivocal	Not done/Unknown
Serologic test results:	☐	☐	☐	☐
Culture results:	☐	☐	☐	☐
Other (specify)	☐	☐	☐	☐

Physician's name _____ Person completing form _____ (if not the same)

Address _____ Address _____

Telephone Number (___) _____ Telephone Number (___) _____

FOR INTERNAL USE ONLY

State ID No. ☐☐☐☐☐☐ CDC ID No. ☐☐☐☐☐☐ Date Reported to CDC __/__/__ (mo dy yr)

LYME DISEASE CASE REPORT FORM
CDC 52.80 REV. 1-91

This report is authorized by law (Public Health Service Act, 42 USC 241). While your response is voluntary, your cooperation is necessary for the understanding and control of this public health problem. Public reporting burden for this collection of information is estimated to average 10 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; ATTN: PRA; Hubert H. Humphrey Bg., Rm 721-B; 200 Independence Ave., SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0009); Washington, DC 20503.

LYME DISEASE NATIONAL SURVEILLANCE CASE DEFINITION

Lyme disease is a systemic, tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is the initial skin lesion. erythema migrans (EM), that occurs in 60% to 80% of patients.

A case of Lyme disease is defined as follows:

1. A person with erythema migrans; or
2. A person with at least one late manifestation and laboratory confirmation of infection.

NOTE: *It should be emphasized that is an epidemiologic case definition intended for surveillance purposes only.*

General clinical epidemiologic definitions:

1. **Erythema migrans (EM):**
For purposes of surveillance, EM is a skin lesion that typically begins as a red macule or papule and expands over a period of days or weeks to form a large round lesion, often with partial central clearing. A solitary lesion must reach at least 5 cm in size. Secondary lesions may also occur. Annular erythematous lesions occuring within several hours of a tick bite represent hypersensitivity reactions and do not qualify as EM. In most patients, the expanding EM lesion is accompanied by other acute symptoms, particularly fatigue, fever, headache, mild stiff neck, arthralgias, or myalgias. These symptoms are typically intermittent. The diagnosis of EM must be made by a physician. Laboratory confirmation is recommended for persons with no known exposure.

2. **Late manifestations:**
These include any of the following when an alternate explanation is not found.

   a. Musculoskeletal system:
   Recurrent, brief attacks (weeks or months) of objective joint swelling in one or a few joints sometimes followed by chronic arthritis in one or a few joints. Manifestations not considered as criteria for diagnosis include chronic progressive arthritis not preceeded by brief attacks and chronic symmetrical polyarthritis. Additionally, arthralgias, myalgias, or fibromyalgia syndromes alone are not accepted as criteria for musculoskeletal involvement.

   b. Nervous system:
   Lymphocytic meningitis, cranial neuritis, particularly facial palsy (may be bilateral), radiculoneuropathy or rarely, encephalomyelitis alone or combination. Encephalomyelitis must be confirmed by showing antibody production against B. burgdorferi in the cerebrospinal fluid (CSF), demonstrated by a higher titer of antibody in CSF than in serum. Headache, fatigue, paresthesias, or mild stiff neck alone are not accepted as criteria for neurologic involvement.

   c. Cardiovascular system:
   Acute onset, high grade (2nd or 3rd degree) atrioventricular conduction defects that resolve in days to weeks and are sometimes associated with myocarditis. Palpitations, bradycardia, bundle branch block, or myocarditis alone are not accepted as criteria for cardiovascular involvement.

3. **Exposure:**
Exposure is defined as having been in wooded, brushy, or grassy areas (potential tick habitats) in an endemic county no more than 30 days prior to the onset of EM. A history of tick bite is not required.

4. **Endemic county:**
An endemic county is one in which at least 2 definite cases have been previously acquired or a county in which a tick vector has been shown to be infected with B. burgdorferi.

5. **Laboratory confirmation:**
Laboratory confirmation of infection with B. burgdorferi is established when a laboratory isolates the spirochete from tissue or body fluid, detects diagnostic levels of IgM or IgG antibodies to the spirochete in serum or CSF, or detects a significant change in antibody levels in paired acute and convalescent serum samples. States may determine the criteria for laboratory confirmation and diagnostic levels of antibody. Syphilis and other known causes of biologic false positive serologic test results should be excluded, as appropriate, when laboratory confirmation has been based on serologic testing alone.

LYMPHOGRANULOMA VENEREUM

IDENTIFICATION

CLINICAL DESCRIPTION:

Infection with L_1, L_2, or L_3 serovars of *Chlamydia trachomatis* may result in a disease characterized by genital lesions, suppurative regional lymphadenopathy, or hemorrhagic proctitis. The infection is usually sexually transmitted.

CASE DEFINITION:

Confirmed:

A case that is laboratory confirmed.

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *C. trachomatis*, serotype L_1, L_2, or L_3 from clinical specimen, **OR**
- Demonstration by immunofluorescence of inclusion bodies in leukocytes of an inguinal lymph node (bubo) aspirate, **OR**
- Positive microimmunofluorescent serologic test for a lymphogranuloma venereum strain of *C. trachomatis.*

REPORTING CRITERIA: Clinical diagnosis initially; laboratory confirmation required to meet case definition.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case. Public health intervention is available on request of the reporting physician.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).
- **Note:** Section labeled "Additional Information for Sexually Transmitted Diseases Only" must be completed.

PUBLIC HEALTH INTERVENTIONS

- Patients should be counseled on methods to reduce their risk for STDS, including HIV.
- Testing for syphilis, gonorrhea, *Chlamydia*, and HIV should be offered and encouraged.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIV. OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. LYMPHOGRANULOMA VENEREUM. Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 322-324.

Kimberly A. Workowski, M.D. & William C. Levine, M.D., M.Sc. *Sexually Transmitted Diseases Treatment Guidelines 2002*., from http://www.cdc.gov/std/treatment/1-2002TG.htm

MALARIA

IDENTIFICATION

CLINICAL DESCRIPTION:

A parasitic infection caused by *Plasmodium vivax*, *P. ovale*, *P. malariae*, or *P. falciparum*. The disease is characterized by fever, chills, headache, and sweating. Depending upon the species, acute illness may develop into a variety of syndromes with severe complications including coma and death. Malaria may also be transmitted transplacentally. The disease may recur over a period lasting up to 50 years.

CASE DEFINITION:

Confirmed*:*

An episode of microscopically confirmed malaria parasitemia in any person (symptomatic or asymptomatic) diagnosed in the United States, regardless of whether the person experienced previous episodes of malaria while outside the country.

LABORATORY CRITERIA FOR CONFIRMATION:

- Demonstration of malaria parasites in blood films.

REPORTING CRITERIA: Laboratory confirmation.

Comment

A subsequent attack experienced by the same person but caused by a different Plasmodium species is counted as an additional case. A subsequent attack experienced by the same person and caused by the same species in the United States may indicate a relapsing infection or treatment failure caused by drug resistance.

Blood smears from questionable cases should be referred to the National Malaria Repository, CDC, for confirmation of the diagnosis.

Cases also are classified according to the following World Health Organization categories:

- *Autochthonous*:
  - *Indigenous*: malaria acquired by mosquito transmission in an area where malaria is a regular occurrence
  - *Introduced*: malaria acquired by mosquito transmission from an imported case in an area where malaria is not a regular occurrence

- *Imported*: malaria acquired outside a specific area (e.g., the United States and its territories)
- *Induced*: malaria acquired through artificial means (e.g., blood transfusion, common syringes, or malariotherapy)
- *Relapsing*: renewed manifestation (i.e., of clinical symptoms and/or parasitemia) of malarial infection that is separated from previous manifestations of the same infection by an interval greater than any interval resulting from the normal periodicity of the paroxysms
- *Cryptic*: an isolated case of malaria that cannot be epidemiologically linked to additional cases

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **OR**
- Malaria Case Surveillance Report - CDC 54.1 (01/2002).

PREVENTION MEASURES:

The parasite is transmitted by the bite of an infected female *Anopheles* mosquito. Non-immune travelers who will be exposed to mosquitoes in malarious areas should regularly use malaria suppressive drugs. Insect repellents regularly applied to the skin, as well as night spraying and bed nets are recommended.

PUBLIC HEALTH INTERVENTIONS:

Blood donors should be questioned about history of malaria or malaria exposure. In the U.S. blood donors who **have not** taken antimalarial drugs and remained free of symptoms may donate blood six months after return from endemic area. Persons who have been on antimalarial prophylaxis should not donate blood for three years after cessation of chemoprophylaxis or treatment.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. Malaria. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 253-261.

Pickering, LK, ed. Malaria. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 318-336.

Louise M. Causer, M.B.B.S., Malaria Surveillance - United States 2000. MMWR July 12, 2002 / 51(SS05);9-21 from http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5105a2.htm

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MALARIA CASE SURVEILLANCE REPORT

Department of Health and Human Services, Centers for Disease Control and Prevention
Division of Parasitic Diseases (MS F-22), 4770 Buford Highway, N.E.
Atlanta, Georgia 30341

State Case No: .....
DASH No: .....

Case No: .....
County: .....

Form Approved
OMB 0920-0009

Patient name (last, first):

Date of symptom onset of **this** attack (mm/dd/yyyy): ____/ ____/ _____

Age (yrs): _____ (mos): _____
Date of birth: ____/ ____/ _____
Is patient pregnant? ☐ Yes ☐ No

Sex: ☐ Male ☐ Female

Physician name (last, first):

Telephone No: ( ) _____ – _____

Ethnicity:
☐ Hispanic or Latino
☐ Not Hispanic or Latino

Race (select one or more):
☐ American Indian or Alaska Native
☐ Native Hawaiian or Other Pacific Islander
☐ Black or African American
☐ Asian ☐ White ☐ Unknown

Lab results:
☐ Smear positive ☐ Smear Negative ☐ No Smear Taken
Species (check all that apply):
☐ Vivax ☐ Falciparum ☐ Malariae ☐ Ovale ☐ Not Determined

State/territory reporting this case: _____
Patient admitted to hospital: ☐ Yes ☐ No
Hospital: _____
Date: ____/ ____/ _____ Hospital record No.: _____

Laboratory name:
Telephone No: ( ) _____ – _____

Specimens being sent to CDC? ☐ Yes ☐ No
If yes: ☐ Smears ☐ Whole Blood ☐ Other: _____

Has the patient traveled or lived outside the U.S. during the past 4 years? ☐ Yes ☐ No If yes, specify:

Country:	1. _____	2. _____	3. _____
Date returned/arrived in U.S. (mm/dd/yyyy):	____/ ____/ _____	____/ ____/ _____	____/ ____/ _____
Duration of stay in foreign country (days):	_____	_____	_____

Did patient reside in U.S. prior to most recent travel?
☐ Yes, for ≥12 months
☐ Yes, for <12 months
☐ No, (specify country): _____
☐ Unknown

Principal reason for travel from/to U.S. for most recent trip:
☐ Tourism ☐ Visiting friends/relatives ☐ Student/teacher
☐ Military ☐ Airline/ship crew ☐ Other: _____
☐ Business ☐ Missionary or dependent
☐ Peace Corps ☐ Refugee/immigrant

Was malaria chemoprophylaxis taken? ☐ Yes ☐ No If yes, which drugs were taken?
☐ Chloroquine ☐ Mefloquine ☐ Doxycycline ☐ Primaquine ☐ Malarone® ☐ Other: _____

Were all pills taken as prescribed?
☐ Yes, missed no doses
☐ No, missed one to a few doses
☐ No, missed more than a few but less than half of the doses
☐ No, missed half or more of the doses
☐ No, missed doses but not sure how many
☐ Don't know

If doses were missed, what was the reason?
☐ Forgot
☐ Didn't think needed
☐ Had a side effect (specify): _____
☐ Was advised by others to stop
☐ Prematurely stopped taking once home
☐ Other (specify): _____

History of malaria in last 12 months (prior to this report)? ☐ Yes ☐ No Date of previous illness: ____/ ____/ _____
If yes, species (check all that apply): ☐ Vivax ☐ Falciparum ☐ Malariae ☐ Ovale ☐ Not Determined

Blood transfusion/organ transplant within last 12 months: ☐ Yes ☐ No If yes, date: ____/ ____/ _____

Clinical complications for this attack:
☐ Cerebral malaria ☐ ARDS ☐ None
☐ Renal failure ☐ Anemia (Hb<11, Hct<33) ☐ Other : _____

Was illness fatal: ☐ Yes ☐ No ☐ Unknown
If yes, date of death : _____/____/_____

Therapy for this attack (check all that apply):
☐ Chloroquine ☐ Tetracycline/doxycycline ☐ Mefloquine ☐ Exchange transfusion ☐ Unknown
☐ Primaquine ☐ Quinine/quinidine ☐ Pyrimethamine-sulfadoxine ☐ Malarone ☐ Other (specify): _____

Person submitting report: _____ Telephone No. : _____

Affiliation: _____ Date: _____/_____/_____

For CDC Use Only. Classification ☐ Imported ☐ Induced ☐ Introduced ☐ Congenital ☐ Cryptic

Public reporting burden of this collection of information is estimated to average 15 minutes per response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Please send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Rd., NE (MS D-24); Atlanta, GA 30333; ATTN: PRA (0920-0009).

 If sending specimens, please forward blood smears (thick and thin) with this report.

Physicians and other health care providers with questions about diagnosis and treatment of malaria cases can call CDC's Malaria Hotline:

- Monday – Friday, 8:00 am to 4:30 pm, EST: call 770-488-7788 (Fax: 770-488-4206)
- Off-hours, weekends, and federal holidays: call 770-488-7100 and ask to have the malaria clinician on call paged

Information on malaria risk, prevention, and treatment is available at:

- CDC's Travelers' Health Web site http://www.cdc.gov/travel
- CDC's Travelers' Health Information Service: call 1-877-FYI-TRIP
- CDC's Malaria Web site http://www.cdc.gov/malaria

Health Information for International Travel **is available from the Public Health Foundation:**
Call 1-877-252-1200, or order on line at http://www.phf.org

 If sending specimens, please forward blood smears (thick and thin) with this report.

MEASLES (RUBEOLA)

Clinical case definition

An illness characterized by all the following:

- a generalized rash lasting greater than or equal to 3 days
- a temperature greater than or equal to 101.0°F (greater than or equal to 38.3°C)
- cough, coryza, or conjunctivitis

Laboratory criteria for diagnosis

- Positive serologic test for measles immunoglobulin M antibody, or
- Significant rise in measles antibody level by any standard serologic assay, or
- Isolation of measles virus from a clinical specimen

Case classification

Suspected: any febrile illness accompanied by rash

Probable: a case that meets the clinical case definition, has noncontributory or no serologic or virologic testing, and is not epidemiologically linked to a confirmed case

Confirmed: a case that is laboratory confirmed or that meets the clinical case definition and is epidemiologically linked to a confirmed case. A laboratory-confirmed case does not need to meet the clinical case definition.

Epidemiologic Classification of Internationally-Imported and U.S-Acquired

Internationally imported case: An internationally imported case is defined as a case in which measles results from exposure to measles virus outside the United States as evidenced by at least some of the exposure period (7–21 days before rash onset) occurring outside the United States and rash onset occurring within 21 days of entering the United States and there is no known exposure to measles in the U.S. during that time. All other cases are considered U.S.-acquired.

U.S.-acquired case: An U.S.-acquired case is defined as a case in which the patient had not been outside the United States during the 21 days before rash onset or was known to have been exposed to measles within the United States.

U.S.-acquired cases are subclassified into four mutually exclusive groups:

> **Import-linked case:** Any case in a chain of transmission that is epidemiologically linked to an internationally imported case.
>
> **Imported-virus case:** a case for which an epidemiologic link to an internationally imported case was not identified, but for which viral genetic evidence indicates an imported measles genotype,

i.e., a genotype that is not occurring within the United States in a pattern indicative of endemic transmission. An endemic genotype is the genotype of any measles virus that occurs in an endemic chain of transmission (i.e., lasting ≥12 months). Any genotype that is found repeatedly in U.S.-acquired cases should be thoroughly investigated as a potential endemic genotype, especially if the cases are closely related in time or location.

Endemic case: a case for which epidemiological or virological evidence indicates an endemic chain of transmission. Endemic transmission is defined as a chain of measles virus transmission that is continuous for ≥12 months within the United States.

Unknown source case: a case for which an epidemiological or virological link to importation or to endemic transmission within the U.S. cannot be established after a thorough investigation. These cases must be carefully assessed epidemiologically to assure that they do not represent a sustained U.S.-acquired chain of transmission or an endemic chain of transmission within the U.S.

Note: Internationally imported, import-linked, and imported-virus cases are considered collectively to be import-associated cases.

States may also choose to classify cases as "out-of-state-imported" when imported from another state in the United States. For national reporting, however, cases will be classified as either internationally imported or U.S.-acquired.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **OR**
- Measles Case Investigation Worksheet (CDC).

PREVENTION MEASURES:

Routinely administer initial dose of MMR (measles, mumps, and rubella) vaccine at 12 - 15 months of age and second dose before school entry (4 - 6 years of age) or, if not received earlier, before sixth grade entry.

PUBLIC HEALTH INTERVENTIONS:

- A single case of measles constitutes an outbreak and is a public health emergency. All confirmed and suspected cases of measles must be reported by telephone to the Kentucky

Immunization Program (or Communicable Disease Branch Manager or State Epidemiologist) as soon as possible and within no longer than 24 hours.

- Prompt decisions should be made on how best to confirm the diagnosis, determine possible source of exposure and identify contacts that may require vaccine or immune globulin promptly. It must also be decided promptly whether and how to get specimens to the Centers for Disease Control and Prevention (CDC) for virus isolation and further epidemiologic studies.

- Contacts who do not receive vaccine because of medical, religious or other reasons should be excluded from school, child-care or other outbreak settings until at least 2 weeks after the onset of rash in the last case of measles.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, IMMUNIZATION PROGRAM: 502-564-4478
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. Measles. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003:347-354.

Pickering, LK, ed. Measles. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 419-429.

Measles Surveillance Worksheet

APPENDIX 7

NAME (Last, First)				Hospital Record No.
Address (Street and No.)	City	County	Zip	Phone
Reporting Physician/Nurse/Hospital/Clinic/Lab	Address			Phone

---------- DETACH HERE and transmit only lower portion if sent to CDC ----------

Measles Surveillance Worksheet

County | State | Zip

Birth Date (Month Day Year)

Age (Unk = 999)

Age Type
0 = 0-120 years
1 = 0-11 months
2 = 0-52 weeks
3 = 0-28 days
9 = Age unknown

Ethnicity
H = Hispanic
N = Not Hispanic
U = Unknown

Race
N = Native Amer./Alaskan Native
A = Asian/Pacific Islander
B = African American
W = White
O = Other
U = Unknown

Sex
M = Male
F = Female
U = Unknown

Event Date (Month Day Year)

Event Type
1 = Onset Date
2 = Diagnosis Date
3 = Lab Test Done
4 = Reported to County
5 = Reported to State or MMWR Report Date
9 = Unknown

Outbreak Associated (Unk = 999)

Reported (Month Day Year)

Imported
1 = Indigenous
2 = International
3 = Out of State
9 = Unknown

Report Status
1 = Confirmed
2 = Probable
3 = Suspect
9 = Unknown

CLINICAL DATA

Any Rash? Y = Yes, N = No, U = Unknown

Rash Onset (Month Day Year)

Rash Duration 0 - 30 Days, 99 = Unknown

Rash Generalized? Y = Yes, N = No, U = Unknown

Fever? Y = Yes, N = No, U = Unknown

If Recorded, Highest Measured Temp. 36.0 - 110.0 degrees, 999.9 = Unknown

Cough? Y = Yes, N = No, U = Unknown

Coryza? Y = Yes, N = No, U = Unknown

Conjunctivitis? Y = Yes, N = No, U = Unknown

COMPLICATIONS

Otitis? Y = Yes, N = No, U = Unknown

Diarrhea? Y = Yes, N = No, U = Unknown

Pneumonia? Y = Yes, N = No, U = Unknown

Encephalitis? Y = Yes, N = No, U = Unknown

Thrombocytopenia? Y = Yes, N = No, U = Unknown

Death? Y = Yes, N = No, U = Unknown

Other Complications? Y = Yes, N = No, U = Unknown

Hospitalized? Y = Yes, N = No, U = Unknown

Days Hospitalized 0 - 998, 999 - Unknown

If Yes, Please Specify:

LABORATORY

Was Laboratory Testing For Measles Done? Y = Yes, N = No, U = Unknown

Date IgM Specimen Taken (Month Day Year)

Result
P = Positive
N = Negative
I = Indeterminate
E = Pending
X = Not Done
U = Unknown

Date IgG Acute Specimen Taken (Month Day Year)

Date IgG Convalescent Specimen Taken (Month Day Year)

Result
P = Significant Rise in IgG
N = No Significant Rise in IgG
I = Indeterminate
E = Pending
X = Not Done
U = Unknown

Other Lab Result
P = Positive
N = Negative
I = Indeterminate
E = Pending
X = Not Done
U = Unknown

Specify Other Lab Method:

VACCINE HISTORY

Vaccinated? (Received measles-containing vaccine?) Y = Yes, N = No, U = Unknown

If Not Vaccinated, What Was The Reason? (See Reason Codes Below)

Vaccination Date (Month Day Year)	Vaccine Type	Vaccine Manuf	Lot Number

(See Type and Manuf. Codes Below)

Number of doses received BEFORE 1st birthday

Number of doses received ON or AFTER 1st birthday

If vaccinated BEFORE 1st birthday, but no doses given ON or AFTER 1st birthday, what was the reason?

If received one dose after 1st birthday, but never received 2nd dose after 1st birthday, what was the reason?

Reason Codes
1 = Religious Exemption
2 = Medical Contraindication
3 = Philosophical Objection
4 = Lab. Evidence of Previous Disease
5 = MD Diagnosis of Previous Disease
6 = Under Age For Vaccination
7 = Parental Refusal
8 = Other
9 = Unknown

Vaccine Type Codes
A = MMR
B = Measles
O = Other
U = Unknown

Vaccine Manuf. Codes
M = Merck
O = Other
U = Unknown

EPIDEMIOLOGIC INFORMATION

Date First Reported to a Health Department (Month Day Year)

Date Case Investigation Started (Month Day Year)

Transmission Setting (Where did this case acquire measles?)
1 = Day Care
2 = School
3 = Doctor's Office
4 = Hospital Ward
5 = Hospital ER
6 = Hospital Outpatient Clinic
7 = Home
8 = Work
9 = Unknown
10 = College
11 = Military
12 = Correctional Facility
13 = Church
14 = International Travel
15 = Other

Outbreak Related? Y = Yes, N = No, U = Unknown

If Yes, Outbreak Name

Source of Exposure For Current Case (Enter State ID if source was an in-state case; enter Country if source was out of US; enter State if source was out-of-state)

Were Age and Setting Verified? (Is age appropriate for setting, i.e. aged 49 years and in day care, etc.) Y = Yes, N = No, U = Unknown

If Transmission Setting Not Among Those Listed And Known, What Was The Transmission Setting?

Epi-Linked to Another Confirmed or Probable Case? Y = Yes, N = No, U = Unknown

Is Case Traceable Within 2 Generations to an International Import? Y = Yes, N = No, U = Unknown

Indicates epidemiologically important items not yet on NETSS screen

Contact Information: (For statistical health department use)

Mother's Name	Father's Name
Phone	

---------- DETACH HERE ----------

The information below is epidemiologically important, but not included on NETSS screens

Activity History For 18 Days Before Rash Onset and 7 Days After Rash Onset
Day -18
Day -17
Day -16
Day -15
Day -14
Day -13
Day -12
Day -11
Day -10
Day -9
Day -8
Day -7
Day -6
Day -5
Day -4
Day -3
Day -2
Day -1
Day 0 (Rash Onset)
Day 1
Day 2
Day 3
Day 4
Day 5
Day 6
Day 7
Clinical Case Definition*: A generalized rash lasting ≥ 3 days, a temperature ≥ 101.0° F (≥38.3° C), and cough, coryza, or conjunctivitis.
Case Classification*: Suspected: Any febrile illness accompanied by rash. Probable: A case that meets the clinical case definition, has noncontributory or no serologic or virologic testing, and is not epidemiologically linked to a confirmed case. Confirmed: A case that is laboratory confirmed or that meets the clinical case definition and is epidemiologically-linked to a confirmed case. A laboratory-confirmed case does not need to meet the clinical case definition.

MENINGOCOCCAL DISEASE (NEISSERIA)

IDENTIFICATION

CLINICAL DESCRIPTION:

Meningococcal disease manifests most commonly as meningitis and/or meningococcemia that may progress rapidly to purpura fulminans, shock, and death. However, other manifestations might be observed.

CASE DEFINITION:

A clinically compatible illness that is laboratory confirmed.

Confirmed:

A clinically compatible case AND isolation of Neisseria meningitides from a normally sterile site or skin scrapings of purpuric lesions.

Probable:

A clinically compatible case that has **either**:

- Evidence of N.meningitidis DNA using a validated polymerase chain reaction (PCR) obtained from a normally sterile site (blood or CSF), **OR**
- Evidence of N.meningitidis antigen by immunohistochemistry (IHC) on formalin-fixed tissue or latex agglutination of CSF

Suspect:

Clinical pupura fulminans in the absence of a positive blood culture. A clinically compatible case with gram negative diplococci from a normally sterile site (blood or CSF).

LABORATORY CRITERIA FOR CONFIRMATION:

Isolation of *Neisseria meningitidis* from a normally sterile site (such as blood, CSF, or less commonly, joint, pleural, or pericardial fluid) or skin scrapings of purpuric lesions.

Note: Positive antigen test results from urine or serum samples are unreliable for diagnosing meningococcal disease.

REPORTING CRITERIA: Clinical diagnosis or laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a period not greater than within 24 hours. Public health intervention expected. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology & health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **or**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **and**
- National Bacterial Meningitis and Bacteremia Case Report - CDC 52.15N REV. 02-93.

PUBLIC HEALTH INTERVENTIONS:

- Investigation of known and suspected contacts.
- Chemoprophylaxis or observation of close contacts (See Reference 3, p. 6-7).
- For each case-patient, ensure that an isolate of *Neisseria meningitidis* from a normally sterile site be forwarded to the Kentucky Public Health Laboratory for serogrouping. Isolates should be forwarded even if the referring laboratory has already determined the serogroup because this will ensure that the isolates are available for further genetic testing should an outbreak investigation become necessary.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, James, ed. MENINGOCOCCAL MENINGITIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2004: 359-366.

Pickering, LK, ed. Meningococcal Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases 25th ed. Elk Grove Village, IL: American Acad. of Pediatrics, 2003:396-401.

Prevention and Control of Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000; Vol. 49 (No. RR-7): 1-10

Guarner J. Greer PW. Whitney A. Shieh WJ. Fischer M. White EH. Carlone GM. Stephens DS. Popovic T. Zaki SR. Pathogenesis and diagnosis of human meningococcal disease using immunohistochemical and PCR assays; *American Journal of Clinical Pathology. 122(5):754-64, 2004 Nov.*

– NATIONAL BACTERIAL MENINGITIS AND BACTEREMIA CASE REPORT –

Patient's Name: _____ (Last, First, M.I.) Phone No.: ( ) _____

Address: _____ (Number, Street, City, State) _____ (Zip Code) Hospital: _____ Patient Chart No. _____

DETACH HERE – Patient identifier information is not transmitted to CDC

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
ATLANTA, GA 30333

NATIONAL BACTERIAL MENINGITIS AND BACTEREMIA CASE REPORT

CDC

Form Approved OMB No. 0920-0009

1. STATE: (Residence of Patient) (1-2)

2. COUNTY: (Residence of Patient) (3-12)

5. HOSPITALIZED? (25) (If YES, date of admission) 1 ☐ Yes 2 ☐ No (26-31) Mo Day Yr

3. STATE I.D.: (13-18)

4. CDC I.D.: (19-24)

6. DATE OF BIRTH: (32-37) Mo Day Yr

7a.) AGE: (38-39)

b.) Is age in day/mo/yr? (40) 1 ☐ Days 2 ☐ Mos 3 ☐ Yrs.

c.) If <8 years of age is patient in daycare? (41) 1 ☐ Yes 2 ☐ No 9 ☐ Unknown (Daycare is defined as a supervised group of 2 or more unrelated children for >4 hours/week).

8. SEX: (42) 1 ☐ Male 2 ☐ Female

9a. RACE: (43) 1 ☐ White 2 ☐ Black 3 ☐ American Indian/Alaskan Native 4 ☐ Asian/Pacific Islander 9 ☐ Not Specified

9b. ETHNIC ORIGIN: (44) 1 ☐ Hispanic 2 ☐ Non-Hispanic

10. OUTCOME: (45) 1 ☐ Survived 2 ☐ Died 9 ☐ Unknown

11. PHYSICIAN'S NAME: _____

12. TYPE OF INFECTION CAUSED BY ORGANISM: (Check all that apply)

1 ☐ Primary Bacteremia (46)
1 ☐ Meningitis (47)
1 ☐ Otitis media (48)
1 ☐ Pneumonia (49)
1 ☐ Cellulitis (50)
1 ☐ Epiglottitis (51)
1 ☐ Peritonitis (52)
1 ☐ Pericarditis (53)
1 ☐ Septic arthritis (54)
1 ☐ Conjunctivitis (55)
1 ☐ Other (specify) (56) _____ (57-58)

13. BACTERIAL SPECIES ISOLATED FROM ANY NORMALLY STERILE SITE:* (59) (Check one)

1 ☐ *Neisseria meningitidis*
2 ☐ *Haemophilus influenzae*
3 ☐ Group B streptococcus
4 ☐ *Listeria monocytogenes*
5 ☐ *Streptococcus pneumoniae** (pneumococcus)
6 ☐ Other Bacterial Species* (Specify: include mycobacteria, fungi) _____

*(Report ONLY CSF Isolates for Pneumococcus or Other Bacteria Species) (60-61)

14. SPECIMEN FROM WHICH ORGANISM ISOLATED: (Check all that apply)

1 ☐ Blood (62)
1 ☐ CSF (63)
1 ☐ Pleural Fluid (64)
1 ☐ Peritoneal Fluid (65)
1 ☐ Pericardial Fluid (66)
1 ☐ Joint (67)
1 ☐ Placenta (68)
1 ☐ Other Normally Sterile Site (69) (specify) (70-71) _____

15. DATE FIRST POSITIVE CULTURE OBTAINED: (Date Specimen Drawn) (72-77) Mo Day Yr

HAEMOPHILUS INFLUENZAE

16a. Did patient receive *Haemophilus b* vaccine? (78) 1 ☐ Yes 2 ☐ No 9 ☐ Unknown **If YES, Please Complete the List Below.**

DOSE	DATE GIVEN (Mo. Day Yr.)	VACCINE NAME/MANUFACTURER	LOT NUMBER
1	(79-84)	(85) _____ / _____	(86-95) _____
2	(96-101)	(102) _____ / _____	(103-112) _____
3	(113-118)	(119) _____ / _____	(120-129) _____
4	(130-135)	(136) _____ / _____	(137-146) _____

16b. What was the serotype? (147) 1 ☐ Type b 2 ☐ Not Typable 9 ☐ Not Tested or Unknown 8 ☐ Other (Specify) _____ (148-149)

16c. If *H. influenzae* was isolated from blood or CSF, was it resistant to:

Ampicillin (150) 1 ☐ Yes 2 ☐ No 9 ☐ Not tested or Unknown
Chloramphenicol (151) 1 ☐ Yes 2 ☐ No 9 ☐ Not tested or Unknown
Rifampin (152) 1 ☐ Yes 2 ☐ No 9 ☐ Not tested or Unknown

NEISSERIA MENINGITIDIS

17a. What was the serogroup? (153) 1 ☐ Group A 2 ☐ Group B 3 ☐ Group C 4 ☐ Group Y 5 ☐ Group W135 6 ☐ Not groupable 9 ☐ Unknown 8 ☐ Other (Specify) _____ (154-155)

17b. If *N. meningitidis* was isolated from blood or CSF, was it resistant to:

Sulfa (156) 1 ☐ Yes 2 ☐ No 9 ☐ Not tested or Unknown
Rifampin (157) 1 ☐ Yes 2 ☐ No 9 ☐ Not tested or Unknown

(Please Print Clearly)

Submitted By: _____

Phone No.: ( ) _____ Date: ____/____/____

Return completed report to:
Meningitis and Special Pathogens Branch
Mailstop C-09
National Center for Infectious Diseases
Centers for Disease Control
Atlanta, GA 30333

Public reporting burden of this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to PHS Reports Clearance Officer ATTN: PRA; Hubert H. Humphrey Bldg., Rm. 721-B; 200 Independence Ave., SW; Washington, DC 20201, and to the Office of Management and Budget; Paperwork Reduction Project (0920-0009); Washington, DC 20503.

