release of disease-causing organisms. We continue to improve and fine-tune our statewide disease surveillance system.

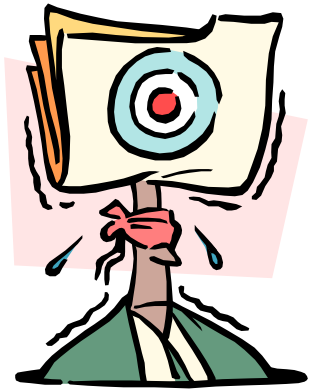
Are hospitals prepared to handle a sudden surge in demand for health care? Because a sudden surge in demand could overwhelm an individual hospital's resources, hospitals collaborate with other hospitals in their area in order to respond to a bioterror attack on a citywide or regional basis. Hospitals are required to maintain disaster response plans and to practice applying them as part of their accreditation process. It is important to know, in an emergency, federal agencies have resources, in place, to respond immediately to a local crisis with additional medical supplies and personnel. Additionally, in June 2002, The Health Resources and Services Administration (HRSA), awarded $1,024,136 to the State of Nevada to enhance hospital preparedness within the State.

With all this talk about possible biochemical agents, just how safe is our water? Should I be disinfecting my water just in case? The United States public water supply system is one of the safest in the world. The general public should continue to drink and use water just as they would under normal conditions. Local water treatment supplier and local governments are on the alert for any unusual activity and will notify you immediately in the event of any public health threat. At this point, we have no reason to believe that additional measures need to be taken. The U.S. Environmental Protection Agency (EPA) is the lead federal agency that makes recommendations about water utility issues. The EPA is working closely with the CDC and the U.S. Departments of Defense and Energy to help water agencies assess their systems, determine actions that need to be taken to guard against possible attack, and develop emergency response plans. For more information, visit http://www.epa.gov/safewater

Are health department labs equipped/capable of doing testing? The federal Centers for Disease Control and Prevention (CDC), the Association of Public Health Laboratories, and other officials are working together to ensure that all state health departments are capable of obtaining results of tests on suspected infectious agents. The nation's laboratories are generally classified as Level A, B, C, or D. Level A laboratories are those typically found in community hospitals and are designated to perform initial testing on all clinical specimens. Public health laboratories are usually Level B; these laboratories can confirm or refute preliminary test results and can usually perform antimicrobial susceptibility tests. Level C laboratories, which are reference facilities and can be public health laboratories, perform more rapid identification tests. Level D laboratories are designed to perform the most sophisticated tests and are located in federal facilities such as CDC. CDC is currently working with public and private laboratory partners to develop a formal a National Laboratory System linking all four Levels. Every state has a Laboratory Response Network (LRN). The LRN links state and local public health laboratories with advanced-capacity laboratories, including clinical, military, veterinary, agricultural, water, and food-testing laboratories. Nevada is in the process of upgrading its laboratory facilities in Reno and Las Vegas.

The best defense during any public health emergency is to avoid panic, report suspicious activities to local authorities, and tune in to the local emergency broadcast network via radio or television. *Follow* the advice of local public health officials.

9-2002/NSHD Public Information Office/J. Flamm/(775) 684-4221



BIOTERROR

What you need to know?

NEVADA STATE HEALTH DIVISION
Office of Public Information

HEALTHY NEVADANS 2010

Please visit our Website:
Health2k.state.nv.us
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What is bioterrorism? Bioterrorism is the intentional use of microorganisms or toxins derived from living organisms to produce death or disease in humans, animals, or plants. It is intended to generally intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

