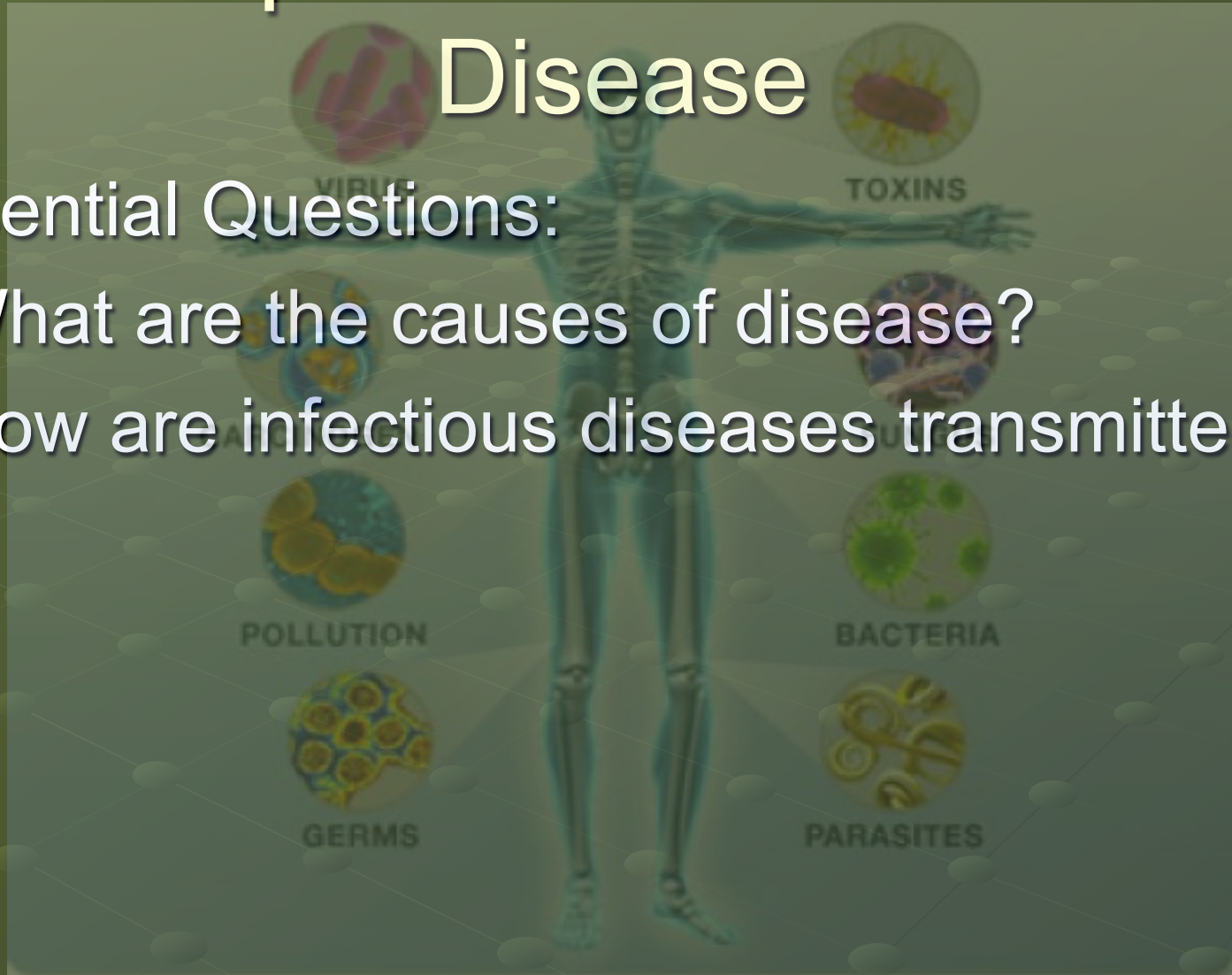


Chapter 40-1: Infectious

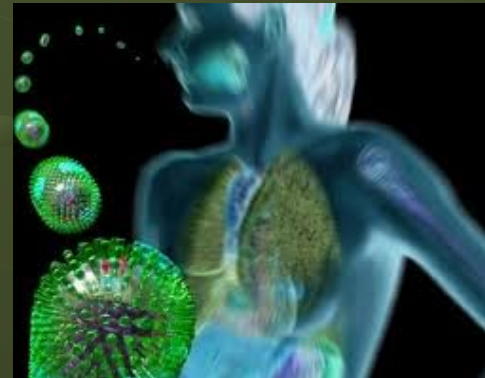
Disease

Essential Questions:

- What are the causes of disease?
- How are infectious diseases transmitted?