MUMPS

Clinical case definition

An illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid and or other salivary gland(s), lasting at least 2 days, and without other apparent cause.

Clinically Compatible Illness

Infection with mumps virus may present as aseptic meningitis, encephalitis, hearing loss, orchitis, oophoritis, parotitis or other salivary gland swelling, mastitis or pancreatitis.

Laboratory criteria

- Isolation of mumps virus from clinical specimen, or
- Detection of mumps nucleic acid (e.g., standard or real time RT-PCR assays), or
- Detection of mumps IgM antibody, or
- Demonstration of specific mumps antibody response in absence of recent vaccination, either a four-fold increase in IgG titer as measured by quantitative assays, or a seroconversion from negative to positive using a standard serologic assay of paired acute and convalescent serum specimens.

Case Classification

Suspected: A case with clinically compatible illness or that meets the clinical case definition without laboratory testing, or a case with laboratory tests suggestive of mumps without clinical information.

Probable: A case that meets the clinical case definition without laboratory confirmation and is epidemiologically linked to a clinically compatible case.

Confirmed: A case that: 1) meets the clinical case definition or has clinically compatible illness, and 2) is either laboratory confirmed or is epidemiologically linked to a confirmed case.

Case Classification for Import Status

Internationally imported case: An internationally imported case is defined as a case in which mumps results from exposure to mumps virus outside the United States as evidenced by at least some of the exposure period (12–25 days before onset of parotitis or other mumps-associated complications) occurring outside the United States and the onset of parotitis or other mumps-associated complications within 25 days of entering the United States and no known exposure to mumps in the U.S. during that time. All other cases are considered U.S.-acquired cases.

U.S.-acquired case: A U.S.-acquired case is defined as a case in which the patient had not been outside the United States during the 25 days before onset of parotitis or other mumps-associated complications or was known to have been exposed to mumps within the United States.

U.S.-acquired cases are sub-classified into four mutually exclusive groups:

Import-linked case: Any case in a chain of transmission that is epidemiologically linked to an internationally imported case.

Imported-virus case: A case for which an epidemiologic link to an internationally imported case was not identified but for which viral genetic evidence indicates an imported mumps genotype, i.e., a genotype that is not occurring within the United States in a pattern indicative of endemic transmission. An endemic genotype is the genotype of any mumps virus that occurs in an endemic chain of transmission (i.e., lasting ≥12 months). Any genotype that is found repeatedly in U.S.-acquired cases should be thoroughly investigated as a potential endemic genotype, especially if the cases are closely related in time or location.

Endemic case: A case for which epidemiological or virological evidence indicates an endemic chain of transmission. Endemic transmission is defined as a chain of mumps virus transmission continuous for ≥12 months within the United States.

Unknown source case: A case for which an epidemiological or virological link to importation or to endemic transmission within the U.S. cannot be established after a thorough investigation. These cases must be carefully assessed epidemiologically to assure that they do not represent a sustained U.S.-acquired chain of transmission or an endemic chain of transmission within the U.S.

Note: Internationally imported, import-linked, and imported-virus cases are considered collectively to be import-associated cases.

Comment

With previous contact with mumps virus either through vaccination (particularly with 2 doses) or natural infection, serum mumps IgM test results may be negative; IgG test results may be positive at initial blood draw and viral detection in RT-PCR or culture may have low yield. Therefore, mumps cases should not be ruled out by negative laboratory results. Serologic tests should be interpreted with caution, as false positive and false negative results are possible with IgM tests.

Currently, there is insufficient information to determine whether any mumps strains are endemic to the United States or to distinguish endemic from non-endemic strains. States may also choose to classify cases as “out-of-state-imported” when imported from another state in the United States. For national reporting, however, cases will be classified as either internationally imported or U.S.-acquired.

States may also choose to classify cases as “out-of-state-imported” when imported from another state in the United States. For national reporting, however, cases will be classified as either internationally imported or U.S-acquired.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES PRIORITY NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 1 business day upon recognition of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03) **OR**
- Mumps Surveillance Worksheet (CDC).

PREVENTION MEASURES:

Routinely administer initial dose of MMR (measles, mumps and rubella) vaccine at 12-15 months of age and second dose before school entry (4 - 6 years of age) or, if not received earlier before sixth grade entry.

PUBLIC HEALTH INTERVENTIONS:

- Early telephone consultation with the Immunization Program, **502-564-4478**, is recommended for consideration of what confirmatory test may be advisable and whether to send specimen to CDC for virus isolation.
- Respiratory isolation and private room for nine days from onset of swelling; less if swelling has subsided. Exclusion from school or workplace until nine days after onset of parotitis if susceptible contacts (those not immunized) are present.
- Exclude susceptible contacts from school or the workplace from the 12th through the 25th day after exposure if other susceptibles are present. Contacts who do not receive vaccine because of medical, religious or other reasons should be excluded until at least 26 days after the onset of parotitis in the last person with mumps in the affected school.
- Immunize susceptible contacts. Although this may not prevent disease after exposure to natural mumps, those who did not develop disease would be protected against infection from subsequent exposures. Immunogloblulin G is not effective and not recommended.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, IMMUNIZATION PROGRAM: 502-564-4478
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446

RELATED REFERENCES

Heymann, David L., ed MUMPS. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 376-379.

Pickering, LK, ed. MUMPS. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 439-443.

Mumps Surveillance Worksheet

APPENDIX 8

NAME (Last, First) 142				Hospital Record No.
Address (Street and No.)	City	County	Zip	Phone
Reporting Physician/Nurse/Hospital/Clinic/Lab	Address			Phone

---------- DETACH HERE and transmit only lower portion if sent to CDC ----------

Mumps Surveillance Worksheet

County | State | Zip

Birth Date (Month Day Year)

Age (Unk = 999)

Age Type
0 = 0-120 years
1 = 0-11 months
2 = 0-52 weeks
3 = 0- 28 days
9 = Age unknown

Ethnicity
H = Hispanic
N = Not Hispanic
U = Unknown

Race
N = Native Amer./Alaskan Native
A = Asian/Pacific Islander
B = African American
W = White
O = Other
U = Unknown

Sex
M = Male
F = Female
U = Unknown

Event Date (Month Day Year)

Event Type
1 = Onset Date
2 = Diagnosis Date
3 = Lab Test Date
4 = Reported to County
5 = Reported to State or MMWR Report Date
9 = Unknown

Outbreak Associated (Unk = 999)

Reported (Month Day Year)

Imported
1 = Indigenous
2 = International
3 = Out of State
9 = Unknown

Report Status
1 = Confirmed
2 = Probable
3 = Suspect
9 = Unknown

CLINICAL DATA

Parotitis?
Y = Yes
N = No
U = Unknown

Notes:

COMPLICATIONS

Meningitis? Y = Yes, N = No, U = Unknown

Deafness? Y = Yes, N = No, U = Unknown

Orchitis ? Y = Yes, N = No, U = Unknown

Encephalitis? Y = Yes, N = No, U = Unknown

Death? Y = Yes, N = No, U = Unknown

Other Complications? Y = Yes, N = No, U = Unknown

If Yes, Please Specify:

Hospitalized? Y = Yes, N = No, U = Unknown

Days Hospitalized 0 - 998, 999 - Unknown

LABORATORY

Was Laboratory Testing For Mumps Done?
Y = Yes
N = No
U = Unknown

Date IgM Specimen Taken (Month Day Year)

Result
P = Positive E = Pending
N = Negative X = Not Done
I = Indeterminate
U = Unknown

Date IgG Acute Specimen Taken (Month Day Year)

Date IgG Convalescent Specimen Taken (Month Day Year)

Result
P = Significant Rise in IgG
N = No Significant Rise in IgG
I = Indeterminate
E = Pending
X = Not Done
U = Unknown

Other Lab Result
P = Positive
N = Negative
I = Indeterminate
X = Not Done
E = Pending
U = Unknown

Specify Other Lab Method:

VACCINE HISTORY

Vaccinated? (Received mumps-containing vaccine?) Y = Yes, N = No, U = Unknown

Vaccination Date Month	Day	Year	Vaccine	Vaccine Type	Manuf.	Lot Number

Vaccine Type Codes
A = MMR
B = Mumps
O = Other
U = Unknown

Vaccine Manufacturer Codes
M = Merck
O = Other
U = Unknown

Number of doses received ON or AFTER 1st birthday

If Not Vaccinated, What Was The Reason?
1 = Religious Exemption
2 = Medical Contraindication
3 = Philosophical Objection
4 = Lab. Evidence of Previous Disease
5 = MD Diagnosis of Previous Disease
6 = Under Age For Vaccination
7 = Parental Refusal
8 = Other
9 = Unknown

EPIDEMIOLOGIC

Date First Reported to a Health Department (Month Day Year)

Date Case Investigation Started (Month Day Year)

Outbreak Related? Y = Yes, N = No, U = Unknown

If Yes, Outbreak Name

Transmission Setting (Where did this case acquire mumps?)
1 = Day Care
2 = School
3 = Doctor's Office
4 = Hospital Ward
5 = Hospital ER
6 = Hospital Outpatient Clinic
7 = Home
8 = Work
9 = Unknown
10 = College
11 = Military
12 = Correctional Facility
13 = Church
14 = International Travel
15 = Other

If Other, Specify Transmission Setting:_____

Were Age and Setting Verified? (Is age appropriate for setting, i.e. aged 49 years and in day care, etc.) Y = Yes, N = No, U = Unknown

Source of Exposure For Current Case (Enter State ID if source was an in-state case; enter Country if source was out of U.S.; enter State if source was out-of-state)

Epi-Linked to Another Confirmed or Probable Case? Y = Yes, N = No, U = Unknown

Indicates epidemiologically important items not yet on NETSS screen

---------- **DETACH HERE and transmit only lower portion if sent to CDC** ----------

Notes/Other information:

Clinical Case Definition (1999):
An illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland, lasting = 2 days, and without other apparent cause.

Case Classification (1999):
***Probable*: a case that meets the clinical case definition, has noncontributory or no serologic or virologic testing, and is not epidemiologically linked to a confirmed or probable case.**
***Confirmed*: a case that is laboratory confirmed or that meets the clinical case definition and is epidemiologically linked to a confirmed or probable case. A laboratory-confirmed case does not need to meet the clinical case definition.**

PERTUSSIS

IDENTIFICATION

CLINICAL CASE DESCRIPTION:

A cough illness lasting at least two weeks with one of the following: paroxysms of coughing, inspiratory "whoop", or post-tussive vomiting, without other apparent cause. The infectious agent is *Bordetella pertussis.*

CASE DEFINITION:

Probable:

Meets the clinical case definition, is not laboratory confirmed, and is not epidemiologically linked to a laboratory-confirmed case

Confirmed*:*

A case that is culture positive and in which an acute cough illness of any duration is present; or a case that meets the clinical case definition and is confirmed by positive PCR; or a case that meets the clinical case definition and is epidemiologically linked directly to a case confirmed by either culture or PCR

Comment:

The clinical case definition above is appropriate for endemic or sporadic cases. In outbreak settings, a case may be defined as a cough illness lasting at least 2 weeks (as reported by a health professional). Because direct fluorescent antibody testing of nasopharyngeal secretions has been demonstrated in some studies to have low sensitivity and variable specificity (5, 6), such testing should not be relied on as a criterion for laboratory confirmation. Serologic testing for pertussis is available in some areas but is not standardized and, therefore, should not be relied on as a criterion for laboratory confirmation.

Both probable and confirmed cases should be reported nationally.

LABORATORY CRITERIA FOR CONFIRMATION:

- Culture isolation of *Bordetella pertussis* from clinical specimen, **OR**
- Positive polymerase chain reaction (PCR) for *B. pertussis*.

REPORTING CRITERIA: Clinical diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Pertussis Surveillance Worksheet

PREVENTION MEASURES:

Routinely administer initial DTaP (diphtheria and tetanus toxoids and acellular pertussis vaccine) series at 2, 4 and 6 months of age and booster doses at 12-18 months of age and before school entry at (4-6 years of age). Pertussis vaccine is not recommended after the seventh birthday.

PUBLIC HEALTH INTERVENTIONS:

- Recommend a 14-day course of erythromycin for all individuals with confirmed or clinical pertussis. Trimethoprim/sulfamethoxazole is an alternative for persons who cannot tolerate erythromycin or for whom erythromycin is contraindicated.
- Exclude all individuals with confirmed pertussis from work, school or other public contact until at least five days of erythromycin (or trimethoprim/sulfamethoxazole) therapy have been completed or until three weeks after onset of paroxysms if appropriate antimicrobial therapy is not taken.
- Assure a 14-day course of erythromycin (or trimethoprim/sulfamethoxazole) prophylaxis for all household contacts of individuals with confirmed pertussis regardless of immunization status. Immediate treatment of household contacts should take precedence over testing household members to identify additional cases.
- Recommend the above preventive regimen for all of the case's close contacts. Close contacts are persons with repeated indoor face-to-face exposure to the case, including those in day care settings and, in certain situations, work and school settings.
- Inform contacts about clinical symptoms of pertussis. Symptomatic contacts should be medically evaluated and, if determined to have pertussis, excluded from work, school, and other public contact until at least five days of erythromycin (or trimethoprim sulfamethoxazole) therapy have been completed.
- Assure that all children six weeks through six years of age (up to the seventh birthday) who are unimmunized or inadequately immunized receive DTaP vaccine.
- *Bordetella parapertussis*. These guidelines are applicable when *B. parapertussis* is isolated from an individual with clinical pertussis.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261
DPH, IMMUNIZATION PROGRAM: 502-564-4478
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. PERTUSSIS. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 399-404.

Pertussis Vaccination: Use of Acellular Pertussis Vaccines Among Infants and Children: Recommendations of the ACIP; MMWR 1997; 46 (No. RR-7): 1-25.

Pickering, LK, ed. PERTUSSIS. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 472-486.

National Immunization Program. Guidelines for the Control of Pertussis Outbreaks; 2000 (amendments made in 2005 and 2006). http://www.cdc.gov/nip/publications/pertussis/guide.htm.

Use of Diphtheria Toxoid-Tetanus Toxoid- Acellular Pertussis Vaccine as a Five-Dose Series: Supplemental Recommendations of the ACIP; MMWR 2000: 49 (No. RR-13): 1-8.

NAME (Last, First) | Hospital Record No.

147

Address (Street and No.) | City | County | Zip | Phone

Reporting Physician/Nurse/Hospital/Clinic/Lab | Address | Phone

----------DETACH HERE and transmit only lower portion if sent to CDC----------

Pertussis Surveillance Worksheet

County | State | Zip

Birth Date (Month, Day, Year)

Age (Unk = 999)

Age Type
0 = 0-120 years
1 = 0-11 months
2 = 0-52 weeks
3 = 0-28 days
9 = Age unknown

Race
N = Native Amer./Alaskan Native
A = Asian/Pacific Islander
B = African American
W = White
O = Other
U = Unknown

Ethnicity
H = Hispanic
N = Not Hispanic
U = Unknown

Sex
M = Male
F = Female
U = Unknown

Event Date (Month, Day, Year)

Event Type
1 = Onset Date
2 = Diagnosis Date
3 = Lab Test Done
4 = Reported to County
5 = Reported to State or MMWR Report Date
9 = Unknown

Outbreak Associated (Unk = 999)

Reported (Month, Day, Year)

Imported
1 = Indigenous
2 = International
3 = Out of State
9 = Unknown

Report Status
1 = Confirmed
2 = Probable
3 = Suspect
9 = Unknown

CLINICAL DATA

Any Cough? Y = Yes, N = No, U = Unknown

Cough Onset (Month, Day, Year)

Paroxysmal Cough? Y = Yes, N = No, U = Unknown

Whoop? Y = Yes, N = No, U = Unknown

Posttussive Vomiting? Y = Yes, N = No, U = Unknown

Apnea? Y = Yes, N = No, U = Unknown

Final Interview Date (Month, Day, Year)

Cough at Final Interview? Y = Yes, N = No, U = Unknown

Duration of Cough at Final Interview (Days)

COMPLICATIONS

Chest X-ray for Pneumonia
P = Positive
N = Negative
X = Not Done
U = Unknown

Seizures Due to Pertussis Y = Yes, N = No, U = Unknown

Acute Encephalopathy Due to Pertussis Y = Yes, N = No, U = Unknown

Hospitalized? Y = Yes, N = No, U = Unknown

Days Hospitalized 0 - 998, 999 - Unknown

Died? Y = Yes, N = No, U = Unknown

TREATMENT

Were Antibiotics Given? Y = Yes, N = No, U = Unknown

First Antibiotic Received
1 = Erythromycin (incl. pediazole, ilosone)
2 = Cotrimoxazole (bactrim/septra)
3 = Clarithromycin/azithromycin
4 = Tetracycline/Doxycycline
5 = Amoxicillin/Penicillin/Ampicillin/Augmentin/Cactor/Cefzime
6 = Other
9 = Unknown

Date Started First Antibiotic (Month, Day, Year)

Days First Antibiotic Actually Taken 0 - 98, 99 - Unknown

Second Antibiotic Received See Choices for First Antibiotic Given

Date Started Second Antibiotic (Month, Day, Year)

Days Second Antibiotic Actually Taken 0 - 98, 99 = Unknown

LABORATORY

Was Laboratory Testing for Pertussis Done? Y = Yes, N = No, U = Unknown

	Result	Date Specimen Taken (Month, Day, Year)
Culture		
DFA		
Serology 1		
Serology 2		
PCR		

RESULT CODES
P = Positive
N = Negative
I = Indeterminate
E = Pending
X = Not Done
S = Parapertussis
U = Unknown

VACCINE HISTORY

Vaccinated? (Received any doses of diphtheria, tetanus, and/or pertussis-containing vaccines) Y = Yes, N = No, U = Unknown

Vaccination Date (Month, Day, Year)	Vaccine Type*	Vaccine Manuf.*	Lot Number*

Vaccine Type Codes
W = DTP Whole Cell
A = DTaP
H = DTaP-Hib
D = DT or Td
T = DTP-Hib
P = Pertussis Only
O = Other
U = Unknown

Vaccine Manufacturer Codes
C = Connaught
L = Lederle
S = SmithKline Beecham
M = Mass. Health Department
I = Mich. Health Department
O = Other
U = Unknown

*Record for each dose (unlikely to be available if patient born before 1978)

Date of Last Pertussis-Containing Vaccine Prior to Illness Onset (Month, Day, Year)

Number of Doses of Pertussis-Containing Vaccine Prior to Illness Onset 0 - 6, 9 = Unknown

Reason Not Vaccinated With ≥ 3 Doses of Pertussis Vaccine
1 = Religious Exemption
2 = Medical Contraindication
3 = Philosophical Exemption
4 = Previous Pertussis Confirmed by Culture or MD
5 = Parental Refusal
6 = Age Less Than 7 Months
7 = Other
9 = Unknown

EPIDEMIOLOGIC INFORMATION

Date First Reported to a Health Department (Month, Day, Year)

Date Case Investigation Started (Month, Day, Year)

Outbreak Related? Y = Yes, N = No, U = Unknown

Epi-Linked? Y = Yes, N = No, U = Unknown

Outbreak Name (Name of outbreak this case is associated with)

Transmission Setting (Where did this case acquire pertussis)?
1 = Day Care
2 = School
3 = Doctor's Office
4 = Hospital Ward
5 = Hospital ER
6 = Hosp. Outpatient Clinic
7 = Home
8 = Work
9 = Unknown
10 = College
11 = Military
12 = Correctional Facility
13 = Church
14 = International Travel
15 = Other

Setting (Outside Household) of Further Documented Spread From This Case
Use same codes as for Transmission Settings, except:
7 = >1 Setting Outside Household
16 = No Documented Spread Outside Household

Number of Contacts in Any Setting Recommended Antibiotics

Note: This form has 2 sides

■ Indicates epidemiologically important items not yet on NETSS screen

DETACH HERE and transmit only lower portion if sent to CDC

The information below is epidemiologically important, but not included on NETSS screens

Age of the person from whom this case contracted Pertussis	Age	Age Type
		0 = 0-120 years; 1 = 0-11 months; 2 = 0-52 weeks; 3 = 0-28 days; 9 = Age unknown

Setting	In which setting was pertussis acquired (Please Specify)	In which setting was there secondary spread (Please Specify)
Day Care		
School		
Doctor's Office		
Hospital (Ward/ER/Outpatient/Clinic)		
Home		
Work		
Travel (International/Domestic)		
Other		
Unknown		

Name of Contact	Birthdate	Relation to the Case	Is it a Case ?	If it's a Case, Case ID #	Cough Onset Date (If Present)	# of PCVs*	Date of Last PCV	Parent's Name and Phone # (If Applicable)

Comments:

*PCV = Pertussis-Containing Vaccine

Clinical Case Definition*:
A cough illness lasting ≥ 2 weeks with one of the following: paroxysms of coughing, inspiratory "whoop", or post-tussive vomiting, without other apparent cause.

Case Classification*:

Probable: A case that meets the clinical case definition, is not laboratory confirmed, and is not epidemiologically linked to a laboratory-confirmed case.

Confirmed: 1) A person with an acute cough illness of any duration who is culture positive, or 2) a case that meets the clinical case definition and is confirmed by PCR, 3) a case that meets the clinical case definition and is epidemiologically linked directly to a case confirmed by either culture or PCR.

*CDC, Case Definitions for Infectious Conditions Under Public Health Surveillance. MMWR 1997;46(No.RR-10):38.
Manual for the Surveillance of Vaccine-Preventable Diseases. 1997.

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PLAGUE

IDENTIFICATION

CLINICAL DESCRIPTION

Plague is transmitted to humans by fleas or by direct exposure to infected tissues or respiratory droplets; the disease is characterized by fever, chills, headache, malaise, prostration, and leukocytosis that manifests in one or more of the following principal clinical forms:

- Regional lymphadenitis (bubonic plague)
- Septicemia without an evident bubo (septicemic plague)
- Plague pneumonia, resulting from hematogenous spread in bubonic or septicemic cases (secondary pneumonic plague) or inhalation of infectious droplets (primary pneumonic plague)
- Pharyngitis and cervical lymphadenitis resulting from exposure to larger infectious droplets or ingestion of infected tissues (pharyngeal plague)

CASE DEFINITION:

Confirmed:
A clinically compatible case with confirmatory laboratory results

Probable:
A clinically compatible case with presumptive laboratory results

Suspected:
A clinically compatible case without presumptive or confirmatory laboratory results

LABORATORY CRITERIA FOR DIAGNOSIS

Presumptive

- Elevated serum antibody titer(s) to *Yersinia pestis* fraction 1 (F1) antigen (without documented fourfold or greater change) in a patient with no history of plague vaccination or
- Detection of F1 antigen in a clinical specimen by fluorescent assay

Confirmatory

- Isolation of *Y. pestis* from a clinical specimen or
- Fourfold or greater change in serum antibody titer to *Y. pestis* F1 antigen

- Isolation of *Y. pestis* from a clinical specimen, **OR**
- Fourfold or greater change in serum antibody to *Y. pestis* fraction 1 (F1) antigen.

REPORTING CRITERIA: Clinical diagnosis initially; laboratory confirmation required to meet case definition.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Ensure that appropriate isolation precautions are being taken at the facility in which the patient is hospitalized.
- Assess need for chemoprophylaxis and surveillance for persons exposed to case patients.
- Source investigation) should be conducted. Search for history of travel to plague-endemic areas, or contact with persons or animals from plague-endemic areas.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. PLAGUE. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 406-412.

Pickering, LK, ed. PLAGUE. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 487- 489.

Prevention of Plague: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1996; 45(No.RR-14): 1-15.

POLIOVIRUS (poliomyelitis)

IDENTIFICATION

CLINICAL CASE DESCRIPTION:

Acute onset of a flaccid paralysis of one or more limbs with decreased or absent tendon reflexes in the affected limbs, without other apparent cause, and without sensory or cognitive loss. The infectious agent is the poliovirus, types 1,2, and 3.

CASE DEFINITION

Confirmed:

A case that meets the clinical case definition and in which the patient has a neurologic deficit 60 days after onset of initial symptoms, has died, or has unknown follow-up status

Probable:

A case that meets the clinical case definition

LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of poliovirus from stool samples, CSF or oropharyngeal secretions in cell culture systems.
- Presumptive diagnosis may be made by fourfold or greater changes in neutralizing antibody level.

Comment: All suspected cases of paralytic poliomyelitis are reviewed by a panel of expert consultants before final classification occurs.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Suspected Polio Case Worksheet (CDC).

PREVENTION MEASURES:

- All children should receive four doses of IPV (Inactivated Polio Vaccine) at ages 2, 4, and 6-18 months and 4-6 years.

- Polio vaccine recommended for previously non-immunized adults traveling to polio endemic countries; members of communities in which wild poliovirus is present; laboratory workers handling specimens containing poliovirus; and health care workers who may be exposed to patients excreting wild-type poliovirus.

PUBLIC HEALTH INTERVENTIONS:

- Immediately notify the Immunization Program: **502-564-4478**.
  Actively search for other cases that may have been initially diagnosed as Guillain-Barre Syndrome, polyneuritis, transverse myelitis, etc.

- If evidence suggests transmission of wild poliovirus, provide Oral Polio Vaccine (OPV) within the epidemic area to all persons, except those for whom OPV is contraindicated because of immunodeficiency, regardless of previous OPV vaccination status.

- If evidence suggests vaccine-associated poliovirus, no vaccination plan need be developed because no outbreaks associated with vaccine-associated poliovirus strains have been documented in the US to date.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, IMMUNIZATION PROGRAM: 502-564-4478.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. POLIOMYELITIS, ACUTE. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 425-431.

Pickering, LK, ed. Poliovirus Infections. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 505-509.

Poliomyelitis Prevention in the United States: Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000; 49(No. RR-5): 1-18.

Paralytic Poliomyelitis - United States, 1980-1994. MMWR 1997; 46(4): 79-83.

PSITTACOSIS

IDENTIFICATION

CLINICAL DESCRIPTION

An illness characterized by fever, chills, headache, photophobia, cough, and myalgia. Infectious agent is *Chlamydia psittaci.*

CASE DEFINITION:

Confirmed*:*

A clinically compatible case that is laboratory confirmed

Probable*:*

A clinically compatible case that is epidemiologically linked to a confirmed case or that has supportive serology (e.g., *C. psittaci* titer of greater than or equal to 32 in one or more serum specimens obtained after onset of symptoms)

LABORATORY CRITERIA FOR DIAGNOSIS

- Isolation of *Chlamydia psittaci* from respiratory secretions, or
- Fourfold or greater increase in antibody against *C. psittaci* by complement fixation or microimmunofluorescence (MIF) to a reciprocal titer of greater than or equal to 32 between paired acute- and convalescent-phase serum specimens, or
- Presence of immunoglobulin M antibody against *C. psittaci* by MIF to a reciprocal titer of greater than or equal to 16

REPORTING CRITERIA:

Laboratory diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- National Psittacosis Surveillance Report- Human Infection – PHS 4.93 CDC.

PREVENTION MEASURES:

Educate persons with high risk for exposure (pet owners, zoo personnel, pet shop operators and poultry processors) to signs and symptoms of disease. Care should be used in cleaning bird housing to minimize contamination of surrounding environments.

PUBLIC HEALTH INTERVENTIONS:

- Infected birds should be treated or destroyed.
- Source investigation: The most common source of infection is exposure to infected psittacine (parrot-like) birds, particularly parrots, parakeets, and lovebirds, although pigeons and poultry (particularly turkeys) may serve as reservoirs. Bird cages, roosts and other housing may harbor the organisms in bird droppings.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Compendium of Measures to Control *Chlamydia psittaci* Infection Among Humans (Psittacosis) and Pet Birds (Avian Chlamydiosis), 2000: MMWR July, 2000, Vol. 49 (No. RR-8).

Heymann, David L., ed. PSITTACOSIS. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 253-261.

Pickering, LK, ed. Chlamydia psittaci (Psittacosis, Ornithosis). Red Book: 2003 Report of the Committee on
Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of
Pediatrics, 2003: 318-336.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

This report is authorized by law (Public Health Service Act, 42 USC 241). While your response is voluntary, your cooperation is necessary for the understanding and control of the disease.

FORM APPROVED
OMB NO. 0920-000

DO NOT WRITE

PSITTACOSIS CASE SURVEILLANCE REPORT

PERSONAL DATA

First four letters of Patient's last name ☐☐☐☐ | Age | Sex

Address (*County/State*)

PRESENT ILLNESS

Date of onset | Specific therapy: *(Specify products and dosage; date of 1st and last dose of each)*

Brief clinical description: *(Symptoms and signs, maximum temperature, etc.)*

Outcome of case: Recovered ☐ Died ☐ Date of death

DIAGNOSTIC TESTS

	Date Collected	Results	Name and Location of Laboratory
Complement fixation (*Specify antigen:* _____)			
Acute stage		(*titre*)	
Early convalescence		(*titre*)	
Late convalescence		(*titre*)	
Virus isolation (*Specimen:*)			
Chest x-rays	Date	Results	

HISTORY AND CONTACT INFORMATION

Occupation at date of onset

Specific duties

Indicate which of the following contacts the patient had during the 5 weeks prior to onset:

☐ Birds Check: ☐ Psittacines ; species: _____ Approximate number: _____
☐ Pigeons _____ Approximate number: _____
☐ Domestic fowl; species: _____ Approximate number: _____
☐ Other birds ; species: _____ Approximate number: _____

Were birds apparently in good health? Yes ☐ No ☐ *(If not, please elaborate);*

☐ Human case of Psittacosis; name: _____
☐ Other ; specify: _____
☐ No known exposure

Indicate where exposure occurred *(Specify the Type of Establishment, such as 1 - private home, 2 - private aviary, 3 - commercial aviary, 4 - pet shop, 5 - bird loft, 6 - poultry establishment, etc. If the patient had multiple contacts, specify to what he was exposed at each place of exposure)*:

Type of Establishment	Owner and Address	Exposed to	Exposure Indoors	Exposure Outdoors	Dates of Exposure

INVESTIGATION OF SOURCE

	Species Tested	Number of Specimens	Date Collected	Owner of Specimens	Results	Name and Location of Laboratory
Virus isolation						
Serologic test						

If pet birds or domestic pigeons or fowl are implicated as the source of human psittacosis, or if any such bird are shown by laboratory methods to be infected, it is important to learn where these birds originated, and wher they were subsequently purchased or obtained by the present owner. These birds may have acquired a latent form of the infection at any place where they have been detained since hatching; therefore, list the address of ever known place where they were harbored, giving approximate dates:

Other cases of human respiratory illness observed in connection with this possible source:
(Name, Age, and Address)

(A PSITTACOSIS CASE SURVEILLANCE REPORT *should be completed for every human case diagnosed.)*

APPRAISAL

Investigator's Name	Title	Address
Date(s) of investigation		

Investigator's impression of case: Confirmed ☐ Presumptive ☐ Diagnostic Problem ☐ Not Psittacosis ☐

Remarks:

Notes:

1. If sera are obtained shortly after onset and again 4 weeks and 8 weeks later, a change in titre may be demonstrated.
2. The virus causing psittacosis belongs to a group designated as the lymphogranuloma venereum-psittacosis group. The complement fixation test gives a group reaction for these diseases. Clinical and epidemiologic findings are given consideration when interpreting these laboratory results.
3. Pet psittacine birds in the U.S. usually include parrots (Amazons, Mexican double-heads, etc.) parakeets, shell parakeets or budgerigars, African grays, cockatoos, cockatiels, love birds, lorios, lorikeets, macaws, rosellas, and parolets.
4. Other birds which have been found to be infected include pet finches, canaries, and rice birds, in addition to many species of wild birds.
5. Psittacosis-like viruses have been found in species other than birds. Therefore, if there is doubt as to the source of infection, contact with mammals should be inquired into.

