Reference List of Laboratory Tests

I. Purpose

To provide a list of agents or conditions for which testing is available for county health departments and other clinical partners. Applicable ordering, specimen information, testing, mailing containers and resulting required for each condition is listed.

II. Procedural instructions

Good laboratory practices include the following:

1. Follow the manufacturer's instructions for specimen collection and handling.
   - Are specimens stored at the proper temperature?
   - Are the appropriate collection containers used?

2. Be sure to properly identify the patient.

   - Does the name on the test requisition match the patient's name?
   - Does the name on the patient's chart match the name on the patient's identification?
   - If more than one patient is present with the same first and last name, how do you determine which one is the test patient? (Look for possible gender differences, social security number, patient identification number, birthdates, different middle name, and relevance of the test to the patient's history).

3. Be sure to label the patient's specimen for testing with two unique identifiers to each patient.

4. Inform the patient of any test preparation such as fasting, clean catch urines, etc.

Local Health Departments and other clinical partners are to refer to the following listing for specimen source, Outreach code for submission, and container supplied by the Division of Laboratory Services.

All submitters are required to follow federal and state regulations for packaging and shipping of specimens. Refer to 49CFR 171-180 for current regulations on packaging and shipping of infectious substances.

CPT codes listed in the DLS Reference List of Test is for reference only. It is the responsibility of each laboratory to determine correct CPT codes for billing.

For tests not listed, call the Division of Laboratory Services at (502)564-4446 for additional information

VIROLOGY

VIRAL SEROLOGY TO DETECT ANTIBODY

Tests for the following are performed under Antibody Detection:

Varicella Zoster (Chickenpox)
Mumps IgG
Measles (Rubeola) IgG
German Measles (Rubella) IgG
SARS-CoV-2

Methodology: EIA

Specimen:

- 2 ml Serum or 6ml Whole Blood

Kit components ordered as needed:

- Red-stopper tube
- Electronic OUTREACH form or Lab Form #275 printed from Internet
- Address label
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material
- Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack. Multi-shipper with cold pack- outside box with Styrofoam inside container, 95kPa bag, freezer pack

Collection and Packaging Instructions:

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Multi-shipper with Cold Pack

	Outreach Test Code	CPT Code	Reference Range
Varicella Zoster	VZE	86787	Immunity Range – Index Greater than or Equal to 1.10
Mumps	MUEG	86735	Mumps IgG antibody detected. Indicative of current or past infection, or consistent with immunity. Immunity Reference range ≥ 1.1 Index. IgM - Detected/Not Detected
Measles	MEAE	86765	Immunity Range – Index Greater than or Equal to 1.10
German Measles	RUBG	86762	Immunity Range – Index Greater than or Equal to 1.10
SARS-CoV-2	COVAB	86769	Negative for the presence of Total Anti-SARS-CoV-2 Nucleocapsid Antibodies

VIRAL PCR

Tests for the following are performed under Viral PCR:

Chickenpox
SARS-CoV-2
Herpes
Influenza
Measles
Mumps
Norovirus
Respiratory Panel

Methodology: Polymerase Chain Reaction (PCR)

Specimen:

- Chickenpox – Swab of lesion in Viral Transport Media
- SARS-CoV-2– Nasopharyngeal swab, Nasal swab, Throat swab in Viral Transport Media; Throat swab or nasal swab in Aptima Multitest Swab Collection Kit
- Herpes – Swab of lesion in Viral Transport Media
- Influenza – Nasopharyngeal swab, Nasal, Tissue, Bronchial wash, Throat swab, Nasal wash all in Viral Transport Media. If sending lung tissue, send in a sterile container. No Formalin or Fixative.
- Measles – Throat swab, NP swab, or NP aspirate in Viral Transport Media
- Mumps – Buccal or throat swab in Viral Transport Media
- Norovirus – Stool, Emesis in sterile empty collection vial
- Respiratory Panel – Nasopharyngeal swab in Viral Transport Media

Kit components ordered as needed:

- Electronic OUTREACH form or Lab Form #275 printed from Internet
- Address label
- Multi-shipper with cold pack- outside box, with Styrofoam inside container/or comparable refrigerated cooler
- 1 freezer pack
- 1 95kPa bag/Absorbent Sheet
- 1 Viral Transport Media/swab
- Sterile empty collection vial (Norovirus)
- Red Stoppered Tube

Collection and Packaging Instructions:

Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack. Send Viral Transport Media specimen on cold pack. Ship Viral Transport Media frozen if delayed shipping.

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx

Multi-shipper with Cold Pack and Multi-shipper with Cold Pack Virus

	Outreach Test Code	CPT Code	Reference Range
Respiratory Panel	RESP	87633	Not Detected
Chickenpox	HSVP	87798	Varicella Zoster Virus DNA Not Detected
SARS-CoV-2	NCOV	CDC Panther GeneXpert - 87635-QW[2]	COVID-19 Not Detected SARS-COV-2 Not Detected SARS-COV-2 Negative
Herpes	HSVP	87529 x2	Herpes Virus Type 1 DNA Not Detected Herpes Virus Type 2 DNA Not Detected
Influenza	FPCR	87501	Negative Influenza A/B by PCR
Measles	MEPCR	87798	Not Detected
Mumps	MUPCR	87798	Not Detected
Norovirus	NORX	87798 x2	Negative for Norovirus by PCR

"This form, when filled in, contains patient information that must be protected in accordance with the Health Insurance Portability Accountability Act."

Lab 275 (Rev 4/2021)

Kentucky Public Health

Viral Isolation and Immunology

KY Division of Laboratory Services
100 Sower Blvd Suite 204
Frankfort KY 40601
(502) 564-4446 FAX (502) 564-7019

Patient Information:

(Use label or fill in completely)

Name (Last, First, MI)

Social Security # Sex EO Birthdate (yyyy-mm-dd)

Home Address

City

State ZIP County

Send Reports to:

Submitter

Street Address / P O Box

City

State ZIP

Phone Fax

Physician (if other than Submitter)

Tests Requested

COVID-19	☐
Influenza	☐
Was patient prescreened for flu?	
Result of prescreening:	
Respiratory Panel	☐
Herpes/VZV	☐
Measles	☐
Mumps	☐
Norovirus	☐
Other	☐

Specimen Source / Date Collected

Throat Swab	☐	
NP Swab	☐	
OP Swab	☐	
Nasal Swab	☐	
Genital Swab	☐	
CSF	☐	
Stool	☐	
Serum	☐	
Other	☐	
Hospitilization		Yes ☐ No ☐
Pregnant		_____weeks

Testing approved?
COVID Sequencing
Yes ☐ No ☐

CLINICAL DATA

Purpose of request:
☐ diagnostic (give onset)
☐ immune status
☐ antibody status
☐ Deceased
Other _____

