

BIOLOGICAL AND CHEMICAL TERRORISM

Session Two –How Biological Agents Are Disbursed

Review: Last week we discussed the three basic groups of biological agents that would likely be used as weapons. Does anyone remember them?

Bacteria, Viruses, and Toxins.

These agents can be disbursed by several means:

- Spraying them in the air (aerosols)
- Infecting animals, which carry the disease to humans
- Food and water contamination, can disperse them
- .Person to Person to a lesser degree

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. We all remember the anthrax spores formulated as a white powder, mailed to individuals in the government and media in the fall of 2001. Postal sorting machines and the opening of letters dispersed the spores as aerosols. Several deaths resulted. The effect was to disrupt mail service and to cause a widespread fear of handling delivered mail among the public.\

ANIMALS - Insects and animals, such as fleas, mice, flies, and mosquitoes, spread some diseases. Deliberately spreading diseases through livestock is also referred to as agro terrorism.

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.

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, which is an acute illness that occurs in West Africa (see CDC site for more on the Lassa Virus).

In the next session we will cover Chemical Terrorism