Q FEVER

Acute Q Fever

Clinical presentation

Acute fever usually accompanied by rigors, myalgia, malaise, and a severe retrobulbar headache. Fatigue, night-sweats, dyspnea, confusion, nausea, diarrhea, abdominal pain, vomiting, non-productive cough, and chest pain have also been reported. Severe disease can include acute hepatitis, atypical pneumonia with abnormal radiograph, and meningoencephalitis. Pregnant women are at risk for fetal death and abortion. Clinical laboratory findings may include elevated liver enzyme levels, leukocytosis, and thrombocytopenia. Asymptomatic infections may also occur.

Note: Serologic profiles of pregnant women infected with acute Q fever during gestation may progress frequently and rapidly to those characteristic of chronic infection.

Clinical evidence

Acute fever and one or more of the following: rigors, severe retrobulbar headache, acute hepatitis, pneumonia, or elevated liver enzyme levels.

Laboratory evidence

Laboratory confirmed:

- Serological evidence of a fourfold change in immunoglobulin G (IgG)-specific antibody titer to *C. burnetii* phase II antigen by indirect immunofluorescence assay (IFA) between paired serum samples, (CDC suggests one taken during the first week of illness and a second 3-6 weeks later, antibody titers to phase I antigen may be elevated or rise as well), **or**
- Detection of *C. burnetii* DNA in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay, **or**
- Demonstration of *C. burnetii* in a clinical specimen by immunohistochemical methods (IHC), **or**
- Isolation of *C. burnetii* from a clinical specimen by culture.

Laboratory supportive:

- Has a single supportive IFA IgG titer of ≥1:128 to phase II antigen (phase I titers may be elevated as well).
- Has serologic evidence of elevated IgG or IgM antibody reactive with *C. burnetii* antigen by enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination.

Note: For acute testing, CDC uses in-house IFA IgG testing (cutoff of ≥1:128), preferring simultaneous testing of paired specimens, and does not use IgM results for routine diagnostic testing.

Case Classification

Confirmed acute Q fever: A laboratory confirmed case that either meets clinical case criteria or is epidemiologically linked to a lab confirmed case.

Probable acute Q fever: A clinically compatible case of acute illness (meets clinical evidence criteria for acute Q fever illness) that has laboratory supportive results for past or present acute disease (antibody to Phase II antigen) but is not laboratory confirmed.

Chronic Q Fever

Clinical presentation

Infection that persists for more than 6 months. Potentially fatal endocarditis may evolve months to years after acute infection, particularly in persons with underlying valvular disease. Infections of aneurysms and vascular prostheses have been reported. Immunocompromised individuals are particularl y susceptible. Rare cases of chronic hepatitis without endocarditis, osteomyelitis, osteoarthritis, and pneumonitis have been described.

Clinical evidence

Newly recognized, culture-negative endocarditis, particularly in a patient with previous valvulopathy or compromised immune system, suspected infection of a vascular aneurysm or vascular prosthesis, or chronic hepatitis, osteomyelitis, osteoarthritis, or pneumonitis in the absence of other known etiology.

Laboratory evidence

Laboratory confirmed:

- Serological evidence of IgG antibody to *C. burnetii* phase I antigen ≥ 1:800 by IFA (while phase II IgG titer will be elevated as well; phase I titer is higher than the phase II titer), **or**
- Detection of *C. burnetii* DNA in a clinical specimen via amplification of a specific target by PCR assay, **or**
- Demonstration of *C. burnetii* antigen in a clinical specimen by IHC, **or**
- Isolation of *C. burnetii* from a clinical specimen by culture.

Laboratory supportive:

- Has an antibody titer to *C. burnetii* phase I IgG antigen ≥1:128 and < 1:800 by IFA.

Note: Samples from suspected chronic patients should be evaluated for IgG titers to both phase I and phase II antigens. Current commercially available ELISA tests (which test only for phase 2) are not quantitative, cannot be used to evaluate changes in antibody titer, and hence are not useful for serological confirmation. IgM tests are not strongly supported for use in serodiagnosis of acute disease, as the response may not be specific for the agent (resulting in false positives) and the IgM response may be persistent. Complement fixation (CF) tests and other older test methods are neither readily available nor commonly used.

Serologic test results must be interpreted with caution, because baseline antibodies acquired as a result of historical exposure to Q fever may exist, especially in rural and farming areas.

Case Classification

Confirmed chronic Q fever: A clinically compatible case of chronic illness (meets clinical evidence criteria for chronic Q fever) that is laboratory confirmed for chronic infection.

Probable chronic Q fever: A clinically compatible case of chronic illness (meets clinical evidence criteria for chronic Q fever) that has laboratory supportive results for past or present chronic infection (antibody to Phase I antigen).

Exposure:

Exposure is usually via aerosol, is broadly interpreted, and may be unknown (especially for chronic infection), but often includes the presence of goats, sheep, or other livestock, especially during periods of parturition. Direct contact with animals is not required, and variable incubation periods may be dose dependent.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours **(Potential Bioterrorism Agent)**. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Q Fever Case Report –CDC 55.1 (03/2002) http://www.cdc.gov/ncidod/dvrd/qfever/case_rep_fm.pdf

PUBLIC HEALTH INTERVENTIONS:

- Investigation of contacts and source of infection: Search for history of contact with sheep, cattle, or goats on farms or research facilities, parturient cats, consumption of raw milk, or association with a laboratory that handles *C. burnetii.*
- Educate persons in high risk occupations (sheep and dairy farmers, veterinary researchers, abattoir workers on sources of infection.
- Educate persons in high risk occupations on the necessity for adequate disinfection (including clothing) and disposal of animal products of conception.
- Restrict access to areas that house potentially infected animals and stress the pasteurization of milk.
- No isolation or exclusion is necessary for persons with Q fever.
- Appropriately dispose of placenta, birth products, fetal membranes, and aborted fetuses at facilities housing sheep and goats.
- Vaccinate (where possible) individuals engaged in research with pregnant sheep or live *C. burnetii*.
- Quarantine imported animals.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DEPARTMENT FOR LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. Q FEVER. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 434-438.

Pickering, LK, ed. Q FEVER. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 512-514.

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention (CDC)
Atlanta, Georgia 30333

Q Fever Case Report

Centers for Disease Control and Prevention Fax: (404) 639-2778

Form Approved
OMB 0920-0009

CDC#

– PATIENT/PHYSICIAN INFORMATION –

Patient's name:

Date submitted: (mm/dd/yyyy)

Physician's name:

Phone no.:

Address: (number, street)

City:

NETSS ID No.: (if reported) Case ID Site State

– DEMOGRAPHICS –

1. State of residence:

2. County of residence:

3. Zip code:

4. Date of birth: (mm/dd/yyyy)

5. Sex:
1 Male
2 Female
9 Not specified

6. Race:
1 White
2 Black
3 American Indian Alaskan Native
4 Asian
5 Pacific Islander
9 Not specified

7. Hispanic ethnicity:
1 Yes
2 No
9 Unk

8. Occupation at date of onset of illness (Check all that apply)
1 wool or felt plant
2 tannery or rendering plant
3 dairy
4 veterinarian
5 medical research
6 animal research
7 slaughterhouse worker
8 laboratory worker
9 rancher
10 live in household with person occupationally related to above?
88 other (please specify)

9. Any contact with animals within 2 months prior to onset? (check all that apply)
1 Cattle
2 Sheep
3 Goats
4 Pigeons
5 Cats
6 Rabbits
8 Other (please specify)

10. Any exposure to birthing animals?
1 Yes 2 No 9 Unk
If yes, which animal

11. Exposure to unpasteurized milk?
1 Yes 2 No 9 Unk
If yes, which animal

12. Any travel in last year?
If yes, State County
Foreign Country

13. Other family member with similar illness in last year?
1 Yes 2 No 9 Unk

– CLINICAL FINDINGS –

14. Date of Onset of Symptoms: (mm/dd/yyyy)

15. Clinical Signs and syndromes (check all that apply)
1 fever (>100.5)
2 myalgia
3 retrobulbar pain
4 malaise
5 rash
6 cough
7 headache
8 splenomegaly
9 hepatomegaly
10 pneumonia
11 hepatitis
12 endocarditis
88 Other (please specify)

16. Any pre-existing medical conditions? (check all that apply)
1 immunocompromised
2 pregnancy
3 valvular heart disease or vascular graft
8 Other

17. Was patient hospitalized because of this illness?
1 Yes 2 No 9 Unk

18. Did patient die from complications of this illness? (If yes, date) (mm/dd/yyyy)
1 Yes 2 No 9 Unk

– LABORATORY DATA –

19. Name of laboratory: City: State: Zip:

20. Serology (Check only if specific assay was performed)

	Phase I Antigen		Phase II Antigen	
	Serology 1 (mm/dd/yyyy)	Serology 2 (mm/dd/yyyy)	Serology 1 (mm/dd/yyyy)	Serology 2 (mm/dd/yyyy)
	Titer or OD* / Positive?	Titer or OD* / Positive?	Titer or OD* / Positive?	Titer or OD* / Positive?
IFA - IgG	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No
IFA - IgM	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No
Complement Fixation	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No
Other test:	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No

*IFA or CF "Titer" or Other test: ELISA (EIA) Optical Density "OD" value.

21. Was there a fourfold change in antibody titer between the two serum specimens? 1 Yes 2 No

* Check only if specific assay was performed.

22. Other Diagnostic Tests ?*	Positive?
PCR	1 Yes 2 No
Immunostain	1 Yes 2 No
Culture	1 Yes 2 No

Sample(s) tested:

– FINAL DIAGNOSIS –

23. Classify case based on the CDC case definition (see criteria below):
1 CONFIRMED 2 PROBABLE

Confirmed Q fever: A clinically compatible case that is laboratory confirmed with 1) a fourfold change in antibody titer to *Coxiella burnetii* antigen by IFA or CF antibody test, or 2) a positive PCR assay, or 3) culture of *C. burnetii* from a clinical specimen, or 4) positive immunostaining of *C. burnetii* in tissue.

Probable Q Fever: A clinically compatible case with single supportive IgG or IgM titer as defined by testing lab

State Health Department Official who reviewed this report:

Name:

Title: Date: (mm/dd/yyyy)

Public reporting burden of this collection of information is estimated to average 10 minutes per response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Please send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to CDC/ATSDR Reports Clearance Officer, 1600 Clifton Rd., NE (MS D-24), Atlanta, GA 30333, ATTN: PRA (0920-0009)

RABIES (Animal)

IDENTIFICATION

CLINICAL DESCRIPTION:

An almost invariably fatal acute encephalomyelitis caused by the rabies virus.

CASE DEFINITION:

A laboratory confirmed infection with rabies virus.

LABORATORY CRITERIA FOR DIAGNOSIS

- A positive direct fluorescent antibody test (preferably performed on central nervous system tissue)
- Isolation of rabies virus (in cell culture or in a laboratory animal)

ACTIONS REQUIRED / PREVENTION MEASURES

DISEASE SURVEILLANCE: None required.

EPIDEMIOLOGY REPORTS REQUESTED:

None requested. The Kentucky Department for Laboratory Services notifies the Division of Epidemiology and Health Planning of positive rabies diagnosis.

PUBLIC HEALTH INTERVENTIONS:

- For follow-up on known rabid animals, ascertain the nature of all physical contact the animal had with humans or other animals during the two weeks prior to its death. Obtain information regarding contact with saliva or saliva-contaminated fomites during this time period.

CONTACTS FOR CONSULTATION

DPH, STATE PUBLIC HEALTH VETERINARIAN: 502-564-3418.
DPH, DEPARTMENT FOR LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Compendium of Animal Rabies Prevention and Control, 2000: National Association of State Public Health Veterinarians. MMWR 2000; Vol. 49 (No.RR-8).

Heymann, David L., ed. RABIES. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 438-447

Human Rabies Prevention - United States, 1999: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999; 48 (No. RR-1).

Pickering, LK, ed. Hepatitis B. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 514-520

RABIES (Human)

IDENTIFICATION

CLINICAL DESCRIPTION:

Rabies is an acute encephalomyelitis that almost always progresses to coma or death within 10 days after the first symptom.

CASE CLASSIFICATION

Confirmed*:*

A clinically compatible case that is laboratory confirmed

LABORATORY CRITERIA FOR CONFIRMATION:

- Detection by direct fluorescent antibody of viral antigens in a clinical specimen (preferably the brain or the nerves surrounding hair follicles in the nape of the neck), or
- Isolation (in cell culture or in a laboratory animal) of rabies virus from saliva, cerebrospinal fluid (CSF), or central nervous system tissue, or
- Identification of a rabies-neutralizing antibody titer greater than or equal to 5 (complete neutralization) in the serum or CSF of an unvaccinated person.

COMMENT:

Laboratory confirmation by all of the above methods is strongly recommended.

REPORTING CRITERIA:

Clinical diagnosis initially: laboratory confirmation required to meet case definition.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency telephone number of the Division of Epidemiology and Health Planning: **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**

- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Ensure that appropriate infection control precautions are being taken at the facility in which the patient is hospitalized.
- Source investigation to be conducted upon laboratory confirmation of a human rabies case.

CONTACTS FOR CONSULTATION

DPH, STATE PUBLIC HEALTH VETERINARIAN: 502-564-3418.
DPH, DEPARTMENT OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. RABIES. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 438-447.

Compendium of Animal Rabies Prevention and Control, 2006: National Association of State Public Health Veterinarians. MMWR 2006; Vol. 55 (No.RR-5).

Human Rabies Prevention - United States, 1999: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999; 48(No.RR-1).

Pickering, LK, ed. RABIES. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 514-520.

RABIES POSTEXPOSURE PROPHYLAXIS

IDENTIFICATION

CLINICAL DESCRIPTION:

The administration of human diploid cell vaccine (HDCV), purified chick embryo cell vaccine (PCEP), or rabies vaccine absorbed, (RVA), with or without human rabies immune globulin (HRIG), after an exposure to a rabid or potentially rabid animal.

CASE DEFINITION:

Administration of human rabies biologics after an exposure to a rabid or possibly rabid animal.

REPORTING CRITERIA:

Administration of the above listed biologics after an exposure.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT in a time period not greater than 5 business days after the completion of administration of the entire treatment course.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM
- Kentucky Rabies Post-Exposure Prophylaxis Report Form – EPID 200PEP

PUBLIC HEALTH INTERVENTIONS:

- Rabies postexposure prophylaxis (PEP) is the intervention.

CONTACTS FOR CONSULTATION

DPH, STATE PUBLIC HEALTH VETERINARIAN: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

CDC Human Rabies Prevention – United States, 1999. Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999; Vol. 48 (No.RR-1).

Compendium of Animal Rabies Prevention and Control, 2000: National Association of State Public Health Veterinarians. MMWR 2000; Vol. 49 (No.RR-8).

Heymann, David L., ed. RABIES. Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 438-448.

Pickering, LK, ed. RABIES. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 514-520.

Kentucky Department for Public Health
Division of Epidemiology and Health Planning
275 East Main St., Mailstop HS2E-A
Frankfort, KY 40621-0001

Rabies Post-Exposure Prophylaxis Report Form

DEMOGRAPHIC DATA

Patient's Last Name	First	M.I.	Date of Birth / /	Age	Gender ☐ M ☐ F ☐ Unk
Address	City	State	Zip		County of Residence
Phone Number	Patient ID Number	Ethnic Origin ☐ His. ☐ Non-His.	Race ☐ W ☐ B ☐ A/PI ☐ Am.Ind. ☐ Other		

RABIES EXPOSURE INFORMATION

Date of Exposure to Animal _____/_____/_____	Animal Causing Exposure (dog, cat, bat, skunk, etc.) _____	Specify Type of Exposure ☐ Bite ☐ Lick ☐ Other_____

Animal Available for 10 Day Observation? ☐ Yes ☐ No	Animal Killed? ☐ Yes ☐ No	Animal Tested? ☐ Yes ☐ No	Test Results ☐ Pos. ☐ Neg.

Did animal exhibit signs of rabies? ☐ Yes ☐ No If yes, explain_____	Name of Local Health Department in Charge of the Animal Quarantine: _____
If not observed or tested, why not?	

Did animal die of natural causes? ☐ Yes ☐ No	If yes, when: ____/____/___	If a domestic animal, was it owned? ☐ Yes ☐ No	Was it vaccinated for rabies? ☐ Yes ☐ No When ____/___/___

PATIENT POST-EXPOSURE VACCINATION INFORMATION

HDCV, RVA or PCEC vaccine started ____/____/____ Please circle the type of vaccine used.	Last dose given on: _____/_____/_____	Total # of doses _____
Was human rabies immune globulin (HRIG) administered? ☐ Yes ☐ No	If yes, when? ____/___/___	How much? _____ml

Payment Source:
☐ Private Insurance ☐ Medicaid ☐ Medicare ☐ Workers Comp. ☐ Out-of-Pocket ☐ No Payment

Submit this form on <u>Completion</u> of PEP Series.

Person or Agency Completing form: Name: Agency:	Attending Physician: Name:
Address:	Address:
Phone: Date of Report: / /	Phone:

THIS FORM IS FOR RABIES POST EXPOSURE PROPHYLAXIS REPORTING ONLY!!!

Do <u>not</u> use this form to report an animal bite, they are reportable directly to the local health department.

Kentucky
UNBRIDLED SPIRIT

ROCKY MOUNTAIN SPOTTED FEVER

Clinical presentation

Rocky Mountain spotted fever (RMSF) is an illness caused by *Rickettsia rickettsii*, a bacterial pathogen transmitted to humans through contact with ticks. *Dermacentor* species of ticks are most commonly associated with infection, including *Dermacentor variabilis* (the American dog tick), *Dermacentor andersoni* (the Rocky Mountain wood tick), and more recently *Rhiphicephalus sanguineus* (the brown dog tick). Disease onset averages one week following a tick bite. Age-specific illness is highest for children and older adults. Illness is characterized by acute onset of fever, and may be accompanied by headache, malaise, myalgia, nausea/vomiting, or neurologic signs; a macular or maculopapular rash appears 4-7 days following onset in many (~80%) patients, often present on the palms and soles. RMSF may be fatal in as many as 20% of untreated cases, and severe, fulminant disease can occur.

Acute illness is best detected by polymerase chain reaction (PCR) and immunohistochemical methods (IHC) in skin biopsy specimens, and occasionally by PCR in appropriate whole blood specimens taken during the first week of illness, prior to antibiotic treatment. Serology can also be employed for detection, however an antibody response may not be detectable in initial samples, and paired acute and convalescent samples are essential for confirmation.

Clinical evidence

Any reported fever and one or more of the following: rash, headache, myalgia, anemia, thrombocytopenia, or any hepatic transaminase elevation.

Laboratory evidence

For the purposes of surveillance,

Laboratory confirmed:

- Serological evidence of a fourfold change in immunoglobulin G (IgG)-specific antibody titer reactive with *Rickettsia rickettsii* antigen by indirect immunofluorescence assay (IFA) between paired serum specimens (one taken in the first week of illness and a second 2-4 weeks later), **or**
- Detection of *R. rickettsii* DNA in a clinical specimen via amplification of a specific target by PCR assay, **or**
- Demonstration of spotted fever group antigen in a biopsy or autopsy specimen by IHC, **or**
- Isolation of *R. rickettsii* from a clinical specimen in cell culture.

Laboratory supportive:

- Has serologic evidence of elevated IgG or IgM antibody reactive with *R. rickettsii* antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination.

Note: Current commercially available ELISA tests are not quantitative, cannot be used to evaluate changes in antibody titer, and hence are not useful for serological confirmation. IgM tests are not strongly supported for use in serodiagnosis of acute disease, as the response may not be specific for the agent (resulting in false positives) and the IgM response may be persistent. Complement fixation (CF) tests and other older test methods are neither readily available nor commonly used. CDC uses in-house IFA IgG testing (cutoff of ≥1:64), preferring simultaneous testing of paired specimens, and does not use IgM results for routine diagnostic testing.

Exposure

Exposure is defined as having been in potential tick habitats within the past 14 days before onset of symptoms. A history of a tick bite is not required.

Case Classification

Confirmed: A clinically compatible case (meets clinical evidence criteria) that is laboratory confirmed.

Probable: A clinically compatible case (meets clinical evidence criteria) that has supportive laboratory results.

Suspect: A case with laboratory evidence of past or present infection but no clinical information available (e.g. a laboratory report).

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES PRIORITY NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT in a time period not greater than 1 business day of the identification of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Rocky Mountain Spotted Fever Case Report - CDC 55.1 (Rev. 01/2001)

PUBLIC HEALTH INTERVENTIONS:

- Obtain travel history for the month preceding onset of symptoms to determine site of probable exposure.
- Patient education as needed to minimize future tick exposure.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. ROCKY MOUNTAIN SPOTTED FEVER. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 459-461.

Pickering, LK, ed. ROCKY MOUNTAIN SPOTTED FEVER. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 532-534.

RUBELLA (“German Measles”)

Clinical case definition

An illness that has all the following characteristics:

- Acute onset of generalized maculopapular rash
- Temperature greater than 99.0 F (greater than 37.2 C), if measured
- Arthralgia/arthritis, lymphadenopathy, or conjunctivitis

Laboratory criteria for diagnosis

- Isolation of rubella virus, or
- Significant rise between acute- and convalescent-phase titers in serum rubella immunoglobulin G antibody level by any standard serologic assay, or
- Positive serologic test for rubella immunoglobulin M (IgM) antibody

Case classification

Suspected: any generalized rash illness of acute onset

Probable: a case that meets the clinical case definition, has no or noncontributory serologic or virologic testing, and is not epidemiologically linked to a laboratory-confirmed case

Confirmed: a case that is laboratory confirmed or that meets the clinical case definition and is epidemiologically linked to a laboratory-confirmed case

Epidemiologic Classification of Internationally-Imported and U.S.-Acquired

Internationally imported case: An internationally imported case is defined as a case in which rubella results from exposure to rubella virus outside the United States as evidenced by at least some of the exposure period (12–23 days before rash onset) occurring outside the United States and the onset of rash within 23 days of entering the United States and no known exposure to rubella in the U.S. during that time. All other cases are considered U.S.-acquired cases.

U.S.-acquired case: A U.S.-acquired case is defined as a case in which the patient had not been outside the United States during the 23 days before rash onset or was known to have been exposed to rubella within the United States.

U.S.-acquired cases are subclassified into four mutually exclusive groups:

Import-linked case: Any case in a chain of transmission that is epidemiologically linked to an internationally imported case.

Imported-virus case: a case for which an epidemiologic link to an internationally imported case was not identified but for which viral genetic evidence indicates an imported rubella genotype, i.e., a genotype that is not occurring within the United States in a pattern indicative of endemic transmission. An endemic genotype is the genotype of any rubella virus that occurs in an endemic chain of transmission (i.e., lasting ≥12 months). Any genotype that is found repeatedly in U.S.-acquired cases should be thoroughly investigated as a potential endemic genotype, especially if the cases are closely related in time or location.

Endemic case: a case for which epidemiological or virological evidence indicates an endemic chain of transmission. Endemic transmission is defined as a chain of rubella virus transmission continuous for ≥12 months within the United States.

Unknown source case: a case for which an epidemiological or virological link to importation or to endemic transmission within the U.S. cannot be established after a thorough investigation. These cases must be carefully assessed epidemiologically to assure that they do not represent a sustained U.S.-acquired chain of transmission or an endemic chain of transmission within the U.S.

Note: Internationally imported, import-linked, and imported-virus cases are considered collectively to be import-associated cases.

States may also choose to classify cases as “out-of-state-imported” when imported from another state in the United States. For national reporting, however, cases will be classified as either internationally imported or U.S.-acquired.

Comments

Serum rubella IgM test results that are false positives have been reported in persons with other viral infections (e.g., acute infection with Epstein-Barr virus [infectious mononucleosis], recent cytomegalovirus infection, and parvovirus infection) or in the presence of rheumatoid factor. Patients who have laboratory evidence of recent measles infection are excluded.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM module **or**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03).

- Rubella Surveillance Worksheet (CDC).

PREVENTION MEASURES:

- Routinely administer initial dose of MMR (measles, mumps and rubella) vaccine at 12 - 15 months of age and second dose before school entry (at 4-6 years of age), or, if not received earlier, before sixth grade entry.
- Vaccine recommended for susceptible women of childbearing age and susceptible young adults who have contact with young children or congregate at institutions of higher education.
- Medical personnel likely to come into contact with persons with rubella or women of childbearing age should show proof of immunity to rubella.

PUBLIC HEALTH INTERVENTIONS:

- Early telephone consultation with the Immunization Program is recommended for consideration of what confirmatory test may be advisable and whether to send specimen to CDC for isolation.
- Exclude children from school and adults from work for seven days after onset of rash.
- If infection occurs during pregnancy, the woman should be counseled by her obstetrician about the risks to her fetus and her options, including termination of the pregnancy.
- Urge immunization of all contacts (children and non-pregnant adults) who have not been previously immunized. However, immunization will not necessarily prevent a second generation of infection or illness. Passive immunization with IG is not indicted.
- Identify pregnant female contacts, especially those in the first trimester. Test such contacts serologically for susceptibility or early infection (IgM antibody) and advise accordingly.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, IMMUNIZATION PROGRAM: 502-564-4478.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. HEPATITIS B. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 464-468.

Pickering, LK, ed. Hepatitis B. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 536-541.

Measles, Mumps, and Rubella – Vaccine Use and Strategies for Elimination of Measles, Rubella and Congenital Rubella Syndrome and Control of Mumps: Recommendations of the ACIP. MMWR 1998: 47(No.RR-8): 1-58.

RUBELLA CONGENITAL SYNDROME (CRS)

Clinical description

Presence of any defect(s) or laboratory data consistent with congenital rubella infection. Infants with congenital rubella syndrome usually present with more than one sign or symptom consistent with congenital rubella infection. However, infants may present with a single defect. Hearing impairment is the most common single defect.

Laboratory criteria for diagnosis

- Isolation of rubella virus, or
- Demonstration of rubella-specific immunoglobulin M (IgM) antibody, or
- Infant rubella antibody level that persists at a higher level and for a longer period than expected from passive transfer of maternal antibody (i.e., rubella titer that does not drop at the expected rate of a twofold dilution per month).
- PCR positive rubella virus

Clinical case definition

An illness, usually manifesting in infancy, resulting from rubella infection in utero and characterized by signs or symptoms from the following categories:

a) Cataracts/congenital glaucoma, congenital heart disease (most commonly patent ductus arteriosus or peripheral pulmonary artery stenosis), hearing impairment, pigmentary retinopathy.
b) Purpura, hepatosplenomegaly, jaundice, microcephaly, developmental delay, meningoencephalitis, radiolucent bone disease.

Case classification

Suspected: A case with some compatible clinical findings but not meeting the criteria for a probable case.

*Probable**: A case that is not laboratory confirmed and that has any two complications listed in paragraph “a” of the clinical case definition or one complication from paragraph “a” and one from paragraph “b”, and lacks evidence of any other etiology.

Confirmed: A clinically consistent case that is laboratory confirmed.

Infection only: A case that demonstrates laboratory evidence of infection, but without any clinical symptoms or signs.

*In probable cases, either or both of the eye-related findings (cataracts and congenital glaucoma) count as a single complication. In cases classified as infection only, if any

compatible signs or symptoms (e.g., hearing loss) are identified later, the case is reclassified as confirmed.

Epidemiologic Classification of Internationally-Imported and U.S.-Acquired

Congenital Rubella Syndrome cases will be classified epidemiologically as internationally imported or U.S.-acquired, according to the source of infection in the mother, using the definitions below, which parallel the classifications for rubella cases.

Internationally imported case: To be classified as an internationally imported CRS case, the mother must have acquired rubella infection outside the U.S. or in the absence of documented rubella infection, the mother was outside the United States during the period when she may have had exposure to rubella that affected her pregnancy (from 21 days before conception and through the first 24 weeks of pregnancy).

U.S.-acquired case: A US-acquired case is one in which the mother acquired rubella from an exposure in the United States. U.S.-acquired cases are subclassified into four mutually exclusive groups:

Import-linked case: Any case in a chain of transmission that is epidemiologically linked to an internationally imported case.

Import-virus case: a case for which an epidemiologic link to an internationally imported case was not identified but for which viral genetic evidence indicates an imported rubella genotype, i.e., a genotype that is not occurring within the United States in a pattern indicative of endemic transmission. An endemic genotype is the genotype of any rubella virus that occurs in an endemic chain of transmission (i.e., lasting ≥12 months). Any genotype that is found repeatedly in U.S.-acquired cases should be thoroughly investigated as a potential endemic genotype, especially if the cases are closely related in time or location.

Endemic case: a case for which epidemiological or virological evidence indicates an endemic chain of transmission. Endemic transmission is defined as a chain of rubella virus transmission continuous for ≥12 months within the United States.

Unknown source case: a case for which an epidemiological or virological link to importation or to endemic transmission within the U.S. cannot be established after a thorough investigation. These cases must be carefully assessed epidemiologically to assure that they do not represent a sustained U.S.-acquired chain of transmission or an endemic chain of transmission within the U.S.

Note: Internationally imported, import-linked, and imported-virus cases are considered collectively to be import-associated cases.

States may also choose to classify cases as “out-of-state-imported” when imported from another state in the United States. For national reporting, however, cases will be classified as either internationally imported or U.S.-acquired.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or a suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- By Fax or Mail: Kentucky Reportable Disease Form – EPID 200 (Jan/03)
- Congenital Rubella Syndrome Case Report (CDC 71.17 Rev. 3/95).

PREVENTION MEASURES:

- Routinely administer initial dose of MMR (measles, mumps and rubella) vaccine at 12 - 15 months of age and second dose before school entry (at 4-6 years of age), or, if not received earlier, before sixth grade entry.
- Vaccine is recommended for all susceptible women of childbearing age who should be warned to avoid pregnancy for three months after receiving rubella vaccine.
- Prenatal or antepartum serologic screening for rubella immunity should be routinely undertaken. Women known to be pregnant should not be immunized during pregnancy.
- If infection occurs during early pregnancy, the woman should be counseled by her obstetrician about the high risk of damage to the fetus, explaining her options, including termination of the pregnancy.

PUBLIC HEALTH INTERVENTIONS:

- Immediately notify the Immunization Program: 502-564-4478.
- IG given after exposure early in pregnancy may not prevent infection or viremia, but may modify or suppress symptoms of disease in the woman. It is sometimes given in huge doses (20 ml) to an exposed susceptible pregnant woman, but its value has not been established.
- Suspected cases of CRS in hospitals or institutions should be managed under contact isolation precautions and placed in a private room. Prevent exposure to susceptible pregnant women.
- Infants with congenital rubella should be considered contagious until they are one year old, unless nasopharyngeal and urine cultures after three months of age are repeatedly negative for rubella virus. Advise mothers that their infants may pose a risk to susceptible pregnant contacts.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

DPH, IMMUNIZATION PROGRAM: 502-564-4478.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. HEPATITIS B. In: Control of Communicable Diseases Manual. 18th. ed. Washington, DC: American Public Health Association, 2003: 464-468.

