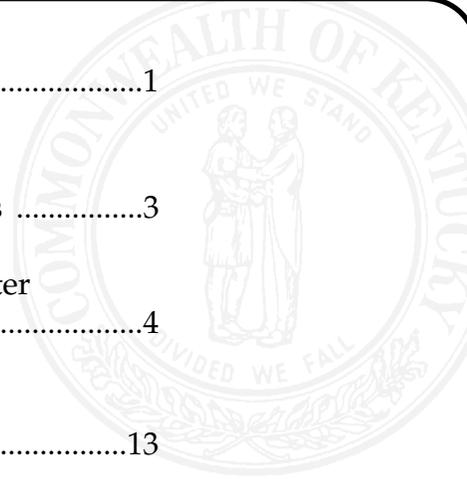


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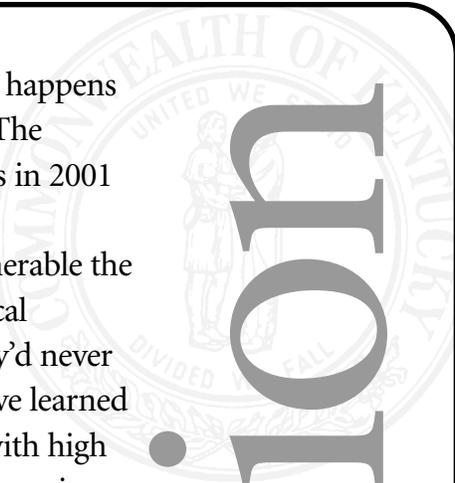


When the “it will never happen here” happens in Kentucky, what will people do? The anthrax attacks in the United States in 2001 revealed the nation’s lack of preparedness for bioterrorism incidents and a sense of how vulnerable the nation is at every level. The government, medical community and media all faced challenges they’d never been called on to meet before. As a nation, we’ve learned that we must become better prepared to deal with high stakes incidents. In Kentucky, much has been done in the last two-and-a-half years to increase the state’s preparedness to respond.

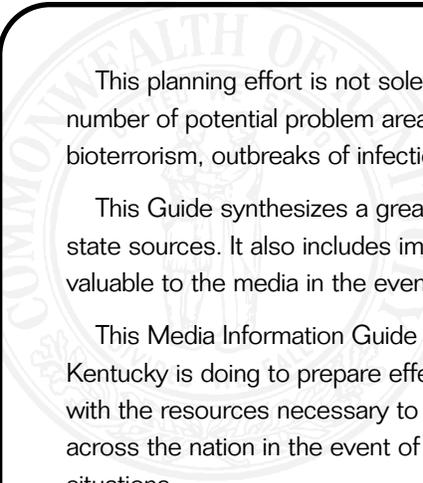
Since 2002, the Kentucky Department for Public Health (DPH) within the Cabinet for Health and Family Services (CHFS) has received more than \$29 million in grant funding from the Centers for Disease Control and Prevention (CDC) and more than \$9 million in grant funding from the Department for Health and Human Services, Health Resources and Services Administration (HRSA) for public health emergency preparedness and planning. These funds have been utilized to prepare the Commonwealth to respond to a biological, chemical or radiological emergency as well as other public health threats. The Cabinet collaborates with local health departments, emergency management, hospitals and other organizations to increase the preparedness of the Commonwealth in its planning activities.

The Statewide Bioterrorism Advisory Committee and the HRSA Hospital Preparedness Subcommittee serve as additional resources to the Cabinet. Membership includes a variety of public and private organizations likely to be involved in emergency preparedness on a daily basis or during an emergency. Members include: state and local public health departments, state emergency management, mental health professionals, Red Cross, University of Kentucky and University of Louisville infection control professionals, media professionals, information technology professionals, veterinarians, industrial hygienists, military hospitals and others.

Kentucky has built a collaborative public health and emergency management community that is planning and preparing on behalf of the citizens of the state, in cooperation with private industry, community groups and other local, state and federal agencies.



introduction



This planning effort is not solely focused on a specific type of disaster; it reaches into a number of potential problem areas or vulnerabilities with a particular focus on acts of bioterrorism, outbreaks of infectious disease or other public health emergencies.

This Guide synthesizes a great deal of information that is available through a number of state sources. It also includes important contact information and resources that may be valuable to the media in the event of various incidents and emergencies.

This Media Information Guide has been developed as an update on what the state of Kentucky is doing to prepare effectively for a state of emergency and to provide the media with the resources necessary to communicate effectively with the citizens of Kentucky and across the nation in the event of bioterrorism-related disasters and/or other disaster situations.

This Guide is not a textbook on biological warfare. Rather, it serves as an update on the state of Kentucky's overall emergency preparedness. By teaming with the media — those who are often times the first responders to an incident — the state hopes to provide a framework for delivering messages efficiently and informatively to the public.

The level of detail in this Media Information Guide is provided in direct response to a study on bioterrorism-related communication in which the media requested detailed information on statewide communication channels. The Guide offers varying levels of value to different media groups and individual. A companion Pocket Guide will provide a condensed version of communications channels and detailed contact information.

Kentucky's Plan for Disaster Preparedness

The Kentucky Department for Public Health (DPH), within the Cabinet for Health and Family Services (CHFS), has the primary responsibility for providing public health services and coordinating medical care services in a public health emergency and collaborating with agencies across the state to upgrade emergency communication resources and planning. This chapter covers information on these collaborations and provides:

- An overview of the **two major disaster response plans** that would be used in a public health emergency — those of the state DPH and the Kentucky Division of Emergency Management (KyEM).
- Details on **key resources**, including updates on the technologies and personnel as well as a step-by-step description of how DPH and CHFS take action during a crisis.

chapter 1

Overview of Kentucky's Two Major Disaster Response Plans

1. Kentucky Department for Public Health (DPH) Disaster Response & Recovery Plan

Kentucky's DPH would be the primary point of contact early on in a potential public health emergency. The DPH Disaster Response & Recovery Plan is organized around three phases of disaster response and communicating with the media during a disaster.

- **Pre-disaster phase** — consists of planning and preparing for disasters from bioterrorism to tornadoes, including disaster exercises, education and training of department staff.
- **Disaster or event phase** — consists of disaster and emergency response services geared to responding to the needs of the community experiencing the disaster. Such services include search and rescue, emergency medical treatment, biological, chemical or radiological response and any other service necessary to protect public health.
- **Disaster recovery and clean-up phase** — consists of services dedicated to sanitation, food supply protection, environmental monitoring, disease and vector control, immunizations, etc.
- **Risk communications policy** — outlines the CHFS process for reaching the media during a disaster of any type and in any location.

Each of the 120 county health departments has developed a disaster response plan that is integrated with its local emergency management plans.

2. Kentucky Division of Emergency Management Emergency Operations Plan

The Emergency Operations Plan for the Kentucky Division of Emergency Management (KyEM) contains more than 300 pages and can be accessed at <http://www.kyem.ky.gov>. The Web site is available to the media as well as to the general public and contains detailed information in a series of "annexes," which are organized by subjects, such as "Increased Readiness," "Search and Rescue Services," "Earthquake," etc. By state law, the KyEM Emergency Operations Plan is the state's governing plan for state response in a declared state of emergency.

Of particular interest is Annex M, "Health and Medical," which demonstrates the integration of responsibilities between KyEM and CHFS. This annex also contains a description of how the various agencies should interact as the KyEM utilizes a "unified command system" during a crisis.

The KyEM Web site provides specific details about which agency deals with which hazard as well as which agency has a primary or secondary response role with an emphasis on enhancing collaborative surveillance/assessment systems during a disaster. KyEM reaches

deep into the state with each of the 120 counties having a county emergency operations plan and a local contact person. The county plans are mirror images of the state plan.

Additionally, KyEM has these ongoing activities:

- Duty officers monitor three large flat screen televisions broadcasting news 24 hours a day.
- Separate from cell phones and landlines, KyEM also employs a microwave system and another state-controlled system that connects directly to law enforcement first responders. Satellite communication is available when needed.
- By federal mandate, cell phones will eventually feature a built-in Global Positioning System locator to lessen difficulties caused by 911 caller and program issues that exist throughout the state.
- KyEM has ongoing contact with local suppliers should generators and diesel fuel be needed in the event of a power outage.
- Emergency Radio Broadcast System provides information put out by the State Police and is then made available to the general public through the Emergency Alert System (EAS).
- Voice mail, e-mail and fax messages at a county level are automatically released simultaneously in a crisis alert.

COLLABORATIVE EFFORTS

1. Agencies, local governments, media and citizens

For disaster planning to be effective, collaboration between agencies, local governments, the media and citizens is mandatory. Many states and major metropolitan areas continue to struggle with interagency conflicts, even as Kentucky is proving to be a leader with collaborative efforts taking place statewide. Examples of the collaborative relationships that form the foundation of Kentucky's emergency preparedness include:

- The Kentucky Hospital Association (KHA) has formed the KHA Hospital Bioterrorism Committee, which is working with the Kentucky DPH on disaster preparedness for Kentucky's hospitals. The Committee provides information that assists hospital personnel in the identification of bioterrorism and other hazardous substances and in responding appropriately during such emergencies.
- The Epidemiology Rapid Response Team was formed in 1987 to assist with the investigation and control of disease outbreaks in Kentucky. The team members serve as valuable resources to the public health system. Members are trained to report, manage and help solve public health issues through surveillance, investigation and follow-up activities. Nearly all members are employed by local health departments throughout the state. DPH has also hired regional epidemiologists based at local health

departments, who are spread throughout the state to assist in collaborative planning and conduct surveillance and epidemiological investigations related to public health preparedness.

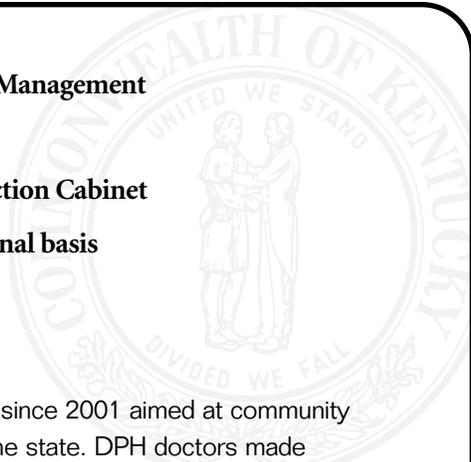
- The Kentucky Community Crisis Response Board (KCCRB) was established in 1996. The KCCRB is attached to KyEM and works closely with that agency to ensure organized, rapid and effective response, crisis intervention and disaster mental health services in the aftermath of crises and disaster. It is the state's designated provider of "psychological first aid."
- In 2004, Kentucky's Division of Mental Health within the Department for Mental Health and Mental Retardation Services was awarded a \$100,000 grant from Substance Abuse and Mental Health Services Administration. The funds enhance the mental health and substance abuse emergency preparedness and response capacity through Kentucky's statewide network of regional MH/MR boards, also known as community mental health centers. In addition to the federal funds, DPH will support the efforts of the Division of Mental Health with a portion of its CDC funds. Each of the 14 regional boards will:
 - **Enhance the emergency preparedness and response capacity on the part of each board**
 - **Coordinate the activities of each board with those of other emergency response entities**
 - **Recruit and train board staff to serve as emergency responders in conjunction with the KCCRB**

2. Governor

As the state's chief administrator, the governor serves by state law as the senior official in the event of a disaster. The governor would rely on a senior leadership team of cabinet secretaries and other state officials in an emergency to advise on key actions. These leaders and other representatives of their agencies also stay in close contact with each other in order to best coordinate preparedness efforts, including keeping the governor informed of preparedness efforts and issues on a pre-disaster basis and advising the governor's office on the coordination of disaster response efforts.

Some key players in this advisory group are:

- **Adjutant General, Kentucky National Guard**
- **Director of the Kentucky Department of Homeland Security**
- **Secretary of the Cabinet for Health and Family Services**
- **Secretary of the Justice and Public Safety Cabinet**
- **Commissioner for the Department for Public Health**

- 
- **Director of the Kentucky Division of Emergency Management**
 - **Kentucky State Police Commissioner**
 - **Secretary of the Environmental and Public Protection Cabinet**
 - **Other agency officials on an as-needed or situational basis**

Key References

Statewide collaborative efforts have been underway since 2001 aimed at community leaders and local government representatives across the state. DPH doctors made presentations on bioterrorism and emerging public health issues and conducted focus groups across the state in a “road show” format. Attendees were drawn from the CHFS, KyEM and first responders, such as hospital, EMS, police and fire employees.

Other exercises dedicated to integrating the personnel and planning efforts of different agencies have also occurred. These involved bringing teams from emergency management, public health and other local officials together to explore ways to reduce overlap of services and increase interagency collaboration.

Other areas of development include:

- **New people on board at local health departments: Regional training coordinators, regional epidemiologists and public health preparedness planners**

As a result of the initiatives from the CHFS, every local health department is in the process of revising and expanding its collaborative community planning for disaster response and recovery.

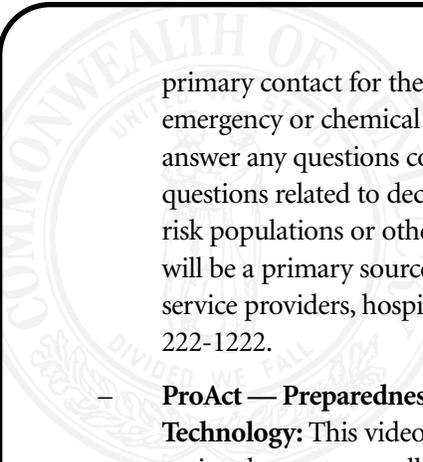
A key mandate for each department is to work in tandem with its local emergency management personnel. To further this effort, DPH has added regional training coordinators specifically for disaster and public health preparedness-related training coordination and a number of public health preparedness planners. In many regions, these people may serve as subject matter experts should a crisis occur in their region. A comprehensive database of local and state disaster contacts is being developed and will be made available to the media via the Web once it is complete.

- **CHFS Announces New Developments in Emergency Communications**

In addition to the comprehensive new database, the Health Alert Network (see Chapter 2 of this Guide for a more detailed description), there are three other key additions to CHFS’ emergency communications efforts statewide: the Poison Control Hotline, ProAct and Ky.Train.Org.

A brief synopsis of communication programs follows:

- **Poison Control Hotline:** The Kentucky Department for Public Health has established a partnership with the Kentucky Regional Poison Center to be the



primary contact for the public during the first six days of a public health emergency or chemical terrorist attack in Kentucky. The poison center will answer any questions concerning possible exposures during the attack or any questions related to decontamination, possible symptoms, patient treatment, at-risk populations or other concerns. It is anticipated the Poison Control Hotline will be a primary source of information for health professionals, emergency service providers, hospitals and the general public. The hotline number is 1-800-222-1222.

– **ProAct — Preparedness & Response On Advanced Communication**

Technology: This videoconference network is designed to bring local, state and national experts as well as public health officials and community clinicians face-to-face in the aftermath of a natural or man-made disaster. For the first time, rural Kentucky will have access to health experts via this dedicated interactive videoconference system, which exists in hospitals and is being expanded to health departments around the state. This network is also being used for statewide training through regional sites.

- **Ky.Train.Org:** A learning management system, Ky.Train.Org is both a registration tool for public health workers, emergency responders and others in the medical or response communities to enroll in disaster response training and a method for tracking course listings, locations and attendees. The site will allow DPH to track what kind of disaster training is taking place statewide as well as individuals who have received specific training.

■ **Cabinet for Health and Family Services’ Initial Media Crisis Response Plan**

This plan provides a framework for how the CHFS Communications Office reacts to a potential or determined public health emergency or disaster.

This risk communication policy goes into effect when the following conditions occur: notification from CHFS Secretary or Public Health Commissioner or designee to the CHFS Communications Office of a potential Kentucky problem. An outline of the Response Plan is shown on the following pages.

