

# Bioterrorism Preparedness

## Are we protected?

**Public health is much better prepared to respond to a bioterrorist threat than it was before September 11, 2001.** However, as we witnessed in the response to Hurricane Katrina and recent terrorist threats around the world, more needs to be done to prevent and better respond to all hazards—future acts of bioterrorism, natural disasters and other public health emergencies and their adverse health consequences. Steps that still need to be taken include making a substantial investment in the recruitment, retention and training of the public health workforce; ensuring a dependable distribution system for needed countermeasures; ensuring adequate funding is available for all those responsible for preparedness; and protecting food and water supplies.

Ultimately, bioterrorism preparedness should go hand-in-hand with everyday public health activities. Programs such as immunization and chronic disease prevention programs cannot be neglected to pay for bioterrorism preparedness. In addition, careful attention needs to be paid to overtaxing public health professionals such as environmental health practitioners and nurses who are already stretched with their everyday responsibilities. In many cases, preparedness for bioterrorism and other emergencies is added to their existing responsibilities without adequate training or additional resources.

## Get the Facts on Bioterrorism Preparedness

- Bioterrorism preparedness is the responsibility of a complicated web of federal, state and local agencies and involves a wide array of professionals from planners, public health officials, nurses, fire and police personnel, to hospital and school personnel.
- No state or city is fully prepared to respond to a bioterrorist attack and its resulting health consequences.
- All 50 states have now developed bioterrorism response plans.
- All states have the systems necessary to rapidly detect a terrorist event through mandatory reportable disease detection systems.
- Thousands of state and local public health personnel have been funded with federal bioterrorism dollars. Without this stream of funding, these positions will be eliminated, exacerbating the current public health workforce shortage.
- Fewer than one-quarter of states and very few cities have achieved “green” status for the Strategic National Stockpile. Without this status, they won’t be able to receive countermeasures and medical supplies from the Strategic National Stockpile to administer and distribute during a public health emergency.
- Over 25 percent of states lack the capacity and infrastructure in their laboratories to respond in the event of a bioterrorist attack.
- 51 of 83 state and local Laboratory Response Network (LRN) reference laboratories have had delays receiving CDC-supplied reagents for detection of bioterrorist agents.
- 40 of the 51 State Public Health Laboratories have cited difficulty recruiting and retaining staff for bioterrorism preparedness.
- Many hospitals remain insufficiently prepared. Hospitals, in general, lack the ability to stockpile certain supplies and countermeasures in the event of a public health emergency. In the event of a bioterrorist attack or other public health emergency as pandemic flu, there will not be enough beds to provide care for a sharp increase in patients. Also, most hospitals do not have plans that address how to respond to a shortage of health care workers in the event of an emergency.

Sources: U.S. Department of Health and Human Services, Trust for America's Health, Association of Public Health Laboratories



## Bioterrorism Agents/Diseases

Agents and diseases used for bioterrorism are likely to be spread easily from person to person and cause severe illness and death. Bioterrorism agents are classified into three categories—A, B and C—depending on how easily they can be transmitted from person to person, how sick they make people and their death rates. Category A agents are those that pose the highest risk to the public's health and safety.

- **Anthrax is a Category A agent.** A serious disease caused by a bacterium that forms spores, anthrax is not known to be spread from one person to another. However, people can get infected with anthrax from animals, or when it is used as a weapon, as it was in 2001. There are three types of anthrax: skin, lung and digestive. Anthrax ingested through the lungs is the most severe, whereas anthrax infection on the skin can be cured with early treatment of antibiotics. In 2001, mail containing anthrax was sent to members of Congress and the news media.
- **Ricin is a Category B agent** that prevents cells from making the proteins they need, which causes cells in people it infects to die. People can be exposed to ricin by inhaling or swallowing it, or through skin and eye contact. As it commonly takes the form of a mist or powder, it was used as a weapon through the mail in 2004. The symptoms of ricin exposure vary depending on how someone is exposed to it and can range from difficulty breathing to nausea to seizures. There is no specific treatment for ricin poisoning; victims should seek medical attention immediately to minimize the health effects of the poisoning.
- **Hantavirus is a Category C agent.** Although preventable by eliminating or minimizing your contact with rodents, hantavirus—a disease that can be fatal—does not have a specific treatment. Many of its symptoms are like those of the flu and include fever and muscle aches, with advanced hantavirus causing lungs to fill with fluid.

Source: Centers for Disease Control and Prevention

## Legislative Activities APHA Is Supporting

- **APHA supports an increase in funding for state and local all-hazards preparedness** under the auspices of the Centers for Disease Control and Prevention (CDC).
- **APHA encourages adequate funding levels for the National Bioterrorism Hospital Preparedness Program** under the Health Resources and Services Administration (HRSA).
- **APHA supports the Public Health Preparedness Workforce Development Act**, which would create federally funded scholarship and student loan repayment programs for public health students and professionals.
- **APHA supports full funding of the Covered Countermeasures Process Fund.** An adequate compensation fund would ensure that people who receive countermeasures—such as vaccines—and become ill, disabled or die, receive compensation for their losses. Without such a fund, first responders and the public will hesitate to receive such countermeasures, as was witnessed during the smallpox vaccination campaign. This fund would also provide increased certainty for industry as it would guarantee demand for countermeasures, as people will be more likely to get vaccinated and receive a countermeasure if they have some protection against the worst-case scenario.
- **APHA supports a \$7.1 billion appropriation to help the nation prepare for pandemic influenza** as another vital step towards all-hazards preparedness. A “carve out” of these funds is necessary to ensure that states and localities have adequate resources to prepare—not only for pandemic flu, but for other public health emergencies as well. This should not be at the expense of other public health programs.