Pickering, LK, ed. Hepatitis B. Red Book: 2003 Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 536-541.

Measles, Mumps, and Rubella – Vaccine Use and Strategies for Elimination of Measles, Rubella and Congenital Rubella Syndrome and control of Mumps: Recommendations of the ACIP. MMWR 1998; 47(No.RR-8): 1-58.

Rubella Surveillance Worksheet

NAME (Last, First)				Hospital Record No.
Address (Street and No.)	City	County	Zip	Phone
Reporting Physician/Nurse/Hospital/Clinic/Lab	Address			Phone

---------- DETACH HERE and transmit only lower portion if sent to CDC ----------

Rubella Surveillance Worksheet

County | State | Zip | Country of Birth

Birth Date (Month Day Year)

Age (Unk = 999)

Age Type
0 = 0-120 years
1 = 0-11 months
2 = 0-52 weeks
3 = 0- 28 days
9 = Age unknown

Ethnicity
H = Hispanic
N = Not Hispanic
U = Unknown

Race
N = Native Amer./Alaskan Native
A = Asian/Pacific Islander
B = African American
W = White
O = Other
U = Unknown

Sex
M = Male
F = Female
U = Unknown

Event Date (Month Day Year)

Event Type
1 = Onset Date
2 = Diagnosis Date
3 = Lab Test Date
4 = Reported to County
5 = Reported to State or MMWR Report Date
9 = Unknown

Outbreak Associated (Unk = 999)

Reported (Month Day Year)

Imported
1 = Indigenous
2 = International
3 = Out of State
9 = Unknown

Report Status
1 = Confirmed
2 = Probable
3 = Suspect
9 = Unknown

CLINICAL DATA

Any Rash? Y = Yes, N = No, U = Unknown

Rash Onset (Month Day Year)

Rash Duration 0 - 30 Days, 99 = Unknown

Fever? Y = Yes, N = No, U = Unknown

If Recorded, Highest Measured Temp. 36.0 - 110.0 Degrees, 999.9 = Unknown

Arthralgia/ Arthritis? Y = Yes, N = No, U = Unknown

Lymphadenopathy? Y = Yes, N = No, U = Unknown

Conjunctivitis? Y = Yes, N = No, U = Unknown

COMPLICATIONS

Encephalitis? Y = Yes, N = No, U = Unknown

Arthralgia/Arthritis? Y = Yes, N = No, U = Unknown

Thrombocytopenia? Y = Yes, N = No, U = Unknown

Death? Y = Yes, N = No, U = Unknown

Other Complications? Y = Yes, N = No, U = Unknown

If Yes, Please Specify:

Hospitalized? Y = Yes, N = No, U = Unknown

Days Hospitalized 0 - 998, 999 - Unknown

LABORATORY

Was Laboratory Testing For Rubella Done? Y = Yes, N = No, U = Unknown

Date IgM Specimen Taken (Month Day Year)

Result
P = Positive E = Pending
N = Negative X = Not Done
I = Indeterminate
U = Unknown

Date IgG Acute Specimen Taken (Month Day Year)

Date IgG Convalescent Specimen Taken (Month Day Year)

Result
P = Significant Rise in IgG
N = No Significant Rise in IgG
I = Indeterminate
E = Pending
X = Not Done
U = Unknown

Other Lab Result
P = Significant Rise in IgG
N = No Significant Rise in IgG
I = Indeterminate
X = Not Done
E = Pending
U = Unknown

Specify Other Lab Method:

VACCINE HISTORY

Vaccinated? (Received rubella-containing vaccine?) Y = Yes, N = No, U = Unknown

Vaccination Date (Month Day Year)	Vaccine	Vaccine Type	Manuf.	Lot Number

Vaccine Type Codes
A = MMR
B = Rubella
O = Other
U = Unknown

Vaccine Manufacturer Codes
M = Merck
O = Other
U = Unknown

Number of doses received ON or AFTER 1st birthday

If Not Vaccinated, What Was The Reason?
1 = Religious Exemption
2 = Medical Contraindication
3 = Philosophical Objection
4 = Lab. Evidence of Previous Disease
5 = MD Diagnosis of Previous Disease
6 = Under Age For Vaccination
7 = Parental Refusal
8 = Other
9 = Unknown

EPIDEMIOLOGIC

Date First Reported to a Health Department (Month Day Year)

Date Case Investigation Started (Month Day Year)

Outbreak Related? Y = Yes, N = No, U = Unknown

If Yes, Outbreak Name

Transmission Setting (Where did this case acquire rubella?)
1 = Day Care
2 = School
3 = Doctor's Office
4 = Hospital Ward
5 = Hospital ER
6 = Hospital Outpatient Clinic
7 = Home
8 = Work
9 = Unknown
10 = College
11 = Military
12 = Correctional Facility
13 = Church
14 = International Travel
15 = Other

If Other, Specify Transmission Setting:_____

Were Age and Setting Verified? (Is age appropriate for setting, i.e. aged 49 years and in day care, etc.) Y = Yes, N = No, U = Unknown

Source of Exposure For Current Case (Enter State ID if source was an in-state case; enter Country if source was out of U.S.; enter State if source was out-of-state)

Epi-Linked to Another Confirmed or Probable Case? Y = Yes, N = No, U = Unknown

Indicates epidemiologically important items not yet on NETSS screen

---------- DETACH HERE and transmit only lower portion if sent to CDC ----------

PREGNANT WOMEN

Was The Case Pregnant?
☐ Y = Yes
N = No
U = Unknown

Number of Weeks Gestation (or Trimester) at Onset of Illness ☐☐☐

1st = First Trimester
2nd = Second Trimester
3rd = Trimester

Or

1 = 1 Week
2 = 2 Weeks
3 = 3 Weeks
Etc. – continue up to 45 weeks

Prior Evidence of Serological Immunity?
☐ Y = Yes
N = No
U = Unknown

Year of Test ☐☐☐☐

OR

Age of Patient at Time of Test ☐☐
0 -50
99 - Unknown

Was Previous Rubella Serologically Confirmed?
☐ Y = Yes
N = No
U = Unknown

Year of Disease ☐☐☐☐

OR

Age of Patient at Time of Disease ☐☐
0 -50
99 - Unknown

The information below is epidemiologically important but not included on NETSS screens

Exposure Period — **Period of Communicability**

21 Days — 14 Days — 7 Days — Rash Onset — 7 Days

Month	Day	Year	Month	Day	Year	Month	Day	Year	Month	Day	Year	Month	Day	Year
☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

Contacts to case in case's infectious period (7 days before to 7 days after rash onset) who are in 1st 5 months of pregnancy

Name	Address/Phone	Documented Prior Rubella Immunization?	If Yes, Date	Documented Rubella Seropositivity Before Or Within 7 Days After First Exposed	If No or Unknown, Action Taken – Rubella Serology, etc.
		☐ Y = Yes N = No U = Unknown	Month ☐☐ Day ☐☐ Year ☐☐	☐ Y = Yes N = No U = Unknown	
		☐ Y = Yes N = No U = Unknown	Month ☐☐ Day ☐☐ Year ☐☐	☐ Y = Yes N = No U = Unknown	
		☐ Y = Yes N = No U = Unknown	Month ☐☐ Day ☐☐ Year ☐☐	☐ Y = Yes N = No U = Unknown	

Group contacts to case in case's infectious period (7 days before to 7 days after rash onset), i.e., households, child care center, school, college, workplace, jail/prison, physician's office/clinic/hospital/emergency room, etc.

Name of Group/Site	Address/Phone	Notes

Clinical Case Definition:
An illness that has all of the following characteristics: acute onset of generalized maculopapular rash, temperature > 99° F (> 37° C), if measured, and arthralgia/arthritis, lymphadenopathy, or conjunctivitis.

Case Classification:
***Suspected*: any generalized rash illness of acute onset**
***Probable*: a case that meets the clinical case definition, has no or noncontributory serologic or virologic testing, and is not epidemiologically linked to a laboratory-confirmed case**
***Confirmed*: a case that is laboratory confirmed or that meets the clinical case definition and is epidemiologically linked to a laboratory-confirmed case**

SALMONELLOSIS
(NON-TYPHOIDAL)

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea, fever, and sometimes vomiting. Asymptomatic infections may occur and the organism may cause extraintestinal infections.

CASE DEFINITION:

Confirmed Case:

A laboratory confirmed case. When available, O and H antigen serotype characterization should be reported.

Probable Case:

A clinically compatible case that is epidemiologically linked to a confirmed case.

LABORATORY CRITERIA FOR CONFIRMATION:

Isolation of *Salmonella* spp. from a clinical specimen.

REPORTING CRITERIA: Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease From – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Attempt to get isolate sent to Kentucky Department for Public Health, Division of Laboratory Services for serotyping.
- Educate public about proper hand washing after toileting or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
- Assess patient's activities for high-risk settings.
- Exclude symptomatic individuals from high-risk settings.
- Exclude symptomatic patients from food handling, generally until asymptomatic. The LHD can require two negative stool cultures taken at least 24 hours apart if they deem the patient's personal hygiene to be inadequate.
- Source investigation by LHD.
- Determine if case is potentially outbreak-related and notify Communicable Disease Branch, Surveillance and Health Data Branch or Division of Epidemiology and Health Planning (502-564-3261 or 1-888-973-7678).

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, FOOD SAFETY BRANCH AND COSMETICS BRANCH: 502-564-7181.
DPH, DIV. OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. SALMONELLOSIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 469- 473.

Pickering, LK, ed. Salmonella Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 541-547.

SHIGELLOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

An acute infection of variable severity characterized by diarrhea (may be bloody or contain mucous), fever, nausea, cramps, and tenesmus. Asymptomatic infections may occur.

CASE DEFINITION:

Confirmed Case:

A case that meets the laboratory criteria for diagnosis. When available, O antigen serotype characterization should be reported.

Probable Case:

A clinically compatible case that is epidemiologically linked to a confirmed case.

LABORATORY CRITERIA FOR CONFIRMATION:

Isolation of *Shigella* sp. from a clinical specimen.

REPORTING CRITERIA: Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION:REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Jan/03)

PUBLIC HEALTH INTERVENTIONS:

- Educate public about proper hand washing after toileting or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
- Assess patient's activities for high-risk settings.
- Exclude infected individuals from high-risk settings (including food handling, patient care and day care work) until they are asymptomatic **AND** two consecutive negative stool cultures (collected at least 24 hours apart and obtained at least 48 hours after discontinuance of antimicrobial therapy) are obtained.
- Educate and advise high-risk patients and food handlers on enteric precautions.
- Source investigation by LHD.
- Determine if case is potentially outbreak-related and notify the Communicable Disease Branch, 502-564-3261, Surveillance and Health Data Branch, 502-564-3418 or Division of Epidemiology and Health Planning, 502-564-3261 or 1**-888-973-7678**.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIV. OF EPIDEMIOLOGY AND HEALTH PLANNING: 502-564-7243.

RELATED REFERENCES

Heymann, David L., ed. SHIGELLOSIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 487-491.

Pickering, LK, ed. Shigella Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics 2003: 551-553.

STDs VOLUNTARILY REPORTABLE

The DPH requests voluntary reporting of the following diseases to improve surveillance of STDs. They should be reported on the EPID-200 form.

CLINICAL DESCRIPTION AND LABORATORY CRITERIA FOR DIAGNOSIS:

Genital Herpes: A condition characterized by visible, painful genital or anal lesions.

Laboratory criteria for diagnosis:

- Isolation of herpes simplex virus from cervix, urethra, or anogenital lesion, **OR**
- Demonstration of virus by antigen detection technique in clinical specimens from cervix, urethra, or anogenital lesion **OR**
- Demonstration of multinucleated giant cells on a Tzanck smear of scrapings from an anogential lesion. .

Case Definition:

Confirmed Case:

A Laboratory confirmed case.

Probable Case:

A clinically compatible case (in which primary and secondary syphilis have been excluded by appropriate serologic tests and darkfield microscopy, when available) with either a diagnosis of genital herpes based on clinical presentation (without laboratory confirmation) or a history of one or more previous episodes of similar genital lesions.

Genital Warts: An infection characterized by the presence of visible, exophilic (raised) growths on the internal or external genitalia, perineum, or perianal region.

Laboratory criteria for diagnosis:

- Histopathologic changes characteristic of human papillomavirus infection in specimens obtained by biopsy or exfoliative cytology **OR**
- Demonstration of virus by antigen or nucleic acid detection in a lesion biopsy.

Case Definition:

Confirmed Case:

A Laboratory confirmed case.

Probable Case:

A clinically compatible case without histopathologic diagnosis and without microscopic or serologic evidence that the growth is the result of secondary syphilis

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUESTS VOLUNTARY REPORTING OF THESE DISEASES TO THE LOCAL OR STATE HEALTH DEPARTMENT.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Report Form – EPID 200 (Rev. Jan/03).

Note: Section labeled "Additional Information for Sexually Transmitted Diseases Only" should also be completed.

PUBLIC HEALTH INTERVENTIONS:

- Patients should be counseled on methods to reduce their risk for STDS, including HIV.
- Testing for syphilis, gonorrhea, *Chlamydia* and HIV should be offered and encouraged.

CONTACTS FOR CONSULTATION

DPH, STD CONTROL PROGRAM: 502-564-4804.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIV. OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. (See index for specific diseases). In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003.

STREPTOCOCCAL DISEASE, INVASIVE, GROUP A

IDENTIFICATION

CLINICAL DESCRIPTION:

Invasive group A streptococcal infections may manifest as any of several clinical syndromes:

- **Pneumonia**
- **Bacteremia** in association with cutaneous infection (e.g., cellulitis, erysipelas, or infection of a surgical or nonsurgical wound)
- **Deep soft-tissue infection** (e.g., myositis or necrotizing faciitis)
- **Meningitis, peritonitis, osteomyelitis, septic arthritis, postpartum sepsis, neonatal sepsis**
- **Streptococcal Toxic Shock Syndrome (see case definition on page 247)**

CASE DEFINITION:

Confirmed Case:

A clinically compatible illness that is laboratory confirmed.

LABORATORY CRITERIA FOR CONFIRMATION:

Isolation of group A *Streptococcus (Streptococcus pyogenes)* by culture from a normally sterile site (e.g., blood or cerebrospinal fluid, or less commonly, joint, pleural, or pericardial fluid)

REPORTING CRITERIA: Clinical diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION:REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678.**

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).
- Toxic-Shock Syndrome Case Report – CDC 52.3 (Rev. 4-96).
- Group A Streptococcus Surveillance Form – EPID 200GAS (1/03)

PUBLIC HEALTH INTERVENTIONS:

- Cluster investigation if more than one case occurs in close geographic and temporal proximity.
- Educate health care community regarding specific elements of clinical case definition which must be met for a case to be reportable at the state and national level.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.

RELATED REFERENCES

Heymann, David L., ed. STREPTOCOCCAL DISEASES CAUSED BY GROUP A. In Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 507-514.

Kentucky Department for Public Health
Division of Epidemiology and Health Planning
275 East Main St., Mailstop HS1E-C
Frankfort, KY 40621-0001

Group A Streptococcus Surveillance

DEMOGRAPHIC INFORMATION

Patient's Last Name	First	M.I.	Age	Date of Birth	Gender
				/ /	☐ M ☐ F ☐ Unk

Race/Ethnicity:
☐ White, not Hispanic ☐ Hispanic ☐ Amer. Indian or Alaskan Native ☐ Black, not Hispanic ☐ Asian or Pacific Islander ☐ Unknown

Date of Onset	Date of Admission	Date of Discharge	Outcome	Date of Death
/ /	/ /	/ /	☐ Survived ☐ Died	/ /

SUBMITTER INFORMATION

Completed By:	Patient Hospital ID # or Health Dept. #:
Hospital Name:	City/State

Date form completed: / /	Is and isolate being sent to CDC? ☐ Yes ☐ No	If yes: Isolate ID: Patient hospital #_____ Lab # _____

LABORATORY INFORMATION

Cultures: Source of GAS: Sterile Site
☐ Blood ☐ Tissue (specify)_____
☐ Synovial fluid ☐ CSF
☐ Pleural fluid ☐ Peritoneal fluid
☐ Other (specify) _____

Date of first GAS isolate: mo☐☐ day☐☐ yr ☐☐

Cultures: Non-sterile site
☐ Throat ☐ Skin ☐ Wound ☐ Vagina
☐ Other (specify) _____

Non-Gas Sterile site Isolates (+/ - 4 days of Gas isolate)
Site: _____ Organism: _____

CLINICAL INFORMATION

Clinical Presentation (check all that apply)

☐ Sepsis (without focus)
☐ Pneumonia
☐ Pharyngitis
☐ Meningitis
☐ Peritonitis
☐ Osteomyelitis
☐ Septic arthritis
☐ Polyarthritis
☐ Fasciitis/myositis
☐ Cellulitis/ Abscess
☐ Surg. wound infection
☐ Nonsurg. wound infection
☐ Postpartum sepsis
☐ Other (specify) _____

Clinical Findings:

Fever (highest) _____ Hypotension (lowest BP): Systolic___ Diastolic_____

Rash: ☐ yes ☐ no ☐ dk

If yes: A. generalized ☐ type/site: _____

B. focal ☐ type/site: _____

Desquamation	yes ☐	no ☐	dk ☐
Syncope/Orthostatic Sx.	yes ☐	no ☐	dk ☐
Vomiting	yes ☐	no ☐	dk ☐
Diarrhea	yes ☐	no ☐	dk ☐
Pharyngitis	yes ☐	no ☐	dk ☐
Injected tongue	yes ☐	no ☐	dk ☐
Myalgia	yes ☐	no ☐	dk ☐
Arthritis/arthralgia	yes ☐	no ☐	dk ☐
Confusion	yes ☐	no ☐	dk ☐

Other (specify) _____

Complications:

Renal impairment yes ☐ no ☐

Disseminated Intravascualar Coagulation (DIC) yes ☐ no ☐

Adult Resp. Distress Synd. ARDS yes ☐ no ☐

Debridement/Myotomy yes ☐ no ☐

Amputation yes ☐ no ☐

Other (specify) _____

C hemistry (highest):

BUN _____
Creatinine _____
SGOT (AST) _____
SGPT (ALT) _____
Urinalysis:
RBC _____ WBC _____
Prot. _____ Casts _____
Coagulation:
Platelets (lowest) _____
PT/PTT (highest) _____/_____
Fibrin Split Products (FSP) _____
Other: _____

Underlying Illness or Prodrome (If none, check box) ☐

☐ Chronic heart disease
☐ Chronic lung disease
☐ Diabetes mellitus
☐ Renal failure w/dialysis
☐ Cirrhosis
☐ Stroke
☐ Immunosupp. therapy (includes steroids)
☐ Organ transplant (specify): _____
☐ Malignancy (non-skin) (specify) : _____
☐ HIV/AIDS
☐ Vasculitis/Lupus (SLE)
☐ Splenectomy/asplenia
☐ Alcohol abuse
☐ Intravenous drug abuse
☐ Sickle cell disease
☐ Postpartum (specify days) _____
☐ Nonsurgical wound (specify) _____date:_____
☐ Surgical wound (specify) _____date:_____
☐ History blunt trauma (specify) _____date:_____

Comments:

CDC Use ONLY

Code 1: ☐ 1 ☐ 2 ☐ 3 ☐ 4

Code 2: ☐ 1 ☐ 2 ☐ 3 ☐ 4

Streptococcus pneumoniae, Drug-Resistant Invasive Disease (DRSP)

Clinical description

Streptococcus pneumoniae causes many clinical syndromes, depending on the site of infection (e.g., acute otitis media, pneumonia, bacteremia, or meningitis).

Laboratory criteria for diagnosis

- Isolation of *S. pneumoniae* from a normally sterile site (e.g., blood, cerebrospinal fluid, or, less commonly, joint, pleural, or pericardial fluid) and
- "Nonsusceptible" isolate (i.e., intermediate- or high-level resistance of the *S. pneumoniae* isolate to at least one antimicrobial agent currently approved for use in treating pneumococcal infection (12, 13)[+]

[+]Resistance defined by National Committee for Clinical Laboratory Standards (NCCLS)-approved methods and NCCLS-approved interpretive minimum inhibitory concentration (MIC) standards (µg/mL) for *S. pneumoniae*. NCCLS recommends that all invasive *S. pneumoniae* isolates found to be “possibly resistant”to beta-lactams (i.e., an oxacillin zone size of less than 20 mm) by oxacillin screening should undergo further susceptibility testing by using a quantitative MIC method acceptable for penicillin, extended-spectrum cephalosporins, and other drugs as clinically indicated (12).

Case classification

Probable: a clinically compatible case caused by laboratory-confirmed culture of *S. pneumoniae* identified as "nonsusceptible" (i.e., an oxacillin zone size of less than 20 mm) when oxacillin screening is the only method of antimicrobial susceptibility testing performed

Confirmed: a clinically compatible case that is laboratory confirmed

[*]Comment

The difference between this case definition and the previous case definition for this condition is the inclusion of new case classifications for reporting purposes.

Case classifications for Drug Resistant *Streptococcus pneumoniae* (DRSP) and Invasive Pneumococcal Disease (IPD) are modified as listed below:

- Isolates causing IPD from children less than five years of age for which antibacterial susceptibilities are available and determined to be DRSP should be reported only as DRSP (event code 11720).
- Isolates causing IPD from children less than five years of age which are susceptible, or for which susceptibilities are not available should be reported ONLY as IPD in children less than five years of age (event code 11717).

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 5 business days of the identification of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Report Form – EPID 200 (Rev. Jan/03).
- Invasive *Streptococcus pneumoniae* Surveillance Report

PREVENTION MEASURES:

- All children aged ≤ 23 months should be vaccinated with Pneumococcal Conjugate Vaccine-7, by receiving three doses at intervals of approximately 2 months. Children who begin the series at ≤ 6 months will receive a fourth dose at 12-15 months.
- Administer the 23-valent pneumococcal vaccine to high-risk patients.

PUBLIC HEALTH INTERVENTIONS:

- Ensure that appropriate isolation precautions are being taken at the facility in which the patient is hospitalized.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIV. OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. Pneumococcal pneumonia. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 413-417.

Preventing Pneumococcal Disease Among Infants and Young Children: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000; 49(No.RR-9): 21-29.

Pickering, LK, ed. Pneumococcal Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 490-500.

National Committee for Clinical Laboratory Standards. Performance standards for antimicrobial susceptibility testing. Villanova, PA: National Committee for Clinical Laboratory Standards, 1994;14(16).

For Local Use Only

STREPTOCOCCUS PNEUMONIAE SURVEILLANCE WORKSHEET

Patient's Name _____ (LAST / FIRST / MIDDLE) Phone Number _____ (AREA CODE + 7 DIGITS)

Current Address _____ (NUMBER / STREET / APT. NUMBER / CITY / STATE) (ZIP CODE) Hospital _____ Patient Chart Number _____

Detatch here — Patient identifier information is not transmitted to CDC

STREPTOCOCCUS PNEUMONIAE SURVEILLANCE WORKSHEET

(Invasive pneumococcal disease and drug-resistant *S. pneumoniae*)

Throughout: Y=Yes N=No U=Unknown

1. **Are you reporting:**
   Drug Resistant *S. pneumoniae* Y ☐ N ☐ U ☐
   Invasive Disease Y ☐ N ☐ U ☐

2. **Date of birth:** ☐☐ (MONTH) ☐☐ (DAY) ☐☐☐☐ (YEAR)

3a. **Age:** ☐☐☐

3b. **Is age in years/months/weeks/days?**
☐ Yrs. ☐ Mos. ☐ Wks. ☐ Days

4. **Sex:** M ☐ Male F ☐ Female U ☐ Unknown

5. **Race:** *(check all that apply)*
   ☐ American Indian/Alaskan Native
   ☐ Asian
   ☐ Black or African American
   ☐ Native Hawaiian or Pacific Islander
   ☐ White
   ☐ Other Race *(specify)* _____

6. **Ethnicity: Is patient Hispanic or Latino?**
   Y ☐ N ☐ U ☐

7. **State in which patient resided at time of diagnosis:** ☐☐

8. **ZIP code at which patient resided at time of diagnosis:** ☐☐☐☐☐

9a. **Hospitalized?** Y ☐ N ☐ U ☐

9b. **If hospitalized for this condition, how many days total was the patient hospitalized?**
(Include days from multiple hospitals if relevant.)
☐☐☐ NUMBER OF DAYS: 0-998; 999=UNKNOWN

10. **Does this patient:** *(check all that apply)*
    Attend a day care* facility? Y ☐ N ☐ U ☐
    Facility name _____
    *DAY CARE IS DEFINED AS A SUPERVISED GROUP OF 2 OR MORE UNRELATED CHILDREN FOR >4 HOURS PER WEEK.
    Reside in a long-term care facility? Y ☐ N ☐ U ☐
    Facility name _____

11. **Did patient die from this illness?** Y ☐ N ☐ U ☐

12. **Onset date:** ☐☐ (MONTH) ☐☐ (DAY) ☐☐☐☐ (YEAR)

13. **Type of infection caused by organism:** *(check all that apply)*
    Bacteremia without focus ☐
    Cellulitis ☐

Item 13 continues next column

13. **Type of infection caused by organism (cont.):**
    Epiglottitis ☐
    Hemolytic uremic syndrome ☐
    Meningitis ☐
    Osteomyelitis ☐
    Otitis media ☐
    Peritonitis ☐
    Pericarditis ☐
    Pneumonia ☐
    Septic arthritis ☐
    Other ☐
    (specify) _____

14. **Sterile site from which organism isolated:**
    (check all that apply)

Blood	☐	**Joint**	☐
CSF	☐	**Bone**	☐
Pleural fluid	☐	**Internal body site**	☐
Peritoneal fluid	☐	**Muscle**	☐
Pericardial fluid	☐	**Other normally sterile site** *(specify)*	☐

15. **Date first positive culture obtained:**
    DATE SPECIMEN TAKEN ☐☐ (MONTH) ☐☐ (DAY) ☐☐☐☐ (YEAR)

16. **Nonsterile sites from which organism isolated, if any:**
    Middle Ear ☐
    Sinus ☐
    Other ☐
    (specify) _____

17a. **Does the patient have any underlying medical conditions or prior illness?**
    Y ☐ **YES.** If yes, fill out 17b.
    N ☐ **NO.** If no, skip to 18.
    U ☐ **UNKNOWN.** Skip to 18.

17b. **What underlying medical conditions does the patient have?** *(check all that apply)*
    Current smoker ☐
    Multiple myeloma ☐
    Sickle cell anemia ☐
    Splenectomy/asplenia ☐
    Immunoglobulin deficiency ☐
    Immunosuppressive therapy (steroids, chemotherapy, radiation) ☐
    Leukemia ☐

Item 17b continues on back

17b. **What underlying medical conditions does the patient have (cont.)?**

Hodgkin's disease	☐	**Cirrhosis/liver failure**	☐
Asthma	☐	**Alcohol abuse**	☐
Emphysema/COPD	☐	**Cardiovascular disease (ASCVD)/CAD**	☐
Systemic lupus erythematosus	☐	**Heart failure/CHF**	☐
Diabetes mellitus	☐	**CSF leak**	☐
Nephrotic syndrome	☐	**Intravenous Drug Use**	☐
Renal failure/dialysis	☐	**Other malignancy** *(specify)* _____	☐
HIV infection	☐	**Organ/bone marrow transplant**	☐
AIDS (CD4<200)	☐	**Other prior illness** *(specify)* _____	☐

VACCINATION HISTORY

18. **Did patient receive POLYSACCHARIDE pneumococcal vaccine?** Y ☐ N ☐ U ☐ **If YES, please complete the list below.**

DOSE	DATE GIVEN (Month/Day/Year)	VACCINE NAME	LOT NUMBER
1	☐☐-☐☐-☐☐☐☐	☐ Pneumovax 23 (Merck) ☐ Pnu-Imune23 (Wyeth) ☐ Other_____ ☐ Unknown	
2	☐☐-☐☐-☐☐☐☐	☐ Pneumovax 23 (Merck) ☐ Pnu-Imune23 (Wyeth) ☐ Other_____ ☐ Unknown	
3	☐☐-☐☐-☐☐☐☐	☐ Pneumovax 23 (Merck) ☐ Pnu-Imune23 (Wyeth) ☐ Other_____ ☐ Unknown	

19. **Did patient receive CONJUGATE pneumococcal vaccine?** Y ☐ N ☐ U ☐ **If YES, please complete the list below.**

DOSE	DATE GIVEN (Month/Day/Year)	VACCINE NAME	MANUFACTURER	LOT NUMBER
1	☐☐-☐☐-☐☐☐☐			
2	☐☐-☐☐-☐☐☐☐			
3	☐☐-☐☐-☐☐☐☐			
4	☐☐-☐☐-☐☐☐☐			

20. RESISTANCE TESTING RESULTS

Oxacillin zone size: (valid 00-30) ☐☐ mm **Oxacillin interpretation:** ☐ R<20mm (possibly resistant) ☐ S>=20mm (susceptible) ☐ Unknown/not tested

SUSCEPTIBILITY METHOD CODES	S/I/R RESULT CODES		SIGN CODES	MIC VALUE
A – AGAR: Agar dilution method **B** – BROTH: Broth dilution **D** – DISK: Disk diffusion (Kirby Bauer) **S** – STRIP: Antimicrobial gradient strip (E-test)	**S** – SUSCEPTIBLE **I** – INTERMEDIATE **R** – RESISTANT **U** – UNK./NOT TESTED	Result indicates whether the micro-organism is susceptible or not susceptible (intermediate or resistant) to the antimicrobial being tested.	Indicate whether the MIC is <, >, ≥, ≤, or = to the numerical MIC value in the last column.	Valid range for data value 0.000-999.999 MIC=minimum inhibitory concentration

21. ANTIMICROBIAL AGENT	SUSCEPTIBILITY METHOD A/B/D/S	S/I/R/U RESULT	SIGN <|>|≥|≤|=	MIC VALUE *(e.g., 0.06 ug/ml)*
Penicillin				
Amoxicillin				
Amoxicillin/clavulanic acid				
Cefotaxime				
Ceftriaxone				
Cefuroxime				
Vancomycin				
Erythromycin				
Azithromycin				
Tetracycline				
Levofloxacin				
Sparfloxacin				
Gatifloxacin				
Moxifloxacin				
Trimethoprim/sulfamethoxazole				
Clindamycin				
Quinupristin/dalfopristin				
Linazolid				
Other: *(list)*				

Submitted by: _____ Phone: (_____)_____ Date: ☐☐-☐☐-☐☐☐☐
DAY MONTH YEAR

SYPHILIS

IDENTIFICATION

CLINICAL DESCRIPTION:

A sexually transmitted disease caused by the spirochete *Treponema pallidum*. The infection usually progresses to four stages:

- **Primary Syphilis,** characterized by a chancre (ulcer) that appears 10 to 90 days, with an average of 21 days after exposure. The chancre appears at the site of exposure and heals within one to four weeks, even without treatment. Infected patients spread infection to their sex partner most often when they are in their primary syphilis stage.
- **Secondary Syphilis**, characterized by eruptions of the skin and/or mucous membranes that are generally infectious. Generalized adenopathy may be present. The skin eruptions can appear as a variety of different rashes and may begin while the chancre is present. However, it usually starts four weeks after the chancre resolves and can occur up to six months after inoculation. The rash resolves in two to six weeks, but may recur with infectious lesions for the first year of the disease. The most common secondary rash is a maculopapular rash of the palms and soles. Two very contagious manifestations of secondary syphilis are mucous patches and condylomata lata. *Treponema pallidum* is abundant in these lesions and sex partners can be easily infected.
- **Early Latent Syphilis**, occurs when the primary and secondary symptoms resolve and lasts throughout the first year of infection. This stage represents the asymptomatic stage of the infection. However, all serologic tests for syphilis will be positive.
- **Late Latent Syphilis** occurs in persons who have been infected with syphilis for more than one year. This stage is non-infectious, and the patient displays no signs or symptoms.
- **Late Syphilis** characterized by manifestations that occur 5 to 20 years after infection. They include gummas; destructive lesions of the skin, viscera, bone and mucosal surfaces; cardiovascular syphilis, destructive lesions of the aorta; and neurosyphilis, destruction of areas of the central nervous system including the brain. Late syphilis can cause death or permanent disability. Late syphilis manifestations occur in 20-25% of patients infected with syphilis who do not receive an adequate regimen of syphilis therapy.