OVERVIEW: CHFS MEDIA CRISIS RESPONSE PLAN

IMMEDIATE ACTION

Within the first 30 minutes following notification, these actions must be taken:

- All media calls to any source within the CHFS (including the DPH) about the issue will be routed initially to the CHFS Communications Office. This is to ensure that reporters get consistent messages and that valuable executive staff time is spent addressing the potential public health problem. All CHFS staff who could potentially receive press calls will be notified by e-mail and by phone by the public information office that calls need to be referred to the public information office in order to determine who responds.
- The CHFS Communications Office will immediately notify the following Kentucky government staff about the situation:
 - Governor’s press secretary
 - Kentucky Division of Emergency Management (KyEM) Public Information Officer (PIO)
 - Kentucky State Police PIO
 - The Military Affairs/Office of Homeland Security
- ⌘ The CHFS Communications Office will notify any other appropriate government agencies. These include:
 - ⌘ Centers for Disease Control and Prevention’s Media Relations Division
 - ⌘ National Public Health Information Coalition
 - ⌘ Local health department public information contacts

CONTINUING EFFORTS AND MESSAGE COORDINATION:

- The CHFS communications office will coordinate with the governor’s office and other appropriate parties to determine what vital messages must reach the public in order to maintain consistency in communication with the media and public.
- The CHFS Communications Office will work with the CHFS Secretary and the public health commissioner or designee and all other involved parties, depending on volume and nature of the calls, to decide how media inquiries will be handled. The Communications Office will coordinate with the governor’s communications director, the PIO for KyEM, the Kentucky State Police PIO, the Military Affairs/Office of Homeland Security and any other appropriate agencies. If a state of emergency is declared, the PIO of KyEM will assume immediate control over the release of information. Support from CHFS communication staff will be provided as needed. (Communication operations procedures under a state of emergency are outlined in a separate topic below.)
- A news conference may be called immediately. A determination will be made with the governor’s communications office on who will lead the news conference as well as other participants. The commissioner of public health will serve as chief spokesperson for the Kentucky Department for Public Health.
- News conferences will be held at the Capitol, Human Resources Complex or KyEM Emergency Operations Center in Frankfort, depending upon the circumstances of the situation. Technology is also in place to do satellite briefings that could be broadcast at locations across the state, such as universities and colleges, or to use the resources of Kentucky Educational Television to broadcast or transmit briefings directly to a wider audience of state media if necessary.

REGULAR BRIEFINGS

- The CHFS Communications Office, working with the CHFS secretary, public health commissioner, the Governor's office and other appropriate parties, will decide what level of regular briefing needs to occur. If there are few new details, then briefings will occur either by news conference or news release at 11 a.m. and 4 p.m. whenever possible. The CHFS Web site will be updated as frequently as possible.

NEWS CONFERENCES

- Notification of news conferences will occur by issuing notices via fax and e-mail. Phone calls will be made to the Associated Press and the Kentucky News Network Capitol bureaus and, if no contact is made, then to their Louisville offices. Other media may be contacted depending upon location and circumstances of the situation.

NEWS RELEASES

- News releases will be sent to all state media via fax/e-mail and will be posted on the CHFS Web site.
- The Associated Press will be called to confirm that the release was received.
- If a particular area of the state is involved, then news releases will be sent to all media in that area following the initial release to the Associated Press. Local media in the affected area will be called to ensure that they received the release.

STATE OF EMERGENCY OPERATIONS

- If a state of emergency is declared, a joint communication office will be established and coordinated by the PIO of KyEM. The office will include public information officers from all appropriate cabinets and agencies. The office will be located at the site of the emergency or at the Emergency Operations Center in Frankfort, which is fallout protected and equipped with communication equipment (including a highly redundant microwave communication system that meets all governmental voice, video and data transmission requirements). The PIO for KyEM will act as official spokesperson on all matters in the event of a state of emergency and assume responsibility for the release of all information.
- If the DPH Emergency Operations Center is operated by DPH (located in the board room of DPH and enabled with phone lines and other necessary equipment), a PIO from CHFS will assist in staffing this office. The PIO will release information as necessary. If a state of emergency is activated and the DPH Center is still operating, the CHFS PIO will provide information to the PIO of KyEM at the state Emergency Operations Center.

Summary

Disaster response and recovery planning is not complete. One of the key tasks still ahead is the need to inform the public of all the new resources being put in place.

Additional areas the state is working on as part of comprehensive emergency planning include:

- Trained volunteers will be needed if Kentucky is to be assured of sustained long-term support for a disaster, such as bioterrorism, that has a “tail” to it; dangerous effects may not occur immediately or the effects may linger as long-term hazards. In these long-term efforts, full-time disaster response teams, both health professionals and emergency management officials can find themselves exhausted after days, weeks or months of hard work.
- The general public needs to hear about disaster preparedness planning as related to health hazards ranging from tainted food to influenza to infectious diseases caused by household pets in order to feel less of a sense of “terrorism fatigue” during non-crisis situations.

From the state level on down to the most rural community, Kentucky’s public health officials and KyEM personnel — along with the new regional training coordinators, regional epidemiologists and public health preparedness planners — are dedicated to collaborating across agency lines with one goal in mind: “Prevent disasters every day.”



The Health Alert Network

The Health Alert Network (HAN) is a nationwide, integrated information and communication system serving as a platform for distribution of health alerts, dissemination of prevention guidelines and other information, distance learning, national disease surveillance and electronic laboratory reporting, as well as for the Centers for Disease Control and Prevention's (CDC) bioterrorism and other public health emergency-related initiatives. The system is designed to strengthen preparedness at the local and state levels by allowing for rapid, wide dissemination of information alerts to pre-determined individuals in a variety of response settings.

Kentucky Department for Public Health (DPH) – Health Alert Network

The Kentucky DPH Disaster Response and Recovery Plan is organized around three phases of disaster response and communicating with the media during a disaster. HAN will serve as a response and communication tool in all phases of the plan.

■ **Pre-disaster phase** — when complete, the HAN will ensure:

- High-speed, secure Internet connections for local health officials, providing access to CDC and DPH's prevention recommendations, practice guidelines and disease data
- Capacity for rapid and secure communication with first responder agencies and other health officials
- Capacity to securely transmit surveillance, laboratory and other sensitive data
- Online; Internet- and satellite-based distance learning systems
- Early warning alert systems using phone, fax and e-mail notification

The purpose of the HAN is to help public health agencies achieve high levels of organizational capacity in protecting the public through rapid communication of essential information.

chapter 2

■ **Disaster or event phase** — Access to HAN

- The HAN in Kentucky is currently being populated with contact information for individuals across the public health workforce as well as local and state emergency response officials and other community partners. Access to information will be based on what the designated role of the individual is and what information is targeted to the individual.

■ **Disaster recovery and clean-up phase** — Access Media Accessible Database

In the 2003 Kentucky Cabinet for Health and Family Services (CHFS)/Department for Public Health (DPH) study, the media indicated a need for access to knowledgeable sources of information and the people who will be in command in the event of a major catastrophe. The CHFS/DPH is currently developing a media accessible database that will be based in part on the information contained in the HAN. The database will include key contact information that the media should refer to in the event of a bioterrorism or other catastrophic emergency or on issues related to the contact's area of expertise. In addition to state contacts at CHFS/DPH and KyEM, the database will include state PIOs, hospital PIOs, Red Cross chapters, the Community Crisis Response Board and comprehensive care contacts, among others.

Members of the media will be consulted prior to the completion of the database in order to incorporate any additional contact information that is thought to be crucial to the media in the event of various disasters. Once fully developed, the database will be accessible to the media through a special Web site being developed as a part of the state's efforts in communicating bioterrorism preparedness throughout the state.

The Media's Role in Statewide Communication

Over the long term, disaster isn't the exception; it's the rule and should be treated as such through planning, training and policymaking. That was the overwhelming point of view of emergency preparedness officials, journalists, community leaders, health care professionals and others in Kentucky in a 2003 study on bioterrorism-related communication commissioned by the Kentucky Cabinet for Health and Family Services/Department for Public Health (CHFS/DPH). A key finding of this study was that few among the media and special needs populations (hearing impaired, visually impaired, non-English speaking, remote rural populations) felt adequately prepared for a grave crisis, whether bioterrorism or the result of a natural disaster.

While many have been first or early responders or have first-hand experience in working through natural or man-made disasters, few people in emergency management, public health or the media have extensive experience in covering acts of terrorism, particularly bioterrorism or other public health emergencies.

Although there are many common sense recommendations and practices that would apply to bioterrorism, there are no good working models from which to extrapolate practical guidance.

Many of the reporters and editors interviewed as part of the research for the 2003 CHFS/DPH study were very open about their need to know more when it comes to disaster preparedness.

The 2003 Kentucky CHFS/DPH Study

The purpose of the Kentucky Health and Safety Communication Study in 2003 was to help determine the most effective method(s) for providing disaster information to the public. A survey was conducted with households chosen randomly as well as from households in traditionally underserved populations, such as persons with hearing disabilities, visual impairments, illiterate persons, non-English speaking persons, low-income persons in rural areas and other segments of the population identified as difficult to reach. In addition, numerous interviews were conducted with the media.

chapter 3

Public Information

A solid communication plan is vital to the state's preparedness efforts. The media is crucial to the state's plan for reaching the public.

State officials are working with the Kentucky Press Association and Kentucky Broadcasters' Association to provide definitive sources of information, a shared understanding of the infrastructure for providing that information and knowledge of the bigger picture. State officials recognize the invaluable role of the media as both responders and respondees; their unique role as the leading two-way channel of information across the state makes them the primary link with the public in any emergency situation.

People are "wired" to respond emotionally — to fear first and think second. And, images broadcast by the electronic media play a critical role in how people perceive risk. The CHFS has learned: "As the public's trust of and access to information increases, their fears subside."

How the media report any disaster plays as crucial a role as what they report in terms of how members of the public perceive the risk to themselves, their family, homes and businesses. Yet, in a recent study, the media readily admitted that they lack understanding of the state's disaster response and information distribution mechanisms.

Bioterrorism – A Different Threat

No one knows exactly how likely a terrorist attack on the United States is or how much damage different types of attacks might cause. Some experts predict that terrorist attacks could occur at the rate of one every two years and the most likely form will be conventional explosives targeting government buildings, skyscrapers, hazardous industrial sites and transportation facilities, roads, bridges, railroads and airports located on the East or West coasts. The general consensus has been that the least likely methods of attack would be chemical, biological, radiological or nuclear. In particular, biological agents require much greater expertise and technology to grow than what is required to mix chemicals for a chemical attack. However, their potential for severe damage, even from a small release and their fairly low cost make certain biological agents attractive to terrorists. The consequences of such an act

A SAMPLING OF STUDY FINDINGS

A sampling of some of the findings from the study

- Seventy-eight percent of the general population gets emergency/disaster information from television; 10 percent from radio; 4 percent from the Internet.
- The media is the most trusted source (53 percent) of disaster or public safety news/information, with government officials a distant second.
- Fifty-two percent feel that city and county authorities have made no preparations for bioterrorism events.
- Although a majority (58 percent) find city and county officials to be only somewhat trustworthy in providing accurate information, a larger percentage (66 percent) would very likely follow orders from these same officials.
- Ninety-nine percent of the general population said they would agree to help a neighbor in the event of a large-scale public health risk.
- The majority of people surveyed (62 percent) said they were not aware of any community organizations that might help them in the event of a large-scale public health risk.

require that states and the federal government prepare for such unthinkable actions.

Covering Acts of Bioterrorism

Much of the damage of any terrorism event occurs days, even weeks after the physical attack. Both the general population and special needs populations, such as those who are hearing or sight impaired, who have other disabilities, who have language barriers or who live in remote areas, will need trusted sources of information.

OVERVIEW : PREPARATION

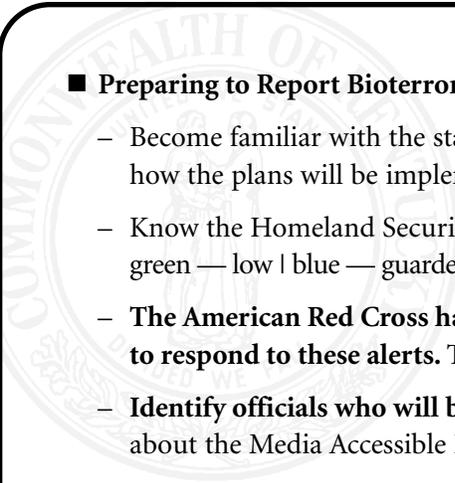
Bioterrorism is no longer a theoretical possibility. It can happen and it can happen in Kentucky. Diseases do not recognize the boundary lines of maps.

As Chapter 1 details, Kentucky officials are aggressively preparing for this possibility as well as to deal with other emerging infectious diseases. Preparation includes:

- **Coordinating planning at the local level**
- **Training public health workers, physicians, nurses and other health care providers**
- **Immediate reporting of suspected bioterrorism-related activity or unusual cases of disease by health care professionals to the state health department**
- **Lab readiness to detect biological agents as quickly as possible**
- **Planning for delivery of Centers for Disease Control and Prevention's (CDC) Strategic National Stockpile (SNS) (treatments and supplies in case of an attack which can be anywhere in the country within 12 hours) and working with local planners to ensure access to certain medications prior to SNS arrival and to plan the dissemination of drugs, vaccines or other necessary supplies at community sites.**

Kentucky public health authorities have been working for the past few years to educate physicians and other health care providers to recognize and report the diseases that would most likely be used in a terrorist attack. Local health care providers would most likely be the first to recognize a possible biological incident.

Presently, individuals can do little in advance to protect themselves from a bioterrorism attack. However, government agencies, health care facilities, public health departments and the media can do a lot to protect the public following an attack. Before an event, editors, producers, reporters, photographers and crews are responsible for thinking about how to respond. Unlike other disasters that have a "ground-zero" — a specific site of activity — bioterrorism-related events may start silently and go unnoticed for days or even weeks before health care providers notice and report increases in certain symptoms or an unusual case of disease to public health officials. There are no police barricades or firefighters rushing in to save people from a burning building, no collapsed houses or rivers overflowing their banks.



■ **Preparing to Report Bioterrorism Emergencies:**

- Become familiar with the state and local emergency plans (see Chapter 1). Know how the plans will be implemented in the event of an attack.
- Know the Homeland Security Advisory System and risk levels: green — low | blue — guarded | yellow — elevated | orange — high | red — severe.
- **The American Red Cross has guidelines for families and communities on how to respond to these alerts.** The details are accessible at <http://www.redcross.org>.
- **Identify officials who will be in charge and how to contact them.** (See more about the Media Accessible Database in Chapter 2.)
- **Contact and build relationships with local public health officials before an event occurs.** (In the 2003 study, at least one major media outlet said it had never received a fax, e-mail or other “news” from the local public health department. Other outlets said they did not have anyone assigned specifically to public health.)
- **Contact and build relationships with reliable, knowledgeable experts at local universities and colleges.** Look for people who can cite sources and key statistics. Know how to reach them in an emergency. (See database for information on subject matter experts.)
- **Ask experts and public health officials for fact sheets and other written documentation** to support the facts.
- **Pre-screen your sources to save time during an event** by eliminating those people who have limited knowledge or are reluctant to share information with the media.

**QUESTIONS TO
ASK PUBLIC HEALTH
OFFICIALS BEFORE
AN EVENT OCCURS**

- Who will be in command?
- What is the chain of command?
- To whom and how do health care professionals report suspicious cases?
- How will these reports be received, processed and coordinated?
- Who decides how to respond and the level of response?
- How are activities coordinated at the local, county, state and federal levels?
- Would the hospitals be willing to allow broadcasts on site?

When covering a terrorism incident:

- **Be precise.** Avoid speculation. Just use the facts. Do not guess what might happen next. This is particularly critical for broadcast reporters who are often called on to

adlib during live coverage of an event.

- **Choose words that do not incite fear**, but convey information.
- **Avoid jargon.** Ask for definitions of terms used by subject matter experts and officials that may not be clear to the general public.
- **Consider how the story will be played and promoted and what the headlines will say.** Do the words cause alarm when no general alarm has been issued? If an immediate threat exists, people need to be told what to do in precise, clear and calm language.
- **Journalists are required to be fair in their reporting by covering both sides of a story.** Ask tough questions and be skeptical; however, make certain both sides are based on fact, not opinion. An overzealous attempt to balance coverage could confuse the public.



Safety Information

An added twist to bioterrorism is that journalists and their newsrooms have themselves been the targets. Since the 2001 anthrax attacks on newsrooms, journalists can no longer consider themselves observers of events — they have become participants. They themselves are at risk and have the same need as the general public to know how best to protect themselves, their workplaces and their families.

How to Protect Yourself

What should the media do if they find themselves to be first or early responders to the site of a chemical or biological terrorist attack?

- Immediately call for emergency responders assistance from police, fire, HAZMAT or other traditional first responders.
- Approach a site cautiously from upwind in order to avoid contact with the chemical or biological agent.
- Assess the situation. What can be done immediately? Who or what is at risk? Any attempt to rescue people or property needs to be weighed against the possibility that you could become part of the problem or be in harm's way.
- Effects of exposure to a biological agent may be delayed. Talk with health care professionals about treatments.

What should the media do if they cover a site that is the target of an attack?

- Identify yourself as a member of the media. Ask for the official spokesperson.
- Learn the context of the situation as soon as possible. Is the general public at risk or is the risk contained to a specific locale and group of individuals?
- Find out if you need protective gear before entering a site.
- Get precise answers. Be accurate. Avoid speculation or talking to people at the scene who might be willing to speculate, but have no real knowledge of the situation or the materials involved.

chapter 4

What if an attack occurs at your place of work?