Date of Onset:

Symptoms:	YES	NO
Fever	☐	☐
Neurological	☐	☐
Headache	☐	☐
Respiratory	☐	☐
Gastrointestinal	☐	☐
Fatigue	☐	☐
Rash	☐	☐
Lesions	☐	☐

Other_____

Immunizations / Date

None ☐
MMR_____
Influenza_____
Varicella_____
COVID_____

Contacts / Recent Travel

Tick bite _____
Mosquito bite _____
Community _____
Other_____
Travel _____

DLS Laboratory Findings

Date Received	Laboratory #	Tech	Date Reported

RABIES DETECTION IN ANIMALS

Specimen:

- Animal head, Brain to include stem and cerebellum

Methodology: Microscopic Exam

Collection Kit (Rabies Kit) Furnished by State Lab Contains:

- Electronic OUTREACH form or Lab Form #254A printed from Internet
- Styrofoam Refrigerated Cooler System
- Address label
- Ice Pack
- 2 plastic Infecon bags (1 small and 1 large)
- 1 (large) white absorbent pad
- Zippered bag for form

Collection and Packaging Instructions:

Heads must be sent ASAP and packaged on cold packs. If shipping will be delayed, specimens should be frozen.

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Rabies Packaging

	Outreach Test Code	CPT Code	Reference Range
Rabies	RABP	NA	No evidence of Rabies seen

Lab 254A (Rev 9/2018)

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, KY 40601
(502)564-4446

Kentucky Public Health

Rabies Examination

Rabies/Necropsy _____
Rabies Test Only _____
(No other Tests will be done)
Ref # _____

Incident Information

Kind of Animal: Dog ____ Cat ____ Fox ____ Skunk ____ Bat ____
Raccoon _____ Other _____
If applicable: Breed _____ Sex _____ Age _____ Color _____
Common Species Name _____
Was Animal: Owned _____ Vaccinated? Yes ____ No _____
Stray _____ Date ____/____ (Mo/Yr)
Symptoms suggestive of Rabies? Yes _____ No _____
If Yes, Describe _____
County of Incident: _____

Reason for Request

Person Bitten? Yes ____ , (Name) _____
(Area of Body) _____
Person Exposed: Scratched _____ Licked _____ Touched _____
Animal Exposed: _____ No Known Exposure: _____

Specimen Information

Animal: Killed _____ Died _____ Date: ____/____/____ (Day/Mon/Year)

Packed For Shipment: Date: ____/____/_____ (Day/Mon/Year)

Identification

Preference: (Must be a person's name) Owner if known, or the person exposed
Name: _____ Phone: _____
Address: _____
City: _____ St: _____ Zip: _____

Submitting County Health Department: _____
City: _____ St: _____ Zip: ___ Phone: _____

If applicable: Vet Clinic; or Reference Lab
Name: _____ Address: _____
City: _____ St: _____ Zip: ___ Phone: _____

All below for DLS use ONLY

Date Received: _____
ID #:_____
Lab # _____

Comments:

Confirmatory :POS _____ Date / Time: _____
NEG _____ To : _____
Unsatisfactory: _____ By : _____
Reason Unsat: _____

Lab 254A (Rev 9/2018)

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

Specimen:

- 2 ml Serum or 6ml whole blood in red-stoppered tube.
- Plasma (potassium EDTA, sodium and lithium heparin, sodium citrate)

Methodology: EIA

Kit components ordered as needed:

- Electronic OUTREACH form or Lab Form #197 printed from Internet
- Mailing Label
- Red stoppered tube
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material

Collection and Packaging Instructions:

Specimens may be stored at 2-8 C for 7 days, or for no longer than 2 days at room temperature.

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Multi-shipper

	Outreach Test Code	CPT Code	Reference Range
HIV	HIV	HIV Combo-87389 Geenius - 86701 & 86702	Non-Reactive: No P24 Antigen or Antibodies to HIV-1/HIV-2 Detected Not detected

Note: If HIV Ag/Ab assay is repeatedly reactive, HIV1/2 Ab differentiation (Geenius) is performed.

Form 197
Revised 9/2018

"This form when filled in contains patient information that must be protected in accordance with the Health Insurance Portability Accountability Act."

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: 502/564-4446 Fax: 502/564-7019

Please complete a separate form for each specimen.

Human Immunodeficiency Virus Serology

PATIENT INFORMATION:

Name (Last, First, MI) _____

Social Security # _____ Sex _____ Race _____ Age _____ Birthdate _____

Home Address _____

City _____ State _____ Zip Code _____ County _____

Send Report To:

Submitter _____

Street Address (PO BOX) _____

City _____ State _____ Zip Code _____

Specimen Information:

Specimen type: ☐ Serum ☐ Whole Blood ☐ Other _____

Date of Collection _____

Program: Has patient been previously tested: ☐ Yes ☐ No

If yes, when *(date)* _____ :previous results: ☐ Negative ☐ Positive ☐ Indeterminate

Reason For Testing: (*Mark One*)

Counseling-Testing Site Volunteer
- ☐ Confidential
- ☐ Anonymous

Maternal & Child Health Clinic Patient
- ☐ Symptoms suggest HIV Infection
- ☐ Risk factors for HIV Infection

- ☐ TB Patient
- ☐ STD Clinic
- ☐ Person in Custody of Social Services
- ☐ Needlestick Injury
- ☐ Other (prior approval required) _____

Laboratory Findings:

Specimen Unsatisfactory:
- ☐ Broken in transit
- ☐ Insufficient quantity
- ☐ Chylous
- ☐ Laboratory Accident
- ☐ Hemolyzed
- ☐ Other _____

ELISA- Enzyme-Linked Immunosorbent Assay Test:
- ☐ Non-reactive: No p24 antigen or antibodies to HIV-1/HIV-2 detected
- ☐ Repeatedly reactive: Supplemental testing required

Confirmatory Test Performed: Geenius
- ☐ Non-reactive: HIV (1 or 2) antibodies are not detected
- ☐ Reactive: Antibody to HIV-1 detected
- ☐ Reactive: Antibody to HIV-2 detected
- ☐ Indeterminate: Testing inconclusive- Please submit an additional specimen as clinically indicated or in six weeks per CDC guidelines

Date Received:	Laboratory Number:	Date Reported:	Technologist:

PRENATAL PROFILE

Tests included in Prenatal Profile: Syphilis, Hepatitis B Surface Antigen(HBsAg), Rubella

Specimen:

- One 6ml red-stoppered tube of whole blood

Methodology: EIA

Kit components ordered as needed:

- One red-stoppered tube
- Electronic OUTREACH form or Lab Form #212 printed from Internet
- Mailing Label
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material
- Multi-shipper with cold pack- outside box, with Styrofoam inside container, 95kPa bag, freezer pack

Note: Use this profile only when ordering complete profile of tests. See lab form #213 for individual Syphilis, Rubella, Hepatitis

Collection and Packaging Instructions:

Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack
https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Multi-shipper, Multi-Shipper with Cold Pack

	Outreach Test Code	CPT Code	Reference Range
Prenatal Profile	PNP	Syphilis IgG – 86780 HBsAg – 87340 Rubella IgG - 86762	Non-Reactive Non-Reactive Consistent with Immunity, Immunity Reference Range- >1.1 Index

Lab Form 212
Revised 9/2018

"This form, when filled in, contains patient information that must be protected in accordance with the Health Insurance Portability & Accountability Act."