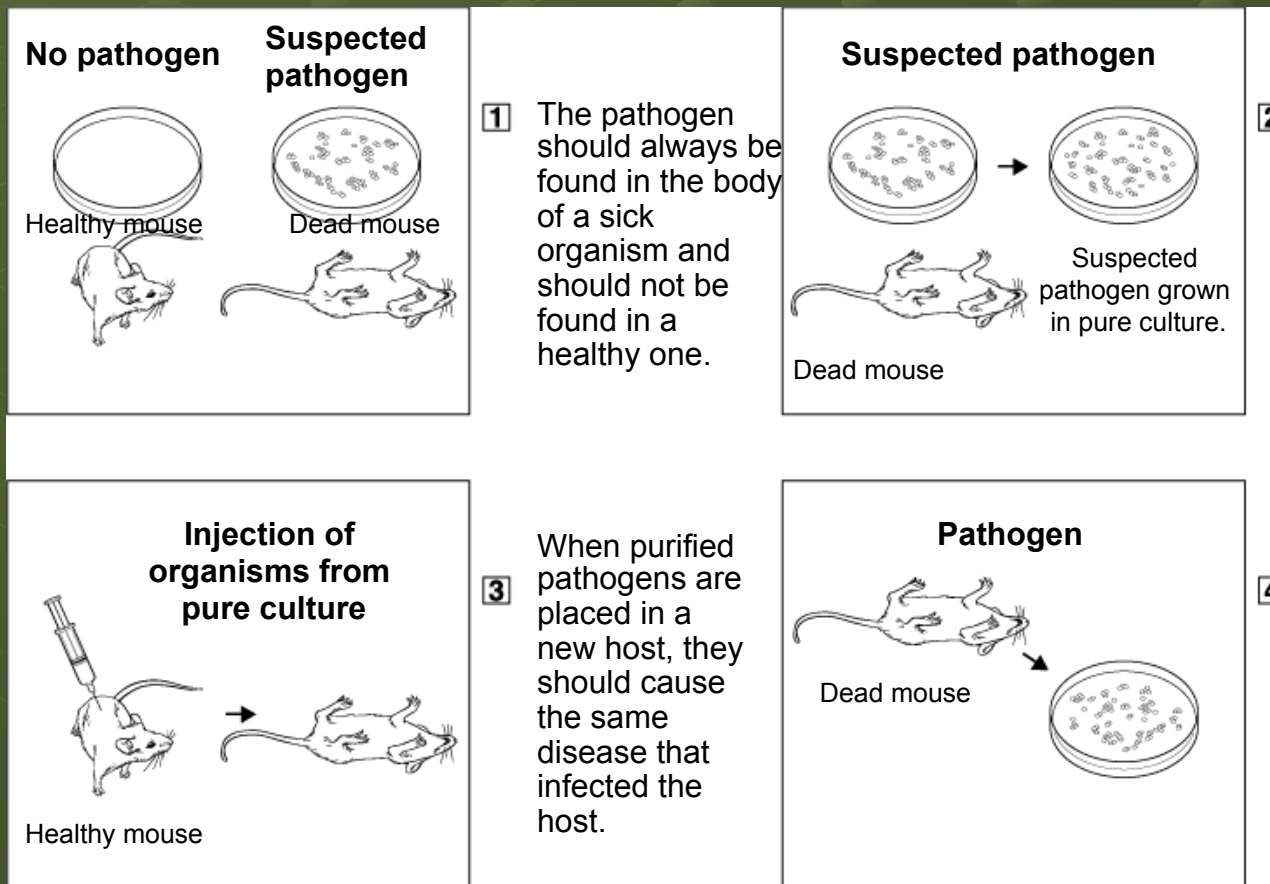
- Disease: any change besides injury that disrupts normal body function
 - Some inherited
 - Some caused by environmental factors (toxins)
 - Some caused by agents (bacteria/virus/fungus) – these are *pathogens*



● Germ theory of disease

■ Diseases caused by microorganisms (germs)

● Koch's postulates



● Agents of disease

- Viruses: common cold, influenza, measles
- Bacteria: tuberculosis, cholera, tetanus
- Protists: malaria, amoebic dysentery
- Worms: *schistosomiasis*, beef tapeworm
- Fungi: athlete's foot, ringworm



- How diseases are spread
 - Cough or physical contact
 - Via contaminated food or water
 - Via infected animals
 - Vectors: animals that carry disease-causing organisms from person to person (ticks, mosquitos, etc.)



- Sexually transmitted diseases
 - Syphilis & gonorrhea –bacteria
 - Hepatitis, genital herpes, AIDS - virus



● Fighting infectious diseases

- Prevention!
- Antibiotics – kill bacteria w/out harming cells
- Antivirals – inhibit virus' s ability to invade & multiply inside cells