- What plans are in place in the event your organization becomes a target of a bioterrorism or other terrorist attack? How will employees be evacuated from the premises? Who will be the public voice for the organization?
- Does your organization have an emergency preparedness plan? If so, when was it updated? Does it include plans for sleeping arrangements and feeding employees should the crisis require round-the-clock coverage?
- Is there an emergency communication manual that clearly shows who will be in charge and how information will be communicated? Who will contact whom and in what order? When was it updated? Perhaps most importantly, where is it located?
- What happens if there is a disruption in power to computers, faxes and telephones, air conditioning or heat? How often are batteries changed in radios and flashlights?
- How many different ways do you have to communicate with each other? Are there enough cell phones for reporters, photographers, editors and producers? Do you need two-way radios, wireless e-mail devices, weather radios?
- Are there plans for communicating with employees' families during an emergency?
- Does your organization have a plan for immunization or other treatment for employees if the workplace is attacked?
- What plans are in place to deal with the aftermath of a disaster, in terms of mental and physical health of employees, vacation schedules and debriefings on what went right and what could have been handled differently? (Studies show that retirement among the media and first responder groups in New York post-9/11 were at extremely high levels.)

Personal preparedness — questions to ask yourself

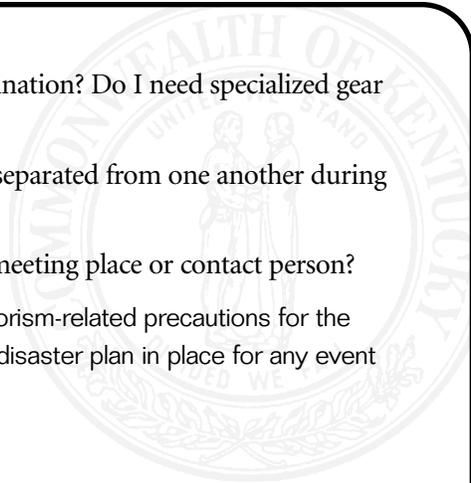
You, too, will be affected by an event of this magnitude and can do your job more effectively if you have made basic plans for yourself and your family.

- If I am out of town when an emergency occurs, whom in my family or at work will I contact?

BIG IDEA: A PERSONAL DISASTER PLAN

The American Red Cross recommendations range from developing a personal disaster plan in low-threat level conditions to being prepared to seek shelter or evacuate during a severe risk of attack.

The Red Cross advises families to develop a family communication plan for high-risk situations. A pre-packed disaster supplies kit for a family could include first-aid supplies, flashlights, extra clothing, sleeping bags, a battery-powered radio or TV (along with extra batteries), food, bottled water, tools, birth certificates, passports, licenses and cash. In the event of any emergency, individuals should follow the instructions of local officials and stay tuned to radio and television stations. For detailed guidelines and planning lists from the Red Cross go to <http://www.redcross.org> or the CHFS/DPH Web site at

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- How do I protect myself from infection or contamination? Do I need specialized gear or clothing to cover a bioterror attack?
 - How will I communicate with my family if we are separated from one another during an emergency?
 - Does my family have a pre-arranged out-of-town meeting place or contact person?

Although DPH does not recommend specific bioterrorism-related precautions for the public, the state does recommend that families have a disaster plan in place for any event (e.g., flood) that includes these emergency supplies:

- A three-day supply of water
- Clothing, blankets and sleeping bags
- First aid kit, including current prescription medications (e.g., blood pressure)
- Battery-powered radio and flashlight with extra batteries
- Sanitation supplies
- Special needs items for infants, older adults or disabled family members

Types of Biological/Chemical Agents of Potential Use in an Attack

Chemical weapons — usually detectable by smell or sight — cause immediate, but finite damage. Decontamination usually eases the symptoms of those exposed. The attack is over once the chemical is no longer disbursed (although high levels of exposure may have fatal or lingering effects).

Biological weapons — viruses or bacteria silently introduced into the environment, take time to be detected and correctly identified (chemical weapons are often detectable by smell and sight, such as chlorine gas and its greenish-yellow color) and, in some cases, can be spread from person-to-person. Time is also required to track down the original source of contamination and to develop the appropriate plan of action to treat people, prevent spread of the disease and to find and arrest the perpetrators. At least 17 nations are believed to have biological weapons programs.

The CDC has identified several biological agents that pose threats as weapons. They are categorized by level of threat.

Category A: Agents that pose the highest threat because they are easy to disseminate with high levels of lethality:

- **Anthrax** — a disease caused by bacteria called *Bacillus anthracis* that occur naturally in warm-blooded animals. If processed for use as a weapon, anthrax would most likely be spread in the air. Symptoms set in as early as a day or two and up to seven weeks after exposure. The inhaled spores grow rapidly, causing fever, difficulty breathing and malaise. Death typically occurs within several days without medical treatment.

Untreated, 90 percent of people exposed to inhalation anthrax die. Antibiotics can stop the disease if they are taken at the time the anthrax spores begin to grow or soon thereafter.

Anthrax can also enter the body through the skin or orally through food. Although serious, these two forms of exposure are less lethal (20 percent for untreated cutaneous anthrax and 25-60 percent for untreated ingested anthrax). Antibiotic treatment is highly effective in treating these two forms of exposure. Anthrax is not contagious. It does not spread from person to person.

- **Smallpox** — a serious, disfiguring and sometimes-fatal disease is caused by the Variola major virus. Smallpox disease was declared eradicated worldwide in 1980 and vaccination stopped everywhere in the world in 1983. In the past, one-third of the people who got the disease died. Smallpox is spread from person to person, usually after the sick person develops a high fever and a rash. The rash works itself from the face, arms and legs onto the trunk of the body, and the fever usually prevents the person from carrying out normal activities.

There is no treatment for smallpox, but the smallpox vaccine provides good protection and serves to stop the spread of the disease. The Strategic National Stockpile (SNS) maintains an emergency supply of doses. A program to produce more vaccine started in 2000. While many vaccines must be given weeks or months before a person is exposed to an infectious agent, the smallpox vaccine can give protection after a person is exposed if administered within three days after exposure. Vaccination within four to seven days of exposure likely offers some protection from disease or may lessen the severity of disease.

- **Plague** — a disease caused by the bacterium *Yersinia pestis*. Pneumonic plague is considered a lethal and potentially effective bio-weapon because it is deadly, contagious and infectious. Untreated, 100 percent of people exposed to pneumonic plague will die; even with treatment, half of those exposed will die. Symptoms are fever, headache, bloody sputum and rapidly progressing pneumonia. To be effective, antibiotics must be administered within 24 hours of the first symptoms.

In nature, plague is transmitted to humans by inhaling the bacteria or by the bite of a flea that has bitten an infected rat. The disease can be controlled by spraying for fleas and controlling rat populations.

There are three forms of plague: pneumonic that infects the lungs; bubonic that infects the lymph system; and septicemic that infects the blood stream. Pneumonic plague can also be passed from one person to another through coughing. Bubonic and septicemic plague are not contagious.

The former Soviet Union produced hundreds of tons of the bacteria. The location of the stockpiles and the scientists who worked on this weapons project are unknown.

- **Tularemia, or rabbit fever or deer fly fever** — The bacterium *Francisella tularensis*

occurs naturally in the United States and causes a potentially serious infectious disease. Inhalation of a single tularemia bacterium can infect a person. As a bio-weapon, the bacteria would likely be released as an aerosol, with the potential for causing severe pneumonia. A small amount of bacteria could infect a large population.

Health care professionals might have difficulty correctly identifying tularemia because symptoms include those similar to influenza or a common cold — sudden fever, headache, diarrhea, body aches, dry cough and weakness. It is not contagious and, if identified early, it can be treated effectively with antibiotics.

- **Botulinum toxin** — the bacterium *clostridium botulinum* that causes a muscle-paralyzing disease called botulism. In solution, the toxin is colorless, odorless and tasteless. It is the most poisonous substance known to man. While the toxin could be disbursed into the air through an aerosol device, most experts believe terrorists would more likely contaminate food and drink. Food-borne botulism can occur in improperly canned or undercooked food. As a bio-weapon, the toxin poses a major threat because it is potent, highly lethal and easy to produce, transport and use. An anti-toxin administered soon after the onset of symptoms can halt the spread of paralysis, but will not reverse paralysis that has already occurred.
- **Viral hemorrhagic fevers** — a group of illnesses that are caused by distinct families of viruses. They infect many body systems and often cause bleeding. While the bleeding itself does not cause death, many of these viruses are life-threatening. Among these illnesses are the filoviruses, such as Ebola; arenaviruses, such as Lassa; bunyaviruses, such as Rift Valley Fever; and flaviviruses, such as yellow fever. Although these viruses are not likely to be developed as weapons, the most likely means of disbursement would be through the air as an aerosol.

Category B: Agents that are easy to disseminate, cause moderate amounts of disease, but with low fatality rates:

- Q fever
- Brucellosis
- Glanders
- Ricin
- Epsilon toxin
- Enterotoxin B
- Viral encephalitis
- Food threats, such as salmonella
- Water threats, such as cholera
- Melioidosis
- Psittacosis
- Typhus fever

Category C: Agents that are not as effective as those in categories A and B, but are easily available and have potential for causing high rates of disease and death:

- **Nipah Virus**

- **Hantavirus**

For more information about biological agents, see the list of resources at the conclusion of this chapter.

Agricultural Bioterrorism

While most emergency preparedness plans focus on protecting human beings, bioterrorists can also strike at the nation's food supply by infecting plants and animals with disease. Because the United States has a large and diverse agricultural industry, the threat of famine is remote, but a single attack in one locale can have a huge economic impact nationally on food producers. This is already evident in the dramatic, worldwide effect such nonterrorist-related events as Mad Cow Disease and bird flu had on the beef and chicken industries. In Kentucky, the extensive horse breeding and racing industries could potentially be at risk as well.

Possible agricultural biological weapons:

- **Foot and mouth disease**

- **Swine fever**

- **Karnal bunt of wheat**

- **Stem rust (wheat)**

- **Sorghum ergot**

- **Barley stripe rust**

- **Mad cow disease**

- **Bird flu**

Hospital Information

Exposure to a chemical, biological, radiological or nuclear agent requires professional medical treatment. Anyone who suspects they have been exposed to a harmful agent should seek medical care immediately.

Getting Information to the Public

The news media remain the public's most consulted source of information in the event of a disaster. To increase the likelihood that communication will be adequate to manage a widespread emergency, the state is developing a number of different strategies for reaching the public in the event of a disaster, both the general public and populations that may have special communication needs, such as hearing impaired, vision impaired, non-English speaking and rural remote populations. (See more resources for reaching special needs populations in Chapter 6.) Some of the strategies for reaching the public with information about emergency preparedness and personal preparedness include:

- A specially designed Web site specifically about bioterrorism and what to do in the event of an attack
- Brochures containing key information that can be widely distributed via various channels throughout the state
- A video highlighting the state's emergency preparedness planning efforts to be used in conjunction with community meetings, training sessions or in a variety of local settings
- Better interface with the news media

Reaching the Public in Special Circumstances

Although circumstances can vary by region and by the nature of a disaster, some considerations for the media include:

- Radio is frequently the lifeline for local news.
- During the Kentucky ice storm in 2003, residents in major metropolitan areas became dependent on the print media for updates, advice and information available in special editions for the non-English speaking populations.
- Many remote, rural areas – particularly in eastern Kentucky – have difficulty receiving television and radio signals even in the best of times. Strategies for reaching these people in a crisis will have to be employed.
- Kentucky's special needs populations, which include people who are hearing and vision-impaired, non-English speaking and elderly, are of concern as they do not receive their news and information as easily as the general public. The Cabinet for Health and Family Services (CHFS) is working to establish

5 chapter

networks through DPH into these populations to be sure they are well-informed in a timely way.

Communicating During a Major Power Outage

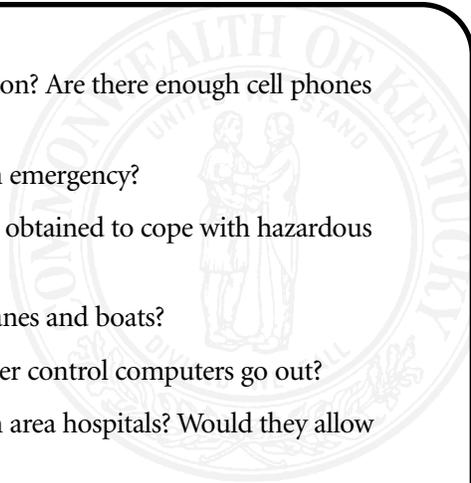
Awareness of alternative communication is critical to keeping the news flowing externally from the state agencies to the press to the public; and internally as departments and newsrooms mobilize to cover a disaster.

- **Battery-operated radios** are more common by far than battery-operated television sets.
- **Shortwave and amateur radio networks** that operate on generators.
- **Cell phone text messaging that may work even when the voice system is down** (Note that most cell phones were useless during the Northeast power outage because their transmission centers were overwhelmed.)
- **Landline telephones** have proven to be well worth keeping as they work when cell phones and remote-style phone systems lose power.
- **Walkie-talkies** are good if the batteries are fresh, but an unknown is how well the cell phones with the “push to talk” feature work when their power supply runs low.
- **Generators** are excellent options, but not all newsrooms and stations have them. Nor do those with generators have the necessary diesel fuel to keep the generators running on an extended basis.
- **One-on-one communication**, although labor-intensive, relying on points of communication that can travel by car or foot to various locations to communicate important news may become a reality.

How Prepared Is Your Newsroom in the Event of a Major Disaster?

The following is a sampling of questions raised by the Radio Television News Directors Foundation’s “Bioterrorism — A Journalist’s Guide to Covering Bioterrorism” in an effort to help the news media assess their preparedness for crisis coverage:

- Are there clear lines of emergency authority in your newsroom? What happens if your senior news managers are absent? Who takes charge?
- Has this plan been circulated in writing and discussed with employees?
- Are any crisis coverage procedures worth rehearsing?
- What are the first steps expected in a crisis coverage situation?
- What is next in planning for extended coverage?
- Should supervisors be placed in the field in hazardous situations?

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- Is the newsroom phone system up to a crisis situation? Are there enough cell phones for reporters, editors, crews and managers?
 - Where can specialized road vehicles be rented in an emergency?
 - Where can specialized clothing and gear be quickly obtained to cope with hazardous materials?
 - What is the newsroom's access to helicopters, airplanes and boats?
 - What are the options if the newsroom and/or master control computers go out?
 - Do the strongest lines of communication exist with area hospitals? Would they allow broadcasting from their facility if necessary?
 - Are there arrangements for sleeping and feeding staff during a crisis, whether short or extended?
 - Is there a plan for supplying and feeding reporters and crews at remote locations? For relieving them? For creating a system of platoon staffing?
 - Is an alternative newsroom site possible?
 - How is staff notified in an emergency? Is there a backup plan?
 - Is there potential for media partners if broadcast or print abilities are lost?
 - Are employee security ID cards adequate, with ID photos?
 - Should gear be sent home with photographers and broadcast crews?
 - Should non-newsroom personnel be used to augment newsroom staff in crisis situations?
 - Is it time to upgrade your newsroom crisis coverage preparedness?



Resources for Reaching Special Needs Populations

Beyond the reach of much of the media are special needs populations such as people with physical and developmental disabilities, people who are blind or deaf, the rural poor and those for whom language is a barrier. In the 2003 state survey commissioned by the Kentucky Cabinet for Health and Family Services /Department for Public Health (CHFS/DPH), these groups were found to have very distinct and well-established “communication” channels with others in their communities and typically relied much less on mainstream media for news and information. The state of Kentucky has responded to those findings by developing and maintaining direct communication with the leadership of institutions and channels that these challenged populations trust.

Nevertheless, the media — primarily television — remain a trusted source of information for many people with special needs. When delivering disaster information to special needs populations the following may apply:

- Scrawling text messages at the bottom of a television screen can clash with closed-captioned messages.
- Sign language interpreters on screen provide assistance to hearing-impaired audiences.
- Telephone numbers for a text telephone or telecommunications device for the deaf can be offered when giving out emergency telephone numbers to the public.
- Simplified messages help those with cognitive difficulties.
- Information in alternate languages or such alternative formats as Braille, cassettes, large fonts, etc., can be offered to assist special needs populations.
- Leaders within special needs populations can be contacted to learn how your news organization might better reach these groups with disaster information.