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: 502/564-4446 Fax: 502/564-7019

Prenatal Profile

Use this form for complete profile only, see Lab Form 213 for individual tests.

Please submit a completed Prenatal Profile Form and one full 6 mL red stoppered tube per patient.

Patient Information (Please use L label or fill in completely):

Patient Name (Last, First, MI)

Patient I.D. # Sex Race Age DOB

Home Address

City State Zip County

Submitter Name Submitter Site Code

Weeks Pregnant Date Collected

Prenatal Profile (Syphilis, HBsAg, Rubella, Hepatitis C) requires one full 6 mL red-stoppered tube and one Plasma Preparation Tube (PPT).

Comments:

For Laboratory Use Only

HEPATITIS A

Tests for the following are performed under Hepatitis A:

- IgM

Methodology: EIA

Specimen:

- 2 ml Serum or 6ml whole blood in red-stoppered tube

Kit components ordered as needed:

- Red-stoppered tube
- Electronic OUTREACH form or Lab Form #213 printed from Internet
- Mailing label
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material
- Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack - Multi-shipper with cold pack- outside box, with Styrofoam inside container, 95kPa bag, freezer pack

HEPATITIS B

Tests for the following are performed under Hepatitis B:

- HBsAg (Hepatitis B surface antigen)
- Anti-HBs (Antibody to HbsAg)
- Anti-HBc (Antibody to HB core antigen)

Methodology: EIA

Patients Qualifying:

- Prenatal patients, their contacts, and local health department employees (See Notes).

Specimen:

- 2 ml Serum or 6ml whole blood in red-stoppered tube

Kit components ordered as needed:

- Red-stoppered tube
- Electronic OUTREACH form or Lab Form #213 printed from Internet
- Mailing label
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material
- Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack - Multi-shipper with cold pack- outside box, with Styrofoam inside container, 95kPa bag, freezer pack

Note: Hepatitis B testing of local health department patients other than prenatal patients and their contacts must be approved by the Division of Epidemiology prior to testing. Hepatitis B testing of local health department employees other than for determining immune status following immunization and in managing needlestick situations must also be approved by the Division of Epidemiology prior to testing.

HEPATITIS C

Patients Qualifying:

- Refer to the DPH Clinical Core Service Guide

Methodology: EIA, Aptima HCV Quantitative Assay

Specimen:

- 2 ml Serum or 6ml whole blood in red-stoppered tube
- 2ml Plasma (Preferred)

Kit components ordered as needed:

- Plasma Preparation Tube (PPT) spun within 6 hours of collection
- Electronic OUTREACH form or Lab Form #213 printed from Internet
- Mailing label
- Shipping Serum and PPT – Ship on ice pack - Multi-shipper with cold pack- outside box, with Styrofoam inside container, 95kPa bag, freezer pack

NOTES:

- Patient will have to be contacted and specimen recollected into PPT tube for any confirmation testing if sample not originally sent in PPT tube.
- Specimens collected in PPT tube can be refrigerated for 3 days before testing or can be frozen up to 6 weeks

Hepatitis - Collection and Packaging Instructions:

Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack
https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Multi-shipper, Multi-shipper with cold pack Hepatitis C, Multi-shipper with cold pack Hepatitis A, Multi-shipper with cold pack Blood

	Outreach Test Code	CPT Code	Reference Range
Hepatitis A	HAV	86709	Non-reactive
Hepatitis B surface antigen	HBSG	87340, 87341	Non-reactive
Hepatitis B surface antibody	HBSB	86706	Non-reactive
Hepatitis B core antibody	HBCB	86704	Non-reactive
Hepatitis C	HEPC	Antibody – 86803 Quantification - 87522	Non-reactive

SYPHILIS

Methodology: EIA

- Screening and confirmation tests performed according to DLS established algorithm

Specimen:

- 2 ml Serum or 6ml of whole blood in red-stoppered tube

Kit components ordered as needed:

- Red-stoppered tube
- Electronic OUTREACH form or Lab Form #213 printed from Internet
- Mailing label
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material
- Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack - Multi-shipper with cold pack- outside box, with Styrofoam inside container, 95kPa bag, freezer pack

Collection and Packaging Instructions:

Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack
https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Multi-shipper, Multi-Shipper with Cold Pack

	Outreach Test Code	CPT Code	Reference Range
Syphilis	IGGE	Syphilis IgG 86780 VDRL 86593 TP-PA 86780	Non-Reactive Non-reactive Non-reactive

Form 213
Revised 12/2018

"This form, when filled in, contains patient information that must be protected in accordance with the Health Insurance Portability & Accountability Act."

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: 502/564-4446 Fax: 502/564-7019

Please complete a separate form for each specimen.

Serodiagnosis

PATIENT INFORMATION:

Name (Last, First, MI)

Social Security # Sex Race Age Birthdate

Home Address

City State Zip Code County

Send Report To:

Submitter

Street Address (PO BOX)

City State Zip Code

Please Use "L" label or Fill In Completely

Specimen Information:

Date of Collection _____

Specimen Type: ☐ Serum ☐ Plasma ☐ Whole Blood ☐ CSF

Purpose of Examination:

☐ Diagnostic
☐ Recheck Specimen
☐ Treatment follow-up
☐ Pre-Hepatitis vaccine
☐ Post-Hepatitis vaccine
☐ Needlestick Injury
☐ Immune Status
☐ Prenatal _____ weeks pregnant
☐ Other, specify _____

Routine Examination Requested

☐ **Rubella IgG**

☐ **Syphilis testing**

☐ **Hepatitis A**

☐ **Hepatitis C**

Hepatitis B

☐ HBsAg (Surface Antigen)
☐ anti-HBs (Antibody to HBsAg)
☐ anti-HBc (Antibody to HB Core Antigen)

Special Examinations

☐ Other Serology, Specify _____

Previously Tested? _____
When? _____
Patient an IDU? _____
Patient a MSM? _____
Date of Specimen Refrigeration: _____

Laboratory Findings

CHLAMYDIA TRACHOMATIS & NEISSERIA GONORRHOEAE

Specimen:

- Endocervical, Vaginal, Male Urethral, Rectal Swab, Pharyngeal
- Urine

Kit components ordered as needed:

- Source: Endocervical, Male Urethral, Rectal, and Pharyngeal Swabs use Aptima Unisex Kit
- Source: Vaginal use Aptima Multitest Swab Kit
- Source: Urine use Aptima Urine Kit
- Electronic OUTREACH form or Lab Form #194 printed from Internet
- Mailing label
- Multi-shipper container with medium canister, bubble wrap, tube shuttle absorbent material

Patient Preparation:

- Urine and Male Urethral Specimens – Patient should not have urinated for at least 1hour prior to specimen collection.

