**Ch23Communicable and Ch 25 Non communicable Diseases**

**Communicable Disease-** a disease that is spread from one living organism to another or through the environment. These are also known as contagious or infectious diseases.

**Infection-** a condition that occurs when pathogens in the body multiply and damage body cells.

**Virus-** is a piece of genetic material surrounded by a protein coat. In order to reproduce, viruses invade the cells of living organisms.

**Bacteria-** are single-celled microorganisms that live almost everywhere on earth. Most are harmless, some helpful, disease causing ones produce toxins.

**Toxins-** substances that kill cells or interfere with their functions.

**Direct Contact**

-Puncture Wounds- a person can get tetanus by stepping on a rusty nail.

-Child Birth- a pregnant woman may transmit an infection to her unborn child through the placenta.

-Contact with infected animals- animal bites and scratches can sometimes transmit disease.

**Indirect Contact**

-Contaminated Objects- if you touch a contaminated object like a doorknob you can pick up pathogens. Keep hands away from eyes, nose, mouth, and wash hands regularly.

Vectors: an organism that carries and transmits pathogens to humans and other animals. Common vectors include flies, mosquitos, and ticks. Diseases that spread this way are malaria, West Nile virus, and Lyme disease.

-Contaminated food or water- when food is improperly handled or stored, harmful bacteria can develop. This is true not only for meat and fish but for fruits and vegetables as well.

**Airborne Transmission-**  when an infected person sneezes or coughs, pathogens are released into the air as tiny droplets that can travel as far as ten feet.

\*\*Many communicable diseases occur in the respiratory tract (passageway that makes breathing possible.)

**Common Cold-** a viral infection that causes inflammation of the mucous membrane ( the lining of various body cavities, including the nose, ears, and mouth) Sneezing, runny nose, and sore throat are most common symptoms.

**Influenza-** or the flu is a viral infection of the respiratory tract. Symptoms include high fever, fatigue, headache, muscle aches, and coughing. Like the common cold it can be spread through the air.

**Pneumonia-** an infection of the lungs in which the air sacs fill with pus and other liquids. Symptoms are similar to the flu which means some people can have pneumonia without realizing it.

**Strep Throat-** bacterial infection spread by direct contact with an infected person or through airborne transmission. Symptoms include sore throat, fever, and enlarged lymph nodes in the neck. Left untreated strep throat can lead to serious conditions, including heart damage.

**Tuberculosis-** TB is a bacterial disease that usually attacks the lungs. It spreads through the air and typically affects people with weak immune systems.

**Hepatitis-** five different types of hepatitis but the most common are A,B, and C. Symptoms include Jaundice (yellowing of the skin and eyes.) some people also develop cirrhosis (scarring of the liver.)

* Hepatitis A: usually attacks the digestive system through contact with the feces of an infected person. Common symptoms include fever, vomiting, fatigue, abdominal pain, and jaundice.
* Hepatitis B: has symptoms similar to those of hepatitis A but can cause liver failure and cirrhosis. The virus can be spread through sexual contact.
* Hepatitis C: Most common blood borne infection in the U.S. Symptoms include jaundice, dark urine, fatigue, abdominal pain, and loss of appetite.

**Immune System-** a network of cells, tissues, organs, and chemicals that fight off pathogens.

**Inflammatory response-** a reaction to tissue damage caused by injury or infection.

**Phagocytes-** white blood cells that attack invading pathogens, surround pathogens and destroy them.

**Antigens-** substances that can trigger an immune response.

**Immunity-** the state of being protected against a particular disease.

**Lymphocyte-** a specialized white blood cell that coordinates and performs many functions of specific immunity.

**Antibody-** is a protein that acts against a specific antigen.

**Vaccine-**a preparation of dead or weakened pathogens that are introduced into the body to stimulate an immune response.

* Live- virus vaccines: made from pathogens grown in laboratories.
* Killed-virus vaccines: use dead pathogens.
* Toxoids: are inactivated toxins from pathogens.
* New and second-generation Vaccines: cutting edge of disease-fighting technology.

**Emerging infections-**  communicable diseases whose occurrence in humans has increased within the past two decades or threatens to increase in the near future.

**Epidemic-** a disease outbreak that affects many people in the same place and at the same time.

**Pandemic-** a global outbreak of an infectious disease.

**Noncommunicable disease-** is a disease that is not transmitted by another person, a vector, or the environment.

**Cardiovascular disease-** a disease that affects the heart or blood vessels.

**Hypertension-** high blood pressure.

**Atherosclerosis-** a disease characterized by the accumulation of plaque on artery walls.

**Arteriosclerosis-** hardened arteries with reduce elasticity.

**Angina Pectoris-** chest pain that results when the heart does not get enough oxygen.

**Arrhythmias-** irregular heartbeats

**Heart attack-** occurs when a reduced or blocked blood supply damages the heart muscle.

**Stroke-** an acute injury in which blood flow to the brain is interrupted.

**Cancer-** uncontrollable growth of abnormal cells .

**Tumor-** this is an abnormal mass of tissue that has no natural role in the body.

**Benign-** or noncancerous tumor.

**Malignant-** or cancerous tumor.

**Metastasis-** the spread of cancer from the point where it originated to other parts of the body.

**Biopsy-** the removal of a small piece of tissue for examination.

**Remission-** this is a period of time when symptoms disappear.

**Autoimmune Disease-** a condition in which the immune system mistakenly attacks itself, targeting the cells, tissues, and organs of a person’s own body.

**Arthritis-** is a group of more than 100 different diseases that cause pain and loss of movement in joints.

**Osteoarthritis-** a disease of the joints in which cartilage breaks down.

**Rheumatoid arthritis-** is a disease characterized by the debilitating destruction of the joints due to inflammation.

**Disability-** any physical or mental impairment that limits normal activities, including seeing, hearing, walking, or speaking.

**Profound deafness-** hearing loss so severe that a person affected cannot benefit from mechanical amplification, such as hearing aid.

**Mental retardation-** this is a below-average intellectual ability present from birth or early childhood and associated with difficulties in learning and social adaptation.

**Americans with Disabilities Act-** a law prohibiting discrimination against people with physical or mental disabilities in the workplace, transportation, public accommodations, and telecommunications.