The following resources may help media representatives address how to reach special needs populations.

chapter 6



Sign Language Interpretation Services

Kentucky Commission on the Deaf and Hard of Hearing | <http://kcdhh.ky.gov/>

Association of the Deaf | <http://www.kydeaf.org>

Kentucky Registry of Interpreters for the Deaf | <http://www.kyrid.org>

School for the Deaf | <http://www.ksd.k12.ky.us>

Emergency/Hotline phone numbers

Poison Control Hotline | 800-222-1222

Disease Reporting Hotline | 888-9REPORT

Emergency and DUI Hotline | 800-222-5555

Traffic/Travel information | In-state Toll Free Dial 511 or Outside Ky 866-737-3767

KSP Missing Persons Hotline | 800-543-7723

Arson Hotline | 800-272-7766

Marijuana and Drug Hotline | 800-367-3847

Kentucky State Police

<http://www.kentuckystatepolice.org/contact.htm>

Individual Post Phone Numbers

Post 1 (Mayfield) | 270-856-3721

Post 2 (Madisonville) | 270-676-3313

Post 3 (Bowling Green) | 270-782-2010

Post 4 (Elizabethtown) | 270-766-5078

Post 5 (Campbellsburg) | 502-532-6363

Post 6 (Dry Ridge) | 859-428-1212

Post 7 (Richmond) | 859-623-2404

Post 8 (Morehead) | 606-784-4127

Post 9 (Pikeville) | 606-433-7711

Post 10 (Harlan) | 606-573-3131

Post 11 (London) | 606-878-6622

Post 12 (Frankfort) | 502-227-2221

Post 13 (Hazard) | 606-435-6069

Post 14 (Ashland) | 606-928-6421

Post 15 (Columbia) | 270-384-4796

Post 16 (Henderson) | 270-826-3312

Kentucky State Police Community Relations

<http://www.kentuckystatepolice.org/news.htm> | 502-695-6300 | ksppubaf@ky.gov

Kentucky State Police Laboratories

Central Forensic Laboratory | 502-564-5230

Western Regional Forensic Laboratory | 270-824-7540

Jefferson Regional Forensic Laboratory | 502-426-8240

Northern Regional Forensic Laboratory | 859-441-2220

Eastern Regional Forensic Laboratory | 606-929-9142

Southeastern Regional Forensic Laboratory | 606-877-1464

Kentucky State Police Human Resources

502-695-6360 | ksprecruit@ky.gov | <http://www.kentuckystatepolice.org/contact.htm>

KSP Webmaster: 502-695-6343 | MichaelT.Morrison@ky.gov

Other

Media Contacts/Information - CHFS Communications Office | 502-564-6786

Bioterrorism Division of Epidemiology and Health Planning | 502-564-3261

Commissioner's Office | 502-564-3970

Department for Public Health Organization Information | 502-564-3970

Division of Adult and Child Health | 502-564-4830

Text Telephone/Telecommunication Device for the Deaf:

Kentucky Assistive Technology Service (KATS) Network

Charles McDowell Rehabilitation Center

502-429-4484 | TDD: 800-327-5287 | <http://www.katsnet.org>

Public TDD/TTY Telephone Locations:

Northern Kentucky University/Campus Library

Remke's Market/Ft. Mitchell, Ky.

Riverside Market/Dayton, Ky.

Interpretation Services in Other Languages

Louisville Metro Office for International Affairs
400 South First Street | Louisville, KY 40202
502-574-4774 | Fax: 502-574-1477

Sample Messages in a Simple Format Those with Cognitive Disabilities Could Understand

Audio Studio (Repair facility in Kentucky School for the Blind)
1867 Frankfort Ave. | Louisville, KY 40206

Recording Studio, Anchorage Presbyterian Church
11403 Park Rd. | Anchorage, KY 40203

Enabling Technologies of Kentuckiana | Spalding University
851 South 4th Street | Administration Building Room 011

Louisville, KY 40203

Voice/Text Telephone: 502-585-9911 ext. 2648

Toll Free: 1-800-896-8941 ext. 2648

Kentucky Assistive Technology Service (KATS) Network
Charles McDowell Rehabilitation Center
502-327-0022 | TDD: 800-327-5287 | <http://www.katsnet.org>

A list of public places with Internet access is located in the appendices of this Guide.

Appendix A: Is Kentucky Really at Risk?

Yes. A “hazard analysis” for the state indicates that no populated area is hazard free. Effective disaster planning recognizes existing problems as well as potential problem areas and the Department for Public Health (DPH) plan highlights 17 areas of vulnerability in Kentucky. For the purpose of this Guide, several are worth noting.

Earthquakes

Along with the expected floods and severe weather patterns, earthquakes are a hazard within the region. Kentucky has a number of primary faults with a high risk of minor earthquake activity that could create a disruption of natural gas and petroleum pipelines that originate in western Kentucky.

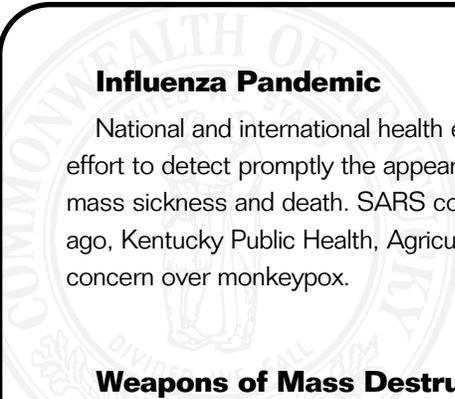
Transportation and Hazardous Materials Accidents

Potential transportation accidents involving hazardous materials on major U.S. highways that traverse the areas of highest population density create a constant threat of release of hazardous materials. Disruption of traffic on state roads and bridges could cause serious and lasting congestion. Hazardous materials accidents are one of the major potential emergencies in Kentucky and could originate from materials in transportation, industrial, residential, commercial or agricultural use — and could seriously compromise the quality of — air, ground or water.

Release of Chemical and Radioactive Agents

Chemical weapons are stockpiled at the Blue Grass Army Depot in Madison County. Uranium is stored at another location in the state. A release of any of these would pose a threat to people and the environment. Kentucky is also home to two major military sites — Fort Knox and Fort Campbell. Although Kentucky is not considered to be a primary target in the event of nuclear war, it could be subjected to radioactive fallout as a result of attacks on another area of the U.S.

appendices



Influenza Pandemic

National and international health experts are monitoring worldwide influenza illness in an effort to detect promptly the appearance of any new, more virulent strain, which could cause mass sickness and death. SARS continues to be a concern around the world and, not long ago, Kentucky Public Health, Agriculture and Fish and Wildlife officials responded to public concern over monkeypox.

Weapons of Mass Destruction

Weapons of Mass Destruction (nuclear, biological, chemical, explosive and incendiary events) are designed to inflict significant harm to people, animals and/or the environment. Kentucky is host to international and national events that receive major press coverage (e.g., Kentucky Derby); is located in a strategic position on major transportation routes used for movement of people, materials and energy across the eastern U.S.; and contains or is adjacent to important cities, military bases and manufacturing plants. These reasons combine to support the state's planning for all types of disaster, including bioterrorist or other WMD attacks.

Appendix B: Resources

- **Centers for Disease Control and Prevention**

<http://www.cdc.gov>

- **American College of Physicians—American Society of Internal Medicine**

<http://www.acponline.org/bioterro/>

- **The America Red Cross**

<http://www.redcross.org>

- **National Institutes of Health**

<http://www.nlm.nih.gov/medlineplus>

- **The Johns Hopkins University**

<http://www.jhsph.edu/preparedness>

- **The Journal of the American Medical Association**

<http://jama.ama-assn.org>

- **U.S. Department of Defense**

<http://www.anthrax.osd.mil>

- **The Washington Post**

<http://www.washingtonpost.com>

Kentucky Web sites

- **Kentucky Department of Public Health**

<http://chfs.ky.gov/dph/>

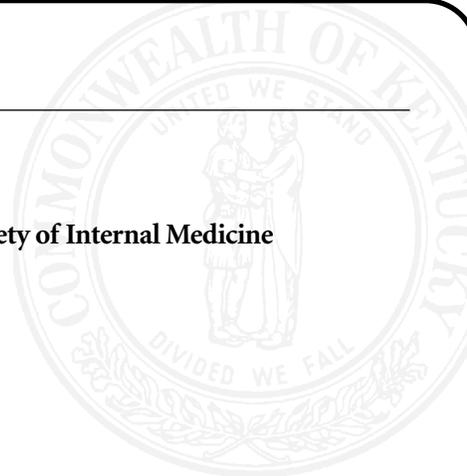
- **Cabinet for Health and Family Services Newsroom Site** <http://chfs.ky.gov/news/>

- **Kentucky Emergency Management and Homeland Security**

<http://kyem.ky.gov/>

- **Kentucky Community Crisis Response Board**

<http://kccrb.ky.gov/>



Appendix C: Public Places with Internet Access

KENTUCKY DEPARTMENT FOR LIBRARIES AND ARCHIVES

300 Coffee Tree Road | Frankfort, KY 40601
502-564-8300
<http://www.kdla.ky.gov>

ADISON COUNTY PUBLIC LIBRARY

Richmond, KY
859-623-6704

ALLEN COUNTY PUBLIC LIBRARY

Scottsville, KY
270-237-3861

ANDERSON COUNTY PUBLIC LIBRARY

Lawrenceburg, KY
502-839-6420

BATH COUNTY MEMORIAL LIBRARY

Owingsville, KY
606-674-2531

BOONE COUNTY PUBLIC LIBRARY

Union, KY
859-384-5550

BOWLING GREEN PUBLIC LIBRARY

Bowling Green, KY
270-781-4882

BOYD COUNTY PUBLIC LIBRARY

Ashland, KY
606-329-0518

BRACKEN COUNTY PUBLIC LIBRARY

Brooksville, KY
606-735-3620

BREATHITT COUNTY PUBLIC LIBRARY

Jackson, KY
606-666-5541

CARROLL COUNTY PUBLIC LIBRARY

Carrollton, KY
502-732-7020

CUMBERLAND COUNTY PUBLIC LIBRARY

Burkesville, KY
270-864-2207

DUERSON-OLDHAM COUNTY PUBLIC LIBRARY

LaGrange, KY
502-222-1141

ESTILL COUNTY PUBLIC LIBRARY

Irvine, KY
606-723-3030

FLOYD COUNTY PUBLIC LIBRARY

Prestonsburg, KY
606-886-2981

GALLATIN COUNTY PUBLIC LIBRARY

Warsaw, KY
859-567-2786

GARRARD COUNTY PUBLIC LIBRARY

Lancaster, KY
859-792-3424

GOODNIGHT MEMORIAL LIBRARY

Franklin, KY
270-586-8397

GREEN COUNTY PUBLIC LIBRARY

Greensburg, KY
270-932-7081

HARBIN MEMORIAL PUBLIC LIBRARY

Greenville, KY
270-338-4760

HARDIN COUNTY PUBLIC LIBRARY

Elizabethtown, KY
270-769-6337

HART COUNTY PUBLIC LIBRARY

Munfordville, KY
270-524-1953

HENDERSON COUNTY PUBLIC LIBRARY

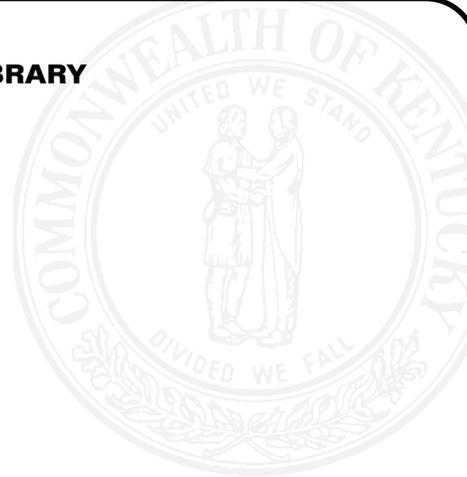
Henderson, KY
270-826-3712

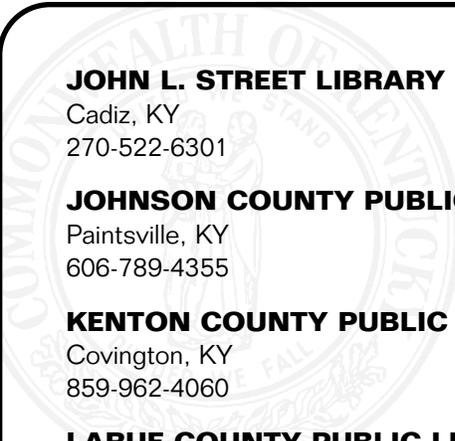
JESSAMINE COUNTY PUBLIC LIBRARY

Nicholasville, KY
859-885-3523

JOHN F. KENNEDY MEMORIAL PUBLIC LIBRARY

West Liberty, KY
606-743-4151





JOHN L. STREET LIBRARY

Cadiz, KY
270-522-6301

JOHNSON COUNTY PUBLIC LIBRARY

Paintsville, KY
606-789-4355

KENTON COUNTY PUBLIC LIBRARY

Covington, KY
859-962-4060

LARUE COUNTY PUBLIC LIBRARY

Hodgenville, KY
270-358-3851

LAUREL COUNTY PUBLIC LIBRARY

London, KY
606-864-5759

LAWRENCE COUNTY PUBLIC LIBRARY

Louisa, KY
606-638-4497

LEE COUNTY PUBLIC LIBRARY

Beattyville, KY
606-464-8014

LOGAN COUNTY PUBLIC LIBRARY

Russellville, KY
270-726-6129

LOUISVILLE FREE PUBLIC LIBRARY

Louisville, KY
502-574-1600

MADISON COUNTY PUBLIC LIBRARY

Richmond, KY
859-623-6704

MARSHALL COUNTY PUBLIC LIBRARY

Benton, KY
270-527-9969

MASON COUNTY PUBLIC LIBRARY

Maysville, KY
606-564-3286

MCCRACKEN COUNTY PUBLIC LIBRARY

Paducah, KY
270-442-2510



MCCREARY COUNTY PUBLIC LIBRARY

Whitley City, KY
606-376-8738

MEADE COUNTY PUBLIC LIBRARY

Brandenburg, KY
270-422-2094

MERCER COUNTY PUBLIC LIBRARY

Harrodsburg, KY
859-734-3680

METCALFE COUNTY PUBLIC LIBRARY

Edmonton, KY
270-432-4981

MOUNT STERLING-MONTGOMERY COUNTY PUBLIC LIBRARY

Mount Sterling, KY
859-498-2404

NELSON COUNTY PUBLIC LIBRARY

Bardstown, KY
502-348-3714

NICHOLAS COUNTY MEMORIAL LIBRARY

Carlisle, KY
859-289-5595

OWEN COUNTY PUBLIC LIBRARY

Owentown, KY
502-484-3450

PAUL SAWYIER PUBLIC LIBRARY

Frankfort, KY
502-223-1658

PERRY COUNTY PUBLIC LIBRARY

Hazard, KY
606-436-2475

PIKE COUNTY PUBLIC LIBRARY DISTRICT

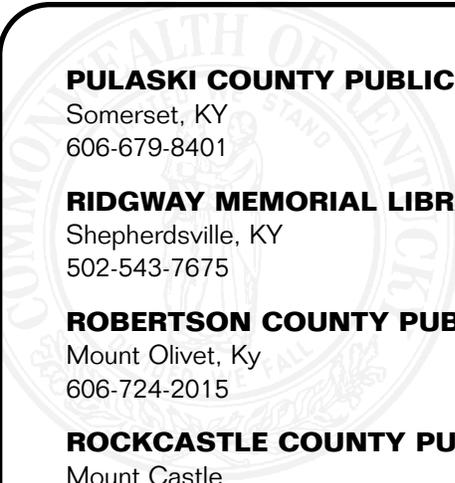
Administrative Offices
Pikeville, KY
606-432-9977

PINEVILLE PUBLIC LIBRARY

Pineville, KY
606-337-3422

POWELL COUNTY PUBLIC LIBRARY

Stanton, KY
606-663-4511



PULASKI COUNTY PUBLIC LIBRARY

Somerset, KY
606-679-8401

RIDGWAY MEMORIAL LIBRARY

Shepherdsville, KY
502-543-7675

ROBERTSON COUNTY PUBLIC LIBRARY

Mount Olivet, Ky
606-724-2015

ROCKCASTLE COUNTY PUBLIC LIBRARY

Mount Castle
606-256-2388

ROWAN COUNTY PUBLIC LIBRARY

Morehead, KY
606-784-7137

RUSSELL COUNTY PUBLIC LIBRARY

Jamestown, KY
270-343-3545

SCOTT COUNTY PUBLIC LIBRARY

Georgetown, KY
502-863-3566

SHELBY COUNTY LIBRARY DISTRICT

Shelbyville, KY
502-633-3803

SPENCER COUNTY PUBLIC LIBRARY

Taylorsville, KY
502-477-8137

TAYLOR COUNTY PUBLIC LIBRARY

Campbellsville, KY
270-465-2562

TODD COUNTY PUBLIC LIBRARY

Elkton, KY
270-265-9071

UNION COUNTY PUBLIC LIBRARY

Morganfield, KY
270-389-1696

UNIVERSITY OF KENTUCKY

Lexington, KY
859-257-0500

WASHINGTON COUNTY PUBLIC LIBRARY

Springfield, KY
859-336-7655

WAYNE COUNTY PUBLIC LIBRARY

Monticello, KY
606-348-8565

WHITLEY COUNTY PUBLIC LIBRARY

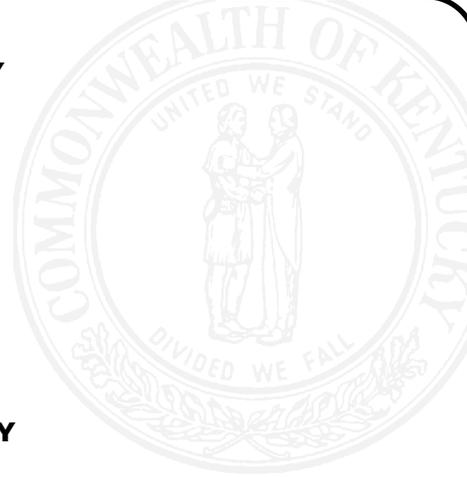
Williamsburg, KY
606-549-0818

WILLIAM B. HARLAN MEMORIAL LIBRARY

Tompkinsville, KY
270-487-5301

WOLFE COUNTY PUBLIC LIBRARY

Campton, KY
606-668-6571



Appendix D: Glossary of Terms/State Agencies

Accident

A deviation from normal operations or activities associated with a hazard that has the potential to result in an emergency.