Collection and Packaging Instructions:

- Unisex Swab Specimens must be assayed with the Aptima assays within 60 days of collection
- Processed urine specimens should be assayed with the Aptima assay within 30 days of collection.
- Urine must be transferred to the urine transport tube within 24hrs of collection.

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx

Multi-shipper

	Outreach Test Code	CPT Code	Reference Range
Chlamydia/ gonorrhea	CTGC	87491	Negative

Form 194
Revised 9/2018

"This form, when filled in, contains patient information that must be protected in accordance with the Health Insurance Portability & Accountability Act."

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: 502/564-4446 Fax: 502/564-7019

Kentucky Public Health

CHLAMYDIA TRACHOMATIS and NEISSERIA GONORRHOEAE

PATIENT INFORMATION:

Name (Last, First, MI) _____ *(Codes defined on second page)*

Social Security # _____ Sex _____ Age _____ DOB _____ Race/Ethnicity *(circle one)* 1 2 4 5 6 7

Home Address _____

City _____ State _____ Zip Code _____ County _____

Please use "L" label or fill in completely

Send Report To:

Health Department _____

Street Address (PO BOX) _____

City _____ State _____ Zip Code _____

Reason For Testing: Did the patient present with Chlamydia/GC symptoms? ☐ Yes ☐ No
Is the patient pregnant? ☐ Yes ☐ No ☐ Unknown

Mark one:
- ☐ Volunteer/Medical Problem
- ☐ Initial (Fam. Plan.) Visit
- ☐ Revisit/Annual (Fam. Plan.)
- ☐ Prenatal Visit
- ☐ Sex Partner Referral
- ☐ Other, please specify_____
- ☐ Unknown/Undetermined_____
- ☐ Cancer

Specimen Information: Source (mark one): ☐ Cervical ☐ Urine ☐ Urethral ☐ Other, specify_____

Date of Collection _____ (dd-mmm-yy) Kit Exp. Date _____ (dd-mmm-yy)

≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈ *For Laboratory Use Only* ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈

Laboratory Results

Chlamydia trachomatis	Neisseria gonorrhoeae	Unsatisfactory
☐ Negative	☐ Negative	☐ No Specimen Received
☐ Positive	☐ Positive	☐ Improper Swabs
☐ Equivocal (submit another specimen)	☐ Equivocal (submit another specimen)	☐ Transport Media Expired
		☐ Other_____

Date and Time Received: **Laboratory Number:**

Date Reported: **Technologist:**

MICROBIOLOGY

BACTERIOLOGY

Tests for the following are performed under Bacteriology:

Bacillus cereus
Campylobacter
Carbapenems Resistant Organisms (CRO)
E. coli (Shigatoxin or O157 suspect)
Salmonella
Shigella
Miscellaneous Bacteria Identification (i.e. Bacillus cereus, Listeria)
Vibrio
Biothreat agents – Bacillus anthracis, Yersinia pestis, Brucella spp. Francisella tularensis, Burkholderia, Orthopox virus
Botulism

Specimen:

- Stool specimen in placed in Cary Blair w/Indicator within 2 hours of collection.
- Pure culture isolate. Agar slant: Heart infusion, trypticase soy, blood or chocolate
- Botulism – Serum (at least 10ml), Feces (10 to 50g), Enema (20ml)
- Orthopox virus – Dry swab, vesicle fluid, skin, or crust

Methodology: Isolation, Identification, Antigenic typing

Collection Kit (Enteric pathogens) Furnished by State Lab Contains:

- Cary Blair w/Indicator preservative
- Electronic OUTREACH form or Lab Form #219 printed from Internet – Bacteriology
- Inmark Category B complete shipper

Notes:

- Stool-Mail immediately after collection; to be received within 24 hours.
- Provide fresh grown on slants and mail immediately at room temperature.
- CRO- Organism identification and AST results must be supplied with isolate.
- Botulism by request and approval of Epidemiology.
- Orthopox assay does not differentiate vaccinia virus or monkeypox virus from other Orthopox viruses detected by this assay. Does not detect Variola virus.
- Refer to Sentinel Guidelines at https://asm.org/Articles/Policy/Laboratory-Response-Network-LRN-Sentinel-Level-C

Collection and Packaging Instructions:

Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack
https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Enteric Collection and Packaging Guidelines, Food Kit

	Outreach Test Code	CPT Code	Reference Range
Salmonella	SGT	Stool – 87045 ID and Typing - 87147	NA
Shigella	SHGR	Stool – 87045 ID and Typing - 87147	NA
Campylobacter	CAMP	Stool – 87046	NA
E. coli	ECO	Stool – 87045 ID and Typing - 87147	NA
Carbapenem Resistant	CRO	81750	No carbapenemase production detected
Miscellaneous Bacteria	MC		NA
Botulism	MEP	87158, 87076	Mouse Bioassay: No C. botulinum toxin detected by mouse bioassay Culture: No C. botulinum isolated
Sentinel Rule Out's			
Bacillus anthracis	MC	87081-Identification 87135 - PCR	PCR - No B. anthracis DNA detected by real-time Identification of organism submitted
Brucella	MC	87040-Identification 87153- PCR	PCR-No Brucella spp. DNA detected by real-time PCR." Identification of organism submitted
Burkholderia	MC	87081-Identification 87153- PCR	PCR- No Burkholderia mallei or Burkholderia pseudomallei DNA detected Identification of organism submitted
Francisella tularensis	MC	87040-Identification 87153- PCR	PCR-"No Francisella tularensis DNA detected by real-time PCR." Identification of organism submitted
Orthopox Virus	MVPCR	81753	PCR - No Orthopoxvirus DNA detected by real time PCR
Yersinia pestis	MC	87070-Identification 87153- PCR	PCR - No *Y. pestis* DNA detected by real-time PCR Identification of organism submitted

Form 219
Revised 9/2018

"This form, when filled in, contains patient information that must be protected in accordance with the Health Insurance Portability & Accountability Act."

