

# EPIDEMIOLOGICAL TERMS

**Pathology:** “study of disease”

**Pathogenesis:** “study of the development/progression of a disease”

**Acute:** sudden onset, lasts short amount of time (flu, colds)

**Chronic:** slow onset, lasts indefinitely (mono, tuberculosis, hepatitis B)

**Latent:** Asymptomatic indefinitely inside host, then causes illness (shingles)

**Herd immunity:** When many people in a population are immune to a particular disease (such as chicken pox)—this acts as a barrier to protect non-immune people from encountering the pathogen.

**Local infection:** confined to one area (warts)

**Systemic (generalized) infection:** toxins or pathogens spread throughout body via blood or lymph.

**Focal infection:** Bacteria started as a local infection (e.g. in gums of mouth) and move to a different spot (e.g. heart valves)

**Mutualism:** Both of the symbionts are helped (*E. Coli*, besides the benefits of microbial antagonism just mentioned, also makes vitamin K and some B vitamins for us).

**Parasitism:** One of the symbionts is helped, one is harmed. (pathogens)

**Opportunistic Microorganisms:** Organisms that do not ordinarily cause disease in their normal environment, but can if they gain access elsewhere.

**CDC:** Centers for Disease Control: Publish Morbidity and Mortality each week for the US population

**Endemic:** infection present within a population at all times (e.g. yeast infections, colds, pimples)

**Epidemic:** infection that has become far more common within the population

**Pandemic:** infection that has spread to many different cities, states, countries or continents

**Incidence:** Number of people that contract the disease within a given amount of time (week or year are common measurements)

**Prevalence:** Number of people that have the disease at a given time (this number should be HIGHER than incidence)

**Communicable:** Disease that can be passed from one person to another, e.g. HIV, rhinoviruses

**Contagious:** Communicable disease easily passed from one person to another (eg HIV is not highly contagious—must have direct blood/body fluid contact; whereas rhinoviruses are easily passed by sneezing, coughing, shaking hands.)

**Vector:** Manner in which disease can be passed from one person to another. Examples are given below:

- *Animal Vectors:* Tropical flies can pass African sleeping sickness, tick bites can transmit Lyme Disease, mammalian bites can transmit rabies
- *Water* can transmit *Giardia*, Amoebic Dysentery and *Vibrio cholera*
- *Object vectors* are called fomites. Examples include contaminated droplets of spit (*Mycobacterium tuberculosis*); catheters; doorknobs (flu and colds); rusted nails can transmit *Clostridium tetani*; contaminated meat from improper handling (*Salmonella*, *E.coli*)
- *Direct contact* includes handshakes, kissing, sharing food/drink, feces, blood, other bodily fluid exchange