

Epidemiologic Triangle (1) ???

• The Epidemiologic Triangle is a model that scientists have developed for studying health problems. It can help your students understand infectious diseases and how they spread.

Epidemiologic Triangle (2) ???

AGENT

- The agent is the cause of the disease \rightarrow ???
- When studying the epidemiology of most infectious diseases ???
- Disease-causing microbes are bacteria, virus, fungi, and protozoa. HOST
- Hosts are organisms, usually humans or animals, which are exposed to and harbor a disease → Carrier.

Epidemiologic Triangle (3) ???

• The Environment—"Where" The environment is the favorable surroundings and conditions external to the host that cause or allow the disease to be transmitted. Some diseases live best in dirty water. Others survive in human blood. Still others, like E. coli, thrive in warm temperatures but are killed by high heat. Other environment factors include the season of the year (in the U.S., the peak of the flu season is between November and March, for example).

• Bacteria: Bacteria are single-celled organisms. Bacteria have the tools to reproduce themselves, by themselves. They are larger than viruses (but still much too small to be seen with the naked eye).

• Viruses have a core of genetic material, but no way to reproduce it on their own. Viruses infect cells and take over their reproductive machinery to reproduce.

• Fungi: Fungi are like plants made up of many cells. They are not called plants because they cannot produce their own food from soil and water. Instead, they live off animals, including people, and plants. Mushrooms and yeast are fungi.

 Protozoa: Protozoa sangat kecil. Kebanyakan hidup di air. Mereka adalah parasit, yang berarti mereka hidup dari organisme lain, dalam beberapa kasus manusia. Malaria adalah protozoa parasit, seperti Giardia.