ACWA

Assembled Chemical Weapons Assessment

Aerosols

Particles of material small enough to remain airborne and spread widely. They are small enough to be inhaled, but large enough to become lodged in the lungs rather than immediately exhaled. Used as a biological weapon.

Aflatoxin

Technically a chemical weapon, this agent is produced by fungi and is often times referred to as a biological weapon. Produced on a large scale by Iraq.

Agency for Toxic Substances And Disease Registry (ATSDR)

An agency of the U.S. Department of Health and Human Services that serves the public by using the best science, taking responsive public health actions and providing trusted health information to prevent harmful exposures and disease related to toxic substances.

AHA

American Heart Association

AHERA

Asbestos Hazard Emergency Response Act of 1986 (Title II of TSCA)

Airborne Infection

A mechanism of transmission of an infectious agent by particle, dust or droplet nuclei suspended in the air.

Alert

An incident that has led to or could lead to a release to the environment of radioactive or other hazardous material. Such a release is not expected to require a response by an offsite response organization to protect the general public offsite.

Al Qaeda

A transnational terrorist organization that is suspected to have developing biological weapons capability.

AMRIID

The United States Army Medical Research Institute of Infectious Diseases located in Fort Detrick, Md. Conducts research focused on medical responses to biological weapon attacks and houses the military's largest Biosafety, Level 4, containment facility. This is usually referred to as USAMRIID.

ANSI

American National Standards Institute

Anthrax

Bacteria that can remain in dormant spore form for decades. It infects skin, lungs and gastrointestinal systems in humans. The pulmonary form is tiny particles and considered the most deadly. It is the most likely to be used in a biological attack.

Antibiotics

Used to treat bacterial diseases, but can be effective against plague and anthrax, however are useless against viruses, such as smallpox.

Antibody

Protein molecule formed by exposure to a "foreign" or extraneous substance (e.g., invading microorganisms responsible for infection or active immunization).

Antigen

A substance that is capable of inducing specific immune response. Introduction of an antigen may be by the invasion of infectious organisms, immunization, inhalation or ingestion.

ARC

American Red Cross

Association

The degree of statistical dependence between two or more events or variables. Events are said to be associated when they occur more frequently together than one would expect by chance.

Asymptomatic

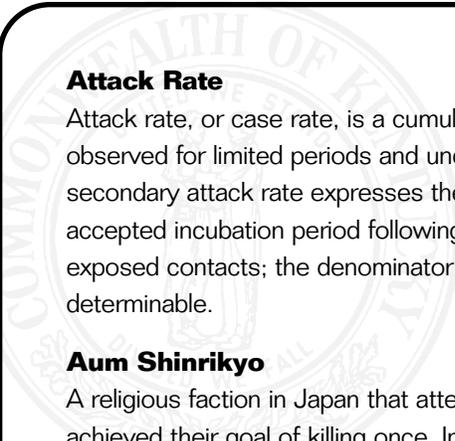
Presenting no symptoms of disease.

Atropine

A drug used to inhibit the actions of acetylcholine in the parasympathetic nervous system (e.g., dilation of the pupil).

ATSDR

Agency for Toxic Substances and Disease Registry is the agency responsible for prevention of human exposure to hazardous substances from hazardous waste sites. It is an agency of the USHHS and was founded as a result of the Superfund Law of 1980.

**Attack Rate**

Attack rate, or case rate, is a cumulative incident rate often used for particular groups, observed for limited periods and under special circumstances, as in an epidemic. The secondary attack rate expresses the number of cases among contacts occurring within the accepted incubation period following exposure to a primary case, in relation to the total of exposed contacts; the denominator may be restricted to susceptible contacts when determinable.

Aum Shinrikyo

A religious faction in Japan that attempted many biological weapons attacks, but only achieved their goal of killing once. In 1995, the group released Sarin, a chemical nerve gas, in the Tokyo subway system killing 12 people and injuring thousands more.

Australia Group

An informal association of nations, formed in 1985, dedicated to controlling the export of any items that could be used as or produce biological and chemical weapons.

AWT

Advanced Wastewater Treatment

BACT

Best Available Control Technology

Bacteria

Single-celled organisms, which release destructive toxins that can infect humans, usually through penetration of the lungs, skin or intestines.

BAT

Best Available Technology

BCT

Best Conventional Pollutant Control Technology

Behavioral Epidemic

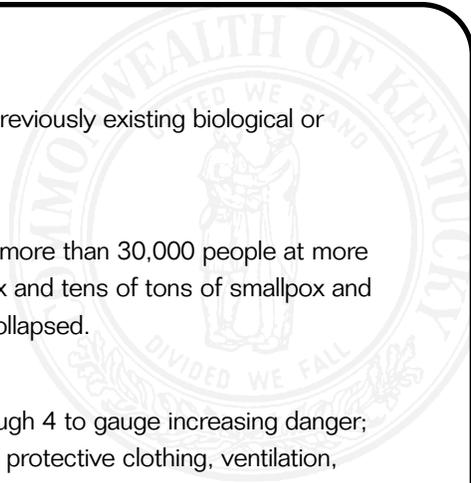
An epidemic originating in behavioral patterns (as opposed to invading microorganisms or physical agents).

BGAD

Blue Grass Army Depot

Biological and Toxins Weapons Convention (BWC)

The primary governance of biological weapons today, the Convention prohibits all activity associated with weapons production. The covenant was first signed in 1972; now 162 countries are signatories; and 144 have ratified it.



The seal of the Commonwealth of Kentucky is visible in the background, featuring a central figure holding a scale and a sword, surrounded by the text "COMMONWEALTH OF KENTUCKY" and "1792".

Biological plausibility

The criterion that an observed, causal association fits previously existing biological or medical knowledge.

Biopreparat

The Soviet biological weapons program that employed more than 30,000 people at more than 40 sites and produced hundreds of tons of anthrax and tens of tons of smallpox and plague, among other agents before the Soviet Union collapsed.

Biosafety

The CDC created containment Biosafety Levels 1 through 4 to gauge increasing danger; each require a specific precautionary measure, such as protective clothing, ventilation, construction, etc.

Bioweapon

A biological weapon that could be a type of bacteria, virus or biologically produced toxin that could be made into a weapon.

BOD

Biologic Oxygen Demand

Botulinum

A Category A biological agent, according to the CDC, produced by the bacterium *Clostridium botulinum* — one of the most poisonous substances.

BPT

Best Practicable Control Technology

Brucella

A Category B biological agent that contains toxin produced by bacteria and considered a potential bioweapon.

BSI

Body Substance Isolation refers to the protective equipment that protects health care workers from patient contact biohazards, such as latex gloves, goggles, masks, gowns, booties and cap.

BTU

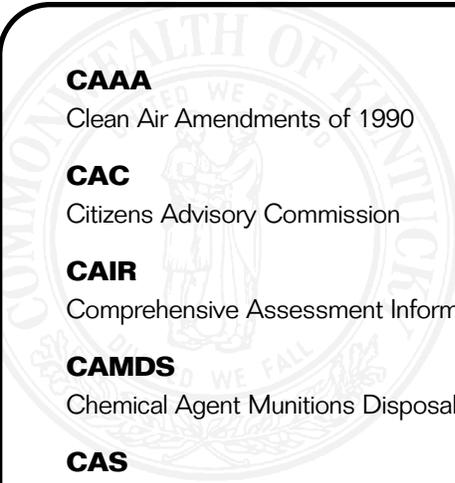
British Thermal Unit

Bubonic Plague

A form of bacterial disease usually transmitted by flea bites. It was responsible for the black death in medieval Europe, but is considered an unlikely weapon in modern times because of its incapability to cause high casualties.

CAA

Clean Air Act



CAAA

Clean Air Amendments of 1990

CAC

Citizens Advisory Commission

CAIR

Comprehensive Assessment Information Rule (under TSCA)

CAMDS

Chemical Agent Munitions Disposal System

CAS

Chemical Abstract Service

Carrier

A person or animal that harbors a specific infectious agent in the absence of discernible clinical disease and serves as a potential source of infection.

Case

A person in the population identified as having the particular disease, health disorder or condition under investigation.

Case fatality rate

The proportion of persons contracting a disease who die of that disease.

Category A

A group of biological agents, including anthrax, smallpox, plague, tularemia, botulinum and viral hemorrhagic fevers thought by the Centers for Disease Control and Prevention (CDC) to pose the greatest threat as biological weapons.

Category B

A group of biological weapons listed by the CDC as being moderately easy to disseminate. They can cause moderate amounts of disease and low fatality rates, but may require specific public health action.

Category C

A group of biological agents that might some day be engineered to produce biological weapons, including Hantavirus and Nipah virus.

CATT

Citizens Advisory Technical Team

CBN

Chemical, biological and nuclear weapons, collectively, or weapons of mass destruction.

CCP

Casualty Collection Point

CDC

Centers for Disease Control and Prevention. A U.S. agency, based in Atlanta, responsible for protecting the health and safety of people by employing disease prevention and control, environmental health and health promotion and education activities. Dr. Julie L. Gerberding is the current director.

CEPP

Chemical Emergency Preparedness Program

CERCLA

Comprehensive Environmental Response, Compensation and Liability Act (The Superfund Law)

CFCs

Chloroflourocarbons

CFR

Code of Federal Regulations

CHAOS

Chief Has Arrived on Scene

CHFS

Cabinet for Health and Family Services

Cesium-137

A radioactive isotope capable of causing biological damage.

Chemical Weapons

Weapons that use chemical agents to affect the skin, eyes, circulatory system, nervous system and/or respiratory system. Examples are tear gas, Sarin and cyanide.

Cidofovir

An antiviral treatment option for those suffering from adverse reactions to the smallpox vaccine.

Cipro-Floxacin

An antibiotic used to treat bacterial infections, such as anthrax and plague.

CISD

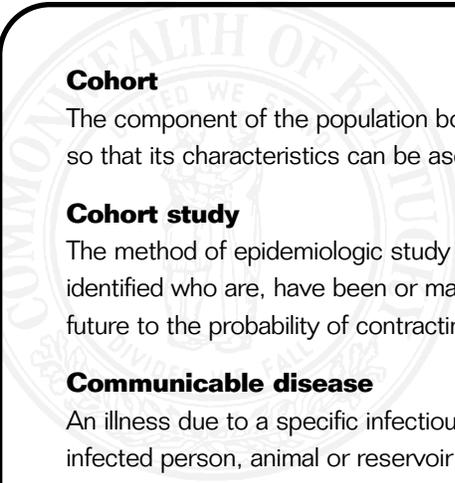
Critical Incident Stress Debriefing

Clustering

A closely grouped series of events or cases of a disease or other health-related phenomena with well-defined distribution patterns, in relation to time or place or both.

CO

Carbon Monoxide

**Cohort**

The component of the population born during a particular period and identified by that period so that its characteristics can be ascertained as it enters successive time and age periods.

Cohort study

The method of epidemiologic study in which subsets of a defined population can be identified who are, have been or may or may not be exposed in different degrees in the future to the probability of contracting a given disease.

Communicable disease

An illness due to a specific infectious agent or its toxic products that is transmitted from an infected person, animal or reservoir to a susceptible host, either directly or indirectly.

Contact (of an infection)

A person or animal that has been in physical association with an infected person or animal or contaminated environment, allowing the opportunity to acquire the infection.

Contact, direct

A mode of infection transmission between an infected host and susceptible host.

Contact, indirect

A mode of infection transmission involving fomites or vectors.

Contact, primary

Person(s) in direct contact or associated with a communicable disease case.

Contact, secondary

Person(s) in contact or associated with a primary contact.

Contagion

The process by which one person infected with a disease passes it to another, either through direct skin contact, inhaled aerosol or contact with contaminated materials.

Contamination

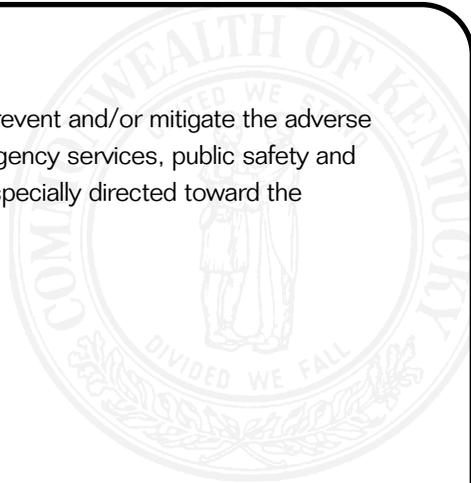
The presence of an infectious agent on a body surface; also on clothes, bedding, surgical instruments or other inanimate articles or substances; also the undesirable deposition of a chemical, biological or radiological material on the surface of structures, areas, objects or people.

CPSC

Consumer Product Safety Commission

Crisis Manager

Selected executive manager officially designated to assume command of the Emergency Operations Center during emergencies. He/she is authorized to declare an emergency, initiate the appropriate response and assign a Recovery Manager when emergency conditions no longer exist.



Critical Incident Stress Management (CISM)

An integrated “system” of interventions designed to prevent and/or mitigate the adverse psychological reactions that so often accompany emergency services, public safety and disaster response functions. CISM interventions are especially directed toward the mitigation of post-traumatic stress reactions.

CSDP

Chemical Stockpile Disposal Program

CSEPP

Chemical Stockpile Emergency Preparedness Program

Cuba

A nation currently on the State Department’s list of state sponsors of terrorism.

CWA

Clean Water Act

CWC

Chemical Weapons Convention, 1997

CWWG

Chemical Weapons Working Group

Cutaneous

The process of contracting through direct contact with the skin such possible bioweapons as anthrax, plague and smallpox.

CZM

Coastal Zone Management

Damage Assessment

The process used to appraise or determine the number of injuries and deaths, damage to public and private property and status of key facilities and services, such as hospitals and other health care facilities, fire and police stations, communication networks, water and sanitation systems, utilities and transportation networks, resulting from a man-made or natural disaster.

DAT

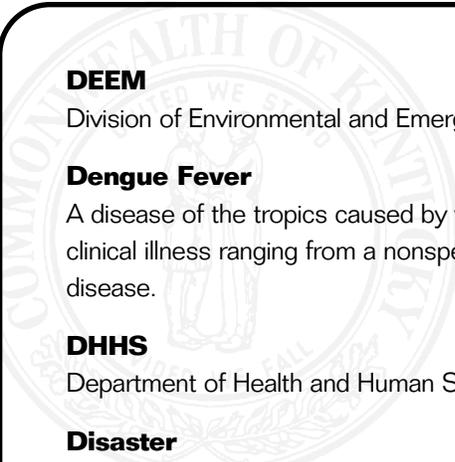
Damage Assessment Team

Death rate

A rate expressing the proportion of a population that dies of a disease.

Decontamination

The reduction or removal of a chemical, biological or radiological material from the surface of a structure, area, object or person.

**DEEM**

Division of Environmental and Emergency Management

Dengue Fever

A disease of the tropics caused by viruses carried by mosquitoes, producing a spectrum of clinical illness ranging from a nonspecific viral syndrome to severe and fatal hemorrhagic disease.

