



MICROBIOLOGY 101

Bacteria:

- single-celled organisms; either round, spiral, or rod-shaped
- typically live in air, soil, water, organic matter, and on our skin
- moisture, temperature, and pH affect their growth
- can be treated with antibiotics
- cause infections such as strep throat, tetanus, and tuberculosis

Viruses:

- smaller than bacteria
- can cause infections in humans, animals, and plants
- contain genetic material (DNA or RNA)
- can be treated with antiviral medications, not antibiotics
- cause infections such as influenza, chicken pox, HIV, and the common cold

Parasites:

- live in, on, or with another organism (known as a host)
- cannot live on its own, and needs nourishment from the host
- infectious disease happens when the parasite attacks the host and multiplies
- often can be treated with antibiotics
- cause infections such as scabies and *Giardia*

Fungi:

- single or multi-celled organisms
- thrive in moist, humid, dark environments
- can be treated with topical creams or oral medication
- cause infections such as athlete's foot, yeast infections, and ringworm