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: 502/564-4446 Fax: 502/564-7019

Special Microbiology

Please complete a separate form for each specimen.

PATIENT INFORMATION:

Name (Last, First, MI)

Social Security # Sex Race Age DOB

Home Address

City State Zip Code County

Please Use "L" Label or Fill In Completely

Send Report To:

Submitter

Street Address (PO BOX)

City State Zip Code

Specimen Information:

Purpose of Exam _____

Specimen Source _____

Date of Collection _____

☐ Clinical Specimen

☐ Referred Culture

Bloody Diarrhea ☐ Yes ☐ No

Examination Requested: *(Please mark one)*

☐ Enteric Pathogens

☐ *Miscellaneous Bacterial Culture

☐ Other _____

Organism Suspected:

Other pertinent Medical Data: **Please complete this section when submitting Miscellaneous Bacterial Cultures*

FOR LABORATORY USE ONLY:

Date Received:	Laboratory Number:

MYCOBACTERIOLOGY (TB)

Specimen:

- Clinical Samples- Sputum, bronchial wash, bronchial alveolar lavage (BAL), fresh tissue, spinal fluid, pleural fluid, pus, urine, other body fluids. (No stool)
- Clinical Isolates- Referred isolates for identification and drug susceptibility studies

Methodology:

- Direct Acid Fast Bacilli smear and culture
- Culture identification by DNA Probe, Maldi-TOF MS, or genetic sequencing
- PCR from concentrate from clinical specimens
- Drug susceptibility studies on MTB isolates only.

Specimen Requirements:

- Clinical Samples: Collect in sterile container. Preferred minimum volume is 2ml and optimally 5ml.
- Clinical Isolates: Pure isolates of acid-fast bacilli on solid or liquid media.

Collection Kit (TB sputum) Furnished by State Lab Contains:

- Conical plastic vial with lid must be 95kPa certified
- Electronic OUTREACH form or Lab Form #207 printed from Internet
- Small Therapak box with SpeciGuard bag/absorbent. USPS – Prepaid label

If shipping by FedEx, please use the UN3373 Pak.

Note: Cultures from hospitals are sent using submitter packaging or Inmark UN3373 box.

Collection and Packaging Instructions:

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Method for Sputum Collection

Clinical Samples- mail immediately after collection; to be received within 24 hours; cold packs preferred-room temperature acceptable.

Clinical Isolates- Provide fresh growth on media; ship immediately at room temperature; avoid extreme temperatures.

Patient Preparation:

- Submit 3 specimens (preferably over 3-5 days), but as quickly as over 24 hours (not optimal)
- Early morning sputa (at least 5ml) are optimal (at least 1 specimen out of 3 must be early morning
- Sputa, suctioned sputa, saline-induced sputa, and invasively obtained specimens (BAL, bronchial washes and tissues) from other times are also permitted

Unacceptable Conditions: Volumes less than 2ml of sputum will have a disclaimer

Notes:

PCR Testing- Smear positive specimens should be sent for PCR if no prior diagnosis of TB infection has been made. Testing of smear negative specimens requires prior approval and consultation with the TB program (502-564-4276)

Outreach: Do not create "new" order on existing patients in the Outreach system. Search for the patient and add order so the entire TB history on the patient remains together. It is important to indicate in the ask it at order questions what TB drugs and when TB drugs were administered to the patient.

Do not cover media growth with patient labels. Place label on bottom portion or right below cap so growth on slant can be viewed through tube

	Outreach Test Code	CPT Code	Reference Range
Clinical Samples	SCP	87015	No acid-fast bacilli
Clinical Isolates	TBCP	87116 87149- Nucleic Acid Probe	No acid-fast bacilli

Form 207
Revised 12/2020

"This form, when filled in, contains patient information that must be protected in accordance with the Health Insurance Portability & Accountability Act."

KY Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: (502)564-4446 Fax: (502)564-7019

Kentucky Public Health

Mycobacteriology

Please complete a separate form for each specimen.

PATIENT INFORMATION:

Name (Last, First, MI)

Social Security # Sex Race Age DOB

Home Address

City State Zip Code County

Send Report To:

Submitter

Street Address (PO BOX)

City State Zip Code

Requesting Physician (if other than submitter)

Please Use "L" Label or Fill in Completely

Specimen Information:

Date of Collection_____

☐ **Clinical Specimen**
- ☐ Sputum
- ☐ Bronchial Washing
- ☐ Gastric fluid
- ☐ Urine
- ☐ CSF
- ☐ Other, please specify_____

☐ **Referred Specimen (Culture)**
Source:_____

Hospital or Laboratory reference number (if applicable_____)

Is the patient on anti-tuberculosis drugs? ☐ Yes ☐ No

Laboratory Findings:

Laboratory Number:

Newborn Screening

Tests for the following are performed in the newborn screening laboratory:

- Acylcarnitines disorders
- Amino Acid Disorders
- Biotinidase
- Congenital Adrenal Hyperplasia
- Congenital Hypothryoidism (CH) [both T4 and TSH tests are performed]
- Cystic Fibrosis
- Galactosemia
- Hemoglobinopathies
- Severe Combined Immunodeficiency (SCID)
- Various Lysosomal Disorders (Krabbe, Pompe, MPS-1)

Refer to 902 KAR 4:030. Newborn screening program for a listing of all disorders

Specimen:

- Testing is only for infants < 6 months of age
- Whole capillary blood applied to the current lot number filter paper in the manner as described on the back of the Newborn Screening Filter Paper Collection Card. Ensure no preservatives or Heparin contamination.
- Unacceptable Conditions - Specimens with layered blood spots, clotted, separated, or inadequate blood

Collection Kit (Newborn screening) Furnished by State Lab Contains:

- Newborn Screening Filter Paper Collection Card
- Green mailing envelope
- FedEx Billable Stamp – Only when state courier is unavailable
- May be obtained by calling 502-782-7734
- Collection Instructions
    - **https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx** Newborn Screening Collection

MUST be current lot# of form and filter paper. Specimens collected after that date will be rejected or processed as per instruction from Director or designee.

Cost:

- A charge of $150.00 will be billed for those submitting an initial newborn screen. No charge will be billed for repeat specimens.