DHHS

Department of Health and Human Services

Disaster

An occurrence of a natural catastrophe, technological accident or human-caused event that has resulted in severe property damage, deaths and/or multiple injuries. A “large-scale disaster” is one that exceeds the response capability of the local jurisdiction and requires state and potentially federal involvement. As used in the Stafford Act, a “major disaster” is “any natural catastrophe [...] or, regardless of cause, any fire, flood or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under [the] Act to supplement the efforts and available resources of states, local governments and disaster relief organizations in alleviating the damage, loss, hardship or suffering caused thereby.”

Disaster Field Office (DFO)

The office established in or near the designated area of a Presidential-declared major disaster to support federal and state response and recovery operations. The DFO houses the Federal Controlling Officer and Emergency Response Team, and where possible, the State Coordinating Office and support staff.

Disaster Mortuary Service Teams (D-Mort)

Team responsible for advising and assisting local and state personnel with a mass fatalities incident in their locality.

Disaster Recovery Center (DRC)

Places established in the area of a Presidential-declared major disaster, as soon as practicable, to provide victims the opportunity to apply in person for assistance and/or obtain information relating to that assistance. DRCs are staffed by local, state and federal agency representatives as well as staff from volunteer organizations (e.g., the American Red Cross).

Disease, preclinical

Disease with no signs or symptoms because they have not yet developed.

Disease, subclinical

A condition in which disease is detectable by special tests, but does not reveal itself by signs or symptoms.

Disinfection

Killing of infectious agents outside of the body by direct exposure to chemical or physical agents.

DMAT

Disaster Medical Assistance Team

Dose Rate

The amount of ionizing radiation that an individual would absorb per unit of time.

Dose response relationship

A relationship in which a change in amount, intensity or duration of exposure is associated with a change — either an increase or decrease in risk.

Dosimeter

An instrument for measuring and registering total accumulated exposure to ionizing radiation.

DOT

Department of Transportation is the agency responsible for the transportation of hazardous materials.

DOT-E

Designation of materials exempt from Department of Transportation regulations.

Doxycycline

An antibiotic used to treat certain bacterial infections, such as anthrax and plague.

DPH

Department for Public Health

DRT

Dead Right There

DSR

Damage Survey Report

Ebola

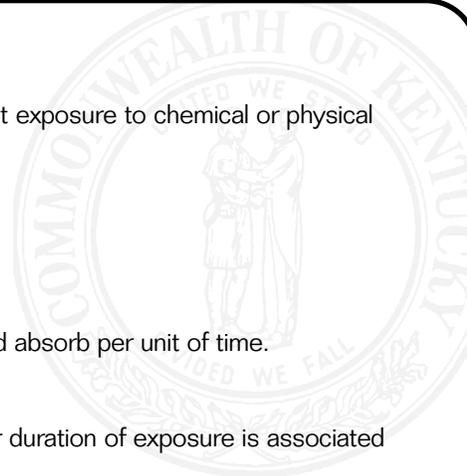
A viral hemorrhagic fever with fatality rates ranging from 50 to 90 percent.

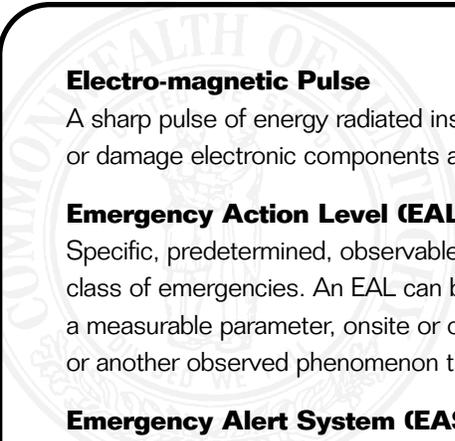
Eczema

A condition characterized by scratchy, itchy, red, dry, blistered and/or leathery skin.

EKU

Eastern Kentucky University





Electro-magnetic Pulse

A sharp pulse of energy radiated instantaneously by a nuclear detonation, which may affect or damage electronic components and equipment.

Emergency Action Level (EAL)

Specific, predetermined, observable criteria used to detect, recognize and determine the class of emergencies. An EAL can be an instrument reading; an equipment status indicator; a measurable parameter, onsite or offsite; a discrete, observable event; results of analyses; or another observed phenomenon that indicates entry into a particular emergency class.

Emergency Alert System (EAS)/ Emergency Broadcast System (EBS)

A digital technology (voice/text) communication system consisting of broadcast stations and interconnecting facilities, authorized by the Federal Communication Commission (FCC). The system provides the President and other national, state and local officials the means to broadcast emergency information to the public before, during and after disasters.

Emergency Environmental Health Services

Services required to correct or improve damaging environmental health effects on humans, including inspection for food contamination, inspection for water contamination and vector control; providing for sewage and solid waste inspection and disposal; cleanup and disposal of hazardous materials; and sanitation inspection for emergency shelter facilities.

Emergency Health Services

Services required to prevent and treat the damaging health effects of an emergency, including communicable disease control; immunization; laboratory services; dental and nutritional services; providing first aid for treatment of ambulatory patients and those with minor injuries; providing public health information on emergency treatment, prevention and control; and providing administrative support, including maintenance of vital records and providing for emergency health funds from state and federal governments.

Emergency Medical Services

Services, including personnel, facilities and equipment, required to ensure proper medical care for the sick and injured. This would be in effect from the time of injury to the time of final disposition, whether medical disposition within a hospital, temporary medical facility or special care facility, release from site or death. Further, emergency medical services specifically include those services immediately required to ensure proper medical care and specialized treatment for patients in a hospital and coordination of related hospital services.

Emergency Mortuary Services

Services required to ensure adequate death investigation, identification and disposition of bodies; removal, temporary storage and transportation of bodies to temporary morgue facilities; notification of next of kin; and coordination of mortuary services and burial of unclaimed bodies.

Emergency Plan and Implementing Procedures (EPIP)

A document that describes a process, rules or consequences of actions to achieve a desired outcome or to provide direction to implement a policy or to meet the operational objectives in a consistent manner. A procedure that delineates individual or organizational roles and responsibilities and methods to meet the minimum requirements to applicable standards.

Emergency Planning and Community Right-to-Know Act (EPCRA)

An act that contains four provisions: addresses planning for chemical emergencies, emergency notification of chemical accidents and releases, reporting of hazardous chemical inventories and toxic chemical release reporting.

Emergency Planning Zones (EPZ)

Areas for which planning is needed to ensure that prompt and effective actions are taken to protect the health and safety of the public if an accident or act of terrorism occurs. There are three possible emergency planning zones to consider:

Immediate Response Zone (IRZ): A circular zone ranging from 10 to 15 kilometers (six to nine miles) from the potential affected event source. Emergency response plans developed for the IRZ must provide for the most rapid and effective protective actions possible because the IRZ will have the highest risk and the least amount of warning time.

Protection Action Zone (PAZ): An area that extends beyond the IRZ to approximately 16 to 50 km (10 to 30 miles) from the affected area. The PAZ is that area where public protective actions may be necessary and where the available warning and response time are such that most people could shelter in place or evacuate.

Precautionary Zone (PZ): The outermost portion of the EPZ, extending from the PAZ outer boundary to a distance where the risk of adverse impacts to humans is negligible. Because of the increased warning and response time available for implementation of response actions in the PZ, detailed local emergency planning is not required, although consequence management planning may be appropriate.

Emergency Response Team (ERT)

Personnel assigned to respond to an emergency situation.

Emergency Response Team Advance Element (ERT-A)

For federal disaster response and recovery activities under the Stafford Act, the portion of the ERT that is first deployed to the field to respond to a disaster incident. The ERT-A is the nucleus of the full ERT.

Emergency Response Team National (ERT-N)

An ERT that has been established and rostered for deployment to catastrophic disasters where the resources of the FEMA region have been or are expected to be overwhelmed. Three ERT-Ns have been established.

Emergency Support Function (ESF)

In the Federal Response Plan, a functional area of response activity established to facilitate the delivery of federal assistance required during the immediate response phase of a disaster to save lives, protect property and public health and maintain public safety. ESFs represent those types of federal assistance that the state will most likely need because of the impact of a catastrophic or significant disaster on its own resources and response capabilities or because of the specialized or unique nature of the assistance required. ESF missions are designed to supplement state and local response efforts.

EMHIS

Environmental Health Management Information System

EMT

Emergency Medical Technician is a formally trained, nationally and state certified pre-hospital medical provider.

Encephalitis

An acute inflammatory process of the brain and central nervous system, most commonly caused by a virus carried by mosquitoes.

EPPC

Environmental and Public Protection Cabinet

Enterotoxin B

A toxin produced by *Staphylococcus* bacteria. It is listed by the CDC as a Category B potential bioweapon.

EOC

Emergency Operations Center

EOP

Emergency Operations Plan

EP

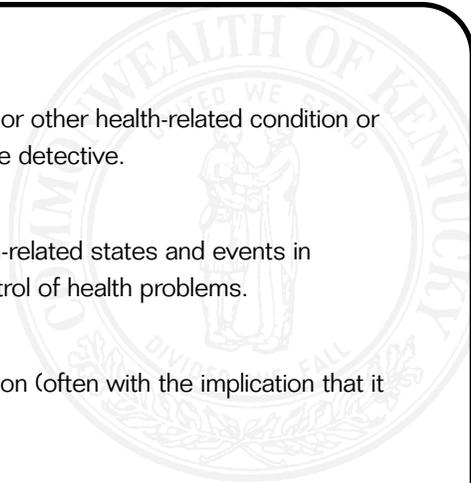
Extraction Procedure

EPA

Environmental Protection Agency

Epidemic

The occurrence in a community or region of cases of an illness or other health-related events clearly in excess of normal expectancy.

**Epidemiologist**

An investigator who studies the occurrence of disease or other health-related condition or events in a defined population. Also known as a disease detective.

Epidemiology

The study of the distribution and determinants of health-related states and events in populations and the application of this study to the control of health problems.

Epizootic

An outbreak (epidemic) of disease in an animal population (often with the implication that it may also affect human population).

Epsilon Toxin

Produced by the bacteria *Clostridium per fringens* and a common cause of food poisoning. It is listed by the CDC in Category B of potential bioweapons.

Eradication (of disease)

Termination of all transmission of infection by extermination of the infectious agent through surveillance and containment.

ERC

Emissions Reduction Credit

ERG

Emergency Response Guide is a DOT guidebook dealing with chemical and hazardous material matters for first responders.

ERP

Emergency Response Plan

Erythematous

Abnormal reddening of the skin due to capillary congestion.

ESA

Endangered Species Act

Evacuation

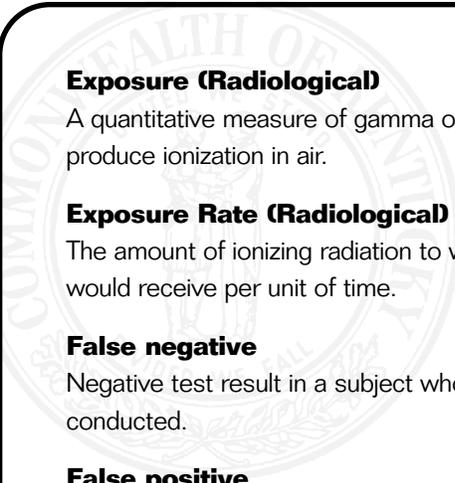
Organized, phased and supervised dispersal of people from dangerous or potentially dangerous areas.

Evacuees

All persons removed or moving from areas threatened or struck by a disaster.

Event

Any real-time occurrence or significant deviation from planned or expected behavior that could endanger or adversely affect people, property or the environment.

**Exposure (Radiological)**

A quantitative measure of gamma or x-ray radiation at a certain place based on its ability to produce ionization in air.

Exposure Rate (Radiological)

The amount of ionizing radiation to which an individual would be exposed or that he or she would receive per unit of time.

False negative

Negative test result in a subject who possesses the attribute for which the test is conducted.

False positive

Positive test result in a subject who does not possess the attribute for which the test is conducted.

Fatality rate

The death rate observed in a designated series of persons affected by a simultaneous event.

FCO

Federal Coordinating Officer, the person appointed by the President to coordinate federal assistance in a Presidential-declared emergency or major disaster.

Federal Radiological Emergency Response Plan (FRERP)

A plan that establishes an organized and integrated capability for timely, coordinated response by federal agencies to peacetime radiological emergencies.

Federal Response Plan (FRP)

A signed agreement among 27 federal departments and agencies, including the American Red Cross, that provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency.

FEMA

The U.S. Federal Emergency Management Administration. In case of a national emergency, including a biological weapons attack, this agency would be responsible for coordinating local and imported emergency response teams.

Field Assessment Team

A small team of pre-identified technical experts that conduct an assessment of response needs (not a preliminary damage assessment) immediately following a disaster. The experts are drawn from agencies and organizations, such as the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and the Federal Emergency Management Agency.

FIFRA

Federal Insecticide, Fungicide and Rodenticide Act

Flash Flood

Follows a situation in which rainfall is so intense and severe and runoff so rapid that it precludes recording and relating it to stream stages and other information in time to forecast a flood condition.

Flood

Normally dry land areas undergoing a general and temporary condition of partial or complete inundation from overflow of inland or tidal waters, unusual or rapid accumulation or runoff of surface waters or mudslides/mudflows caused by accumulation of water.

Flu

Also known as influenza.

Fomites

Articles that convey infection to others because they have been contaminated by pathogenic organisms. Examples include dishes, door handles and toys.

Foot and mouth disease (FMD)

A disease of cattle that could be used as a weapon because of its potential economic impact on beef sales, especially for export.

FQHC

Federally Qualified Health Center

Gamma radiation

Electromagnetic radiation (like visible light, radio waves and ultraviolet light) that readily penetrates most materials and is sometimes called "penetrating rad."

Geneva Protocol

The first multi-national faction, signed in 1925, to cover chemical and biological weapons.

Gentamicin

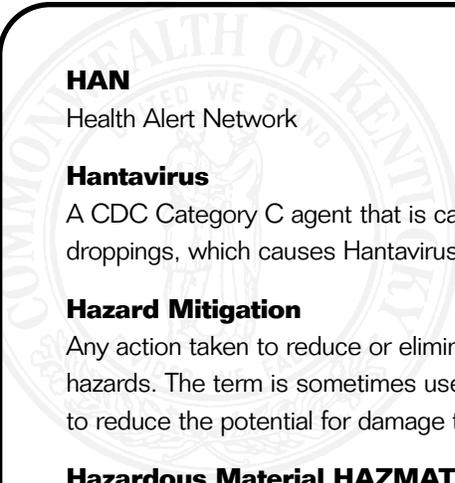
An antibiotic used to treat certain bacterial infections. It is administered intravenously and is therefore less efficient to administer in mass quantities.

Glanders

A highly lethal bacterial disease that can kill 50 percent of those exposed. Has been developed as a bioweapon and was used against livestock by Germany in World War I. The CDC lists it as Category B.

Governor's Authorized Representative

The person empowered by the Governor to execute, on behalf of the state, all necessary documents for disaster assistance.



HAN

Health Alert Network

Hantavirus

A CDC Category C agent that is carried by rodents and mostly transmitted through their droppings, which causes Hantavirus Pulmonary Syndrome.

Hazard Mitigation

Any action taken to reduce or eliminate the long-term risk to human life and property from hazards. The term is sometimes used in a stricter sense to mean cost-effective measures to reduce the potential for damage to a facility or facilities from a disaster event.

Hazardous Material HAZMAT

Any substance or material that when involved in an accident and released in sufficient quantities poses a risk to people's health, safety, and/or property. These substances and materials include explosives, radioactive materials, flammable liquids or solids, combustible liquids or solids, poisons, oxidizers, toxins and corrosive materials.

HCS

OSHA Hazard Communication Standard (Worker Right-To-Know)

Hemorrhage

Uncontrollable bleeding.

Hemorrhagic Fever

A severe multisystem syndrome (multisystem in that multiple organ systems in the body are affected) caused by a virus, such as the Ebola virus.

HEPA Filter

High-Efficiency Particulate Air filters are used to filter out submicron-sized particles; they are not suitable for use in biological work, however.

Herd immunity

The immunity of a group or community. The resistance of a group to invasion and spread of an infectious agent, based on the resistance to infection of a high proportion of individual members of the group.

HHS

Health and Human Services, the federal cabinet-level agency under which the CDC, NIH and other agencies are based.

High-Hazard Areas

Geographic locations that for planning purposes have been determined through historical experience and vulnerability analysis to be likely to experience the effects of a specific hazard (e.g., hurricane, earthquake, hazardous materials accident), resulting in vast property damage and loss of life.

HMTA

Hazardous Materials Transportation Act

Host

A person or other living animal, including birds and arthropods, that affords subsistence to an infectious agent under natural conditions.

