Why Are Environmental Health Services So Important?

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

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Environmental Health is an important part of Disease Control and Prevention

So, How Do Diseases Occur?

Diseases Need 3 Ingredients To Spread: Agent, Host, Environment

These ingredients make up the Disease Causation Triad. Diseases need all of these ingredients to spread.

(Graphic of a triangle with host, agent, and environment inside)

An agent refers to...

... a germ, chemical, or physical cause of disease or injury, for example viruses, bacteria, radiation, physical hazards, chemicals.

A host refers to...

... people and animals that get diseases, for example children, neighbors, pets, ourselves.

An environment refers to...

... surroundings an agent must move through to reach the host, for example air, water, food sewage.

These environmental factors contribute to the quality of our health.

When an outbreak occurs, epidemiology, laboratory, and environmental health work together to stop the disease.

Epidemiologists focus on the host, asking, “Who? When? Where?”

Laboratorians focus on the agent, asking, “What?”

Environmental Health Specialists focus on the environment, asking, “How? Why?”

Together, epidemiology, laboratory, and environmental health services control disease. Answering HOW and WHY a disease occurs helps find ways to keep agents from hosts.

So, back to the Disease Causation Triad...

When epidemiology, laboratory, and environmental health services work together, the Disease Causation Triad becomes a Disease Prevention Shield, keeping agents from moving through the environment to reach the host.
For Example: *Salmonella* is a germ often found on raw chicken, and it can make people sick. A family goes out to eat. These restaurant practices help prevent *Salmonella* from reaching the family: wash hands, disinfect, wear gloves.

So, why are environmental health services important?

Environmental Health services

Answer HOW and WHY a disease occurs,

Recommend actions to STOP outbreaks and PREVENT future ones,

Shield hosts from harmful agents through environmental controls.

Ultimately...

Environmental Health Services are VITAL to Disease Control and Prevention.

Find Environmental Health Resources: [www.cdc.gov/nceh/ehs](http://www.cdc.gov/nceh/ehs)