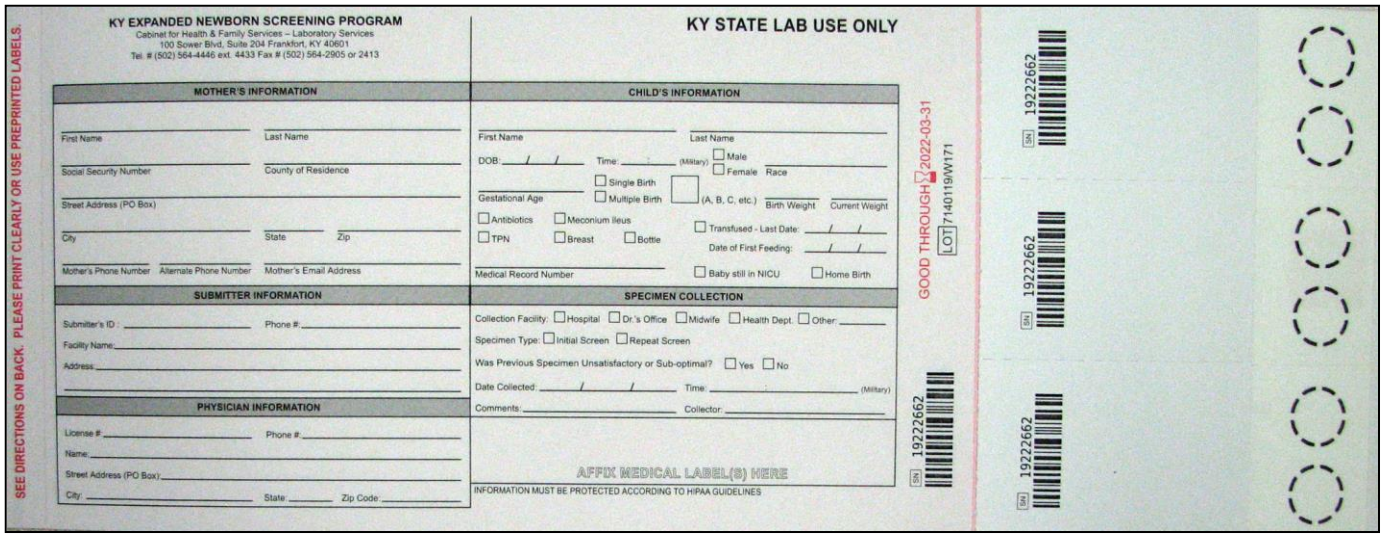
	Outreach Test Code	HCPCS Code	Reference Range
Newborn Screening	None – Order through KY Child	S3620	See individual disorder

A. NEWBORN SCREENING INDIVIDUAL TESTS

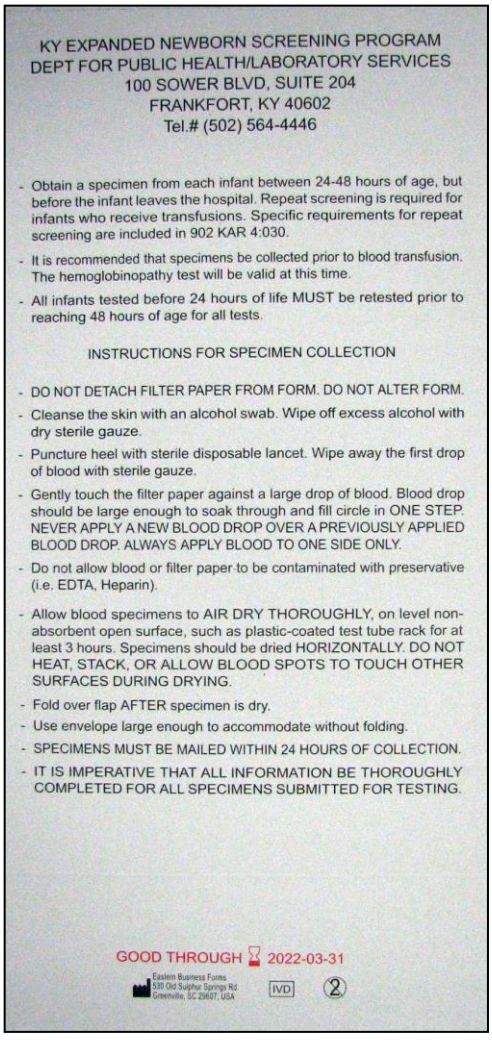
DISORDER	METHODOLOGY	REFERENCE RANGE	INDIVIDUAL CPT CODE
ACYLCARNITINES	MS/MS	Within Profile Range	82016
Includes:	FATTY ACID DISORDERS: Carnitine uptake defect, Long-chain -3hydroxyacyl-CoA dehydrogenase deficiency (LCHAD), Medium-chain acyl-CoA dehydrogenase deficiency (MCAD), Short-chain acyl-CoA dehydrogenase deficiency (SCAD), Trifunctional protein deficiency, Very long-chain acyl-CoA dehydrogenase deficiency (VLCAD), Carnitine acylcarnitine translocase deficiency, Carnitine palmitoyl transferase deficiency, Glutaric academia type II ORGANIC ACID DISORDERS:3-methylcrotonyl CoA-Carboxylase Deficiency, Beta-ketothiolase, Glutaric acidemia type 1, Isovaleric acidemia, 3-hydroxy 3-methylglutaric aciduria, Methylmalonic acidemia, Methylmalonic acidemia mutase deficiency, Propionic Acidemia, Multiple carboxylase deficiency, 2-Methyl-3-Hydroxybutyric aciduria, 3-Methylglutaconic aciduria, Isobutryl-CoA dehydrogenase deficiency, Malonic academia, Ethylmalonic encephalopathy, 2-Methylbutyryl-CoA dehydrogenase deficiency		
AMINO ACID DISORDERS	MS/MS	Within Profile Range	82139
Includes:	Argininosuccinate Acidemia, Citrullinemia, Homocystinuria, Maple Syrup Urine Disease, Phenylketonuria, Tyrosinemia, Argininemia, Hyperphenylalaninemia, Hypermethioninemia, Nonketotic Hyperglycinemia		
BIOTINIDASE DEFICIENCY	FIA	>45U/dL	82261
CONGENITAL ADRENAL HYPERPLASIA (CAH)	FIA	Weight Based	83498
CONGENITAL HYPOTHYROIDISM	FIA	TSH: <20 µU/mL T4: Age based	84437, 84443
CYSTIC FIBROSIS	FIA	<58.0 ng/mL	83516
GALACTOSEMIA	Beutler-Baluda (adaptation)	>2.5U/dL	82776
HEMOGLOBINOPATHIES	HPLC	F + A	83021
PEROXISOMAL STORAGE DISORDERS	FIA, MS/MS	Within Normal Limits	NA
Includes:	X-Linked adrenoleukodystrophy disorders (X-ALD))		
SEVERE COMBINED IMMUNODIFICIENCY (SCID)	PCR	Within Normal Limits	81479
SPINAL MUSCULAR ATROPHY (SMA)	PCR	Within Normal Limits	81400
VARIOUS LYSOSOMAL DISORDERS (POMPE, MPS-1, KRABBE)	MS/MS	Full Enzyme Activity	82542,83789

THE NEWBORN SCREENING FILTER PAPER COLLECTION CARD, REQUIRES STORAGE IN A COOL, DRY PLACE. DO NOT STORE IN PLASTIC BAGS.

