

Infection, Types of infections, Classification of infection, Source of infection in man, Methods of transmission of infection.

Infection

The establishment and multiplication of organism in the tissue of host to constitute infection.

Types of infections

Below, we'll explore the different types of infections, list some examples you may be familiar with, and look into some possible treatments.

- **Viral infections**

Viruses are very tiny infectious organisms. They're even smaller than bacteria. Some examples of viral infections include:

influenza (the flu), common cold, measles, rubella, chickenpox, human immunodeficiency virus (HIV), viral hepatitis, which can include hepatitis A, B, C, D, and E.

- **Bacterial infections**

Bacteria are single-celled microorganisms. They're very diverse, coming in a variety of different shapes and sizes.

Some examples of bacterial infections include:

Bacterial urinary tract infections (UTIs),

Bacterial food poisoning, often caused by *E. coli*, *Salmonella*, or *Shigella*

Bacterial cellulitis, such as due to *Staphylococcus aureus* (MRSA)

Bacterial vaginosis, gonorrhea, syphilis, cholera, tetanus.

- **Fungal infections**

Fungi are another diverse group of organisms that can include things like yeasts and molds.

Not all fungi can make you ill, but some examples of fungal infections include:

vaginal yeast infections, athlete's foot, thrush, fungal meningitis.

- **Parasitic infections**

Parasites live on or in a host organism and get food or other nutrients at the host's expense. There are three types of parasites that can cause illness in humans:

Protozoa: small, one-celled organisms

Helminths: larger, worm-like organisms

Ectoparasites: organisms such as fleas, ticks, and lice.

Some examples of infections that are caused by parasites include:

malaria, toxoplasmosis, trichomoniasis, giardiasis

tapeworm infection, roundworm infection

pubic and head lice, leishmaniasis

Classification of infection:

1-Primary infection: initial infection with organism in host constitute primary infection.

2-Reinfection: subsequent infection by the same organism.

3-Focal infection: infection at localized sites like appendix and tonsil, general effect are produced.

4-Secondary infection: when in a host whose resistance is lowered by preexisting infectious disease a new organism may set up an infection.

5-Cross infection: a patient suffering from a disease and new infection is set up from another host or external source.

6-Nasocomial infection: it's cross infection occurring in hospital.

7-Subclinical infection: is one where clinical effects are not apparent.

Source of infection in man:

- 1- **Man** - a- patient, b- carrier.
- 2- **Animals** - zoonosis
- 3- **Insects** - arthropod borne disease
- 4- **Soil** – round worm, hook worm, spores.
- 5- **Water** -bacterial , viral and parasitic infection.
- 6- **Food**- food poisoning.
- 7- **Vector**- mechanical vector & biological vector.

Methods of transmission of infection:

- 1- **Contact** – syphilis, gonorrhea.
- 2- **Inhalation** – influenza, tuberculosis, small pox.
- 3- **Infection** – cholera (water) , food poisoning (food) .
- 4- **Inoculation** – tetanus (infection) , rabies (dog) , serum hepatitis (injection) , arbovirus (insects) .
- 5- **Insects** – mechanical vector (dysentery and typhoid by house fly) or biological vector (malaria by sundfly) .
- 6- **Congenital** – syphilis, rubella.
- 7- **Laboratory infection** – injection, catheterization

