

Source: [KBhBIO101CentralDogmaQuizReview](#)

1 | Diseases, an overview

Definition 1 · ****Disease**** an abnormal condition that causes impairment in/loss of function of an organism (a.k.a. decreased fitness) that is not due to immediate external injury.

1.1 | Causes of Disease

- Infectious agents
- Deficiency disorders
- Heritable factors
- Physiological disorders (immunodeficiency, autoimmune disorders, allergies, etc.)

1.2 | Types of Diseases

1.2.1 | Congenital Disease

Diseases present at birth due to DNA abnormalities / pregnancy pathological issues

1.2.2 | Acquired Disease

Diseases that begin during the lifetime due to exposure to some environmental factors...

- **Microrganism Invasion** => “infectious disease”
- **Autoimmune reaction** => your body fighting your body
- **Nutrient deficiency** => not eating good
- **Mechanical wear** => wear and tear of physical body parts
- **Ingestion of noxious chemicals** => eating poison

An aside...

Infectious diseases actually smaller on the causes of death in the US

- Heart disease => wear + deficiency
- Cancer => heritable + DNA
- Unintentional injuries => not a disease
- Chronic respiratory disease => wear
- Stroke => not a disease
- Alzheimer disease => wear
- Diabetes => autoimmune, nutrient, wear
- Influenza <= **here, finally, an infections disease.** ***

1.3 | Disease-causing Agents

- **Protozoan** => single-celled eukaryotes
- **Fungal** => single/multi-celled eukaryotes
- **Bacteria** => single-celled prokaryotes

- **Viral** => acellular parasitic infectious agent
- **Helminthus** => multicellular worms
- **Prions** => acellular misfolded proteins
- **Viroids** => infections nucleic acids w/o protein coat to make virus