FRONT



BACK



Environmental Microbiology

MICROBIOLOGY

Qualifying Specimens:

- Consumer complaint of illness suspected from a food product
- Consumer complaint of visible contamination in a food product
- Consumer complaint of Chemical contamination in a food product
- Foodborne illness outbreak – by request of Epidemiology or Food Safety Branch
- Routine surveillance of a food manufacturing facility or process
- Regulatory check of a manufacturing process or facility

Specimen:

- 100 grams of food (25-50 grams of food per requested food pathogen testing)

Mailing:

- Food collection kits are mailed in a plain standard cardboard box (12x8x6)

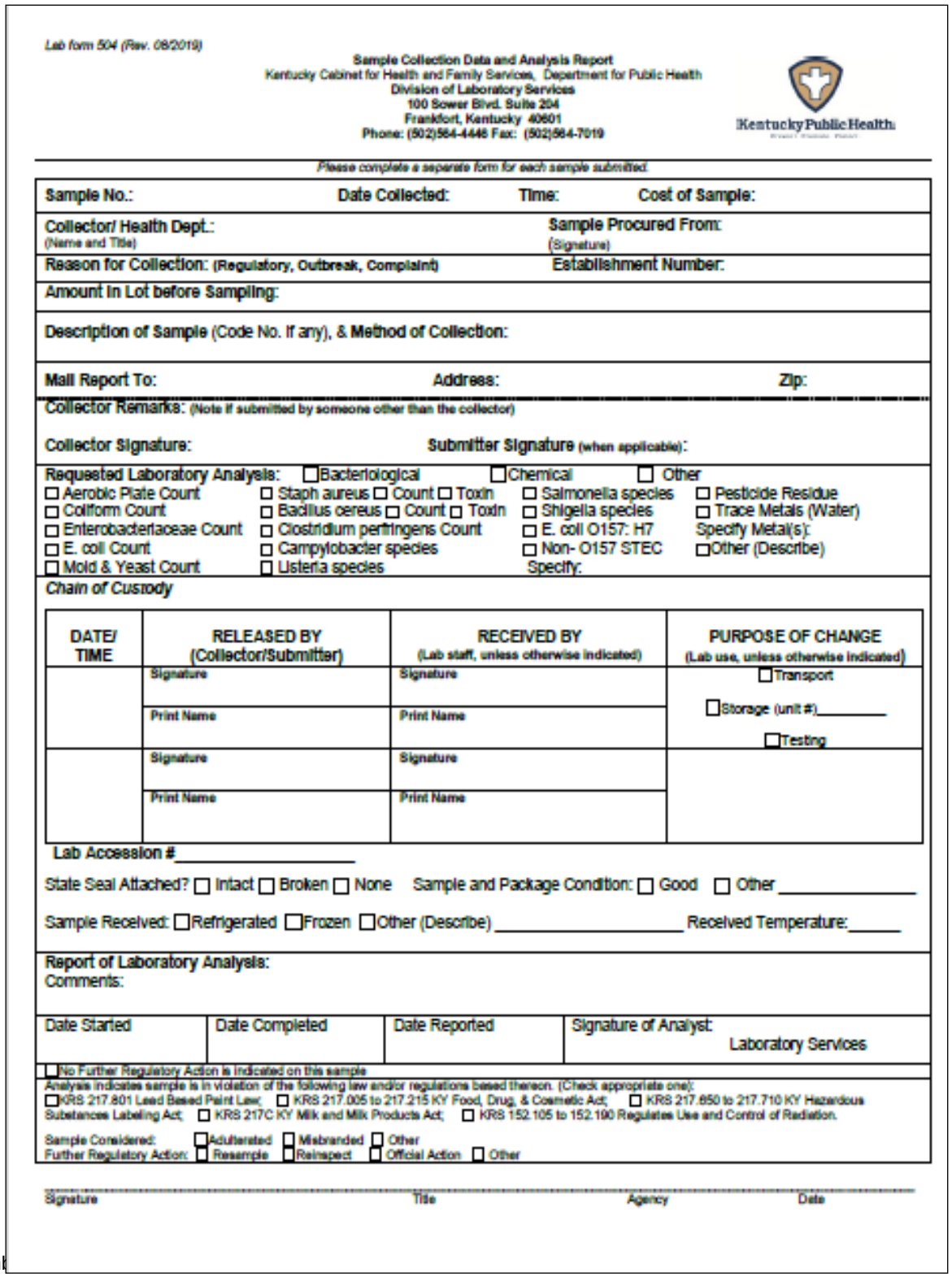
Collection Kit Furnished by:

- **Kentucky State Public Health Lab (DLS) (502)564-4446**

Collection and Packaging Instructions:

Specimen should be stored at 2-8°C prior to shipping. Ship ASAP. If possible, ship on cold pack
https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Food Kit

Call laboratory before sending specimens.



Lab form 504 (Rev. 08/2019)

Sample Collection Data and Analysis Report
Kentucky Cabinet for Health and Family Services, Department for Public Health
Division of Laboratory Services
100 Sower Blvd. Suite 204
Frankfort, Kentucky 40601
Phone: (502)564-4446 Fax: (502)564-7019

Kentucky Public Health

Please complete a separate form for each sample submitted.

Sample No.: **Date Collected:** **Time:** **Cost of Sample:**

Collector/ Health Dept.: (Name and Title) **Sample Procured From:** (Signature)

Reason for Collection: (Regulatory, Outbreak, Complaint) **Establishment Number:**

Amount in Lot before Sampling:

Description of Sample (Code No. if any), & **Method of Collection:**

Mail Report To: **Address:** **Zip:**

Collector Remarks: (Note if submitted by someone other than the collector)

Collector Signature: **Submitter Signature** (when applicable):

Requested Laboratory Analysis: ☐ Bacteriological ☐ Chemical ☐ Other

☐ Aerobic Plate Count	☐ Staph aureus ☐ Count ☐ Toxin	☐ Salmonella species	☐ Pesticide Residue
☐ Coliform Count	☐ Bacillus cereus ☐ Count ☐ Toxin	☐ Shigella species	☐ Trace Metals (Water)
☐ Enterobacteriaceae Count	☐ Clostridium perfringens Count	☐ E. coli O157: H7	Specify Metal(s):
☐ E. coli Count	☐ Campylobacter species	☐ Non- O157 STEC	☐ Other (Describe)
☐ Mold & Yeast Count	☐ Listeria species	Specify:	

