

Bioterrorism and Biosafety

Bioterrorism and biosafety are inter-related issues that are of vital concern to individual and public health.

What is Bioterrorism?

The CDC defines bioterrorism as the deliberate release of viruses, bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants. These agents are typically natural, but can be changed so as to increase their ability

to cause disease, make them resistant to current medicines, or allow them to spread more easily through people or the environment. Biological agents can be spread through air, water, or food. Terrorists may use biological agents because they can be extremely difficult to detect and do not cause illness for several hours to several days. Some bioterrorism agents, like the smallpox virus, can be spread from person to person while some, like anthrax, can not.

What is Biosafety?

Biosafety broadly concerns the caution and care you should take when dealing with substances that may cause problems to your health. It's a very wide category that includes everything from how you handle used medical needles, to how you respond to toxins or a bioterrorist attack. Biosafety procedures and preparations depend on the specific scenario and the nature of the biosafety hazard to begin with.

Types of Biosafety/Bioterrorist Risks
Bioterrorism agents can be separated



into three categories, depending on how easily they can be spread and their health risks.

Category A agents are considered the highest risk to public health and national security, for several reasons: they can be easily spread or transmitted from person to person, can result in high death rates, may cause public panic and social/political disruption, and require special action for public health preparedness. Examples include anthrax and small pox.

Category B agents are the second highest priority because they are moderately easy to spread, result in moderate illness rates and low death rates, and require specific responses by public health organizations, such as enhanced disease monitoring. These include threats to water and food safety.

Finally, there is Category C, the third highest priority agents. These include recently emerging diseases, such as the Hantavirus, that could be engineered to harm people and have the

potential to affect public health.

What Can You Do?

Biosafety hazards, whether natural or the result of bioterrorism, are rare, but always possible. The best thing you can do is be prepared and get informed. Prepare a safety kit of supplies for emergency situations, de-

velop a family disaster plan, keep up with developments regarding public health issues, and be aware of local, state, and federal response plans. Learn more at <http://emergency.cdc.gov/preparedness/>
Source: CDC

HIGHLIGHTS

The Miami-Dade County Health Department has several programs that deal with local bio-hazard or biosafety issues.

The Public Health Preparedness Program helps keep the public ready for any public health emergencies. Contact: 305-470-6928.

The Disease Control and Epidemiology Program does constant surveillance for infectious illnesses, whatever their origin. Contact: 305-470-5660

Environmental Health monitors diseases or public health threats from the environment, including biosafety concerns like pollution and public hygiene. Contact: 305-623-3500

For more health topics, visit www.dadehealth.org/atoz/atoz.asp