Vocabulary/Ch. 17

Friedland

**Disease**: Any impaired function of the body with a characteristic set of symptoms

**Infectious disease**: A disease caused by a pathogen

**Chronic diseases**: A disease that slowly impairs functioning of an organism

**Acute diseases**: A disease that rapidly impairs the functioning of an organism

**Epidemic**: A situation in which a pathogen causes a rapid increase in disease

**Pandemic**: An epidemic that occurs over a large geographic region

**Plague**: An infectious disease caused by the bacterium *yersinia pestis*, carried by fleas

**Malaria**: An infectious disease caused by one of several species of protists in the genus *Plasmodium*

**Tuberculosis**: A highly contagious disease caused by the bacterium *Mycobacterium* *tuberculosis* that primarily infects the lungs

**Emergent infectious diseases**: An infectious disease that has not been previously described or has not been common for at least 20 years

**Acquired Immune Deficiency Syndrome (AIDS)**: An infectious disease caused by the human immunodeficiency virus (HIV)

**Human Immunodeficiency Virus (HIV)**: A virus that causes acquired immune deficiency syndrome

**Ebola hemorrhagic fever**: An infectious disease with high death rates, caused by the Ebola virus

**Mad cow disease**: A disease in which prions mutate into deadly pathogens and slowly damage a cow’s nervous system

**Prions**: A small, beneficial protein that occasionally mutates into a pathogen

**Bird flu**: Also known as the *Spanish flu*, an avian influenza that is caused by the H1N1 virus

**West Nile virus**: Lives in hundreds of species of birds and is transmitted among birds by mosquitoes

**Neurotoxins**: A chemical that disrupts the nervous systems of animals

**Carcinogens**: Chemicals that cause cancer

**Mutagens**: Carcinogens that cause damage to the genetic material of a cell

**Teratogens**: Chemicals that interfere with the normal development of embryos or fetuses

**Allergens**: A chemical that causes allergic reactions

**Endocrine disruptors**: Chemicals that interfere with normal functioning of hormones in an animal’s body

**Dose-response studies**: A study that exposes organisms to different amounts of a chemical and then observes a variety of possible responses, including mortality or changes in behavior or reproduction

**Acute studies**: An experiment that exposes organisms to an environmental hazard for a short duration

**LD50**: The lethal dose of a chemical that kills 50 percent of the individuals in a dose-response study

**Sublethal effects**: The effects of an environmental hazard that are not lethal, but which may impair an organism’s behavior, physiology, or reproduction

**ED50**: An abbreviation for the effective dose of a chemical that causes 50 percent of the individuals in a dose-response study to display a harmful, but nonlethal, effect

**Chronic studies**: An experiment that exposes organisms to an environmental hazard for a long duration

**Epidemiology**: The study of the causes of illness and disease in the populations of humans and other organisms

**Retrospective studies**: A study that monitors people who have been exposed to an environmental hazard at some time in the past

**Prospective studies**: A study that monitors people who might become exposed to harmful chemicals in the future

**Synergistic interactions**: Risks that cause more harm together than expected based on separate individual risks

**Routes of exposure**: The way in which an individual might come into contact with an environmental hazard

**Solubility**: How well a chemical dissolves in a liquid

**Biomagnification**: The increase in chemical concentration in animal tissues as the chemical moves up the food chain

**Persistence**: The length of time a chemical remains in the environment

**Environmental hazard**: Anything in the environment that can potentially cause harm

**Innocent-until-proven-guilty principle**: A principle based on the philosophy that a potential hazard should not be considered an actual hazard until the scientific definitively demonstrate that it actually causes harm

**Precautionary principle**: A principle based on the philosophy that action should be taken against a plausible environmental hazard

**Stockholm convention**: This international agreement produced a list of 12 chemicals known as the “dirty dozen” to be banned, phased out, or reduced

**REACH** (registration, evaluation, authorization, and restriction of chemicals): A 2007 agreement among the nations of the European Union about regulation of chemicals