

CHAIN OF INFECTION

For an infection to develop,

each link of the chain

must be connected.

Breaking any link of the chain

can stop the transmission

of infection!

INFECTIOUS DISEASE

Any microorganism that can cause a disease such as a bacterium, virus, parasite, or fungus. Reasons that the organism will cause an infection are virulence (ability to multiply and grow), invasiveness (ability to enter tissue), and pathogenicity (ability to cause disease).

RESERVOIR

The place where the microorganism resides, thrives, and reproduces, i.e., food, water, toilet seat, elevator buttons, human feces, respiratory secretions.

PORTAL OF EXIT

The place where the organism leaves the reservoir, such as the respiratory tract (nose, mouth), intestinal tract (rectum), urinary tract, or blood and other body fluids.

MODE OF TRANSMISSION

The means by which an organism transfers from one carrier to another by either direct transmission (direct contact between infectious host and susceptible host) or indirect transmission (which involves an intermediate carrier like an environmental surface or piece of medical equipment).

PORTAL OF ENTRY

The opening where an infectious disease enters the host's body such as mucus membranes, open wounds, or tubes inserted in body cavities like urinary catheters or feeding tubes.

SUSCEPTIBLE HOST

The person who is at risk for developing an infection from the disease. Several factors make a person more susceptible to disease including age (young people and elderly people generally are more at risk), underlying chronic diseases such as diabetes or asthma, conditions that weaken the immune system like HIV, certain types of medications, invasive devices like feeding tubes, and malnutrition.