What are some of the agents we may encounter? CDC defines three categories of biologic agents with potential to be used as weapons, based on ease of dissemination or transmission, potential for major public health impact (e.g., high mortality), potential for public panic and social disruption. Agents of highest concern are Anthrax, Plague, Smallpox, Botulism, Tularemia, and Ebola hemorrhagic fever. The following summarizes the clinical features of these agents: **Anthrax.** A nonspecific symptom indicating the onset of a disease such as fever, difficulty breathing, cough, and chest discomfort, follows inhalation of infectious spores. Approximately 2--4 days after initial symptoms, sometimes after a brief period of improvement, respiratory failure and blood circulation collapse ensue. Inhalational anthrax also might include thoracic edema and a widened mediastinum on chest x-ray. Gram-positive bacilli can grow on blood culture, usually 2--3 days after onset of illness. Cutaneous anthrax follows exposure of the organism onto the skin, occurring particularly on exposed areas of the hands, arms, or face. A swelling, fluid-filled area becomes an itchy, discolored spot on the skin, which enlarges and ulcerates after 1--2 days. Small, 1--3 mm vesicles may surround the ulcer. A painless, depressed, black area forms usually with surrounding swelling subsequently develops. The syndrome also may include enlarged and painful lymph nodes. **Plague.** Clinical features of pneumonic plague include fever, cough with spitting of blood, and chest pain. A chest x-ray will show evidence of pneumonia. **Botulism.** Clinical features include symmetric neurological difficulties such as drooping eyelids, weakened jaw clench, and difficulty swallowing or speaking, blurred vision, and respiratory dysfunction from respiratory muscle paralysis or upper airway obstruction. Inhalation botulism would have a similar clinical presentation as food borne botulism; however, the gastrointestinal symptoms that accompany food borne botulism may be absent. **Smallpox (variola).** The acute clinical symptoms of smallpox resemble other acute viral illnesses, such as influenza, beginning with a 2--4 day nonspecific onset of symptoms of fever and weakness, before rash appears. Several clinical features can help clinicians differentiate varicella (chickenpox) from smallpox. The rash of varicella is most prominent on the trunk and develops in successive groups of lesions over several days, resulting in lesions in various stages of development and resolution. In comparison, the pus-filled rash of smallpox is typically most prominent on the face and extremities, and lesions develop at the same time. **Inhalational Tularemia.** Characterized by an abrupt onset of an acute, nonspecific fever illness beginning 3--5 days after exposure, with pneumonia developing in a substantial proportion of cases during subsequent days. **Viral Hemorrhagic Fevers** (filoviruses [e.g., Ebola, Marburg] and arenaviruses [e.g., Lassa, Machupo]). After an incubation period of usually 5--10 days (range: 2--19 days), illness is characterized by abrupt onset of fever, weakness, and headache. Other signs and symptoms include nausea and vomiting, abdominal pain, diarrhea, chest pain, cough, and sore throat. A rash, prominent on the trunk, develops in most patients approximately 5 days after onset of illness. Bleeding problems occur as the disease progresses. ALL OF THESE DISEASES REQUIRE PROMPT MEDICAL CARE.

Is Anthrax contagious? No. Anthrax is not contagious; the illness cannot be transmitted from person to person.

Can I get screened or tested to find out whether I have been exposed to Anthrax? There's no screening test for anthrax; there is no test that a physician can perform that says you've been exposed to or carry Anthrax. The only way exposure can be determined is through a public health investigation. The tests that you hear or read about, such as nasal swabs and environmental tests, are not tests to determine whether an individual should be treated. These tests are used only to determine the extent of exposure in a given setting.

If I receive a suspicious letter or package in the mail, what should I do? Do not open or shake. Place it in a plastic bag or container and seal. Leave the room, close the door, and evacuate. Wash your hands with soap and water. Call 911.

How can I know my cold or flu is not anthrax? Many human illnesses begin with what are commonly referred to as "flu-like" symptoms, such as fever and muscle aches. However, in most cases, anthrax can be distinguished from the flu because the flu has additional symptoms. In previous reports of anthrax cases, early symptoms usually did not include a runny nose, which is typical of the flu or cold.

Should I buy and store antibiotics? There is no need to buy or store antibiotics, and indeed, it may be detrimental to both the individual and the community. First, only people who are exposed to anthrax should take antibiotics, and health authorities must make the determination. Second, individuals may not stockpile or store the correct antibiotics. Third, under emergency plans, the federal authorities can ship appropriate antibiotics from its stockpile where needed.

What should I do to be prepared? We continue to hear stories of the public buying gas masks and hoarding medicine in anticipation of a possible bioterrorist or chemical attack. Nevada State Health Division does not recommend either. In the event of a public health emergency, local and state health departments will inform the public about the actions individuals need to take.

Does every city have an adequate emergency response system, especially one geared for a bioterrorist attack? How quickly can it be implemented? The emergency response system varies from community to community on the basis of each community's investment in its public health infrastructure. Nevada is preparing well for possible bioterror. In June 2002, Nevada received a $10.4 million dollar grant to adequately prepare for such an event. These funds are being used to strengthen Nevada's overall public health system so it may better respond to man-made threats, such as the deliberate