Congenital infection often results from pregnant women with untreated primary, secondary and early latent syphilis. It can also result, with less frequency, from women who have untreated late latent to late syphilis. This infection may cause stillbirth, infant death, or severe complications that do not manifest and become apparent until much later in life. They include interstitial keratitis, saber shins, Hutchinson's teeth, saddlenose, and deafness. The presence of the lesions caused by primary and secondary syphilis increases risk of acquiring HIV infection. Congenital syphilis is classified in 2 separate stages:

- Newborns less than one year old.

- Persons over one year of age with congenitally acquired infection.

CASE DEFINITION:

Confirmed Case:

laboratory confirmed.

Probable Case:

A clinically compatible case with one or more ulcers (chancres) consistent with primary syphilis and a reactive serologic test (nontreponemal: Venereal Disease Research Laboratory [VDRL] or rapid plasma reagin [RPR]; treponemal: fluorescent treponemal antibody absorbed [FTA-ABS] or microhemagglutination assay for antibody to *T. pallidum* [MHA-TP])

LABORATORY CRITERIA FOR CONFIRMATION:

- Laboratory confirmation of *T. pallidum* by darkfield microscopy, by reactive serology, or by clinical manifestations of acquired infection.

REPORTING CRITERIA: Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION OF PRIMARY, SECONDARY, EARLY LATENT OR CONGENITAL SYPHILIS: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 24 hours of the identification of a case or suspected case. Other stages of syphilis require routine notification within 5 business days.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Form - EPID 200 (Rev. Jan/03).

Note: Section labeled “Additional Information for Sexually Transmitted Diseases” must be completed.

PREVENTION MEASURES:

- Pregnant women must receive syphilis serologies on the first prenatal visit, and more often if indicated or deemed necessary by the attendant caregiver.
- Although treatment ends infectiousness, a pregnant woman treated less than 30 days before delivery can have an infected infant and therefore a full evaluation of the

infant is recommended. These recommendations are outlined in the CDC 2002 Treatment Guidelines (Pages 18-30).

PUBLIC HEALTH INTERVENTIONS:

- Patients treated for early syphilis should be advised to have follow-up serologies at six-month intervals for two years.
- Patients diagnosed with syphilis or identified as contacts, suspects or associates, should receive educational information about the disease, be counseled on ways to reduce their risk of acquiring STDs, including HIV, and offered an HIV test.
- Patients with primary symptoms should be interviewed for all sexual contacts within 90 days prior to onset of symptoms. Patients with secondary symptoms should be interviewed for all contacts in the six months prior to onset of symptoms. Patients with early latent syphilis should be interviewed for all contacts in the year preceding treatment.
- All patients and contacts should be cluster interviewed to identify other individuals at risk. All individuals at risk should be counseled on risk reduction and referred for examination and treatment if appropriate.
- All interviews should pursue screening sites in areas of high incidence or where there is a danger of an outbreak.
- All sexual contacts within 90 days should be preventively treated. Those over 90 days should be tested and only treated if a case.

CONTACTS FOR CONSULTATION

DPH, STD CONTROL PROGRAM: 502-564-4804.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, DIV. OF LABORATORY SERVICES: 502-564-4446

RELATED REFERENCES

Heymann, David L., ed. SYPHILIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 518-525.

2002 Guidelines for the Treatment of Sexually Transmitted Diseases, MMWR Vol. 51(RR-6).

TETANUS

IDENTIFICATION

CLINICAL DESCRIPTION:
A disease with an acute onset of hypertonia (extreme tension of the muscles) and/or painful muscular contractions (usually of the muscles of the jaw and neck) and generalized muscle spasms without other apparent medical cause, following the contamination of a wound with *Clostridium tetani*.

CASE DEFINITION:

Confirmed Case:

A clinically compatible illness, as reported by a health–care professional.

REPORTING CRITERIA: Clinical diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Jan/03).
- Tetanus Surveillance Case Report - (CDC 71.15).
- Tetanus Surveillance Worksheet - (CDC).

PREVENTION MEASURES:

- Tetanus toxoid administered with diphtheria toxoid and acellular pertussis vaccine as a triple antigen for children <7 years of age. Routinely administer initial series at 2, 4 and 6 months and booster doses at 12-18 months of age and before school entry (at 4-6 years of age).
- Active protection should be maintained by administering booster doses of Td (tetanus diphtheria) every 10 years.
- Protection with vaccine is recommended for workers in contact with soil, sewage, domestic animals, members of the military forces, policemen and others with greater than usual risk of traumatic injury and older adults who are currently at highest risk of tetanus.

PUBLIC HEALTH INTERVENTIONS:

- Case investigation to determine circumstances of the wound and history of tetanus vaccination.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.

RELATED REFERENCES

Heymann, David L., ed. TETANUS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 528-533.

Pickering, LK, ed. Tetanus. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 611-516.

Tetanus Surveillance - United States, 1991-1994. MMWR 1997; 46(No.SS-2): 15-25.

Use of Diptheria Toxoid-Tetanus Toxoid- Acellular Pertussis Vaccine as a Five-Dose Series: Supplemental Recommendations of the ACIP; MMWR 2000: 49 (No. RR-13): 1-8.

Tetanus Surveillance Worksheet

NAME (Last, First)				Hospital Record No.
Address (Street and No.)	City	County	Zip	Phone
Reporting Physician/Nurse/Hospital/Clinic/Lab	Address			Phone

---------- DETACH HERE and transmit only lower portion if sent to CDC ----------

Tetanus Surveillance Worksheet

CDC NETSS ID [ ]

County

State

Zip

Birth Date Month [ ] Day [ ] Year [ ]

Age [ ] Unk = 999

Age Type [ ]
0 = 0-120 years
1 = 0-11 months
2 = 0-52 weeks
3 = 0-28 days
9 = Unknown

Ethnicity [ ]
H = Hispanic
N = Not Hispanic
U = Unknown

Race [ ]
N = Native Amer./Alaskan Native
A = Asian/Pacific Islander
B = African American
W = White
O = Other
U = Unknown

Sex [ ]
M = Male
F = Female
U = Unknown

Event Date Month [ ] Day [ ] Year [ ]

Event Type [ ]
1 = Onset Date
2 = Diagnosis Date
3 = Lab Test Date
4 = Reported to County
5 = Reported to State or MMWR Report Date
9 = Unknown

Reported Month [ ] Day [ ] Year [ ]

Imported [ ]
1 = Indigenous
2 = International
3 = Out of State
9 = Unknown

Report Status [1]
1 = Confirmed
2 = Probable
3 = Suspect
9 = Unknown

HISTORY

Date Year of Onset Month [ ] Day [ ] Year [ ]

Occupation

History of Military Service (Active or Reserve)? [ ]
Y = Yes
N = No
U = Unknown

Year of Entry Into Military Service [ ]

Tetanus Toxoid (TT) History Prior to Tetanus Disease
(Exclude Doses Received Since Acute Injury) [ ]
0 = Never
1 = 1 dose
2 = 2 doses
3 = 3 doses
4 = 4 + doses
9 = Unknown

Years Since Last Dose [ ]
0 - 98
99 = Unknown

CLINICAL DATA

Acute Wound Identified? [ ]
Y = Yes
N = No
U = Unknown

Date Wound Occurred Month [ ] Day [ ] Year [ ]

Principal Anatomic Site [ ]
1 = Head
2 = Trunk
3 = Upper Extremity
4 = Lower extremity
9 = Unspecified

Work Related? [ ]
Y = Yes
N = No
U = Unknown

Environment [ ]
1 = Home
2 = Other Indoors
3 = Farm/Yard
4 = Automobile
5 = Other Outdoors
9 = Unknown

Circumstances:

Principal Wound Type [ ]
1 = Puncture
2 = Stellate Laceration
3 = Linear Laceration
4 = Crush
5 = Abrasion
6 = Avulsion
7 = Burn
8 = Frost bite
9 = Compound Fracture
10 = Other (e.g. with cancer) Specify:_____
11 = Surgery
12 = Animal bite
13 = Insect bite/sting
14 = Dental
15 = Tissue necrosis
99 = Unknown

Wound Contaminated? [ ]
Y = Yes
N = No
U = Unknown

Depth of Wound [ ]
1 = 1cm. or less
2 = More than 1cm.
9 = Unknown

Signs of Infection? [ ]
Y = Yes
N = No
U = Unknown

Devitalized, Ischemic, or Denervated Tissue Present? [ ]
Y = Yes
N = No
U = Unknown

MEDICAL CARE PRIOR TO ONSET

Was Medical Care Obtained For This Acute Injury? [ ]
Y = Yes
N = No
U = Unknown

Tetanus Toxoid (TT) or Td Administered Before Tetanus Onset? [ ]
Y = Yes
N = No
U = Unknown

If Yes, TT or Td Given How Soon After Injury? [ ]
1 = < 6 Hours
2 = 7-23 Hours
3 = 1-4 Days
4 = 5-9 Days
5 = 10- 14 Days
6 = 15+ Days
9 = Unknown

Wound Debrided Before Tetanus Onset? [ ]
Y = Yes
N = No
U = Unknown

If Yes, Debrided How Soon After Injury? [ ]
1 = < 6 Hours
2 = 7-23 Hours
3 = 1-4 Days
4 = 5-9 Days
5 = 10-14 Days
6 = 15+ Days
9 = Unknown

Tetanus Immune Globulin (TIG) Prophylaxis Received Before Tetanus Onset? [ ]
Y = Yes
N = No
U = Unknown

If Yes, TIG Given How Soon After Injury? [ ]
1 = < 6 Hours
2 = 7-23 Hours
3 = 1-4 Days
4 = 5-9 Days
5 = 10-14 Days
6 = 15+ Days
9 = Unknown

Dosage (Units) [ ]
0-998
999 = Unknown

Associated Condition (If no Acute Injury) [ ]
1 = Abscess
2 = Ulcer
3 = Blister
4 = Gangrene
5 = Cellulitis
6 = Other Infection
7 = Cancer
8 = Gingivitis
88 = None
99 = Unknown

Describe Condition:

Diabetes? [ ]
Y = Yes
N = No
U = Unknown

If Yes, Insulin-Dependent? [ ]
Y = Yes
N = No
U = Unknown

Parenteral Drug Abuse? [ ]
Y = Yes
N = No
U = Unknown

Describe Condition:

CLINICAL COURSE

Type of Tetanus Disease [ ]
1 = Generalized
2 = Localized
3 = Cephalic
4 = Unknown

TIG Therapy Given? [ ]
Y = Yes
N = No
U = Unknown

If Yes, How Soon After Illness Onset? [ ]
1 = < 6 Hours
2 = 7-23 Hours
3 = 1-4 Days
4 = 5-9 Days
5 = 10-14 Days
6 = 15+ Days
9 = Unknown

Dosage (Units) [ ]
0-998
999 = Unknown

Days Hospitalized [ ]
0-998
999 = Unknown

Days in ICU [ ]
0-998
999 = Unknown

Days Received Mechanical Ventilation [ ]
0-998
999 = Unknown

Outcome One Month After Onset? [ ]
R = Recovered
C = Convalescing
D = Died

If Died, Date Expired Month [ ] Day [ ] Year [ ]

Tetanus Surveillance Worksheet

NAME (Last, First) 203				Hospital Record No.
Address (Street and No.)	City	County	Zip	Phone
Reporting Physician/Nurse/Hospital/Clinic/Lab	Address			Phone

---------- DETACH HERE and transmit only lower portion if sent to CDC ----------

Tetanus Surveillance Worksheet

NEONATAL (< 28 DAYS OLD)

Mother's Age in Years	Mother's Birthdate	Date Mother's Arrival in U.S.	Mother's Tetanus Toxoid (TT) History PRIOR to Child's Disease (Known Doses Only)	Years Since Mother's Last Dose
99 = Unknown	Month Day Year	Month Day Year	0 = Never 1 = 1 dose 2 = 2 doses 3 = 3 doses 4 = 4 + doses 9 = Unknown	0 - 98 99 = Unknown

Child's Birthplace	Birth Attendant(s)	Other Birth Attendant(s) (If Not Previously Listed)
1 = Hospital 2 = Home 3 = Other 9 = Unknown	1 = Physician 2 = Nurse 3 = Licensed Midwife 4 = Unlicensed Midwife 5 = Other 9 = Unknown	

Other Comments?	Reporter's Name	Title
Y = Yes N = No U = Unknown		

Institution Name	Phone Number	Date Reported
	- -	Month Day Year

Clinical Case Definition*:

Acute onset of hypertonia and/or painful muscular contractions (usually of the muscles of the jaw and neck) and generalized muscle spasms without other apparent medical cause.

Case Classification*:

Confirmed: A clinically compatible case, as reported by a health-care professional.

Notes/Other Information:

*CDC. Case Definitions for Infectious Conditions Under Public Health Surveillance. MMWR1997;46(No. RR-10):39.

TOXIC SHOCK SYNDROME

IDENTIFICATION

CLINICAL CASE DEFINITION:

For Toxic Shock Syndrome (except Streptococcal Toxic Shock Syndrome)

An illness with **ALL** the following clinical manifestations:

- Fever with temperature ≥ 38.9^o C (102° F).
- Rash - diffuse macular erythroderma.
- Desquamation - one to two weeks after onset of illness, particularly palms and soles.
- Hypotension - systolic blood pressure ≤ 90 mm Hg for adults or less than fifth percentile by age for children < 16 years of age; orthostatic drop in diastolic blood pressure ≥ 15 mm Hg from lying to sitting, orthostatic syncope, or orthostatic dizziness, **AND**

- Multisystem involvement - three or more of the following:
  -
  Gastrointestinal: vomiting or diarrhea at onset of illness.
  Muscular: severe myalgia or creatine phosphokinase level at least twice the upper limit of normal for laboratory.
  Mucous membrane: vaginal, oropharyngeal, or conjunctival hyperemia.
  Renal: blood urea nitrogen or creatine at least twice the upper limit for normal for laboratory or urinary sediment with pyuria (≥ 5 leukocytes per high-power field) in the absence of urinary tract infection.
  Hepatic: total bilirubin, serum glutamic-oxaloacetic transaminase (SGOT), or serum glutamic-pyruvic transaminase (SGPT) at least twice the upper limit of normal for laboratory.
  Hemotologic: platelets < 100,00/mm^3
  Central Nervous System: disorientation or alterations in consciousness without focal neurologic signs when fever and hypotension are absent, **AND**

- Negative results on the following tests, if obtained:
  Blood, throat or cerebrospinal fluid cultures (blood culture may be positive for Staphylococcus aureus).
- Rise in titer to Rocky Mountain Spotted Fever,Leptospirosis, or Measles.

For Streptococcal Toxic Shock Syndrome

An illness with the following clinical manifestations occurring within the first 48 hours of hospitalization or, for a nosocomial case, within the first 48 hours of illness:

- Hypotension defined by a systolic blood pressure ≤90 mm Hg for adults or less than the fifth percentile by age for children aged <16 years

- Multi-organ involvement characterized by two or more of the following:

  - **Renal impairment**: Creatinine ≥2 mg/dl (≥177 umoI/L) for adults or greater than or equal to twice the upper limit of normal age. In patients with preexisting renal disease, a greater than twofold elevation over the baseline level.
  - **Coagulopathy**: Platelets ≤100,00/mm^3 (≤100 $x10^6$ /L) or disseminated intravascular coagulation, defined by prolonged clotting times, low fibrinogen level, and the presence of fibrin degradation products
  - **Liver involvement**: Alanine aminotransferase, aspartate aminotransferase, or total bilirubin levels greater than or equal to twice the upper limit of normal for the patients age. In patients with preexisting liver disease, a greater than twofold increase over the baseline level
  - **Acute respiratory distress syndrome**: defined by acute onset of diffuse pulmonary infiltrates and hypoxemia in the absence of cardiac failure or by evidence of diffuse capillary leak manifested by acute onset of generalized edema, or pleural or peritoneal effusions with hypoalbuminemia
  - A generalized erythematous macular rash that may desquamate
  - Soft-tissue necrosis, including necrotizing faciitis or myositis, or gangrene
  - Isolation of group A Streptococcus

CASE DEFINITION:

- (Except for streptococcal toxic-shock syndrome) A patient with an illness compatible with all six clinical findings described above, including desquamation, unless the patient dies before desquamation could occur.

- For streptococcal toxic-shock syndrome, the criteria in I. A. 2.

REPORTING CRITERIA: Clinical diagnosis.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon identification of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 – (Rev. Jan/03).
- Toxic-Shock Syndrome Case Report - CDC 52.3 Rev 4-96.
- For Streptococcal toxic-shock syndrome the Group A Streptococcus Surveillance report information is needed to complete the case definition, (i.e., faciitis/myositis, disseminated intravascular coagulation and adult respiratory distress syndrome).

PUBLIC HEALTH INTERVENTIONS:

- Cluster investigation if more than one case occurs in close geographic and temporal proximity.
- Newly identified risk factors include use of contraceptive diaphragms and vaginal contraceptive sponges, and infection following childbirth or abortion.
- Educate health care community regarding specific elements of clinical case definition that must be met for a case to be reportable at the state and national level.

CONTACTS FOR CONSULTATION

DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.

RELATED REFERENCES

Heymann David L., ed. TOXIC SHOCK SYNDROME. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 506 507.

Pickering, LK, ed. Toxic Shock Syndrome. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 624-629.

Patient's Name _____ Telephone No. _____ TOXIC - SHOCK SY

Address _____ *(Detach top portion*

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

FORM APPROVED
OMB NO. 0920-0009

TOXIC - SHOCK SYNDROME CASE REPORT

The First Three Letters of Patient's Last Name (1-3) ☐☐☐

CDC No. (4-8) ☐☐☐☐☐

State No. (9-10) ☐☐

State Case No. (11-15) ☐☐☐☐☐

Age (16-17) ☐☐

Date of Birth: Mo. (18-19) ☐☐ Day (20-21) ☐☐ Yr. (22-23) ☐☐

Sex (24): Male ☐ 1 Female ☐ 2

Outcome (25): Lived ☐ 1 Died ☐ 2

Race/Ethnicity (26):
☐ 1 White (not Hispanic)
☐ 2 Black (not Hispanic)
☐ 3 Hispanic
☐ 4 Asian/Pacific Islander
☐ 5 American Indian/Alaskan Native
☐ 9 Not Specified

Date of Onset of Symptoms: Mo. (27-28) ☐☐ Day (29-30) ☐☐ Yr. (31-32) ☐☐

Date of Onset of Coincident Menstrual Period (If applicable): Mo. (33-34) ☐☐ Day (35-36) ☐☐ Yr. (37-38) ☐☐

Admitted to Hospital (39): Yes ☐ 1 No ☐ 2 Unk ☐ 9

Date of Hospital Admission: Mo. (40-41) ☐☐ Day (42-43) ☐☐ Year (44-45) ☐☐

CASE CLASSIFICATION (46):
Menstruation-associated ☐ 1
Wound-associated ☐ 2
Postpartum-associated ☐ 3
Other ☐ 4 (specify) _____
No. days postpartum ☐☐ (47-48)

CLINICAL FINDINGS Major Criteria

Fever (highest-if not recorded, leave blank) ☐☐☐.☐ F (49-52)

Hypotension (lowest) Systolic ☐☐☐ (53-55) Diastolic ☐☐ (56-57)

Syncope Yes ☐ 1 No ☐ 2 (58)

Orthostatic dizziness Yes ☐ 1 No ☐ 2 (59)

Rash (60) Yes ☐ 1 No ☐ 2 Unk. ☐ 9 (61) If yes, Generalized ☐ 1 Focal ☐ 2 Describe: _____

Desquamation (62) Yes ☐ 1 No ☐ 2 Unk. ☐ 9 If yes, describe: _____

SIGNS AND SYMPTOMS (First 4 Days of Illness)

	YES 1	NO 2	UNK 9		YES 1	NO 2	UNK 9		YES 1	NO 2	UNK. 9
(63) Vomiting	☐	☐	☐	(68) Conjunctival hyperemia	☐	☐	☐	(73) Vaginal ulceration	☐	☐	☐
(64) Diarrhea	☐	☐	☐	(69) Oropharyngeal hyperemia	☐	☐	☐	(74) Disorientation	☐	☐	☐
(65) Abdominal pain	☐	☐	☐	(70) Injected tongue	☐	☐	☐	(75) Seizures	☐	☐	☐
(66) Myalgia	☐	☐	☐	(71) Vaginal hyperemia	☐	☐	☐	(76) Cardiac Arrhythmia	☐	☐	☐
(67) Sore throat	☐	☐	☐	(72) Vaginal discharge	☐	☐	☐	If Yes, describe _____			

LABORATORY DATA (Most Abnormal Values in First 4 Days of Illness)

			Not Obtained
WBC Count (77-79)	☐☐.☐	000/mm³	(80) ☐
(81-82) Neutrophils	☐☐	%	(83) ☐
(84-85) Bands	☐☐	%	(86) ☐
(87-88) Metamyelocytes	☐☐	%	(89) ☐
(90-91) Myelocytes	☐☐	%	(92) ☐
(93-95) Platelets	☐☐☐	000/mm³	(96) ☐
(97-99) Highest platelet value after 7 days of illness	☐☐☐	000/mm³	
(100-102) SGOT	☐☐☐	IU/L	(103) ☐
(104-106) SGPT	☐☐☐	IU/L	(107) ☐
(108-110) Alkaline phosphatase	☐☐☐	IU/L	(111) ☐
(112-114) Bilirubin	☐☐.☐	mg/dl	(115) ☐
(116-119) Amylase	☐☐☐☐	Somogyi Units/dl	(120) ☐

Urinalysis			Not Obtained
(121-122) WBC/HPF	☐☐	("Many" = 99)	(123) ☐
(124-125) RBC/HPF	☐☐	("Many" = 99)	(126) ☐
(127) Protein (0-4+)	☐		(128) ☐
(129-130) BUN	☐☐	mg/dl	(131) ☐
(132-134) Creatinine	☐☐.☐	mg/dl	(135) ☐
(136-138) Calcium	☐☐.☐	mg/dl	(139) ☐
(140-141) Phosphorus	☐.☐	mg/dl	(142) ☐
(143-144) Albumin	☐.☐	g/dl	(145) ☐
(146-149) Creatine phosphokinase (CPK)	☐☐☐☐	IU/L	(150) ☐
(151) CPK-myocardial band	Yes ☐ 1 No ☐ 2 Unk ☐ 9		(152) ☐

(153) EKG Normal ☐ 1 Abnormal ☐ 2 Not obtained ☐ 3 Unk. ☐ 9 If Abnormal, describe _____

(154) Chest X-Ray Normal ☐ 1 Abnormal ☐ 2 Not obtained ☐ 3 Unk. ☐ 9 If Abnormal, describe _____

This report is authorized by law (Public Health Service Act, 42 USC 2

IOME CASE REPORT

sfore sending to CDC.)

Physician's Name _____ Telephone No. _____

Address _____

CULTURES

BLOOD (155) Positive ☐ 1 Negative ☐ 2 Not Done ☐ 3 Unk ☐ 9 **If Positive,** what organism(s): 1 _____ (156-157) 2 _____ (158-159)

URINE (160) Positive ☐ 1 Negative ☐ 2 Not Done ☐ 3 Unk ☐ 9 **If Positive,** what organism(s): 1 _____ (161-162) 2 _____ (163-164)

Colony Count 1. ☐☐☐ 000/ml (165-167) 2. ☐☐☐ 000/ml (168-170)

THROAT (171) Normal Flora ☐ 1 Abnormal ☐ 2 Not Done ☐ 3 Unk ☐ 9 **If Abnormal,** what organism(s): 1 _____ (172-173) 2 _____ (174-175)

NARES (176) Done ☐ 1 Not Done ☐ 3 Unk ☐ 9 **If Done,** what organism(s): 1 _____ (177-178) 2 _____ (179-180)

VAGINA (181) Done ☐ 1 Not Done ☐ 3 Unk ☐ 9 **If Done,** what organism(s): 1 _____ (182-183) 2 _____ (184-185)

Was *Staphylococcus aureus* present in the vagina? (186) **Yes** ☐ 1 **No** ☐ 2 **Unk** ☐ 9

If *S. aureus* present in vagina, is it resistant to penicillin and ampicillin only? (187) **Yes** ☐ 1 **No** ☐ 2 **Unk** ☐ 9

Other Site(s) _____ (188-189) **Organism(s)** 1. _____ (190-191) 2. _____ (192-193)

Was patient taking antibiotics when culture(s) performed? (194) **Yes** ☐ 1 **No** ☐ 2 **Unk.** ☐ 9 **If yes, which sites?** _____ (195-196)

TAMPON/NAPKIN/MINIPAD USE – IF APPLICABLE (During Period When Patient Became Ill)

PRODUCTS USED (197-198)

Tampon only ☐ 1 Minipad only ☐ 3 Tampon and Minipad ☐ 5 Tampon, Napkin, and Minipad ☐ 7 Other _____ (199-200) ☐ 10

Napkin only ☐ 2 Tampon and Napkin ☐ 4 Napkin and Minipad ☐ 6 Sea Sponge ☐ 8 Unknown ☐ 9

(If Only One Brand Was Used Before Onset of Symptoms, List Only That Brand)

BRAND # 1 (Most frequently used, judged by time)

NAME (201-202)		STYLE (ABSORBENCY) (203)	
Assure	☐ 1	Super-plus	☐ 1
Kotex		Super	☐ 2
Plastic Inserter	☐ 2	Regular	☐ 3
Stick Inserter	☐ 3	Junior	☐ 4
Inserter Unk	☐ 4	Unknown	☐ 9
o.b.	☐ 5		
Playtex			
Deodorized	☐ 6		
Non-deodorized	☐ 7		
Deodorant unk	☐ 8		
Pursettes	☐ 10		
Rely	☐ 11		
Tampax	☐ 12		
Other (specify) _____	☐ 13		
Unknown	☐ 9		

BRAND # 2

NAME (204-205)		STYLE (ABSORBENCY) (206)	
Assure	☐ 1	Super-plus	☐ 1
Kotex		Super	☐ 2
Plastic inserter	☐ 2	Regular	☐ 3
Stick inserter	☐ 3	Junior	☐ 4
Inserter unk	☐ 4	Unknown	☐ 9
o.b.	☐ 5		
Playtex			
Deodorized	☐ 6		
Non-deodorized	☐ 7		
Deodorant unk	☐ 8		
Pursettes	☐ 10		
Rely	☐ 11		
Tampax	☐ 12		
Other (specify) _____	☐ 13		
Unknown	☐ 9		

Was Brand No. 1 the only tampon brand used during period when patient became ill? (207) **Yes** ☐ 1 **No** ☐ 2 **Unk.** ☐ 9

NAPKIN BRAND: _____ (208-209)

MINIPAD BRAND: _____ (210-211)

How was information in this section verified? (212)

Patient's Memory ☐ 1

Patient viewing product box ☐ 2

Interviewer viewing product box ☐ 3

Other (describe) ☐ 4 _____

RECURRENCE INFORMATION FOR MENSTRUATION - ASSOCIATED CASES

Has patient had similar illness in past during menstrual period? (213) **Yes** ☐ 1 **No** ☐ 2 **Unk.** ☐ 9 **If yes, how many episodes?** (214) **One** ☐ 1 **Two** ☐ 2 **Three** ☐ 3 **More than Three** ☐ 4

OTHER INFORMATION

Please describe any other pertinent or unusual features of this case _____

How was case reported to Health Department? (215) By patient or relative ☐ 1 By physician ☐ 2 By hospital ☐ 3 Other ☐ 4

Person Completing Form	Date Reported to Health Department (216-221)	Date Form Completed (222-227)

FOR CDC USE ONLY ☐ 1 ☐ 2 ☐ 3 ☐ 4 (228)

nd is also recommended by the Conference of State and Territorial
ary for the understanding and control of the disease

TOXOPLASMOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:
A systemic disease caused by the coccidian protozoan *Toxoplasma gondii*. The disease is characterized by fever, lymphadenopathy, and lymphocytosis. Immunocompromised individuals may develop cerebral signs, pneumonia, and myocarditis. Primary infection during pregnancy may result in infant mortality or congenital abnormalities.

CASE DEFINITION:

Confirmed Case:

A clinically compatible illness that is laboratory confirmed.

LABORATORY CRITERIA FOR CONFIRMATION:

- Demonstration of *Toxoplasma gondii* in body tissues or fluids, **OR**
- Significant change in antibody titer on paired specimen serology, **OR**
- In infants, demonstration of specific IgM or increasing titer in sequential sera are conclusive evidence of congenital infection.

REPORTING CRITERIA: Clinical diagnosis and laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES ROUTINE REPORTING: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within five (5) business days of the identification of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).

PREVENTION MEASURES:

- Educate pregnant women and immunocompromised persons about the risk of transmission of toxoplasmosis from raw meats and contact with cats:

  a) Cook meats to 150° F (66° C). Freezing meat reduces infectivity but does not eliminate it.

b) Avoid cleaning litter pans or contact with cats of unknown feeding history. Wear gloves when gardening and thoroughly wash hands after work and before eating.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Haymann, David L., ed. TOXOPLASMOSIS. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 538-541.

Pickering, LK, ed. *Toxoplasma gondii* Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Villange, IL: 631-635.

CDC. Preventing Congenital Toxoplasmosis. MMWR 2000; Vol. 49 (No. RR-2): 57-67.

TUBERCULOSIS

IDENTIFICATION

CLINICAL DESCRIPTION:

A bacterial disease usually affecting the lungs (pulmonary TB) caused by organisms in the *Mycobacterium tuberculosis* complex (*M. tuberculosis, M. bovis, M. africanum*). Systemic symptoms include low-grade fever, night sweats, fatigue, and weight loss. Other parts of the body (extrapulmonary TB) can also be affected (e.g., brain, lymph nodes, kidneys, bones, joints, larynx, intestines, eyes). In pulmonary or laryngeal TB, there may also be hemoptysis, a persistent and productive cough, chest pain, and shortness of breath.

CASE DEFINITION:

Confirmed Case:

A case that meets the following for laboratory confirmation or clinical diagnosis.

Laboratory Confirmation by one of the following methods:

- Isolation of *M. tuberculosis* or *M. tuberculosis* complex organisms from a clinical specimen. Use of rapid identification techniques for *M. tuberculosis* such as DNA probes and mycolic acid high-pressure liquid chromatography (HPLC) performed on a culture from a clinical specimen are acceptable under this criterion.
- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification test. Nucleic acid amplification (NAA) tests must be accompanied by culture for mycobacteria species. However, for surveillance purposes, CDC will accept results obtained from nucleic acid amplification (NAA) tests approved by the FDA and used in accordance with the approved product labeling on the package insert. Current FDA-approved NAA tests are only approved for smear-positive respiratory specimens. The NAA test used by the Kentucky Public Health laboratory is the Mycobacterium Tuberculosis Direct (MTD).
- Demonstration of acid-fast bacilli in a clinical specimen when a culture has not been or cannot be obtained. This criteria has most commonly been used to diagnose tuberculosis in the post-mortem setting.

Case Definition

In the absence of laboratory confirmation of *M. tuberculosis* complex after a diagnostic process has been completed, persons must have all of the following criteria for clinical tuberculosis:

- Evidence of tuberculosis infection based on a positive tuberculin skin test, **AND**
- An abnormal unstable (worsening or improving) chest radiograph, **AND/OR**

- Evidence of current tuberculosis disease (e.g., fever, night sweats, cough, chest pain, weight loss, hemoptysis), **AND**
- Receive treatment with two or more antituberculosis medications.

