

Infectious Disease Information Sheet

Vocabulary:

1. Reservoir – All of the locations that a pathogenic organism can exist.
2. Host – Any living organism that is infected with a pathogen resulting in illness (term improperly used in film)
3. Study case – the individual or group who are the reason for the analysis. They are usually the most recently infected.
4. Primary case – the original, common host. Results in transmission to all others in the Tree of Transmission.
5. Collateral case – host that does not transmit the pathogen to any other organism, either through their own death or through a cure.
6. Index case -
7. Transmission – The spread of a pathogen from one host to another.
8. Vector – Any organism that acts as an intermediate, assists a pathogen in transmission.
9. Mutation – any change in the genetic code of an organism. Sometimes results in changes in structure or function.
10. Isolation – Method of stopping transmission by eliminating access for the pathogen to new hosts
11. Outbreak – disease on a local scale (within a school, town, or small social group) - Chicken Pox.
12. Epidemic – disease on a regional or national scale (the Northeast, Southeastern Asia) – SARS, The Flu, Malaria
13. Pandemic – disease on a global scale (across all geographic, social and cultural borders) AIDS
14. Incubation period – the length of time between infection and the onset of symptoms

Methods of transmission (most invasive to least invasive)

1. Airborne

Def. – Pathogen spreads through open air without any other assistance.

Invasiveness: Extremely high

Ex.- Common Cold, Influenza Prevention: Isolation

2. Droplet

Def. – Organism spreads in tiny, sometimes aerosolized droplets of water.

Invasiveness: High: Range is limited by duration aloft. Viability limited by desiccation.

Ex.- Chicken Pox Prevention: Physical distance, disinfection, control of aerosol.

3. Direct contact – (environmental)

Def. – Coming in direct contact with an inanimate object or surface.

Invasiveness: Medium: limited by need to make physical contact with object.

Ex.- Athletes Foot

4. Fecal - Oral

Def. – Organism spreads from the ingestion or handling of objects infected with fecal coliform.

Invasiveness: Medium: - limited by need to physically ingest the organism.

Ex.- Salmonella, "food poisoning"

5. Body fluid – open (Close Contact)

Def. – Infected body fluids of one organism come in contact with mucus membranes of another in a relatively short span of time. Contact with air does not reduce invasiveness.

Invasiveness: Medium – Low: Requires that close, direct contact with the actual host occur.

Ex.- Pink Eye, Mononucleosis

6. Body fluid – (closed)

Def. – Infected body fluids of one organism come in contact with mucus membranes of another in a relatively short span of time.

Invasiveness: Low – Low: Requires extremely intimate contact between two individuals

Ex.- Hepatitis, AIDS

Factors affecting ease of transmission:

Tolerance of organism to:

1. Presence of Oxygen
2. Desiccation
3. Lack of food
4. Temperature change
5. Radiation