Household interview study

A collection of information from a sample of a civilian noninstitutionalized population by trained interviewers who go to the dwellings of the persons selected for interview.

HRSA

Health Resources and Services Administration is the agency that provides health resources to traditionally medically underserved populations in the United States, such as homeless, residents of public housing, migrant workers and AIDS patients.

HSWA

Hazardous and Solid Waste Amendments

IARC

International Agency for Research on Cancer

IC

Infection Control

IC

Incident Commander

ICN

Infection Control Nurse

ICS

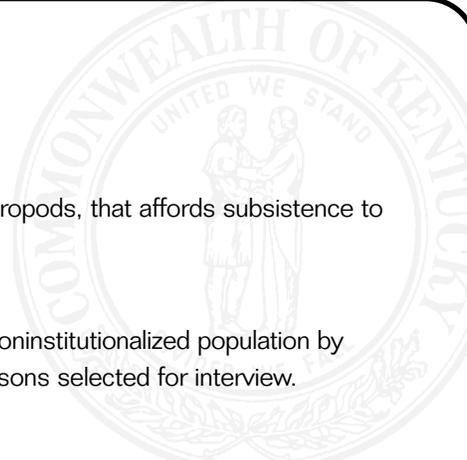
Incident Command System is a unified, efficient, orderly method of establishing an order of work, accountability, end-state to an emergency scene.

Immunization

Protection of susceptible individuals from communicable disease by administration of a living modified agent (as in measles), a suspension of killed organisms (as in whooping cough) or an inactivated toxin (as in tetanus).

Incidence

The number of instances of illness during a given period in a specified population.



Incident Command System (ICS)

A standardized organizational structure used to command, control and coordinate the use of resources and personnel that have responded to the scene of an emergency. The concepts and principles for ICS include common terminology, modular organization, integrated communication, unified command structure, consolidated action plan, manageable span of control, designated incident facilities and comprehensive resource management.

Incident rate

A measure of the rate at which new events occur in the population.

Incubation Period

The time interval between invasion by an infectious agent and appearance of the first sign or symptom of the disease in question.

Index case

The first case in a family or other defined group to come to the attention of the investigator.

Infection

The invasion of a body by microorganisms (bacteria, viruses or fungi), which can reproduce in the body to produce a disease or remain dormant for long periods.

Infectiousness

A characteristic of the disease that concerns the relative ease with which it is transmitted to other hosts.

Infective, Infectious

Capable of causing infection.

Influenza (flu)

A common viral infection with initial symptoms, such as fever, chills, nausea and cough. Because of the flu's resemblance to many other biological agents, it is a likely initial diagnosis for a disease actually caused by a bioterror attack.

Inoculation

Introduction of a vaccine (or other matter) into the body.

Inversion

A weather condition that can worsen the effects of the release of an outdoor biological agent. It is the act in which a cold layer of air traps warmer air close to the ground, preventing vertical mixing of air and allowing an aerosol to remain at ground level. Inversions typically occur at night, sunrise and sunset, but can persist for days.

Investigational new drug (IND)

A new drug, antibiotic drug or biological drug that is used in a clinical investigation. The term also includes a biological product that is used in vitro for diagnostic purposes.

Iran

One of the nations currently on the State Department's list of state sponsors of terrorism. Iran is presently believed to have large stockpiles of biological weapons, but details on this matter are unknown.

Iraq

One of the nations currently on the State Department's list of state sponsors of terrorism. In 1990, Iraq was known to possess mass quantities of biological weapons, but at this time the state of their program is unknown.

Isolation

The seclusion of an infected individual to prevent the spread of infection to others.

Israel

A nation that is believed to have a biological weapons program, but details are not known.

ITC

Interagency Testing Committee

JACADS

Johnston Atoll Chemical Agent Disposal System, Johnston Atoll, Pacific Ocean

Japan

This nation's Unit 731 used biological weapons on the Chinese people before and during World War II. The agents they used included anthrax, cholera and plague.

Joint Information Center (JIC) / Joint Public Information Center (JPIC)

A central point of contact for all news media near the scene of a large-scale disaster. News media representatives are kept informed of activities and events by public information officials who represent all participating federal, state and local agencies that are collocated at the JIC.

Joint Information System (JIS)

Under the Federal Response Plan, connection of public affairs personnel, decision-makers and news centers by electronic mail, fax and telephone when a single federal-state-local JIC is not a viable option.

JPSC

Justice and Public Safety Cabinet

KATS

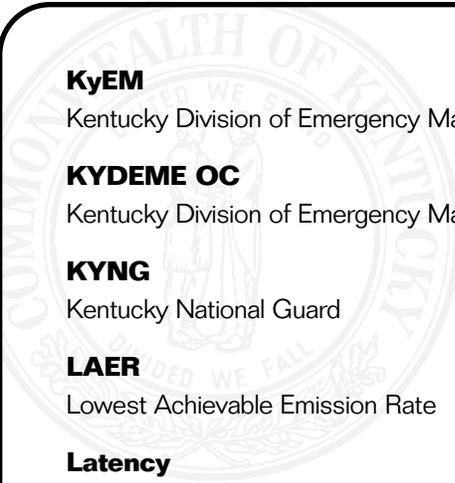
Kentucky Assistive Technology Service

KCCRB

Kentucky Community Crisis Response Board

KHA

Kentucky Hospital Association



KyEM

Kentucky Division of Emergency Management

KYDEME OC

Kentucky Division of Emergency Management Operations Center

KYNG

Kentucky National Guard

LAER

Lowest Achievable Emission Rate

Latency

The period between the exposure to a disease and the onset of symptoms.

Lead Federal Agency (LFA)

The federal agency that owns, authorizes, regulates or is otherwise deemed responsible for the activity causing the emergency and that has the authority to take whatever action necessary to stabilize the accident.

LEPC

Local Emergency Planning Committee

Lexis-Nexis

An online ADP service with which to search national and worldwide indices of legal, news, public records and business information.

LFCHD

Lexington-Fayette County Health Department

LFUCH

Lexington-Fayette Urban County Government

Local Emergency Planning Committee (LEPC)

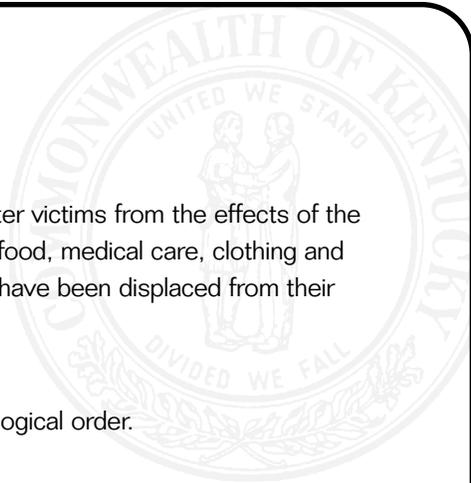
Committee that develops an emergency plan to prepare for and respond to chemical emergencies. Consists of representatives from community organizations, such as elected and local officials; law enforcement; civil defense; firefighting; first aid; health; local environmental and transportation agencies; hospitals; broadcast and print media; community groups; and representatives of facilities subject to the emergency planning and community right-to-know requirements.

LUST

Leaking Underground Storage Tanks

Mandatory or Directed Evacuation

This is a warning to persons within the designated area that an imminent threat to life and property exists, and individuals **MUST** evacuate in accordance with the instructions of local officials.

**Marburg**

A viral hemorrhagic fever, closely related to Ebola.

Mass Care

The actions taken to protect evacuees and other disaster victims from the effects of the disaster. Activities include providing temporary shelter, food, medical care, clothing and other essential life support needs to those people that have been displaced from their homes because of a disaster or threatened disaster.

Master Log

A log recording emergency and JIC events in a chronological order.

Material Safety Data Sheet (MSDS)

A form, maintained for each chemical used at a site, that lists data on fire, explosion and reactivity hazards; health information on exposure limits, effects of exposures and recommended first aid; physical and chemical properties; protective clothing requirements; handling precautions; and disposal procedures.

MCI

Mass Casualty Incident is defined by the number and severity of patients surpassing local resources, rescuers, medical facilities and transportation assets.

Melioidosis

A disease listed by the CDC as a Category B potential bioweapon that is caused by the *Burkholderia pseudomallei* bacteria.

Memorandum Of Agreement

A formally documented agreement usually between governmental organizations establishing cooperative agreements for sharing of resources or carrying out activities.

Metropolitan Medical Response System (MMRS)

This program originated in 1996 and was developed to increase coordination at all levels in the event of any incident involving weapons of mass destruction. Managed by the Office of Emergency Response (OER), it works with local police, fire, hazmat, EMS, hospital, public health and other emergency-response personnel in the event of a terrorist attack.

Milling

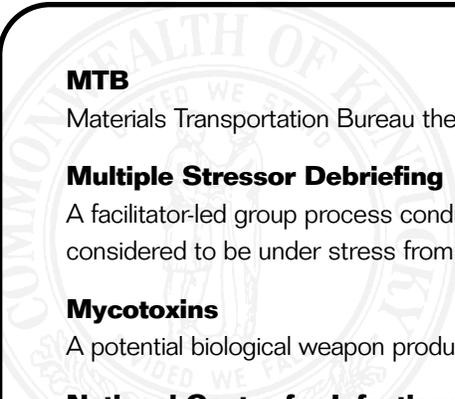
A mechanical process for powdering biological agents (bacteria or viruses) to produce uniform particles tiny enough to remain aloft in the air for long periods and easily inhaled and become lodged in the lung.

Morbidity

Illness.

MSDS

Material Safety Data Sheets

**MTB**

Materials Transportation Bureau the Department of Transportation

Multiple Stressor Debriefing

A facilitator-led group process conducted soon after a traumatic event with individuals considered to be under stress from trauma exposure.

Mycotoxins

A potential biological weapon produced by fungi including Tricothene.

National Center for Infectious Diseases (NCID)

A part of the CDC, the NCID's mission is to prevent illness, disability and death caused by infectious diseases in the United States and around the world.

NCEH

National Center for Environmental Health

NDMS

The National Disaster Medical System, which is a partnership between the U.S. Department of Health and Human Services, the Department of Defense, the Department of Veterans Affairs, FEMA, state and local governments, private businesses and civilian volunteers. Its core purpose is to coordinate response to a natural or terrorist emergency at all levels.

Negative-Pressure Room

A room in which air moves from adjacent spaces (e.g., the corridor) into the room. When negative pressure exists, a continuous air current enters the room under the door, which prevents airborne particles generated in the room from escaping into the corridor.

NEPA

National Environmental Policy Act

NESHAP

National Emissions Standard for Hazardous Air Pollutants

NFA

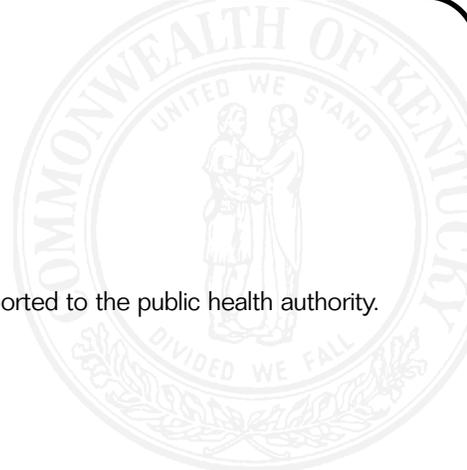
National Fire Academy is a national training academy of fire sciences providing services, education and training.

NIOSH

National Institute for Occupational Safety and Health

Nipah virus

A "new" virus discovered in Malaysia in 1999 and listed by the CDC as a Category C potential bioweapon. This virus is closely related to the Hendra virus in Australia, both have a mortality rate of 50 percent.



NOAA

National Oceanic and Atmospheric Administration

Nosocomial infection

An infection originating in a medical facility.

Notifiable disease

A disease that, by statutory requirements, must be reported to the public health authority.

Nox

A mixture of nitrous oxide and nitrous dioxide.

North Korea

One of the nations currently on the State Department's list of state sponsors of terrorism. North Korea is suspected to have a large stockpile of biological weapons, but details are not known.

Nosocomial Spread

The contraction of a disease while in a hospital.

NPDES

National Pollutant Discharge Elimination System

NPRM

Notice of Proposed Rulemaking

NRC

Nuclear Regulatory Commission or National Response Center

NREMT

National Registry Emergency Medical Technician

NSPS

New Source Performance Standards

NTP

National Toxicology Program

NTSB

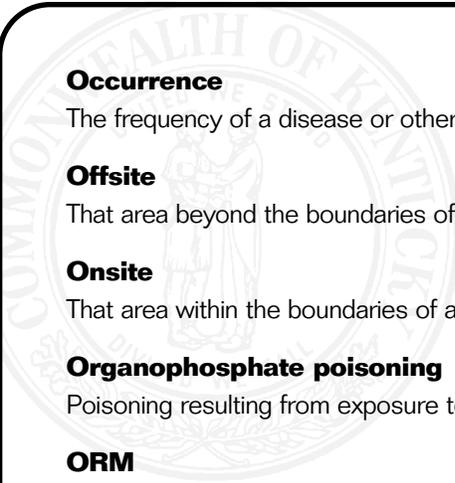
National Transportation Safety Board

Nuclear Detonation

An explosion resulting from fission and/or fusion reactions in nuclear material, such as that from a nuclear weapon.

NVOAD

National Voluntary Organizations Active in Disaster



Occurrence

The frequency of a disease or other attribute or event in a population.

Offsite

That area beyond the boundaries of the site (outside the fence).

Onsite

That area within the boundaries of a facility (inside the fence).

Organophosphate poisoning

Poisoning resulting from exposure to certain pesticides.

ORM

Other Regulated Materials

OSD

Office of the Secretary of Defense

OSHA

Occupational Safety and Health Administration

OSHRC

Occupational Safety and Health Review Commission

OTA

Office of Technology Assessment

Outcomes

All of the possible results that may stem from exposure to a causal factor or from preventive or treatment interventions.

Outliers

Observations differing widely from the rest of the data, suggesting that these values come from a different population.

Pandemic

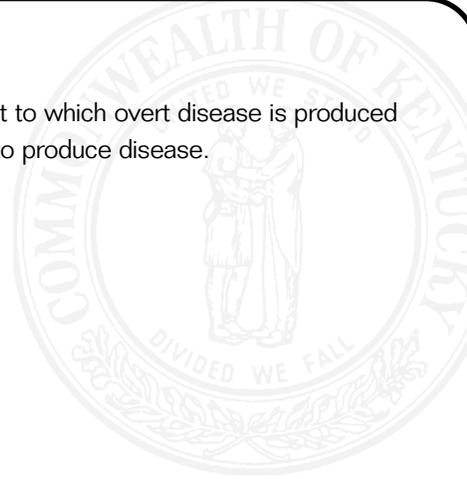
An epidemic occurring over a very wide area and usually affecting a large proportion of the population.

Parasite

An animal or vegetable organism that lives on or in another and derives its nourishment therefrom.

Pathogen

Any agent that causes a disease, such as a virus, bacteria, fungus or toxin.

**Pathogenicity**

The property of an organism that determines the extent to which overt disease is produced in an infected population or the power of an organism to produce disease.

PCBs

Polychlorinated biphenyls

PEL

Permissible Exposure Limit

PHS

Public Health Services

pH

Potential of Hydrogen — measure of acidity and alkalinity

Plague

A bacterial infection that can infect humans and occurs in three forms: bubonic, pneumonic and septicemic. Pneumonic plague is the only form that is contagious and would be the most likely to be used in a terror attack.

PM

10-micron Particulate Matter

PM ACWA

Program Manager Assembled Chemical Weapons Assessment

PMCD

Program Manager for Chemical Demilitarization

PMN

Premanufacture Notification (under TSCA)

Pneumonic

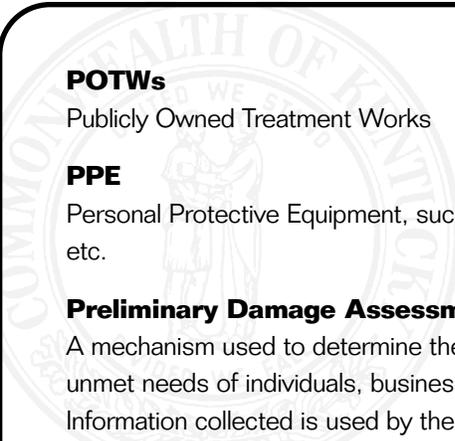
Contracted through the lungs, for example, pneumonic plague and pneumonic anthrax.

Population-based

Pertaining to a general population defined by geopolitical boundaries.

Post Traumatic Stress Disorder (PTSD)

An psychiatric disorder that can occur following the experience or witnessing of life-threatening events, such as military combat, natural disasters, terrorist incidents, serious accidents or violent personal assaults like rape. People who suffer from PTSD often relive the experience through nightmares and flashbacks, have difficulty sleeping and feel detached or estranged, and these symptoms can be severe enough and last long enough to significantly impair the person's daily life.