REPORTING CRITERION: Laboratory confirmation of tuberculosis or a clinical diagnosis without laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES PRIORITY NOTIFICATION:
REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 1 business day upon recognition of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUIRED:

- Upon confirmation of a confirmed case, the local health department will be responsible for sending to the Department for Public Health, State TB Control Program, the following forms:
- **Report of Verified Case of Tuberculosis (RVCT)** *(CDC 72.9 A)* and
- **Follow Up 1 - Initial Drug Susceptibility** *(CDC 72.9 B)*
- Upon completion of TB treatment, the following form should be sent to the State TB Program:
- **Follow Up 2 - Case Completion** *(CDC 72.9 C)*

PUBLIC HEALTH INTERVENTIONS:

- For patients with pulmonary and laryngeal tuberculosis, control of infectivity is best achieved by prompt specific drug therapy.
- Patients must remain isolated (at home or in a negative pressure room designated for TB patients) until three consecutive smears are negative for AFB from sputum specimens collected on different days, **AND** the patient has been on appropriate therapy for at least two weeks, **AND** there is evidence of clinical improvement.
- Investigation of known contacts and source case.
- Initial tuberculin testing of all household members and other close contacts, with repeat skin testing of those with negative skin tests 8-10 weeks post exposure.

CONTACTS FOR CONSULTATION

LOCAL HEALTH DEPARTMENT TB COORDINATOR
DEPARTMENT FOR PUBLIC HEALTHTUBERCULOSIS CONTROL PROGRAM
Phone 502.564.4276; Fax 502.564.3772

RELATED REFERENCES

Centers for Disease Control and Prevention. Core Curriculum on Tuberculosis. 5th Edition, 2004.

Diagnostic Standards and Classification of Tuberculosis in Adults and Children. American Journal Respiratory Critical Care Medicine. 2000; 161:1376-1395. Internet address: www.atsjournal.org.

American Thoracic Society/Centers for Disease Control and Prevention. Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection. American Journal Respiratory Critical Care Medicine. 2000.

Tuberculosis Laws. KRS Ch. 215. 511-600, 902 KAR 2:020-090 (Surveillance, Control, Detection, Prevention).

Centers for Disease Control and Prevention. MMWR Recommendations and Reports. June 20, 2003/Vol. 52/No. RR-11.

TULAREMIA

IDENTIFICATION

CLINICAL DESCRIPTION:
An illness caused by the bacterium *Francisella tularensis*, with a variety of clinical presentation including lymphadenopathy, with or without cutaneous ulceration, and with or without conjunctivitis; pharyngitis, sepsis, intestinal signs, pneumonic disease, and a typhoidal illness without localizing signs and symptoms.

CASE DEFINITION:

Confirmed Case:

A clinically compatible case with confirmatory laboratory results.

Probable Case:

A clinically compatible case with laboratory results indicative of presumptive infection

LABORATORY CRITERIA FOR CONFIRMATION:

Confirmatory:

Isolation of F. tularensis in a clinical specimen or Fourfold or greater change in serum antibody titer to F. tularensis antigen

Presumptive:

Elevated serum antibody titer(s) to F. tularensis antigen (without documented fourfold or greater change) in a patient with no history of tularemia vaccination or Detection of F. tularensis in a clinical specimen by fluorescent assay

REPORTING CRITERIA: Clinical diagnosis with laboratory confirmation

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION:
REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Kentucky Reportable Disease Report Form – EPID 200 (Jan/03).
- Kentucky Tularemia Case Report Form – EPID 200TUL.

PUBLIC HEALTH INTERVENTIONS:

- Source investigation by LHD - contact with potentially infected arthropods, animal hosts (especially dressing and eating wild game), and contaminated water. Cases have also been traced to exposures in clinical microbiology laboratories.
- Patient education as needed to minimize future exposures.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, David L., ed. TULAREMIA. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 573-576.

Pickering, LK, ed. Tularemia In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: 666-667.

EPID 2005 TUL

Kentucky Department for Public Health
Division of Epidemiology and Health Planning
275 East Main St., Mailstop HS1E-C
Frankfort, KY 40621-0001

Tularemia Case History Report Form

Mail Form to Local Health Department

DEMOGRAPHIC DATA				
Patient's Last Name First M.I.	Date of Birth / /	Age	Gender ☐ M ☐ F ☐ Unk	
Address City State Zip			County of Residence	
Phone Number	Patient ID Number	Ethnic Origin ☐ His. ☐ Non-His.	Race ☐ W ☐ B ☐ A/PI ☐ Am.Ind ☐ Other	

TULAREMIA CASE HISTORY				
Date of Onset / /	Describe Clinical Symptoms:			
Date of Diagnosis / /				
Hospitalized? ☐ Yes ☐ No	Admission Date / /	Discharge Date / /	Died? ☐ Yes ☐ No ☐ Unk	Date of Death / /
Hospital Name:		Attending Physician:		

LABORATORY INFORMATION				
Date	Name or Type of Test	Name of Laboratory	Specimen Source	Results

TULAREMIA EXPOSURE HISTORY
History of tick or mosquito bite within 2 weeks of onset? ☐ yes ☐ no If yes, list type of vector and location of exposure:
History of exposure from handling contaminated water, blood or tissue from the carcass of infected animal (e.g. rabbits) within 2 weeks prior to illness? ☐ yes ☐ no If yes, type of animal handled? Type of contact with animal? Origin of animal?
History of handling or ingesting insufficiently cooked meat of infected animal or drinking contaminated water within 2 weeks prior to illness? ☐ yes ☐ no If yes, type of exposure? Origin of animal?
History of inhalation of dust from contaminated soil, grain or hay? ☐ yes ☐ no If yes, what were the circumstances for exposure?

Person or Agency Completing form:	Attending Physician:
Name: Agency:	Name:
Address:	Address:
Phone: Date of Report: / /	Phone:

TYPHOID FEVER

IDENTIFICATION

CLINICAL DESCRIPTION:

An illness caused by *Salmonella typhi* often characterized by the insidious onset of sustained fever, headache, malaise, anorexia, constipation or diarrhea, and nonproductive cough. However, mild and atypical infections may occur. Carriage of *S. typhi* may be prolonged.

CASE DEFINITION:

Confirmed Case:

A clinically compatible case that is laboratory confirmed

Probable Case:

A clinically compatible case that is epidemiologically linked to a confirmed case in an outbreak

LABORATORY CRITERIA FOR CONFIRMATION:

Isolation of *S. typhi* from blood, stool or other clinical specimens; serologic evidence alone is not sufficient for diagnosis.

REPORTING CRITERIA: Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Rev 01/03)
- Typhoid Fever Surveillance Report - CDC 52.5.

PUBLIC HEALTH INTERVENTIONS:

- Educate public about proper hand washing after toileting or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
- Assess patient's activities for high-risk settings.
- Enteric precautions while ill.
- Exclude patient from food handling and patient care until at least 3 negative cultures taken at least 24 hours apart and at least 48 hours after any antibiotic, and not earlier than one month after onset.
- If any of these cultures is positive, repeat cultures at intervals of one month until at least 3 consecutive negative cultures are obtained.
- If patient also has schistosomiasis, also do urine cultures.
- Household and close contacts should be excluded from food handling occupations until at least 2 negative fecal and urine cultures, taken at least 24 hours apart, are obtained.
- Source investigation by LHD. Obtain travel history; all travel companions should be contacted and interviewed.
- Asymptomatic carriage should **NOT** be reported as typhoid fever.

CONTACTS FOR CONSULTATION

DPH, COMMUNI ABLE DISEASE BRANCH: 502-564-3261.
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Heymann, David L., ed. TYPHOID FEVER. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 577-583.

Pickering, LK,ed. Salmonella Infections. In: 1997 Red Book: Report of the Committee on Infectious Diseases. 24th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 541-547.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta, Georgia 30333

CDC

TYPHOID FEVER SURVEILLANCE REPORT

CDC NO.: (1-5)

Form Approved OMB No. 0920-0009

Instructions:
– Please complete this form only for new, symptomatic, culture-proven cases of typhoid fever. –

DEMOGRAPHIC DATA

1. Reporting State: (6-7)
2. First three letters of patient's last name: (8-10)
3. Date of birth: Mo. Day Yr. (11-16) or Age: (in years) (17-18)
4. Sex: (19) 1 Male 2 Female
5. Does the patient work as a foodhandler? (20) 1 Yes 0 No 9 Unk.
6. Citizenship: (21) 1 U.S. 9 Other: _____ 9 Unk.

CLINICAL DATA

7. Was the patient ill with typhoid fever? (fever, abdominal pain, headache, etc) (22) 1 Yes 0 No 9 Unk.
   If Yes, give date of onset of symptoms: Mo. Day Yr. (23-28)
8. Was the patient hospitalized? (29) 1 Yes 0 No 9 Unk.
   If Yes, how many days was the patient hospitalized? Days (30-31)
9. Outcome of case: (32) 1 Recovered 2 Died 9 Unk.

LABORATORY DATA

10. Date *Salmonella typhi* first isolated: Mo. Day Yr. (33-38)
    Site(s) of isolation: *(check all that apply)* (39) 1 Blood 2 Stool 3 Gall bladder 9 Other (specify): _____ (40-55)
11. Was **antibiotic sensitivity testing** performed on this (these) isolate(s) at the laboratory? *(Please contact the clinical laboratory for this information)* (56) 1 Yes 0 No 9 Unk.
    If Yes, was the organism **resistant** to:
    - Ampicillin: (57) 1 Yes 0 No 9 Not tested
    - Chloramphenicol: (58) 1 Yes 0 No 9 Not tested
    - Trimethoprim-sulfamethoxazole: (59) 1 Yes 0 No 9 Not tested
    - Fluoroquinolones (e.g., Ciprofloxacin): (60) 1 Yes 0 No 9 Not tested

EPIDEMIOLOGIC DATA

12. Did this case occur as part of an outbreak? (two or more cases of typhoid fever associated by time and place) (61) 1 Yes 0 No 9 Unk.
13. Did the patient receive typhoid vaccination (primary series or booster) within **five years** before onset of illness? (62) 1 Yes 0 No 9 Unk.
    If Yes, indicate type of vaccine received: (Year received:)
    - Standard killed typhoid shot (Wyeth-Ayerst): (63) 1 Yes 0 No 9 Unk. (64-66)
    - Oral Ty21a or Vivotif (Berna) four pill series: (66) 1 Yes 0 No 9 Unk. (67-69)
    - ViCPS or Typhim Vi shot (Pasteur Merieux): (68) 1 Yes 0 No 9 Unk. (70-71)
14. Did the patient travel or live outside the United States during the 30 days before the illness began? (72) 1 Yes 0 No 9 Unk.
    If Yes, please list in order the countries visited during the 30 days before the illness began: (other than the United States)
    1. _____ (73-88)
    2. _____ (89-104)
    3. _____ (105-120)
    4. _____ (121-136)
    Date of most recent return or entry to the United States: Mo. Day Yr. (137-142)
15. Was the purpose of the international travel:
    a.) Business? (143) 1 Yes 0 No 9 Unk.
    b.) Tourism? (144) 1 Yes 0 No 9 Unk.
    c.) Visiting relatives or friends? (145) 1 Yes 0 No 9 Unk.
    d.) Immigration to U.S.? (146) 1 Yes 0 No 9 Unk.
    e.) Other? (147) 1 Yes 0 No 9 Unk.
    (if other, specify): _____ (148-164)
16. Was the case traced to a typhoid carrier? (165) 1 Yes 0 No 9 Unk.
    If Yes, was the carrier **previously** known to the health department? (166) 1 Yes 0 No 9 Unk.
17. Comments: _____

18. Name of Person Completing Form: _____
    Address: _____
    Telephone: (_____) _____ Date: ____/____/____ (Mo. Day Yr.)

– THANK YOU VERY MUCH FOR TAKING THE TIME TO COMPLETE THIS FORM –

Please send a copy to your STATE EPIDEMIOLOGY OFFICE **and** the
FOODBORNE AND DIARRHEAL DISEASES BRANCH, CENTERS FOR DISEASE CONTROL AND PREVENTION,
Mailstop A-38, Atlanta, Georgia, 30333. • Fax: (404) 639-2205

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to DHHS Reports Clearance Officer, Paperwork Reduction Project (0920-0009); Rm 531H, H.H. Humphrey Bldg.; 200 Independence Ave., SW, Washington, DC 20201. While your response is voluntary your cooperation is necessary for the understanding and control of this disease.

VIBRIOSIS (Non-Cholera *Vibrio spp)*

IDENTIFICATION

CLINICAL DESCRIPTION

An infection of variable severity characterized by diarrhea and vomiting, primary septicemia, or wound infections. Asymptomatic infections may occur, and the organism may cause extraintestinal infections. The most common species are V*ibrio vulnificans* and *Vibrio parahaemolyticus*. *Vibrio parahaemolyticus* typically is a disease of moderate severity lasting 1-7 days, characterized by watery diarrhea, abdominal cramps and sometimes nausea, vomiting, fever and headache. *Vibrio vulnificus* produces septicemia in persons with chronic liver disease, chronic alcoholism or hemochromatosis; or those who are immunosuppressed. *V. vulnificus* appears 12 hours to 3 days after eating raw or undercooked seafood, especially oysters and over 90% of patients who become hypotensive die.

LABORATORY CRITERIA FOR CONFIRMATION

Isolation of *Vibrio spp.* other than toxigenic *Vibrio cholerae 01* or *0139* from a clinical specimen. (Infections due to toxigenic *Vibrio cholerae01 or 0139* are reportable as cholera).

CASE DEFINITION

Confirmed Case: A case that meets the laboratory criteria for diagnosis. Note that species identification and, if applicable, serotype designation (i.e. *Vibrio cholerae non-01/non-0139*) should be reported.

Probable Case: A clinically-compatible symptomatic case that is epidemiologically linked to a confirmed case.

REPORTING CRITERIA

Clinical diagnosis initially; laboratory confirmation required to meet case definition.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If local health department personnel cannot be contacted directly, notification shall be made by electronic submission (during work hours) or by telephone (24 hours/7 days) to the emergency number of the Division of Epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUIRED:

- Electronically through KYEPHRS-DSM **OR**
  Kentucky Reportable Disease Report Form – EPID 200 (Rev. Jan/03) **AND**
- Cholera and Other Vibrio Illness Surveillance Report-CDC 52.79 (Rev. 11/98)
  Fax completed form to DPH disease consultant.

PUBLIC HEALTH INTERVENTIONS:

- Educate consumers about the risks associated with eating raw seafood unless it has been irradiated.
- Educate seafood handlers and processors on preventive measures.

CONTACTS FOR CONSULTATION

KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.

KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

RELATED REFERENCES

Haymann, David L., ed. *Vibrio parahaemolyticus* Enteritis. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 114-115.

Haymann, David L., ed. Infection with *Vibrio vulnificus.* In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2000: 115-116.

Pickering, LK, ed. Other *Vibrio* Infections. In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: 689-690.

PATIENT'S NAME:	TEL.: Home	Work
ADDRESS:		
PHYSICIAN'S NAME:	TEL.:	

– PATIENT IDENTIFIERS NOT TRANSMITTED TO CDC –

SEND COMPLETED REPORT TO STATE INFECTION CONTROL

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

CHOLERA AND OTHER VIBRIO ILLNESS SURVEILLANCE REPORT

State will forward to: Centers for Disease Control and Prevention
Foodborne and Diarrheal Diseases Branch M/S A38
1600 Clifton Road
Atlanta, GA 30333

OMB 0920-0322 Exp. Date 12/31/2002

I. DEMOGRAPHIC AND ISOLATE INFORMATION

1. First three letters of patients first name: (1-3)

REPORTING HEALTH DEPARTMENT

State: (4-5)	City: (6-15)	County/Parish: (16-26)
State No.: (27-37)	CDC USE ONLY (38-48)	FDA No.: (49-57)

2. Date of birth: Mo. Day Yr. (58-63)

3. Age: Years Mos. (64-67)

4. Sex: (68) ☐ M (1) ☐ F (2) ☐ Unk. (9)

5. Race/Ethnicity: (69) ☐ White (not Hispanic) (1) ☐ Black (not Hispanic) (2) ☐ Hispanic (3) ☐ Asian/Pacific Islander (4) ☐ American Indian/ Alaska Native (5) ☐ Other: _____ (8) ☐ Unk. (9)

6. Occupation: (70-81)

7. *Vibrio* species isolated (check one or more):

Species	Stool	Blood	Wound	Other	Date specimen collected (If more than one specify earliest date) Mo. Day Yr.	If wound or other, specify site :
☐ *V. alginolyticus*	☐ (82)	☐ (83)	☐ (84)	☐ (85)	(86-91)	(92-103)
☐ *V. cholerae* O1	☐ (104)	☐ (105)	☐ (106)	☐ (107)	(108-113)	(114-125)
☐ *V. cholerae* O139	☐ (126)	☐ (127)	☐ (128)	☐ (129)	(130-135)	(136-147)
☐ *V. cholerae* ***non***-O1, ***non***-O139	☐ (148)	☐ (149)	☐ (150)	☐ (151)	(152-157)	(158-169)
☐ *V. cincinnatiensis*	☐ (170)	☐ (171)	☐ (172)	☐ (173)	(174-179)	(180-191)
☐ *V. damsela*	☐ (192)	☐ (193)	☐ (194)	☐ (195)	(196-201)	(202-213)
☐ *V. fluvialis*	☐ (214)	☐ (215)	☐ (216)	☐ (217)	(218-223)	(224-235)
☐ *V. furnissii*	☐ (236)	☐ (237)	☐ (238)	☐ (239)	(240-245)	(246-257)
☐ *V. hollisae*	☐ (258)	☐ (259)	☐ (260)	☐ (261)	(262-267)	(268-279)
☐ *V. metschnikovii*	☐ (280)	☐ (281)	☐ (282)	☐ (283)	(284-289)	(290-301)
☐ *V. mimicus*	☐ (302)	☐ (303)	☐ (304)	☐ (305)	(306-311)	(312-323)
☐ *V. parahaemolyticus*	☐ (324)	☐ (325)	☐ (326)	☐ (327)	(328-333)	(334-345)
☐ *V. vulnificus*	☐ (346)	☐ (347)	☐ (348)	☐ (349)	(350-355)	(356-367)
☐ *Vibrio* species - not identified	☐ (368)	☐ (369)	☐ (370)	☐ (371)	(372-377)	(378-389)
☐ Other (specify): _____ (390-405)	☐ (406)	☐ (407)	☐ (408)	☐ (409)	(410-415)	(416-427)

8. Were other organisms isolated from the same specimen that yielded *Vibrio*? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (428)

Specify organism(s): _____ (429-450)

9. Was the identification of the species of *Vibrio* (e.g., *vulnificus, fluvialis*) confirmed at the State Public Health Laboratory? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (451)

10. Complete the following information if the isolate is *Vibrio cholerae* O1 or O139:

Serotype (452) (check one)
☐ Inaba (1) ☐ Not Done (4)
☐ Ogawa (2) ☐ Unk. (9)
☐ Hikojima (3)

Biotype (453) (check one)
☐ El Tor (1) ☐ Not Done (3)
☐ Classical (2) ☐ Unk. (9)

Toxigenic? (454) (check one) Yes (1) ☐ No (2) ☐ Unk. (9) ☐

If YES, toxin positive by: (check all, that apply)
☐ ELISA (455)
☐ Latex agglutination (456)
☐ Other (specify): _____ (457-471)

Name of Hospital: _____

Address: _____

State: ____ Age: ____ Sex: ____

II. CLINICAL INFORMATION

Vibrio species: _____

1. Date and time of onset of first symptoms:

Mo. Day Yr. (472-7)

Hour Min. (478-9) (480-1) ☐ am (1) ☐ pm (2) (482)

2. Symptoms and signs:

max. temp. ____ • ____ (483-5) (486) (487) ☐ F (1) ☐ C (2) (488)

	Yes (1)	No (2)	Unk. (9)	
Fever	☐	☐	☐	(489)
Nausea	☐	☐	☐	(490)
Vomiting	☐	☐	☐	(491)
Diarrhea	☐	☐	☐	(492)
(max. no. stools/24 hours: _____) (493-494)				
Visible blood in stools	☐	☐	☐	(495)
Abdominal cramps	☐	☐	☐	(496)
Headache	☐	☐	☐	(497)
Muscle pain	☐	☐	☐	(498)
Cellulitis	☐	☐	☐	(499) Site: _____ (500-514)
Bullae	☐	☐	☐	(515) Site: _____ (516-530)
Shock (systolic BP <90)	☐	☐	☐	(531)
Other	☐	☐	☐	(532) (specify): _____ (533-549)

3. Total duration of illness: _____ (days) (550-552)

4. Admitted to a hospital for this illness? (553) ☐ Yes (1) ☐ No (2) ☐ Unk.(9)

	Mo.	Day	Yr.	
Admission date:				(554-559)
Discharge date:				(560-565)

5. Any sequelae? (e.g., amputation, skin graft) (566) ☐ Yes (1) ☐ No (2) ☐ Unk.(9)

If YES, describe: _____ (567-635)

6. Did patient die? (636) ☐ Yes (1) ☐ No (2) ☐ Unk.(9)

If YES, date of death: Mo. Day Yr. (637-642)

7. Did patient take an antibiotic as treatment for this illness? (643) Yes (1) ☐ No (2) ☐ Unk. (9) ☐

If YES, name(s) of antibiotic(s):

		Date began antibiotic: Mo. Day Yr.	Date ended antibiotic: Mo. Day Yr.
1.	(644-646)	(647-652)	(653-658)
2.	(659-661)	(662-667)	(668-673)
3.	(674-676)	(677-682)	(683-688)

8. Pre-existing conditions?

	Yes (1)	No (2)	Unk. (9)		
Alcoholism	☐	☐	☐	(689)	
Diabetes	☐	☐	☐	(690)	on insulin? ☐ ☐ ☐ (691)
Peptic ulcer	☐	☐	☐	(692)	
Gastric surgery	☐	☐	☐	(693)	type: _____ (694-709)
Heart disease	☐	☐	☐	(710)	Heart failure? ☐ ☐ ☐ (711)
Hematologic disease	☐	☐	☐	(712)	type: _____ (713-728)
	☐	☐	☐	(729)	type: _____ (730-745)
Immunodeficiency	☐	☐	☐	(746)	type: _____ (747-762)
Liver disease	☐	☐	☐	(763)	type: _____ (764-779)
Malignancy	☐	☐	☐	(780)	type: _____ (781-796)
Renal disease	☐	☐	☐	(797)	specify: _____ (798-810)
Other					

9. Was the patient receiving any of the following treatments or taking any of the following medications in the 30 days before this *Vibrio* illness began?

	Yes (1)	No (2)	Unk. (9)		If YES, specify treatment and dates:
Antibiotics	☐	☐	☐	(811)	_____ (812-830)
Chemotherapy	☐	☐	☐	(831)	_____ (832-850)
Radiotherapy	☐	☐	☐	(851)	_____ (852-870)
Systemic steroids	☐	☐	☐	(871)	_____ (872-890)
Immunosuppressants	☐	☐	☐	(891)	_____ (892-910)
Antacids	☐	☐	☐	(911)	_____ (912-930)
H_2-Blocker or other ulcer medication (e.g., Tagamet, Zantac, Omeprazole)	☐	☐	☐	(931)	_____ (932-950)

III. EPIDEMIOLOGIC INFORMATION

1. Did this case occur as part of an outbreak? (Two or more cases of *Vibrio* infection) Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (951) If YES, describe: _____ (952-970)

2. Did the patient travel outside his/her home state in the 7 days before illness began? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (973)

Patient home state: ____ (971-972)

If YES, list destination(s) and dates:

	City/State/Country	Date Entered Mo. Day Yr.	Date Left Mo. Day Yr.
1.	(974-1004)	(1005-1010)	(1011-1016)
2.	(1017-1047)	(1048-1053)	(1054-1059)
3.	(1060-1090)	(1091-1096)	(1097-1102)

3. Please specify which of the following seafoods were eaten by the patient in the 7 days before illness began: (If multiple times, most recent meal)

Type of seafood	Yes (1)	No (2)	Unk. (9)		Mo. Day Yr.		Any eaten raw? Yes (1)	No (2)	Unk. (9)	
Clams	☐	☐	☐	(1103)		(1104-1109)	☐	☐	☐	(1110)
Crab	☐	☐	☐	(1111)		(1112-1117)	☐	☐	☐	(1118)
Lobster	☐	☐	☐	(1119)		(1120-1125)	☐	☐	☐	(1126)
Mussels	☐	☐	☐	(1127)		(1128-1133)	☐	☐	☐	(1134)
Oysters	☐	☐	☐	(1135)		(1136-1141)	☐	☐	☐	(1142)
Shrimp	☐	☐	☐	(1143)		(1144-1149)	☐	☐	☐	(1150)
Crawfish	☐	☐	☐	(1151)		(1152-1157)	☐	☐	☐	(1158)
Other shellfish	☐	☐	☐	(1159)		(1160-1165)	☐	☐	☐	(1166)
(specify): _____										(1167-1191)
Fish	☐	☐	☐	(1192)		(1193-1198)	☐	☐	☐	(1199)
(specify): _____										(1200-1225)

State: ____ Age: ____ Sex: ____

III. EPIDEMIOLOGIC INFORMATION (CONT.)

Vibrio species: _____

4. In the 7 days before illness began, was patient's skin exposed to any of the following?

	Yes (1)	No (2)	Unk. (9)	
A body of water (fresh, salt, or brackish water)	☐	☐	☐	(1226)
Drippings from raw or live seafood	☐	☐	☐	(1227)
Other contact with marine or freshwater life	☐	☐	☐	(1228)

If YES, specify body of water location: _____ (1229-1242)

Date of exposure: Mo. ☐☐ Day ☐☐ Yr. ☐☐ (1250-5)

Time of exposure: Hour ☐☐ (1256-7) Min. ☐☐ (1258-9) ☐ am (1) ☐ pm (2) (1260)

If YES to any of the above, answer each:

	Yes (1)	No (2)	Unk. (9)	
Handling/cleaning seafood	☐	☐	☐	(1243)
Swimming/diving/wading	☐	☐	☐	(1244)
Walking on beach/shore/ fell on rocks/shells	☐	☐	☐	(1245)
Boating/skiing/surfing	☐	☐	☐	(1246)
Construction/repairs	☐	☐	☐	(1247)
Bitten/stung	☐	☐	☐	(1248)
Other: (specify)	☐	☐	☐	(1249)

_____ (1261-1275)

- If skin was exposed to water, indicate type: (1276)

☐ Salt (1) ☐ Brackish (3) ☐ Unk. (9)
☐ Fresh (2) ☐ Other (8) (specify): _____ (1277-1284)

Additional comments:
_____
_____ (1285-1290)

- If skin was exposed, did the patient sustain a wound during this exposure, or have a pre-existing wound? (choose one): (1291)

☐ YES, sustained a wound. (1) ☐ YES, had a pre-existing wound. (2) ☐ YES, uncertain if wound new or old. (3) ☐ NO. (4) ☐ Unk . (9)

If YES, describe how wound occurred and site on body :
(Note: Skin bullae that appear as part of the acute illness should be recorded in section II, Clinical Information, only).

_____ (1292-1320)

If isolate is *Vibrio cholerae* O1or O139 please answer questions 5 - 8.

5. If patient was infected with *V. cholerae* O1 or O139, to which of the following risks was the patient exposed in the 4 days before illness began:

	Yes (1)	No (2)	Unk. (9)	
Raw seafood	☐	☐	☐	(1321)
Cooked seafood	☐	☐	☐	(1322)
Foreign travel	☐	☐	☐	(1323)
Other person(s) with cholera or cholera-like illness	☐	☐	☐	(1324)
Street-vended food	☐	☐	☐	(1325)
Other	☐	☐	☐	(1326)

(specify): _____ (1327-1350)

6. If answered "yes" to foreign travel (question III. 5), had the patient been educated in cholera prevention measures before travel? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1351)

If YES, check all source(s) of information received:

☐ Pre-travel clinic (1352) ☐ Friends (1355) ☐ Travel agency (1358)
☐ Airport (departure gate) (1353) ☐ Private physician (1356) ☐ CDC travelers' hotline (1359)
☐ Newspaper (1354) ☐ Health department (1357) ☐ Other (specify): (1360) _____ (1361-1400)

7. If answered "yes" to foreign travel (question III. 5), what was the patient's reason for travel? (check all that apply)

☐ To visit relatives/friends (1401)
☐ Business (1402)
☐ Tourism (1403)
☐ Military (1404)
☐ Other (specify): (1405) _____
_____ (1406-1426)
☐ Unk. (1427)

8. Has patient ever received a cholera vaccine? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1428)

(If YES, specify type most recently received):
☐ Oral (1429) ☐ Parenteral (1430)

Most recent date: Mo. ☐☐ Day ☐☐ Yr. ☐☐ (1431-1436)

If domestically acquired illness due to <u>any</u> *Vibrio* species is suspected to be related to seafood consumption, please complete section IV (Seafood Investigation).

ADDITIONAL INFORMATION or COMMENTS

_____
_____
_____
_____

CDC Use Only
Comment: (1444-1454) _____
_____
Source: (1443) ☐
Syndrome: (1455) ☐

Person completing section I - III: _____ **Date:** Mo. ☐☐ Day ☐☐ Yr. ☐☐ (1437-1442)

Title/Agency: _____ **Tel.:** ( ) _____

CDC Isolate No.
_____ (1456-1463)

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Project Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA 30333, ATTN: PRA (0920-0322). Do not send the completed form to this address.

State: ____ Age: ____ Sex: ____

IV. SEAFOOD INVESTIGATION SECTION

Vibrio species: _____

For each seafood ingestion investigated, please complete as many of the following questions as possible. (Include additional pages section IV if more than one seafood type was ingested and investigated.)

1. Type of seafood (e.g., clams): _____ (1464-1480)

Date consumed: Mo. ____ Day ____ Yr. ____ (1481-1486)

Time consumed: Hour ____ Min. ____ (1487-8) (1489-90) ☐ am (1) ☐ pm (2) (1491)

Amount consumed: _____ (1492-1512)

If patient ate multiple seafoods in the 7 days before onset of illness, please note why this seafood was investigated (e.g.,consumed raw, implicated in outbreak investigation):

_____

2. How was this fish or seafood prepared? (1513)

☐ Raw (1) ☐ Baked (2) ☐ Boiled (3) ☐ Broiled (4) ☐ Fried (5) ☐ Steamed (6) ☐ Unk. (9) ☐ Other (8) (specify): _____ (1514-1530)

3. Was seafood imported from another country? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1531) If YES, specify exporting country if known: _____ (1532-1554)

4. Was this fish or shellfish harvested by the patient or a friend of the patient? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1555) (If YES, go to question 12.)

