

Bioterrorism

Allen County Public Health Preparations

Because of ongoing concerns about potential terrorist attacks, the U.S. government is working to improve overall preparation against terrorism. One aspect of this preparation is to learn more about protecting ourselves in the event of an attack using biological agents. This document focuses on common sense principles that will be useful in a bioterrorist attack.

If a public health emergency happens in our community, Allen County Public Health will be the local agency responsible for preparing and guiding medical response and public information efforts. During such an emergency, a critical role of the Public Health Department will be to work with other local first responders, such as fire and police. The Public Health Department will also coordinate response activities with state and federal agencies.

Allen County Public Health is providing this information to help you understand what response you may be asked to take in the event of a bioterrorist attack.

What is bioterrorism?

Biological agents are organisms or toxins that can kill or incapacitate people, livestock and crops. A biological attack is the deliberate release of germs or other biological substances that can make you sick.

The three basic groups of biological agents that would likely be used as weapons are bacteria, viruses and toxins. Most biological agents are difficult to grow and maintain. Many break down quickly when exposed to sunlight and other environmental factors, while others, such as anthrax spores, are very long lived. Biological agents can be dispersed by spraying them into the air, by infecting animals that carry the disease to humans and by

contaminating food and water. Delivery methods include:

- **Aerosols** - biological agents are dispersed into the air, forming a fine mist that may drift for miles. Inhaling the agent may cause disease in people or animals.
- **Animals** - some diseases are spread by insects and animals, such as fleas, mice, flies, mosquitoes and livestock.
- **Food and water contamination** - some pathogenic organisms and toxins may persist in food and water supplies. Most microbes can be killed, and toxins deactivated, by cooking food and boiling water. Most microbes are killed by boiling water for one minute, but some require longer. Follow official instructions.
- **Person-to-person** - spread of a few infectious agents is also possible. Humans have been the source of infection for smallpox, plague, and the Lassa viruses.

Specific information on biological agents is available through the [Centers for Disease Control and Prevention](#).

How can I prepare for a bioterrorist attack?

The following are things you can do to protect yourself, your family and your property from the effects of a biological threat:

- Build an [Emergency Supply Kit](#), which includes items like non-perishable food, water, a battery-powered or hand-crank radio, extra flashlights and batteries.
- Make a [Family Emergency Plan](#). Your family may not be together when disaster strikes, so it is important to know how you will contact one another, how you will get back together and what you will do in case of an emergency.
 - Plan places where your family will meet, both within and outside of your immediate neighborhood.
 - It may be easier to make a long-distance phone call than to call across town, so an out-of-town contact may be in a better position

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- to communicate among separated family members.
- You may also want to inquire about emergency plans at places where your family spends time: work, daycare and school. If no plans exist, consider volunteering to help create one.
- Knowing your community's warning systems and disaster plans.
- Notify caregivers and babysitters about your plan.
- Make plans for your pets
- Check with your doctor to ensure all required or suggested immunizations are up to date. Children and older adults are particularly vulnerable to biological agents.
- Consider installing a High-Efficiency Particulate Air (HEPA) filter in your furnace return duct. These filters remove particles in the 0.3 to 10 micron range and will filter out most biological agents that may enter your house. If you do not have a central heating or cooling system, a stand-alone portable HEPA filter can be used.

How do I respond during a bioterrorist attack?

The first evidence of an attack may be when you notice symptoms of the disease caused by exposure to an agent. Follow these guidelines during a biological threat:

- In the event of a biological attack, public health officials may not immediately be able to provide information on what you should do. It will take time to determine exactly what the illness is, how it should be treated, and who is in danger. However, you should watch TV, listen to the radio, or check the Internet for official news and information including signs and symptoms of the disease, areas in danger, if medications or vaccinations are being distributed and where you should seek medical attention if you become ill.
- If you become aware of an unusual and suspicious substance, quickly get away.
- Protect yourself. Cover your mouth and nose with layers of fabric that can filter the air but still allow breathing. Examples include two to three layers of cotton such as a t-shirt, handkerchief or towel. Otherwise, several layers of tissue or paper towels may help.
- There may be times when you would want to consider wearing a face mask to reduce spreading germs if you yourself are sick, or to avoid coming in contact with contagious germs if others around you are sick.
- If you have been exposed to a biological agent, remove and bag your clothes and personal items. Follow official instructions for disposal of contaminated items.
- Wash yourself with soap and water and put on clean clothes.
- Contact authorities and seek medical assistance. You may be advised to stay away from others or even quarantined.
- If a family member becomes sick, it is important to be suspicious.
- Do not assume, however, that you should go to a hospital emergency room or that any illness is the result of the biological attack. Symptoms of many common illnesses may overlap.
- Use common sense, practice good hygiene and cleanliness to avoid spreading germs, and seek medical advice.
- Consider if you are in the group or area authorities believe to be in danger.
- If your symptoms match those described and you are in the group considered at risk, immediately seek emergency medical attention.
- Follow instructions of doctors and other public health officials.
- If the disease is contagious expect to receive medical evaluation and treatment. You may be advised to stay away from others or even deliberately quarantined.
- For non-contagious diseases, expect to receive medical evaluation and treatment.

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- In a declared biological emergency or developing epidemic, there may be reason to stay away from crowds where others may be infected.

Protecting your air supply

While you may not be able to completely filter your air supply, taking these precautions may help limit your exposure to a biological agent.

Be prepared to improvise with what you have on hand to protect your nose, mouth, eyes and cuts in your skin. Anything that fits snugly over your nose and mouth, including any dense-weave cotton material, can help filter contaminants in an emergency. It is very important that most of the air you breathe comes through the mask or cloth, not around it. Do whatever you can to make the best fit possible for children. There are also a variety of face masks readily available in hardware stores that are rated based on how small a particle they can filter in an industrial setting. Simple cloth face masks can filter some of the airborne "junk" or germs you might breathe into your body, but will probably not protect you from chemical gases.

What should I do after an act of bioterrorism?

In some situations, such as the case of the anthrax letters sent in 2001, people may be alerted to potential exposure. If this is the case, pay close attention to all official warnings and instructions on how to proceed. The delivery of medical services for a biological event may be handled differently to respond to increased demand. The basic public health procedures and medical protocols for handling exposure to biological agents are the same as for any infectious disease. It is important for you to pay attention to official instructions via radio, television, and emergency alert systems.

If you have any questions about bioterrorism please contact Allen County Public Health at 419-228-4457. Health Department staff members are available to answer your questions Monday to Friday from 8:00 a.m. to 4:30 p.m.

You can also visit

www.allencountypublichealth.org. For information about putting together an Emergency Preparation Plan, visit the FEMA site at www.ready.gov. Also, see the Centers for Disease Control and Prevention's Web site at www.emergency.cdc.gov for additional information.