**POTWs**

Publicly Owned Treatment Works

PPE

Personal Protective Equipment, such as gloves, helmets, protective clothing, boots, masks, etc.

Preliminary Damage Assessment (PDA)

A mechanism used to determine the impact and magnitude of damage and the resulting unmet needs of individuals, businesses, the public sector and the community as a whole. Information collected is used by the state as a basis for the governor's request for a Presidential declaration and by FEMA to document the recommendation made to the President in response to the governor's request. PDAs are made by at least one state and one federal representative. A local government representative familiar with the extent and location of damage in the community often participates; other state and federal agencies and voluntary relief organizations may also be asked to participate as needed.

Prevalence

The number of instances of a given disease or other condition in a given population at a designated time.

Prevention

The goals of public health and medicine are to promote health, to preserve health, to restore health when it is impaired and to minimize suffering and distress.

Primary case

The individual who introduces the disease into the family or group under study.

ProAct

Preparedness and Response on Advanced Communication Technology

Prodromal period

A period during which premonitory symptoms of disease are shown; in smallpox, it is a period of fever, headache, backache and myalgias, followed quickly by the appearance of a maculopapular rash.

Protective Action

Physical measures, such as evacuation or sheltering, taken to prevent potential health hazards resulting from a release of hazardous materials to the environment from adversely affecting employees or the offsite population.

PRPs

Potentially Responsible Parties

PSD

Prevention of Significant Deterioration

psia

Pounds per Square Inch Available

Psittacosis

Listed by the CDC as a Category B potential bioweapon, this disease is caused by the *Chlamydia psittaci* bacteria.

Public Information Officer (PIO) / Public Affairs Officer (PAO)

A federal, state or local government official responsible for preparing and coordinating information given to the media and the public.

Pulmonary

Relating to the lungs.

Pustular

Small raised places on the skin containing pus and having an inflamed base.

Q fever

A bacterial disease listed by the CDC as a Category B potential bioweapon.

Quantitative data

Data in numerical quantities, such as continuous measurements or counts.

Quarantine

The process by which individuals who may have been exposed to a disease, but have not yet shown signs or symptoms, are restricted to a given area and kept apart from others not exposed to the disease.

Radiation Emergency Assistance Center/Training Site (REAC/TS)

A multipurpose medical facility located in Oak Ridge, Tennessee, prepared to deal with all types of radiation exposure emergencies, provide medical and health physics advice and assist in radiological emergencies.

Radiation Sickness

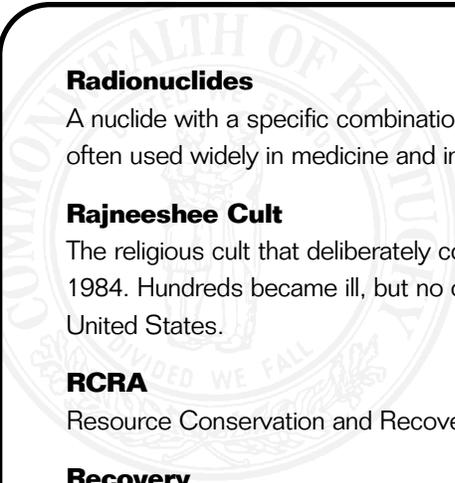
The symptom characterizing the sickness known as radiation injury, resulting from excessive exposure of the whole body to ionizing radiation.

Radiological Assistance Program (RAP)

A Department of Energy program that provides for radiological assistance to federal, state and major Nuclear Regulatory Commission licensees if an incident involves radioactive materials.

Radiological Monitoring

The process of locating and measuring radiation by means of survey instruments that can detect and measure (as exposure rates) ionizing radiation.

**Radionuclides**

A nuclide with a specific combination of protons and neutrons that is energetically unstable; often used widely in medicine and industry.

Rajneeshee Cult

The religious cult that deliberately contaminated salad bars with Salmonella in Oregon in 1984. Hundreds became ill, but no one died. This was the first incident of bioterrorism in the United States.

RCRA

Resource Conservation and Recovery Act of 1976

Recovery

The long-term activities beyond the initial crisis period and emergency response phase of disaster operations that focus on returning all systems in the community to a normal status or to reconstitute these systems to a new condition that is less vulnerable.

Regional Operating Center (ROC)

The temporary operations facility for the coordination of federal response and recovery activities, located at the FEMA Regional Office (or Federal Regional Center) and led by the FEMA Regional Director or Deputy Director until the DFO becomes operational. Once the ERT-A is deployed, the ROC performs a support role for federal staff at the disaster scene.

Relative risk

The ratio of the risk of disease or death among the exposed to the risk among the unexposed.

Remediation

The process of correcting or counteracting a problem.

Reservoir

The natural habitat of the infectious agent.

Resource Management

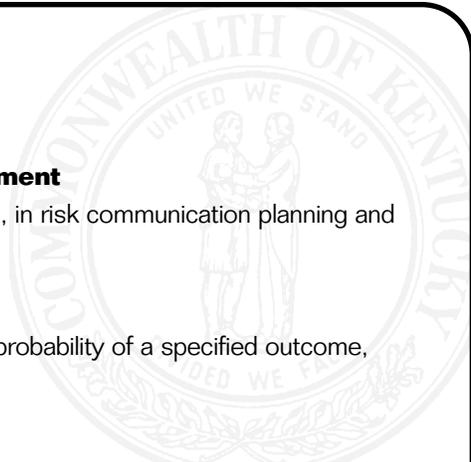
Those actions taken by a government to identify sources and obtain resources needed to support disaster response activities; coordinate the supply, allocation, distribution and delivery of resources so that they arrive where and when most needed; and maintain accountability for the resources used.

Rickettsia

Bacteria that respond to antibiotics, but have longer incubation periods like viruses and are not contagious. Examples are Q fever and typhus.

Ricin

A toxin produced by castor beans that is included in the CDC's Category B of potential bioweapons.



Risk

A probability that an event will occur.

Risk Communication Planning Needs Assessment

Process to determine gaps, both actual and anticipated, in risk communication planning and preparation.

Risk factor

An attribute of exposure associated with an increased probability of a specified outcome, such as the occurrence of a disease.

RSPA

Research and Special Programs Administration of the Department of Transportation

RTECS

Registry of Toxic Effects of Chemical Substances

Salmonella

A type of bacterium that can cause severe gastrointestinal symptoms when ingested.

SARA

Superfund Amendments and Reauthorization Act of 1987

Sarin

A toxic chemical warfare agent.

SCBA

Self-contained Breathing Apparatus that is used in atmospheres that are hazardous or could rapidly become hazardous, (for instance contaminated, super heated or oxygen deficient).

Screening

The use of tests or examinations to identify unrecognized disease.

SDWA

Safe Drinking Water Act

Sepsis

The presence of microorganisms in the blood.

Seroepidemiology

Epidemiologic study or activity based on the detection in serological testing of characteristic change in the serum level of specific antibodies.

Shelter-in-place

The action taken to utilize a barrier, often a building, to separate or shield individuals at risk from a hazardous material to minimize contact with the material or its hazardous effects.

**SIP**

State Implementation Plan

Smallpox

A contagious viral disease that has killed hundreds of millions of people. It is perhaps the most feared potential bioweapon.

SNUR

Significant New Use Rule

SOCMI

Synthetic Organic Chemical Industry

Soviet Union

The former Soviet Union had a massive biological weapons program called Biopreparat that employed tens of thousands of scientists and produced mass quantities of different types of biological agents.

SPCC Plan

Spill Prevention Control and Countermeasure Plan

Spontaneous Evacuation

Residents or citizens in the threatened areas observe an emergency event or receive unofficial word of an actual or perceived threat and, without receiving instructions to do so, elect to evacuate the area. Their movement, means and direction of travel are unorganized and unsupervised.

Spores

A dormant dehydrated form of bacteria that can be resistant to degradation by heat, ultraviolet and other agents that would destroy the living bacterium. An example could be anthrax in spore form.

SQG

Small Quantity Generator (of hazardous waste)

SRF

State-administered water pollution control Revolving Funds

Stability

The ability of a biological agent to retain its ability to cause disease over time and resist degradation.

Stafford Act

Robert T. Stafford Disaster Relief and Emergency Assistance Act, enacted to provide an orderly and continuing means of assistance by the federal government to state and local governments in carrying out their responsibilities to alleviate the suffering and damage that result from disasters.

START

Simple Triage and Rapid Treatment

State Coordinating Officer (SCO)

The person appointed by the governor to coordinate state commonwealth or territorial response and recovery activities with FRP-related activities of the federal government in cooperation with the FCO.

State Emergency Response Commission (SERC)

A commission that provides leadership, coordination, technical assistance and training, works closely with Local Emergency Planning Committees (LEPC) to help identify specific needs and carry out programs and uses knowledge and expertise to help all affected groups, organizations and individuals meet their responsibilities under the Emergency Planning and Community Right-to-Know Act (EPCRA, a.k.a., Sara Title III).

State Liaison

An official assigned to a particular state who handles initial coordination with the state in the early stages of an emergency.

State sponsors of terrorism

A State Department report "Patterns of Global Terrorism" contains a list of nations believed to be state sponsors of terrorism. The list includes Cuba, Iran, Iraq, Libya, North Korea, Syria and Sudan.

Statistical significance

Statistical methods that allow an estimate to be made of the probability for the observed or greater degree of association between independent and dependent variables under the null hypothesis.

Streptomycin

An antibiotic, administered intravenously, used to treat certain bacterial infections.

Sudan

One of the nations on the State Department's list of state sponsors of terrorism.

Surveillance

Ongoing scrutiny; generally, using methods distinguished by their practice-ability, uniformity and, frequently, their rabidity, rather than by complete accuracy.

Surveillance of disease

The continuing scrutiny of all aspects of occurrence and spread of a disease that is pertinent to initiate investigative or control measures.

Sverdlovsk

A location where anthrax was accidentally released from a Soviet bioweapons facility in 1979. At least 68 people were killed.

**SWDA**

Solid Waste Disposal Act

Syria

One of the nations on the State Department's list of state sponsors of terrorism.

TAR

Tone Alert Radio

TCDD

Tetrachlorobenzo-p-dioxin

Terrorism

The use of — or threatened use of — criminal violence against civilians or civilian infrastructure to achieve political ends through fear and intimidation rather than direct confrontation. Emergency management is typically concerned with the consequences of terrorist acts directed against large numbers of people (as opposed to political assassination or hijacking, which may also be considered “terrorism”).

TOCDF

Tooele Chemical Agent Disposal Facility, Tooele County, UT

Tornado

A local atmospheric storm, generally of short duration, formed by winds rotating at very high speeds, usually in a counter-clockwise direction. The vortex, up to several hundred yards wide, is visible to the observer as a whirlpool-like column of winds rotating about a hollow cavity or funnel. Winds may reach 300 miles per hour or higher.

Toxins

Poisonous substances produced by many different types of organisms, including bacteria, animals and plants.

Transmission

The process of passing a contagious disease from one individual to another.

Transmission of infection

Transmission of infectious agents. Any mechanism by which an infectious agent is spread through the environment or to another person.

Triage

Sorting according to a system of priorities.

TSCA

Toxic Substances Control Act gave the EPA the ability to track and report the hazard to environment and health of more than 75,000 domestically produced and imported chemicals. It gives the EPA power to ban unreasonably hazardous materials.

TSS

Total Suspended Solids (non-filterable)

Tularemia

A bacterial infection that is not contagious, but highly infectious. It can infect humans by multiple routes, but the most likely is thought to be inhalation of an aerosol.

Typhus fever

A disease caused by the *Rickettsia prowazekii* bacteria. It is listed by the CDC as a Category B potential bioweapon.

UIC

Underground Injection Control

UN

United Nations

United Nations Special Commission (UNSCOM)

This commission was established in the wake of the Gulf War to oversee the destruction of weapons of mass destruction.

UPAC

International Union of Pure and Applied Chemistry

Urban legends

Popular stories alleged to be true and transmitted from person to person by oral or written communication (e.g., fax or email). Stories typically comprise outlandish, humiliating, humorous, terrifying or supernatural events — events which, in the telling, always happened to someone else. The CDC's Health Related Hoaxes and Rumors Web site (http://www.cdc.gov/hoax_rumors.htm) lists current urban legends and whether there is any basis in fact for them.

USDW

Underground Source of Drinking Water

USFA

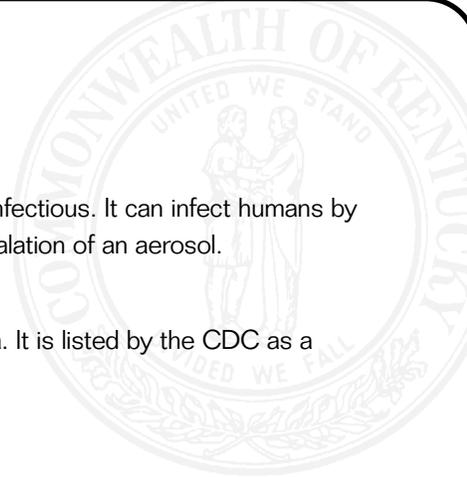
United States Fire Administration is an entity of FEMA. Its mission is to reduce the loss of life and economy due to fire and similar events.

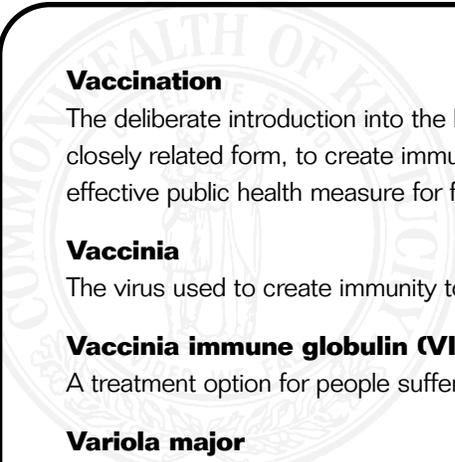
USHHS

U.S. Department of Health and Human Services is the principal agency for protecting the health of all Americans and providing essential human services.

UST

Underground Storage Tank



**Vaccination**

The deliberate introduction into the body of either a known pathogen, such as a virus or a closely related form, to create immunity against later exposure. It is considered the most effective public health measure for fighting many biological agents.

Vaccinia

The virus used to create immunity to smallpox in humans.

Vaccinia immune globulin (VIG)

A treatment option for people suffering from side effects from the smallpox vaccine.

Variola major

The more severe form of smallpox; would usually kill 30 to 50 percent of persons infected with it who were unvaccinated.

Vector

The Institute for Viral Preparations, Moscow. It is one of only two locations in the world officially permitted to hold stocks of the smallpox virus. The other is the Centers for Disease Control and Prevention in Atlanta.

Vector-borne

Illness that is transmitted through an invertebrate, such as an insect.

Vesicular

Composed of fluid-filled sacs, such as blisters.

VHAP

Volatile Hazardous Air Pollutant

VIE

Values, Interests, Expectations

Viral

Caused by a virus.

Viral Encephalitis

A virus listed by the CDC as a Category B potential bioweapon.

Viral hemorrhagic fevers (VHFs)

A group of viruses, including Ebola, that cause internal and external bleeding. Ebola is said to cause severe illness and has a high fatality rate, whereas other viruses in this family are not as severe and cause only mild illness.

Virulence

The ability of a disease agent to cause illness – sometimes expressed in a percentage of exposed people who will develop the disease.

Viruses

Organisms smaller than bacteria and unable to survive on their own. Viruses invade cells or humans and cause illness and death. They infect humans in a number of different ways: through the lungs (pulmonary), through the skin (cutaneous) or through food or drink (gastrointestinal).

VOC

Volatile Organic Compound

Voluntary Evacuation

A warning to persons within a designated area that a threat to life and property exists or is likely to exist in the immediate future. Individuals issued this type of warning or order are NOT required to evacuate; however, it would be to their advantage to do so.

Vozrozh-deniye Island

In 1971 three people died in a possible test of aerosolized smallpox in this location. A large vaccination effort was undertaken to control the outbreak.

Weapon-ization

The process that leads to a naturally occurring disease agent becoming a biological weapon.

WHO

The World Health Organization headquartered in Geneva, Switzerland. WHO is the primary coordinating body for global health programs and policy.

WMD

Weapons of Mass Destruction is the national concern of the use of nuclear, biological or chemical weapons against the civilian population of the United States by both foreign and domestic terrorists.

“Worried well”

This term is used for those who seek medical attention in the midst of a biological, chemical or nuclear attack because they are concerned they might be ill. It is later discovered that they are not ill.

Z list

OSHA list of hazardous chemicals