5. Where was this seafood obtained? (1556) (Check one)

☐ Oyster bar or restaurant (1) ☐ Seafood market (4) ☐ Unk. (9)
☐ Truck or roadside vendor (2) ☐ Other (8)
☐ Food store (3) (specify): _____ (1557-1590)

6. Name of restaurant, oyster bar, or food store: _____ Tel.: ( )

Address:

7. If oysters, clams, or mussels were eaten, how were they distributed to the retail outlet? (1591)

☐ Shellstock (sold in the shell) (1) ☐ Shucked (2) ☐ Unk. (9) ☐ Other (8) (specify): _____ (1592-1610)

8. Date restaurant or food outlet received seafood: Mo. ____ Day ____ Yr. ____ (1611-1616)

9. Was this restaurant or food outlet inspected as part of this investigation? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1617)

10. Are shipping tags available from the suspect lot? (1618) Yes (1) ☐ No (2) ☐ Unk. (9) ☐

(Attach copies if available)

11. Shippers who handled suspected seafood: (please include certification numbers if on tags)

_____

_____

12. Source(s) of seafood:

_____

_____

13. Harvest site:

_____ (1619-1639) **Date:** Mo. ____ Day ____ Yr. ____ (1640-1645) **Status:** (1646) ☐ Approved (1) ☐ Prohibited (2) ☐ Conditional (3) ☐ Other (8) (specify): _____ (1647-1666)

_____ (1667-1687) Mo. ____ Day ____ Yr. ____ (1688-1693) (1694) ☐ Approved (1) ☐ Prohibited (2) ☐ Conditional (3) ☐ Other (8) (specify): _____ (1695-1714)

14. Physical characteristics of harvest area as close as possible to harvest date:

		Result		Date Measured Mo. Day Yr.	
Maximum ambient temp.	(1715-1718)		☐ F (1) ☐ C (2) (1719)		(1720-1725)
Surface water temp.	(1726-1727)		☐ F (1) ☐ C (2) (1728)		(1729-1734)
Salinity (ppt)	(1735-1736)				(1737-1742)
Total rainfall (inches in prev. 5 days)	(1743-1744)				(1745-1750)
Fecal coliform count	(1751-1755)				(1756-1761)

(Attach copy of coliform data)

15. Was there evidence of improper storage, cross-contamination, or holding temperature at any point? Yes (1) ☐ No (2) ☐ Unk. (9) ☐ (1762) If YES, specify deficiencies:

_____

_____

Person completing section IV: _____ **Date:** Mo. ____ Day ____ Yr. ____ (1763-1768)

Title/Agency: _____ **Tel.:** ( )

WATERBORNE OUTBREAKS

IDENTIFICATION

CLINICAL DESCRIPTION: Clinical symptoms vary with the etiologic agent. Bacterial, parasitic or viral agents may cause diarrhea, nausea, vomiting, dermatitis or respiratory illness. Chemical agents may cause gastrointestinal, neurologic or respiratory symptoms, visual impairment or other clinical manifestations.

CASE DEFINITION:

Confirmed Case:
An incident in which two or more persons experience similar illness:

- After ingestion or use of water intended for drinking, or after exposure to water intended for recreational use, **AND**
- Epidemiologic evidence implicates the water as the source of the illness.

REPORTING CRITERIA: Laboratory isolation of an etiologic agent from ill individuals and/or from the suspected water source.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES PRIORITY NOTIFICATION: **REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT** within 1 business day upon recognition of a case or suspected case.

EPIDEMIOLOGY REPORTS REQUESTED:
- Electronically: KYEPHRS-DSM **OR**
- Kentucky Reportable Disease Form – EPID 200 (Rev. Jan/03).

PUBLIC HEALTH INTERVENTIONS:
- Source investigation by LHD.
- Specific intervention dependent upon etiologic agent.
- Determine if case is outbreak-related and notify Division of Epidemiology and Health Planning.

CONTACTS FOR CONSULTATION
DPH, COMMUNICABLE DISEASEBRANCH: 502-564-3261
DPH, ENVIRONMENTAL MANAGEMENT BRANCH: 502-564-4856
DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418

RELATED REFERENCES

Heymann, David L., ed. (See index for specific diseases). In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003.

DEPARTMENT OF HEALTH
& HUMAN SERVICES
Centers for Disease Control
and Prevention
National Center for Infectious Diseases
Atlanta, GA 30333

WATERBORNE DISEASES OUTBREAK REPORT

This form should be used to report outbreaks of illness after consumption or use of water intended for drinking, as well as outbreaks associated with exposure (ingestion, contact or inhalation) to recreational water.

CDC USE ONLY
–
___ ___ ___ ___ ___ ___

Form Approved
OMB No. 0920-0004

SUBMITTED COPIES OF THIS FORM SHOULD INCLUDE AS MUCH INFORMATION AS POSSIBLE; BUT THE COMPLETION OF EVERY ITEM IS NOT REQUIRED.

1. TYPE of EXPOSURE:
- ☐ Drinking water
- ☐ Recreational water
- ☐ Other: _____

2. LOCATION of OUTBREAK:
State: _____
City or Town: _____
County: _____

3. DATE of OUTBREAK:
(Date first case became ill):
Mo. ___ Day ___ Yr. ___

4. NUMBERS OF:

	Actual	Estimated
Persons exposed:		
Persons ill:		
Hospitalized:		
Fatalities:		

5. HISTORY of EXPOSED PERSONS:
Enter the no. of persons with the following symptoms:

NO. OF PERSONS INTERVIEWED: ___ NO. OF INTERVIEWED PERSONS WHO WERE ILL: ___

Diarrhea (≥3 stools/day): ___ Diarrhea (other): ___ /(Specify definition): _____
Visible blood in stools: ___ Nausea: ___ Fever: ___ Vomiting: ___ Cramps: ___
Eye infections: ___ Ear infections: ___ Skin infections: ___ Rash: ___ Dermatitis: ___
Respiratory symptoms: ___ Other, specify: _____

6. INCUBATION PERIOD:

	Hrs.	Days
Shortest:	☐	☐
Longest:	☐	☐
Median:	☐	☐
Mean:	☐	☐

7. DURATION of ILLNESS:

	Hrs.	Days
Shortest:	☐	☐
Longest:	☐	☐
Median:	☐	☐
Mean:	☐	☐

8. SPECIMENS EXAMINED from PATIENTS: (stool, vomitus, serum, etc.)

SPECIMEN	No. PERSONS	FINDINGS
EXAMPLE *Stool*	*11*	*8 Giardia intestinalis 3 negative*

9. ETIOLOGY of OUTBREAK:

Agent (If not known enter "Unk.")	Diagnostic Certainty: Confirmed	Suspected
Pathogen:	☐	☐
Chemical:	☐	☐
Other:	☐	☐

Comments:

10a. EPIDEMIOLOGIC DATA: (e.g., vehicle/source - specific attack rates; dose-response curve, **attach local and/or state report if available**)

EXPOSURE (vehicle/source)	Number of Persons EXPOSED: ILL	NOT ILL	TOTAL	% ILL	Number of Persons NOT EXPOSED: ILL	NOT ILL	TOTAL	% ILL	ODDS/RISK RATIO (If available)	p VALUE or CONFIDENCE INTERVAL (If available)

☐ **No data were collected from comparison groups to estimate risk but water was the only common source shared by persons who were ill.**

10b. Comments:

11. WATER SUPPLY CHARACTERISTICS: *(check all that apply for drinking water or recreational water)*

*If recreational water outbreak, this refers to recreational water treatment

a) TYPE OF DRINKING WATER SUPPLY:
- ☐ Community or Municipal
  - ☐ City or County (Name: _____)
  - ☐ Subdivision
  - ☐ Trailer Park
- ☐ Noncommunity (does not obtain water from a community water system, but has developed/maintained its own water supply)
  - ☐ Camp, Cabin, Recreational area
  - ☐ School
  - ☐ Restaurant
  - ☐ Hotel, Motel
  - ☐ Church
  - ☐ Other: _____
- ☐ Individual household supply
- ☐ Bottled water
- ☐ Other: _____
- ☐ Unknown

b) WATER SOURCE OR SETTING:
- ☐ Well
- ☐ Spring/Hot spring
- ☐ River, Stream
- ☐ Lake, Pond, Reservoir
- ☐ Ocean
- ☐ Pool
  - ☐ Waterpark
  - ☐ Community/municipal
  - ☐ Subdivision/neighborhood apartment
  - ☐ Hotel/motel
  - ☐ Membership club
  - ☐ Private home
  - ☐ Kiddie/wading
- ☐ Fountain
  - ☐ Interactive
  - ☐ Ornamental
  - ☐ Waterpark
- ☐ Hot tub
- ☐ Whirlpool/spa pool
- ☐ Other: _____
- ☐ Unknown

c) WATER TREATMENT PROVIDED:*
- ☐ No treatment
- ☐ Disinfection
  - ☐ Chlorine
  - ☐ Chlorine and Ammonia (chloramine)
  - ☐ Bromine
  - ☐ Ozone
  - ☐ U.V.
  - ☐ Other: _____
  - ☐ Unknown
- ☐ Coagulation and/or Flocculation
- ☐ Settling (sedimentation)
- ☐ Filtration at purification plant (**don't** include home filters) or pool
  - ☐ Rapid sand
  - ☐ Slow sand
  - ☐ Diatomaceous earth
  - ☐ Other: _____
  - ☐ Unknown
- ☐ Other: _____
- ☐ Unknown

IF RECREATIONAL EXPOSURE, PROCEED TO QUESTION (13), OTHERWISE PROCEED TO (12a).

12. FACTORS CONTRIBUTING TO DRINKING WATER CONTAMINATION: (check **all** that apply) *See 16

a) Contamination at the water source:

- ☐ Overflow of sewage
- ☐ Underground seepage of sewage
- ☐ Septic system drainage
- ☐ Flooding, heavy rains
- ☐ Use of a back-up source of water by a water utility
- ☐ Improper construction or location of well or spring
- ☐ Contamination of wells through limestone or fissured rock
- ☐ Contamination from wild/domestic animals
- ☐ Chemical pollution
- ☐ Algal bloom
- ☐ Other: _____
- ☐ Unknown

b) Water treatment deficiencies:

- ☐ No disinfection
- ☐ Temporary interruption of disinfection
- ☐ Chronically inadequate disinfection
- ☐ No filtration
- ☐ Inadequate filtration
- ☐ Deficiencies in other treatment processes
- ☐ Other: _____
- ☐ Unknown

c) Contamination in the water distribution system or home plumbing:

- ☐ Cross connection of potable and non-potable water pipes resulting in back siphonage (negative pressure or backflow)
- ☐ Contamination of mains during construction or repair
- ☐ Contamination of storage facility
- ☐ Contamination in building/home
- ☐ Other: _____
- ☐ Unknown

d) OTHER REASONS/CONTRIBUTING FACTORS FOR CONTAMINATION OF WATER (eg. corrosive water):

.....

13. ROUTE OF ENTRY FOR RECREATIONAL EXPOSURE:

- ☐ Accidental ingestion
- ☐ Intentional ingestion
- ☐ Contact
- ☐ Inhalation
- ☐ Other: _____
- ☐ Unknown

14. FACTORS CONTRIBUTING TO RECREATIONAL WATER CONTAMINATION : (check **all** that apply) *See 16

a) FRESH OR MARINE WATER (e.g. lakes, rivers, oceans):

- ☐ High bather density/load
- ☐ Fecal accident by bather(s)
- ☐ Use by diaper/toddler aged children
- ☐ Overflow or release of sewage
- ☐ Flooding, heavy rains
- ☐ Stagnant water
- ☐ Water Temperature ≥ 30℃
- ☐ Chemical pollution
- ☐ Algal bloom
- ☐ Animal feces observed near site
- ☐ Agricultural/animal production in watershed
- ☐ Unprotected watershed
- ☐ Other: _____
- ☐ Unknown

b) FILTERED AND/OR DISINFECTED SWIMMING VENUES (e.g. swimming pools, water parks, hot tubs, whirlpools/spa pools):

- ☐ High bather density/load
- ☐ Fecal accident by bather(s)
- ☐ Use by diaper/toddler aged children
- ☐ No disinfection
- ☐ Inadequate disinfection
- ☐ Poor monitoring of disinfection levels
- ☐ Cross contamination (specify _____)
- ☐ Combined adult/child pool filtration systems
- ☐ No filtration
- ☐ Inadequate filtration
- ☐ Other: _____
- ☐ Unknown

15. WATER SPECIMENS EXAMINED: (provide information for routine samples collected **before** and **during** the outbreak investigation as well as for any special lab studies)

☐ NONE TESTED

ITEM	DATE	LABORATORY RESULTS: MICROBIOLOGY	DISINFECTANT RESIDUAL	TURBIDITY
EXAMPLES *Tap Water*	*10/11/01*	*Total coliforms - none found in two 100ml samples; Giardia - 10 cysts/100L*	*0.5 mg/L*	*0.1 NTU*
Untreated Raw Water	*11/02/01*	*23 fecal coliforms per 100 ml*	*Not Done*	*10.0 NTU*
System History	*Prev. 3 mos*	*MCL for total coliforms exceeded month before outbreak*	*NA*	*>MCL*
Source Water	*Prev. 2 wks*	*Heavy runoff, high turbidity*	*NA*	*5.0 NTU*

16. REMARKS: Clarify for sections 12 and 14 which checked items are confirmed or are suspected factors

Briefly describe the unusual aspects of the outbreak and/or the outbreak investigation not covered above. Attach epidemic curve and summary report, if available.

.....

.....

.....

Person to contact for information about water quality or water system:

_____

_____

Person completing form: (please print)

NAME: _____

AGENCY: _____

E-MAIL: _____

TEL. NO: (_____) ___ ___ ___ - ___ ___ ___ ___
area code

DATE OF REPORT: ___ ___ / ___ ___ / ___ ___
MO. DAY YR.

Date investigation initiated:

___ ___ / ___ ___ / ___ ___
MO. DAY YR.

Note: Epidemic and laboratory assistance for the investigation of a waterborne outbreak is available upon request by the State Health Department to the Centers for Disease Control and Prevention. To improve national surveillance of outbreaks of waterborne diseases, please send a copy of this report, your internal report, and the questionnaire used in the epidemiologic investigation (if available) to:

Centers for Disease Control and Prevention
Division of Parasitic Diseases
Attention: Waterborne Disease Coordinator
4770 Buford Highway, NE, Mailstop F22
Atlanta, GA 30341-3724

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Project Clearance Officer, 1600 Clifton Road, MS D-24, Atlanta, GA 30333, ATTN: PRA (0920-0004). <—DO NOT MAIL CASE REPORTS TO THIS ADDRESS–

YELLOW FEVER

IDENTIFICATION

CLINICAL DESCRIPTION:

A mosquito-borne viral illness characterized by acute onset and constitutional symptoms followed by a brief remission and a recurrence of fever, hepatitis, albuminuria, and in some cases renal failure, shock, and generalized hemorrhages.

CASE DEFINITION:

Confirmed Case:

A clinically compatible case that is laboratory confirmed.

Probable Case:

A clinically compatible case with supportive serology (stable elevated antibody titer to yellow fever virus [e.g., greater than or equal to 32 by complement fixation, greater than or equal to 256 by immunofluorescence assay, greater than or equal to 320by hemagglutination inhibition, greater than or equal to 160 by neutralization, or a positive serologic results by immunoglobulin M-capture enzyme immunoassay]. Cross-reactive serologic reactions to other flaviviruses must be excluded, and the patient must not have a history of yellow fever vaccination.)

LABORATORY CRITERIA FOR CONFIRMATION:

- Fourfold or greater change in yellow fever antibody titer with no history of recent yellow fever immunization, and cross-reactions to other flaviviruses ruled out, **OR**
- Demonstration of yellow fever virus, antigen, or genome in tissue, blood or other body fluid.

REPORTING CRITERIA: Laboratory confirmation.

ACTIONS REQUIRED / PREVENTION MEASURES

KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT IMMEDIATELY upon recognition of a case or suspected case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by telephone to the emergency number of the Division of epidemiology and Health Planning: **1-888-973-7678**.

EPIDEMIOLOGY REPORTS REQUESTED:

- Electronically: KYEPHRS-DSM **OR**
- Report electronically through the DSM-KYEPHRS

PUBLIC HEALTH INTERVENTIONS:

- A thorough history of travel three to six days before the onset of symptoms to locate the probable area of exposure to yellow fever.
- Observe all persons who had traveled to the area of exposure.

CONTACTS FOR CONSULTATION

DPH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
DPH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

RELATED REFERENCES

Heymann, David L., ed. YELLOW FEVER. In: Control of Communicable Diseases Manual. 18th ed. Washington, DC: American Public Health Association, 2003: 595-600

Pickering, LK, ed. Arboviruses (Including Dengue, Japanese Encephalitis, and Yellow Fever). In: 2003 Red Book: Report of the Committee on Infectious Diseases. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003: 199-205.

Yellow Fever Vaccine: Recommendations of the Advisory Committee on Immunization Practice (ACIP). MMWR 1984; 32(52): 679-682, 687-688.

Appendix A:

Kentucky Disease Surveillance Administrative Regulations

Disease Surveillance Administrative Regulations:

902 KAR 2:020. Disease surveillance.

RELATES TO: KRS 211.180(1), 214.010, 214.645, 333.130

STATUTORY AUTHORITY: KRS 194A.050, 211.090(3)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 211.180 requires the Cabinet for Health Services to implement a statewide program for the detection, prevention, and control of communicable diseases, chronic and degenerative diseases, dental diseases and abnormalities, occupational diseases and health hazards peculiar to industry, home accidents and health hazards, animal diseases which are transmissible to man, and other diseases and health hazards that may be controlled. KRS 214.010 requires every physician and every head of family to notify the local health department of the existence of diseases and conditions of public health importance, known to him or her. This administrative regulation establishes notification standards and specifies the diseases requiring urgent, priority, or routine notification, in order to facilitate rapid public health action to control diseases, and to permit an accurate assessment of the health status of the Commonwealth.

Section 1. Notification Standards. (1) A health professional licensed under KRS Chapters 311 through 314, and a health facility licensed under KRS Chapter 216B, shall give notification pursuant to subsection (3) of this section, if:

(a) The health professional makes a probable diagnosis of a disease specified in Section 2, 3, or 4 of this administrative regulation; and

(b) The diagnosis is supported by:

1. "Case Definitions for Infectious Conditions under Public Health Surveillance"; or

2. A reasonable belief that the disease is present.

(2)(a) A single report by a hospital of a condition diagnosed by a test result from the hospital laboratory shall constitute notification on behalf of the hospital and its laboratory.

(b) A hospital may designate an individual to report on behalf of the hospital's laboratory and the hospital's clinical facilities.

(3) The notification shall be given to the:

(a) Local health department serving the jurisdiction in which the patient resides; or

(b) Department for Public Health.

(4) The reporting professional shall furnish the:

(a) Name, birthdate, address, county of residence, and telephone number of the patient; and

(b) Clinical, epidemiologic, and laboratory information pertinent to the disease.

(5) Upon the confirmation of a laboratory test result which indicates infection with an agent associated with one (1) or more of the diseases or conditions specified in Section 2, 3, or 4 of this administrative regulation, the director of a clinical laboratory licensed under KRS Chapter 333 shall:

(a) Report the result to the:

1. Local health department serving the jurisdiction in which the patient resides; or

2. Department for Public Health; and

(b) Report the patient's name, birthdate, address, and county of residence; and

Section 2. Diseases Requiring Urgent Notification. (1) Notification pursuant to Section 1(3) of this administrative regulation of the following diseases shall be made within twenty-four (24) hours:

(a) Anthrax;

(b) Botulism;

(c) Brucellosis;

(d) Campylobacteriosis;

(e) Cryptosporidiosis;

(f) Cholera;

(g) Diphtheria;

(h) Escherichia coli O157:H7;

(i) Escherichia coli, shiga toxin positive;

(j) Encephalitis, California group;

(k) Encephalitis, Eastern equine;

(l) Encephalitis, St. Louis;

(m) Encephalitis, Venezuelan equine;

(n) Encephalitis, Western;

(o) Encephalitis, West Nile Virus;

(p) Hansen's Disease;

(q) Hantavirus infection;

(r) Hemophilus influenzae invasive disease;

(s) Hepatitis A;

(t) Listeriosis;

(u) Measles;

(v) Meningococcal infections;

(w) Pertussis;

(x) Plague;

(y) Poliomyelitis;

(z) Psittacosis;

(aa) Q fever;

(bb) Rabies, animal;

(cc) Rabies, human;

(dd) Rubella;

(ee) Rubella syndrome, congenital;

(ff) Salmonellosis;

(gg) Shigellosis;

(hh) Syphilis, primary, secondary, early latent or congenital;

(ii) Tetanus;

(jj) Tularemia;

(kk) Typhoid fever;

(ll) Vibrio parahaemolyticus;

(mm) Vibrio vulnificus;

(nn) Yellow fever.

(2) Weekend or evening urgent notification.

(a) If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to an emergency number provided by the local health department or the Department for Public Health.

(b) For the protection of patient confidentiality, this notification shall include:

1. The name of the condition being reported; and

2. A telephone number that can be used by the department to contact the reporting professional.

(3) Upon receipt of a report for a disease specified in subsection (1) of this section, the local health department shall:

(a) Immediately notify the Department for Public Health; and

(b) Assist the department in carrying out a public health response as instructed.

Section 3. Diseases Requiring Priority Notification. (1) Notification pursuant to Section 1(3) of this administrative regulation of the following diseases shall be made within one (1) business day:

(a) Group A streptococcal infection, invasive;

(b) Hepatitis B, acute;

(c) Hepatitis B infection in a pregnant woman or a child born in or after 1992;

(d) Mumps;

(e) Toxic shock syndrome;

(f) Tuberculosis.

(2) Upon receipt of a report for a disease or condition specified in subsection (1) of this section, a local health department:

(a) Shall investigate the report and carry out public health measures appropriate to the disease or condition;

(b) Shall notify the Department for Public Health of the case, in writing, within five (5) business days; and

(c) May seek assistance from the Department for Public Health.

Section 4. Diseases Requiring Routine Notification. (1) Notification pursuant to Section 1(3) of this administrative regulation of the following diseases shall be made within five (5) business days:

(a) Chancroid;

(b) Chlamydia trachomatis infection;

(c) Ehrlichiosis;

(d) Gonorrhea;

(e) Granuloma inguinale;

(f) Hepatitis C, acute;

(g) Histoplasmosis;

(h) Lead poisoning;

(i) Legionellosis;

(j) Lyme Disease;

(k) Lymphogranuloma venereum;

(l) Malaria;

(m) Rabies postexposure prophylaxis;

(n) Rocky Mountain Spotted Fever;

(o) Streptococcus pneumoniae, drug-resistant invasive disease;

(p) Syphilis, other than primary, secondary, early latent or congenital; and

(q) Toxoplasmosis.

(2) Upon receipt of a report for a disease or condition specified in subsection (1) of this section, a local health department shall:

(a) Make a record of the report;

(b) Answer inquiries or render assistance regarding the report if requested by the reporting entity; and

(c) Forward the report to the Department for Public Health within three (3) business days.

Section 5. Outbreaks or Unusual Public Health Occurrences. (1) If, in the judgment of a health professional licensed under KRS Chapters 311 through 314, or a health facility licensed under KRS Chapter 216B, an unexpected pattern of cases, suspected cases, or deaths which may indicate a newly-recognized infectious agent, an outbreak, epidemic, related public health hazard or an act of bioterrorism, such as smallpox, appears, a report shall be made immediately by telephone to the:

(a) Local health department where the professional is practicing or where the facility is located; or

(b) Department for Public Health.

(2) An instance of suspected staphylococcal or other foodborne intoxication or an instance of salmonellosis or other foodborne or waterborne infection shall be reported within one (1) business day, and shall include all known information about the persons affected.

(3) The local health department:

(a) Shall investigate the outbreak or occurrence;

(b) Shall carry out public health measures appropriate to the disease or condition involved;

(c) Shall make medical and environmental recommendations appropriate to prevent future similar outbreaks or occurrences; and

(d) May seek assistance from the Department for Public Health.

Section 6. Laboratory Surveillance. (1)(a) In addition to the reports required by Sections 1 through 4 of this administrative regulation, laboratory results shall be reported weekly for influenza virus isolates.

(b) The report shall include the:

1. Name, birthdate, address, and county of residence of the person with the disease; and

2. Specific laboratory information pertinent to the result.

(c) The format of the report shall be an alphabetical listing of each person for whom a report is submitted.

(2) Upon request by the Department for Public Health, a clinical laboratory within a hospital licensed under KRS Chapter 216B, or a laboratory licensed under KRS Chapter 333, shall report:

(a) The numbers of isolates and information regarding the antimicrobial resistance patterns of the isolates;

(b) At intervals agreed upon between the laboratory and the department, not less frequently than three (3) months, for the following:

1. Staphylococcus aureus;

2. Enterococcus species; or

3. Other organism specified in a request that includes a justification of the public health importance of the organism.

Section 7. Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) Surveillance. (1) A health professional licensed under KRS Chapters 311 through 314, a health facility licensed under KRS Chapter 216B, and a laboratory licensed under KRS Chapter 333, shall report:

(a) A positive test result for HIV infection including a result from:

1. Elisa;

2. Western Blot;

3. PCR;

4. HIV antigen; or

5. HIV culture;

(b) CD4+ assay including absolute CD4+ cell counts and CD4+%;

(c) HIV detectable Viral Load Assay; and

(d) A positive serologic test result for HIV infection; or

(b) A diagnosis of AIDS that meets the definitions of AIDS established in:

1. "Adult HIV/AIDS Confidential Case Report Form"; or

2. "Pediatric HIV/AIDS Confidential Case Report Form".

(2) An HIV infection or AIDS diagnosis shall be reported within five (5) business days and, if possible, on the "Adult HIV/AIDS Confidential Case Report form" or the "Pediatric HIV/AIDS Confidential Case Report form".

(a) A report for a resident of Jefferson, Henry, Oldham, Bullitt, Shelby, Spencer, and Trimble Counties shall be submitted to the HIV/AIDS Surveillance Program of the Jefferson County Health Department.

(b) A report for a resident of another Kentucky county shall be submitted to the HIV/AIDS Surveillance Program of the Kentucky Department for Public Health, or as directed by the HIV/AIDS project coordinator.

(3) A report for a person with HIV infection without a diagnosis of AIDS shall be identified in the following order by a Unique Identifier (UI) consisting of the person's:

(a) Initials of last and first name;

(b) Date of birth, using the format MMDDYY; and

(c) Last four (4) digits of Social Security number.

(4) The following additional information shall be included with each report for a person with HIV infection without a diagnosis of AIDS:

(a) Gender;

(b) Race;

(c) Risk factor, as identified by CDC;

(d) County of residence;

(e) Name of facility submitting report;

(f) Date and type of HIV test performed;

(g) Results of CD4+ cell counts and CD4+%;

(h) Results of viral load testing;

(i) PCR, HIV culture, HIV antigen, if performed;

(j) Results of TB testing, if available; and

(k) HIV status of the person's partner, spouse or children.

(5) Reports of AIDS cases shall include the patient's full name and the information in subsections (1) through (4) of this section; and

(a) The patient's complete address;

(b) Opportunistic infections diagnosed; and

(c) Date of onset of illness.

(6)(a) Reports of AIDS shall be made whether or not the patient has been previously reported as having HIV infection.

(b) If the patient has not been previously reported as having HIV infection, the AIDS report shall also serve as the report of HIV infection.

(7) A physician or medical laboratory that makes a report under this section shall maintain a log with the name of the patient who tested positive and the unique identifier assigned.

Section 8. Reporting of Communicable Diseases in Animals. (1) Upon arriving at a probable diagnosis in an animal of a condition known to be communicable to humans, a veterinarian licensed under the provisions of KRS Chapter 321 shall report the occurrence within one (1) business day to:

(a) The local health department in which the animal is located; or

(b) If the local health department cannot be reached, the Department for Public Health.

(2) Upon the confirmation of a laboratory test result which indicates infection of an animal with an agent associated with a condition known to be communicable to humans, the director of a clinical laboratory licensed under KRS Chapter 333 shall, within one (1) business day, report the result to the:

(a) Local health department serving the jurisdiction in which the animal is located; or

(b) Department for Public Health.

(3) The local health department:

(a) Shall investigate the report and carry out public measures for the control of communicable diseases appropriate to the condition;

(b) Shall notify the Department for Public Health of the occurrence, in writing, within five (5) business days; and

(c) May seek assistance from the Department for Public Health.

Section 9. Asbestosis, Coal Worker's Pneumoconiosis, and Silicosis. (1) A reporting provider shall submit the following information relating to a person diagnosed with asbestosis, coal worker's pneumoconiosis, or silicosis:

(a) Name;

(b) Address;

(c) Birthdate; and

(d) County of residence.

(2) A reporting provider shall submit the required information to the department within three (3) months following the diagnosis.

Section 10. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Case Definitions for Infectious Conditions under Public Health Surveillance, MMWR, May 2, 1997, Volume 46, Number RR-10", published by the Epidemiology Program Office, Centers for Disease Control and Prevention, Public Health Service, U.S. Department of Health and Human Services, Atlanta, Georgia;

(b) "Adult HIV/AIDS Confidential Case Report (CDC 50.42A, Revised January, 2000)"; and

(c) "Pediatric HIV/AIDS Confidential Case Report form (CDC 50.42B, Revised January, 2000)"; and

(d) "Control of Communicable Diseases Manual 17th Edition, An Official Report of the American Public Health Association, American Public Health Association, Washington, D.C., 2000".(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Department for Public Health, 275 East Main Street, Frankfort, Kentucky, 40621, Monday through Friday, 8 a.m. to 4:30 p.m. (CDS-2; 1 Ky.R. 187; eff. 12-11-74; Am. 2 Ky.R. 464; eff. 4-14-76; 11 Ky.R. 1518; 1786; eff. 6-4-85; 16 Ky.R. 663; 1185; eff. 11-29-89; 21 Ky.R. 128; eff. 8-17-94; 23 Ky.R. 3119; 3597; 4131; eff. 6-16-97; 27 Ky.R. 1099; 1489; eff. 12-21-2000; 29 Ky.R. 812; 1273; eff. 10-16-02.)

CABINET FOR HEALTH SERVICES

Department for Public Health

Division of Epidemiology and Health Planning

(New Administrative Regulation)

902 KAR 2:065. Immunization requirements for long term care facilities.

RELATES TO: KRS 211.180, 214.010, 216.510, 216.515, 216.530

STATUTORY AUTHORITY: KRS 194A.050, 211.090, 209.550, 209.552, 209.554

NECESSITY, FUNCTION, AND CONFORMITY: KRS 209.554 mandates the Cabinet for Health Services, Department for Public Health (department) to promulgate administrative regulations to implement requirements of KRS 209.550 and 209.552 relating to immunization of residents and staff of long term care facilities against influenza and pneumococcal disease. This administrative regulation establishes requirements for long term care facilities to provide vaccine, to request that residents and employees agree to be vaccinated against influenza and pneumococcal disease, to maintain documentation of immunizations, and to report outbreaks of influenza-like illness (ILI).

Section 1. Definitions. (1) "Advisory Committee on Immunization Practices" or "ACIP" means the United States Public Health Service Committee that makes national immunization recommendations to the Centers for Disease Control and Prevention (CDC).

(2) "Annual schedule" means the schedule for administering a once-a-year vaccination against influenza that is established by ACIP to ensure that in the event of a shortage or delay in production of vaccine, persons at greatest risk are served first.

(3) "If vaccine is available" means that a sufficient supply of vaccine has been produced by vaccine manufacturers and is available for purchase and shipment.

(4) "Influenza " means an acute viral infection of the respiratory tract caused by influenza viruses characterized by the sudden onset of a group of signs and symptoms such as fever, headache, myalgia, coryza, sore throat, and a dry cough that has been confirmed by laboratory culture.

(5) "Influenza-like illness" or "ILI" means, in the absence of a known cause (other than influenza), onset of fever greater than or equal to 100 degrees Fahrenheit and:

(a) Cough; or

(b) Sore throat.

(6) "Influenza vaccine" means a vaccine licensed by the Food and Drug Administration (FDA), which produces immunity to influenza.

(7) "Immunize" means to vaccinate.

(8) "Medically indicated" means a vaccine is recommended by the ACIP for:

(a) A person who has not been immunized against a disease; and

(b) For whom vaccination is recommended based on:

1. The age of the person;

2. A preexisting medical condition that may cause the person to be at risk; or

3. An occupation of the person that may put others at risk of contracting the disease.

(9) "Outbreak" means two (2) or more cases of influenza, or ILI, occurring in a single long-term care facility during a one (1) week period.

(10) "Pneumococcal disease" means a bacterial infection usually involving the lungs producing inflammation caused by Streptococcus pneumoniae, the bacteria commonly referred to as pneumococcus.