Chain of Custody

DATE/ TIME	RELEASED BY (Collector/Submitter)	RECEIVED BY (Lab staff, unless otherwise indicated)	PURPOSE OF CHANGE (Lab use, unless otherwise indicated)
	Signature	Signature	☐ Transport
	Print Name	Print Name	☐ Storage (unit #)_____
	Signature	Signature	☐ Testing
	Print Name	Print Name	

Lab Accession #_____

State Seal Attached? ☐ Intact ☐ Broken ☐ None Sample and Package Condition: ☐ Good ☐ Other _____

Sample Received: ☐ Refrigerated ☐ Frozen ☐ Other (Describe) _____ Received Temperature:_____

Report of Laboratory Analysis:
Comments:

Date Started	Date Completed	Date Reported	Signature of Analyst: Laboratory Services

☐ No Further Regulatory Action is indicated on this sample

Analysis indicates sample is in violation of the following law and/or regulations based thereon. (Check appropriate one):
☐ KRS 217.801 Lead Based Paint Law; ☐ KRS 217.005 to 217.215 KY Food, Drug, & Cosmetic Act; ☐ KRS 217.850 to 217.710 KY Hazardous Substances Labeling Act; ☐ KRS 217C KY Milk and Milk Products Act; ☐ KRS 152.105 to 152.190 Regulates Use and Control of Radiation.

Sample Considered: ☐ Adulterated ☐ Misbranded ☐ Other
Further Regulatory Action: ☐ Resample ☐ Reinspect ☐ Official Action ☐ Other

Signature Title Agency Date

Note: For bacteriological water analyses, all samples must be collected and submitted by authorized collectors. Samples not requiring chain of custody precautions must arrive in the laboratory within 30hrs of collection and are to be kept at <8°C during transport. Use FedEx label provided. Recommend sample collection on Monday, Tuesday, or Wednesday and mail the same day. Samples requiring chain of custody precautions must arrive in the laboratory (DLS or another certified laboratory) within 6hrs of collection and are to be kept at <8°C during transport.

If you have any questions about submission of water samples, contact DLS at 502-564-4446.

WATER BACTERIOLOGY ANALYSIS

Qualifying Water Sources:

E.coli and Total Coliforms

- Private drinking water; wells, cisterns, springs
- Public Swimming Beaches
- Public Swimming Pools
- Dairy Water

Legionella

- Private drinking water; wells, cisterns, springs
- Recreational water
- Commercial water

Methodology:

- E. coli and Total Coliforms - LTB/BGBB(SM9921D), Colilert(SM9223B)
- Legionella – Legiolert and culture

Specimen:

- 1 (100 ml) bottle (provided in the kit and filled just over the 100ml fill line with headspace)

Mailing Label:

- FedEx label

Collection Kit Furnished by:

Kentucky State Public Health Lab (DLS) (502)564-4446

- Idexx Bottle in zip bag with absorbent
- Refrigerated Cooler
- FedEx Label

Collection and Packaging Instructions:

https://chfs.ky.gov/agencies/dph/dls/Pages/default.aspx
Water Collection

	Outreach Test Code	CPT Code	Reference Range
Water Bacteriology	WATERB	NA	Acceptable limits for drinking water: <1 per 100ml (none detected) Acceptable limits for recreation water • Total Coliform limit not established for beach water • E. coli content shall not exceed 130 colonies per 100ml as a geometric mean based on not less than 5 samples taken during a 30-day period. Acceptable limits for Dairy water: Presence of total coliforms is unacceptable in dairy or food manufacturing source/processing water.
Legionella	WLEG	NA	<1 per 100ml (none detected)

REV. 9/2018

KY Division of Laboratory Services 100 Sower Blvd. Suite 204 Frankfort, Kentucky 40601 Phone: 502/ 564-4446 Fax: 502/ 564-7019	Kentucky Public Health Water Bacteriology Analysis Report
(Please complete a separate form for each sample.)	

Authorized Collector:_____

Collectors Phone #: _____Sanitarian Number:_____

Collection Date:_____ Collection Time:_____

Occupant or Owner:_____

Request Identifying No:_____Site No.:_____

Sample No.:_____ Sample Seq. No:_____

County:_____

Submitter *(Use LHN Site#)*:_____

[] Drinking Water []Recreational Waters []Spas/Therapeutic Pools

[] Check here if accompanied by Chain-of-custody form

Collector's Remarks:

Laboratory Findings:

Date & Time Received	Laboratory Number	Date & Time Reported	Technologist

Environmental Chemistry

Dental Fluoride (Supplement Program)

Patients Qualifying:

- The program targets preschool children without a source of optimally fluoridated water. Older children could receive the supplements in certain instances.

Methodology:

- FIA by Lachet Quickchem

Specimen:

- Sample of water supply

Collection Kit Furnished by:

- Dental Program (502)564-3246 ext. 4421

Collection kit contains:

- Mailing Container
- Request Form # 505c
- Mailing label # 505b
- Instructions

	Outreach Test Code	CPT Code	Reference Range
Dental Fluoride	FL	NA	0.8-1.4 PPM Kentucky's optimal fluoride concentration is: 0.90PPM

Lab 505C
Rev. 9/2018

Kentucky Public Health Laboratory
100 Sower Blvd., North Loading Dock,
P.O. Box 2020
Frankfort, Kentucky 40602-2020
Phone: 502/564-4446 Fax: 502/564-7019

(Please complete a separate form for each water supply.)

Kentucky Public Health

Fluoride Test For Supplement Program

Name of Child(ren): Sex: DOB:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____
Home Address

_____
City State Zip Code

Name of Parent or Guardian:

Send Report To:

_____
Office/Clinic

_____
Street Address (P.O. Box)

_____
City State Zip Code

_____ ( ) _____
County Phone Number

Specimen Information:
Water Supply: ☐ Well ☐ Cistern ☐ City ☐ Bottled Water

☐ Other, specify_____

Laboratory Findings:

__ __ . __ __ (parts/million) µg/mL

Date Received:	Laboratory Number:	Date Reported:	Technologist:

Food Chemistry

Methodology:

- Pesticides- GC-MS MS, GC-MS
- Mercury- Mercury Analyzer
- TOX-1 – GC-MS

Specimen:

- Pesticides- Fruits and Vegetables screening and quantitation
- Mercury- Fish
- Toxin, Drugs, Pesticides- Meat Screening
- Organochlorine – Raw Milk Screening

Collection Kit Furnished by:

- Contact the Division of Laboratory Services

Ship immediately after collection. Perishable foods shipped with cold packs.

OSHA

Methodology:

- Chemical and physical analysis
- GC-FID
- Electrobalance

Specimen:

- Air samples
- Solvents
- Dust
- Metals
- Lead in wipes, soil, and paint

Collection Kit Furnished by:

- Request specific media from DLS Environmental Chemistry (502)782-7713