



Washington Regional Threat and Analysis Center

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Responding to a “White Powder” incident No Media Release

TITLE Responding to a “White Powder” incident	SERIES NUMBER 2008-264
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*WRTAC Analyst Notes: Due to the recent white powder incidents in multiple states (all deemed to be a hoax and sent from an identified location) the following information is provided for your information regarding **Biological Warfare**.*

History:

Terrorism involving biological weapons can range from putting deadly substances in the nation's food supply to the aerosolized release of a contagious virus over a city. The Biological Weapons Convention, signed in 1972, prohibits the manufacture, stockpiling and use of biological weapons. But there are several countries that continue to make and study them. Some countries' stockpiles are unaccounted for, as is the case with Iraq.

Weapons:

Center for Disease Control and Prevention's list of biological weapons classifications:

Category A - weapons most likely to be used in an attack; Anthrax (further description below), botulinum toxin, plague, ricin, smallpox, tularemia and viral hemorrhagic fevers

Category B- weapons are second-highest priority to the CDC, because they are fairly easy to disseminate, cause moderate amounts of disease and low fatality rates. But these weapons require specific public-health action such as improved diagnostic and detection systems. These agents include: Q fever, brucellosis, glanders, ricin, Enterotoxin B, viral encephalitis, food safety threats, water safety threats, melioidosis, psittacosis and typhus fever.

Category C- weapons, described by the CDC as "emerging infectious disease threats," are fairly easy to obtain, produce and disseminate and can produce high rates of disease and mortality. These include the Nipah virus and Hantavirus.

Delivery Systems:

Biological weapons can be aerosolized, meaning they can be spread into the air and inhaled by humans (inhalation). These weapons can also be put into food or water supplies, where they would be ingested (ingestion). Many will also cause harm if they contact human skin (cutaneous).

Symptoms: Symptoms can include flu-like symptoms, exhaustion, pneumonia, weight loss, stomach pain, diarrhea, respiratory failure and shock.

Treatment:

The presentation of symptoms from a biological weapons attack can vary from 3-4 days to weeks or months. Public health systems often can't identify a bioterrorism event because symptoms often mirror ones exhibited by a person with the common cold or the flu. Treatments include antidotes, antibiotics and vaccines.

In the event white powder is presented:

1. Notify 911 - request Law Enforcement & Fire/Haz Mat response
2. Isolate the delivery package (letter, box etc.) and refrain from further disturbance
3. Isolate the area in which the powder was discovered.
4. If possible - isolate HVAC
5. Isolate potentially exposed personnel away from others & away from the source.
6. Keep unexposed personnel out of area
7. Persons who came in contact should wash exposed skin (hands & face) and remove and bag any clothing which was contaminated with the powder.
8. When haz-mat arrives they will conduct field tests which can help rule out many hazardous materials. They will also conduct decon on exposed persons if field testing indicates a need for same.
9. If a threat is indicated or further analysis is needed, evidence would be turned over to JTTF for processing.

ANTHRAX (CDC Category A)

Overview: Anthrax is an infectious disease caused by the spore-forming *Bacillus anthracis* bacterium. Human anthrax can present in 3 major forms: inhalation (respiratory tract), cutaneous (skin), and gastrointestinal (ingestion). Naturally acquired anthrax cases are rare in the US and do not spread person to person. The most common form is cutaneous anthrax which accounts for 95% of US cases. Anthrax in animals is common in parts of Africa, Asia and the Middle East. In the US, pockets of infection have occurred in the Dakotas, Nebraska, Mississippi, Arkansas, Texas, Louisiana and California; sporadically found in other areas of the US. Anthrax has been weaponized in the past and has a high potential for bioterrorism.

Other Names: Wool sorters' disease, Cumberland disease, Malignant Carbuncle/Pustule

Occurrence:

- **Natural:**
 - **Animals:** grazing animals (domestic and wild) such as cattle, sheep, goats, horses
 - **Humans:** Sporadic cases due to handling infected animals or infected animal products. Does not spread person to person. Cutaneous form most common in US and accounts for over 95% of cases.
 - **Map:** http://www.vetmed.lsu.edu/whocc/mp_world.htm
- **Biowarfare:** A key indicator of intentional use of anthrax would be the **sudden appearance of the inhalational form of the disease in a discreet group of people within a common geographic area**. Anthrax is known to have been weaponized by Iraq and the former Soviet Union. Several other countries and terrorist groups have demonstrated the intent to weaponize anthrax.

Medical Course:

	Average incubation time	Early signs and symptoms	Late signs and symptoms	Mode of transmission
Inhalation	2-5 days	Fever, sore throat, fatigue, cough	Severe difficulty breathing, bluing of skin, shock, death	Inhaled spores
Cutaneous	Immediate to 3 days	Bumps on skin and blisters	Sores with black centers, skin swelling	Spores enter through breaks in skin
Gastrointestinal	1-7 days	Fever, loss of appetite, vomiting, diarrhea	High fever, disorientation, shock, death	Eating spores, usually in infected meat

Lethality:

- **Inhalation.** Untreated: **90-100%** Treated: improved, but usually diagnosed too late
- **Cutaneous.** Untreated: 25% Treated: <1%.
- **Gastrointestinal.** Untreated: estimated to be 25%-75% Treated: improved outcome.

Treatment:

- Early antibiotics
- Decontamination
- Vaccination (pre or post exposure)

Stability in the Environment:

- Very stable: viable for years in soil, water, milk, and silk

Additional information:

- Extremely stable in an aerosol.

<http://www.cidrap.umn.edu/idsa/bt/anthrax/biofacts/anthraxfactsheet.html>