(11) "Pneumococcal vaccine" means the FDA licensed twenty-three (23) valent pneumococcal polysaccharide vaccine (PPV).

Section 2. Vaccine Availability. (1) If vaccine is available, a long-term care facility shall:

(a) Obtain a sufficient quantity of influenza and pneumococcal vaccine to immunize each employee or resident of a facility for whom the vaccine is medically indicated; or

(b) Enter into an agreement with a local health department or other health care provider to obtain and administer influenza and pneumococcal vaccine to each employee or resident of a facility for whom the vaccine is medically indicated.

(2) A long-term care facility may charge a third party, a resident, or an employee for the cost of the:

(a) Vaccine; and

(b) Administration of the vaccine.

Section 3. Immunization Schedule. (1) A long-term care facility shall request that each current employee or resident agree to be vaccinated on an annual schedule against influenza when the vaccine is:

(a) Available; and

(b) Medically indicated.

(2) A long-term care facility shall request that each current employee or resident agree to be vaccinated against pneumococcal disease if the vaccine is:

(a) Available; and

(b) Medically indicated.

(3) Upon admission or employment, a long-term care facility shall request that each new employee or resident agree to be vaccinated on an annual schedule against influenza when the vaccine is:

(a) Available; and

(b) Medically indicated.

(4) Upon admission or employment, a long-term care facility shall request that each new employee or resident agree to be vaccinated against pneumococcal disease if the vaccine is:

(a) Available; and

(b) Medically indicated.

(5) If a long-term care facility is located within a larger facility, such as a hospital, the provisions of this administrative regulation shall apply to all employees of the larger facility who may also work in the long-term care facility on a full-time, part-time, or contractual basis.

Section 4. Health Records. (1) A long-term care facility shall maintain an immunization health record for each employee or resident that shall document:

(a) The immunization status of the employee or resident for influenza virus and pneumococcal disease;

(b) The date that the employee or resident received counseling on the risks and benefits of the vaccines;

(c) The date the employee or resident was requested to be immunized against influenza virus and pneumococcal disease; and

(d) The date the employee or resident was vaccinated against each disease.

(2) If after being advised of the risks and benefits of the vaccine, an employee, resident, or legal guardian of a resident refuses to be vaccinated, as provided in KRS 209.555, a long-term care facility shall document in the health record:

(a) The date each vaccine was offered;

(b) Each vaccine that was not administered; and

(c) The reason each vaccine was refused.

Section 5. Reporting. (1) Upon recognition of an outbreak of ILI, a long-term care facility shall report the outbreak within twenty four (24) hours to the:

(a) Local health department serving the jurisdiction in which the long-term care facility is located; or

(b) Department for public health by phone, facsimile, or e-mail.

(2) Upon receipt of a report of an outbreak from a long-term care facility, a local health department shall:

(a) Immediately notify the Department for Public Health, Division of Epidemiology; and

(b) Assist the department in carrying out a public health response as instructed.

(3) Within one (1) week of reporting an outbreak of ILI, a long-term care facility shall submit a completed Kentucky Reportable Disease Form for each affected employee or resident to:

(a) The local county health department serving the jurisdiction in which the long-term care facility is located; or

(b) The Department for Public Health, Division of Epidemiology.

(4) Upon notification of an outbreak of ILI, the Department for Public Health shall contact the long-term care facility to make recommendations for appropriate confirmation of the etiology of illness and intervention.

(3) The Department for Public Health shall maintain a data-base of confirmed outbreaks of influenza occurring in long-term care facilities.

(4) The Department for Public Health shall maintain a data system to report the number of long-term care residents diagnosed with influenza or pneumococcal disease, and associated complications who have been discharged from a Kentucky hospital to a long-term care facility.

Section 6. Educational Literature. Within ninety (90) days of publication by the CDC, the Department for Public Health shall provide each licensed long-term care facility with a camera-ready copy of the most current vaccine information statements for influenza and pneumococcal disease.

Section 7. Incorporation by Reference. (1) "Kentucky Reportable Disease Form, EPID 200 (Rev. Jan/01)" is incorporated by reference.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Department for Public Health, 275 East Main Street, Frankfort, Kentucky 40621, Monday through Friday, 8 a.m. to 4:30 p.m.

NICHOLAS Z. KAFOGLIS, M.D., Chairman

RICE C. LEACH, MD, Commissioner

MARCIA R. MORGAN, Secretary

APPROVED BY AGENCY: October 14, 2002

FILED WITH LRC: October 15, 2002 at 9 a.m.

PUBLIC HEARING: A public hearing on this regulation will be held November 21, 2002, at 9 a.m., in the Cabinet for Health Services Auditorium, 1st floor, Health Services Building, 275 East Main Street, Frankfort, Kentucky. Individuals interested in attending shall notify this agency in writing by November 15, 2002. If no notice of intent to attend the hearing is received by that date the hearing may be canceled. The hearing is open to the public. Any person who attends will be given the opportunity to comment on the proposed administrative regulation. If you do not wish to attend the public hearing, you may submit written comments on the proposed administrative regulation. Send written notice of intent to attend the public hearing or written comments to: Jill Brown, Cabinet Regulation Coordinator, Office of the General Counsel, Cabinet for Health Services, 275 East Main Street - 5W-D, Frankfort, Kentucky 40621, (502) 564-7905, fax (502) 564-7573.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact person: Victor Negron

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation requires long-term care facilities to administer annual influenza vaccine and peumococcal vaccine to employees and residents.

(b) The necessity of this administrative regulation: This administrative regulation is necessary in order to meet the requirements of KRS 209.550 through 209.554 which requires employees and residents to be immunized against influenza and pneumococcal disease.

(c) How this administrative regulation conforms to the content of the statutes: This administrative regulation sets requirements for long-term care facilities to provide or arrange for employees and residents to be vaccinated against influenza and pneumococcal disease.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation will assist in the effective administration of KRS 209.550 to 209.554 by providing long-term care facilities with requirements for documenting, reporting and providing or arranging for immunizations of employees and residents against influenza and pneumococcal disease.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) The necessity of the amendment to this administrative regulation:

(b) How the amendment conforms to the content of the authorizing statutes:

(c) How the amendment will assist in the effective administration of the statutes:

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: Approximately 330 licensed long-term care facilities.

(4) Provide an assessment of how the above group or groups will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment. Long-term care facilities will be required by this new administrative regulation to provide or arrange immunizations against influenza and pneumococcal disease for all residents and employees. This will involve considerable man-hours to assess and document the immunization status of each resident or employee, to provide or arrange for the vaccine, and to report outbreaks. In addition, the cost to long-term care facilities and third party payers to immunize approximately 60,000 employees and residents against influenza would be over $700,000 for vaccine and vaccine administration. The cost to vaccinate long-term care facility residents and employees against pneumococcal disease would be over $1,000,000. Hospital based long-term care facilities could experience considerable costs to immunize all hospital employees against influenza and pneumococcal disease.

(5) Provide an estimate of how much it will cost to implement this administrative regulation:

(a) Initially: The cost to implement this new administrative regulation will be approximately $15,000 for additional staff time, mailing costs, and training sessions.

(b) On a continuing basis: Approximately $25,000 in additional staff time will be needed on a yearly basis to maintain a data system, follow-up and intervention in outbreaks, for mailing educational materials, for conducting training sessions, and for negotiating with vaccine manufacturers.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: State General Funds.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: No fees or increased funding will be necessary to implement this new administrative regulation.

(8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees: This administrative regulation does not establish any fees directly or indirectly.

(9) TIERING: Is tiering applied? Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all those individuals or entities regulated by it. Disparate treatment of any person or entity subject to this administrative regulation could raise questions of arbitrary action on the part of the agency. The "equal protection" and "due process" clauses of the Fourteenth Amendment of the U.S. Constitution may be implicated as well as Sections 2 and 3 of the Kentucky Constitution.

Appendix B:

Disease Surveillance Forms

OB _____
CDC Use Only

REPORT OF OUTBREAK OF SUSPECTED VIRAL GASTROENTERITIS

Viral Gastroenteritis Section
DASH Unit 75
Centers for Disease Control and Prevention
1600 Clifton Road, N.E., Mailstop G-04
Atlanta, GA 30333

Telephone (404) 639-3577 or (404) 639-3607
Facsimile (404) 639-3645
E-Mail CaliciNet@cdc.gov

Primary contact for epidemiologic investigation Date _____ mm/dd/yyyy

Name _____ Telephone_____

Agency _____ Facsimile _____

Address_____ E-mail _____

_____

Outbreak Information

State Outbreak ID _____ EFORS code _____ (if known) Date health department notified _____ mm/dd/yyyy

Date of first case _____ mm/dd/yyyy Date of last case _____ mm/dd/yyyy

Location(s) of outbreak: State_____City _____County (list if several) _____

If multistate, list other states_____

Suspected mode of transmission (can check more than one)

☐ Person-to-person ☐ Foodborne ☐ Waterborne

☐ Unknown ☐ Other_____

If food or waterborne

Implicated food or water source _____ Foodhandler implicated? (can check more than one)

☐ Yes: epidemiologic evidence
☐ Yes: laboratory evidence
☐ Yes: suspected, but no evidence
☐ No

Setting (if there is an additional setting, please add below in comments)

☐ Nursing home ☐ Assisted Living ☐ Restaurant / Deli / Cafeteria ☐ Hotel ☐ School ☐ Daycare ☐ Camp

☐ Community ☐ Prison ☐ Ship ☐ Religious Facility ☐ Hospital ☐ Private event ☐ Catered Event

☐ Work Place ☐ Private Home ☐ Other _____ Date of event (if applicable) _____ mm/dd/yyyy

Illness Characteristics

Number of persons exposed _____ Number of persons ill _____

Number visiting health care provider _____ *Number hospitalized*_____*Number deaths*_____
(Categories NOT mutually exclusive)

Symptoms: Number of persons with information _____

No. with abdominal cramps ____ No. with fever____

No. with diarrhea ____ No. with vomiting ____

Median incubation period (hours) ____ range _____

Median duration of illness (hours) ____ range_____

No. with other symptom(s) _____

Comments:_____

_____

Part II

Specimen Collection

Contact person for specimen handling _____

Telephone _____ Facsimile _____ E-Mail _____

Number of stool specimens submitted _____ Number of vomitus specimens submitted _____

Tested for bacteria? ☐ Yes ☐ No Results (if known) _____

Tested for ova and parasites? ☐ Yes ☐ No Results (if known) _____

Stool and vomitus specimens collected from ill persons should be stored in watertight containers (e.g., stool collection cups) and refrigerated (**not** frozen), and shipped on frozen refrigerant packs (not on wet ice) accompanied by CDC form 50.34 (DASH Form).

Number of acute serum specimens collected from: ill persons _____ control persons _____

Anticipated date for collection of convalescent sera _____
mm/dd/yyyy

Matching acute and convalescent serologic specimens should be stored and shipped frozen in plastic (transportable) aliquot tubes, accompanied by CDC form 50.34 (DASH Form). Acute sera should be collected within 7 days of onset of symptoms and convalescent sera should be collected 3 weeks after the collection of acute sera.

Other specimens collected? ☐ Yes ☐ No Type _____ Date Collected _____
mm/dd/yyyy

Date specimens shipped to CDC _____ Specimen type _____
mm/dd/yyyy

Date specimens shipped to CDC _____ Specimen type _____
mm/dd/yyyy

Tracking Number (FedEx, UPS, USPS, etc): _____

List of unique identifiers and specimen type for samples submitted to CDC for testing

Unique ID	Specimen Type[1]	Date of Collection (mm/dd/yyyy)	Additional Information[2]

[1]e.g. Bulk stool, vomitus, serum, rectal swab, environmental specimen
[2]e.g. Foodhandler / ship crew

THANK YOU

Revised 02/04

RESET PRINT EXPORT DATA

MMWR, Vol. 50, No. RR-9, Page 11

RECOMMENDATIONS REGARDING SPECIMEN COLLECTION FOR DIAGNOSIS OF NLVs*

Clinical Specimens

Stool

Timing. Specimen collection for viral testing should begin on day 1 of the epidemiologic investigation. Any delays to await testing results for bacterial or parasitic agents could preclude establishing a viral diagnosis. Ideally, specimens should be obtained during the acute phase of illness (i.e., within 48--72 hours after onset) while the stools are still liquid or semisolid because the level of viral excretion is greatest then. With the development of sensitive molecular assays, the ability to detect viruses in specimens collected later in the illness has been improved. In specific cases, specimens might be collected later during the illness (i.e., 7--10 days after onset), if the testing is necessary for either determining the etiology of the outbreak or for epidemiologic purposes (e.g., a specimen obtained from an ill foodhandler who might be the source of infection). If specimens are collected late in the illness, the utility of viral diagnosis and interpretation of the results should be discussed with laboratory personnel before tests are conducted.

Number and Quantity. Ideally, specimens from ≥10 ill persons should be obtained during the acute phase of illness. Bulk samples (i.e., 10--50 ml of stool placed in a stool cup or urine container) are preferred, as are acute diarrhea specimens that are loose enough to assume the shape of their containers. Serial specimens from persons with acute, frequent, high-volume diarrhea are useful as reference material for the development of assays. The smaller the specimen and the more formed the stool, the lower the diagnostic yield. Rectal swabs are of limited or no value because they contain insufficient quantity of nucleic acid for amplification.

Storage and Transport. Because freezing can destroy the characteristic viral morphology that permits a diagnosis by EM, specimens should be kept refrigerated at 4 C. At this temperature, specimens can be stored without compromising diagnostic yield for 2--3 weeks, during which time testing for other pathogens can be completed. If the specimens have to be transported to a laboratory for testing, they should be bagged and sealed and kept on ice or frozen refrigerant packs in an insulated, waterproof container. If facilities for testing specimens within 2--3 weeks are not available, specimens can be frozen for antigen or PCR testing.

Vomitus

Vomiting is the predominant symptom among children, and specimens of vomitus can be collected to supplement the diagnostic yield from stool specimens during an investigation. Recommendations for collection, storage, and shipment of vomitus specimens are the same as those for stool specimens.

Serum

Timing. If feasible, acute- and convalescent-phase serum specimens should be obtained to test for a diagnostic ≥4-fold rise in IgG titer to NLVs. Acute-phase specimens should be obtained during the first 5 days of symptoms, and the convalescent-phase specimen should be collected from the third to sixth week after resolution of symptoms.

Number and Quantity. Ideally, 10 pairs of specimens from ill persons (i.e., the same persons submitting stool specimens) and 10 pairs from well persons (controls) should be obtained. Adults should provide 5--7 ml of blood, and children should provide 3--4 ml.

Storage. Specimens should be collected in tubes containing no anticoagulant, and the sera should be spun off and frozen. If a centrifuge is not available, a clot should be allowed to form, and the serum should be decanted and frozen. If this step cannot be accomplished, the whole blood should be refrigerated but not frozen.

Environmental Specimens

NLVs cannot be detected routinely in water, food, or environmental specimens. Nevertheless, during recent outbreaks (*33--36*), NLVs have been detected successfully in vehicles epidemiologically implicated as the source of infection. If a food or water item is strongly suspected as the source of an outbreak, then a sample should be obtained as early as possible and stored at 4 C. If the epidemiologic investigation confirms the link, a laboratory with the capacity to test these specimens should be contacted for further testing. If drinking water is suspected, special filtration (*45*) of large volumes (i.e., 5--100 liters) of water can concentrate virus to facilitate its detection.

REPORTING FORM FOR OUTBREAKS OF SUSPECTED OR CONFIRMED VIRAL GASTROENTERITIS IN NURSING HOMES THAT ARE DETERMINED *NOT* TO BE FOODBORNE

(for foodborne outbreaks please complete the CDC form entitled Investigation of a Foodborne Outbreak)

General Information **Today's Date** _____/_____/_____

Primary contact person for epidemiologic investigation _____

Telephone _____ District _____

Outbreak Information

Date of first case _____/_____/_____ Date health department notified _____/_____/_____

Date of last case _____/_____/_____ Outbreak ongoing? Yes No

Institution Name _____ City or County _____

Number of residents ill _____ (x_1) Total number of residents in the nursing home _____(y_1)

Resident attack rate _____% (x_1/y_1 x 100)

Number of staff ill _____ (x_2) Total number of staff employed by the nursing home _____(y_2)

Staff attack rate _____% (x_2/y_2 x 100)

Illness Characteristics

Predominant symptoms (circle those that apply) Diarrhea NauseaVomiting Fever

Abdominal Cramps Other _____

Average duration of illness (specify hours or days) _____

Number of residents admitted to a hospital _____ Number of residents who died _____

Laboratory Information

Number of stool specimens collected _____ Number of vomitus specimens collected _____

Tested for bacteria? Yes No Results_____

Tested for ova and parasites? Yes No Results _____

Tested for viruses? Yes No Results_____

Number of paired acute and convalescent serum specimens collected _____

Results _____

Additional Comments

_____

_____

_____

Please send a copy of this completed form to the Office of Epidemiology. If you prepared a report of the investigation please send it as well. Thank you!

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention (CDC)
Atlanta, Georgia 30333

CDC# ☐☐☐☐ (1-4)

Tick-Borne Rickettsial Disease Case Report

Use for: *Rocky Mountain spotted fever (RMSF), ehrlichiosis (human monocytic ehrlichiosis [HME]), and human granulocytic ehrlichiosis [HGE]).*

CDC SAFER·HEALTHIER·PEOPLE™

Form Approved
OMB 0920-0009

– PATIENT/PHYSICIAN INFORMATION –

Patient's name: _____

Address: _____ (number, street)

City: _____

Date submitted: ___ ___ / ___ ___ / ___ ___ ___ ___ (mm/dd/yyyy) (5-6) (7-8) (9-12)

Physician's name: _____ Phone no.: _____

NETSS ID No.: (if reported) ☐☐☐☐☐☐ — ☐☐☐ — ☐☐
Case ID (13-18) Site (19-21) State (22-23)

– DEMOGRAPHICS –

1. State of residence: Postal abrv: ☐☐ (24-25)

2. County of residence: (26-50) _____
☐ Check, if history of travel outside county of residence within 30 days of onset of symptoms

3. Zip code: (51-59) ___ ___ ___ ___ ___ - ___ ___ ___ ___

4. Sex: (60) 1☐ Male 2☐ Female

5. Date of birth: ___ ___ / ___ ___ / ___ ___ ___ ___ (mm/dd/yyyy) (61-62) (63-64) (65-68)

6. Race: (69) 1☐ White 2☐ Black 3☐ American Indian Alaskan Native 4☐ Asian 5☐ Pacific Islander 9☐ Not specified

7. Hispanic ethnicity: (70) 1☐ Yes 2☐ No

8. INDICATE DISEASE TO BE REPORTED: (71) 1☐ **RMSF** 2☐ **HME** 3☐ **HGE** 4☐ **Ehrlichiosis (unspecified, or other agent)**

– CLINICAL SIGNS,SYMPTOMS, AND OUTCOMES –

9. Was a clinically compatible illness present? (72)
(fever or rash, plus one or more of the following signs: headache, myalgia, anemia, thrombocytopenia, leukopenia, or elevated hepatic transaminases) 1☐ YES 2☐ NO 9☐ Unk

10. Date of Onset of Symptoms: ___ ___ / ___ ___ / ___ ___ ___ ___ (mm/dd/yyyy) (73-74) (75-76) (77-80)

11. Was an underlying immunosuppressive condition present? (81)
1☐ YES 2☐ NO 9☐ Unk
Specify condition(s): _____

12. Specify any life-threatening complications in the clinical course of illness: (82)
1☐ Adult respiratory distress syndrome (ARDS) 3☐ Meningitis/encephalitis
2☐ Disseminated intravascular coagulopathy (DIC) 4☐ Renal failure 9☐ None
8☐ Other: _____

13. Was the patient hospitalized because of this illness? (83) (If yes, date)
1☐ YES 2☐ NO 9☐ Unk ___ ___ / ___ ___ / ___ ___ ___ ___ (mm/dd/yyyy) (84-85) (86-87) (88-91)

14. Did the patient die because of this illness? (92) (If yes, date)
1☐ YES 2☐ NO 9☐ Unk ___ ___ / ___ ___ / ___ ___ ___ ___ (mm/dd/yyyy) (93-94) (95-96) (97-100)

– LABORATORY DATA –

15. Name of laboratory: _____ **City:** _____ **State:** ___ ___ **Zip:** ___ ___ ___ ___ ___ - ___ ___ ___ ___

Below, indicate Y (Yes) or N (No), ONLY if the test or procedure was performed. Lack of selection indicates that the test or procedure was not performed.

16. Serologic Tests	Serology 1 COLLECTION DATE (mm/dd/yyyy) ___ ___ / ___ ___ / ___ ___ ___ ___ (101-2) (103-4) (105-8) Titer / Positive?	Serology 2* COLLECTION DATE (mm/dd/yyyy) ___ ___ / ___ ___ / ___ ___ ___ ___ (109-10) (111-12) (113-16) Titer / Positive?
IFA - IgG	(_____) 1☐ YES 2☐ NO (117)	(_____) 1☐ YES 2☐ NO (118)
IFA - IgM	(_____) 1☐ YES 2☐ NO (119)	(_____) 1☐ YES 2☐ NO (120)
Other test: _____ (121-130)	(_____) 1☐ YES 2☐ NO (131)	(_____) 1☐ YES 2☐ NO (132)

* Was there a fourfold change in antibody titer between the two serum specimens? 1☐ YES 2☐ NO (137)

17. Other Diagnostic Tests ?	Positive?
PCR	1☐ YES 2☐ NO (133)
Morulae visualization*	1☐ YES 2☐ NO (134)
Immunostain	1☐ YES 2☐ NO (135)
Culture	1☐ YES 2☐ NO (136)

* Visualization of morulae not applicable for RMSF.

– FINAL DIAGNOSIS –

18. Classify case based on the CDC case definition (see criteria below): (138)
1☐ **RMSF** 2☐ **HME** 3☐ **HGE**
4☐ **Ehrlichiosis** (unspecified, or other agent): _____ (139-148)

(149) 1☐ **CONFIRMED** 2☐ **PROBABLE**

State Health Department Official who reviewed this report:

Name: _____

Title: _____ Date: ___ ___ / ___ ___ / ___ ___ ___ ___ (mm/dd/yyyy)

COMMENTS:

CDC CASE DEFINITION

Confirmed RMSF: A clinically compatible case with 1) a fourfold change in antibody titer to *Rickettsia rickettsii* antigen by IFA, CF, latex agglutination, microagglutination, or indirect hemagglutination antibody test in two serum samples, or 2) a positive PCR assay, or 3) immunostaining of antigen in a skin biopsy or autopsy sample, or 4) isolation and culture of *R. rickettsii* from a clinical specimen.

Probable RMSF: A clinically compatible case with 1) a single positive antibody titer by IFA (≥1:64 if IgG); or 2) a single CF titer ≥1:16; or 3) a single titer ≥1:128 by a latex agglutination, indirect hemagglutination antibody, or microagglutination test; or 4) a fourfold rise in titer or a single titer >1:320, by Proteus OX-19 or OX-2 test.

Confirmed Ehrlichiosis: A clinically compatible case with 1) a fourfold change in antibody titer to antigen from an *Ehrlichia* species by IFA in two serum samples, or 2) a positive PCR assay, or 3) the visualization of morulae in white blood cells with a single serum positive antibody titer by IFA, or 4) immunostaining of antigen in a skin biopsy or autopsy sample, or 5) isolation and culture of an *Ehrlichia* species from a clinical specimen.

Probable Ehrlichiosis: A clinically compatible case with 1) a single positive antibody titer by IFA, or 2) the visualization of morulae in white blood cells.

Public reporting burden of this collection of information is estimated to average 10 minutes per response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Please send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Rd., NE (MS D-24); Atlanta, GA 30333; ATTN: PRA (0920-0009).

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention (CDC)
Atlanta, Georgia 30333

CDC# ☐☐☐☐ (1-4)

Tick-Borne Rickettsial Disease Case Report

Use for: *Rocky Mountain spotted fever (RMSF), ehrlichiosis (human monocytic ehrlichiosis [HME]), and human granulocytic ehrlichiosis [HGE]).*

CDC SAFER·HEALTHIER·PEOPLE™

Form Approved
OMB 0920-0009

– PATIENT/PHYSICIAN INFORMATION –

[redacted]

Date submitted: ___/___/___ (mm/dd/yyyy) (5-6) (7-8) (9-12)

Physician's name: _____ Phone no.: _____

NETSS ID No.: (if reported) ☐☐☐☐☐☐ — ☐☐☐ — ☐☐
Case ID (13-18) Site (19-21) State (22-23)

– DEMOGRAPHICS –

1. State of residence: Postal abrv: ☐☐ (24-25)

2. County of residence: (26-50) _____
☐ Check, if history of travel outside county of residence within 30 days of onset of symptoms

3. Zip code: (51-59) ___ ___ ___ ___ ___ - ___ ___ ___ ___

4. Sex: (60) 1☐ Male 2☐ Female

5. Date of birth: ___ ___/___ ___/___ ___ ___ ___ (mm/dd/yyyy) (61-62) (63-64) (65-68)

6. Race: (69) 1☐ White 2☐ Black 3☐ American Indian Alaskan Native 4☐ Asian 5☐ Pacific Islander 9☐ Not specified

7. Hispanic ethnicity: (70) 1☐ Yes 2☐ No

8. INDICATE DISEASE TO BE REPORTED: (71) 1☐ **RMSF** 2☐ **HME** 3☐ **HGE** 4☐ **Ehrlichiosis (unspecified, or other agent)**

– CLINICAL SIGNS,SYMPTOMS, AND OUTCOMES –

9. Was a clinically compatible illness present? (72)
(fever or rash, plus one or more of the following signs: headache, myalgia, anemia, thrombocytopenia, leukopenia, or elevated hepatic transaminases) 1☐ YES 2☐ NO 9☐ Unk

10. Date of Onset of Symptoms: ___ ___/___ ___/___ ___ ___ ___ (mm/dd/yyyy) (73-74) (75-76) (77-80)

11. Was an underlying immunosuppressive condition present? (81)
1☐ YES 2☐ NO 9☐ Unk
Specify condition(s): _____

12. Specify any life-threatening complications in the clinical course of illness: (82)
1☐ Adult respiratory distress syndrome (ARDS) 3☐ Meningitis/encephalitis
2☐ Disseminated intravascular coagulopathy (DIC) 4☐ Renal failure 9☐ None
8☐ Other: _____

13. Was the patient hospitalized because of this illness? (83) (If yes, date)
1☐ YES 2☐ NO 9☐ Unk ___ ___/___ ___/___ ___ ___ ___ (mm/dd/yyyy) (84-85) (86-87) (88-91)

14. Did the patient die because of this illness? (92) (If yes, date)
1☐ YES 2☐ NO 9☐ Unk ___ ___/___ ___/___ ___ ___ ___ (mm/dd/yyyy) (93-94) (95-96) (97-100)

– LABORATORY DATA –

15. Name of laboratory: _____ **City:** _____ **State:** ___ ___ **Zip:** ___ ___ ___ ___ ___ - ___ ___ ___ ___

Below, indicate Y (Yes) or N (No), ONLY if the test or procedure was performed. Lack of selection indicates that the test or procedure was not performed.

16. Serologic Tests	Serology 1 COLLECTION DATE (mm/dd/yyyy) ___ ___/___ ___/___ ___ ___ ___ (101-2) (103-4) (105-8) Titer / Positive?	Serology 2* COLLECTION DATE (mm/dd/yyyy) ___ ___/___ ___/___ ___ ___ ___ (109-10) (111-12) (113-16) Titer / Positive?
IFA - IgG	(_____) 1☐ YES 2☐ NO (117)	(_____) 1☐ YES 2☐ NO (118)
IFA - IgM	(_____) 1☐ YES 2☐ NO (119)	(_____) 1☐ YES 2☐ NO (120)
Other test: _____ (121-130)	(_____) 1☐ YES 2☐ NO (131)	(_____) 1☐ YES 2☐ NO (132)

* Was there a fourfold change in antibody titer between the two serum specimens? 1☐ YES 2☐ NO (137)

17. Other Diagnostic Tests ?	Positive?
PCR	1☐ YES 2☐ NO (133)
Morulae visualization*	1☐ YES 2☐ NO (134)
Immunostain	1☐ YES 2☐ NO (135)
Culture	1☐ YES 2☐ NO (136)

* Visualization of morulae not applicable for RMSF.

– FINAL DIAGNOSIS –

18. Classify case based on the CDC case definition (see criteria below): (138)
1☐ **RMSF** 2☐ **HME** 3☐ **HGE**
4☐ **Ehrlichiosis** (unspecified, or other agent): _____ (139-148)

(149) 1☐ **CONFIRMED** 2☐ **PROBABLE**

State Health Department Official who reviewed this report:

Name: _____

Title: _____ Date: ___ ___/___ ___/___ ___ ___ ___ (mm/dd/yyyy)

COMMENTS:

CDC CASE DEFINITION

Confirmed RMSF: A clinically compatible case with 1) a fourfold change in antibody titer to *Rickettsia rickettsii* antigen by IFA, CF, latex agglutination, microagglutination, or indirect hemagglutination antibody test in two serum samples, or 2) a positive PCR assay, or 3) immunostaining of antigen in a skin biopsy or autopsy sample, or 4) isolation and culture of *R. rickettsii* from a clinical specimen.

Probable RMSF: A clinically compatible case with 1) a single positive antibody titer by IFA (≥1:64 if IgG); or 2) a single CF titer ≥1:16; or 3) a single titer ≥1:128 by a latex agglutination, indirect hemagglutination antibody, or microagglutination test; or 4) a fourfold rise in titer or a single titer >1:320, by Proteus OX-19 or OX-2 test.

Confirmed Ehrlichiosis: A clinically compatible case with 1) a fourfold change in antibody titer to antigen from an *Ehrlichia* species by IFA in two serum samples, or 2) a positive PCR assay, or 3) the visualization of morulae in white blood cells with a single serum positive antibody titer by IFA, or 4) immunostaining of antigen in a skin biopsy or autopsy sample, or 5) isolation and culture of an *Ehrlichia* species from a clinical specimen.

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CDC# ☐☐☐☐ (1-4)

Tick-Borne Rickettsial Disease Case Report

Use for: *Rocky Mountain spotted fever (RMSF), ehrlichiosis (human monocytic ehrlichiosis [HME]), and human granulocytic ehrlichiosis [HGE]).*

CDC SAFER·HEALTHIER·PEOPLE™

Form Approved
OMB 0920-0009

– PATIENT/PHYSICIAN INFORMATION –

Patient's name: _____

Address: _____ (number, street)

City: _____

Date submitted: ___/___/___ (mm/dd/yyyy) (5-6) (7-8) (9-12)

Physician's name: _____ Phone no.: _____

NETSS ID No.: (if reported) ☐☐☐☐☐☐ — ☐☐☐ — ☐☐
Case ID (13-18) Site (19-21) State (22-23)

– DEMOGRAPHICS –

1. State of residence: Postal abrv: ☐☐ (24-25)

2. County of residence: (26-50) _____
☐ Check, if history of travel outside county of residence within 30 days of onset of symptoms

3. Zip code: (51-59) ___ ___ ___ ___ ___ - ___ ___ ___ ___

4. Sex: (60) 1☐ Male 2☐ Female

5. Date of birth: ___/___/___ (mm/dd/yyyy) (61-62) (63-64) (65-68)

6. Race: (69) 1☐ White 2☐ Black 3☐ American Indian Alaskan Native 4☐ Asian 5☐ Pacific Islander 9☐ Not specified

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4☐ **Ehrlichiosis** (unspecified, or other agent): _____ (139-148)

(149) 1☐ **CONFIRMED** 2☐ **PROBABLE**

State Health Department Official who reviewed this report:

Name: _____

Title: _____ Date: ___/___/___ (mm/dd/yyyy)

COMMENTS:

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