

## Chapter 24 –lesson 1

### 3. What are communicable diseases?

- Microorganisms- living things \_\_\_\_\_
- Most are harmless

Def. **communicable disease** is a \_\_\_\_\_

### 2. Causes of communicable diseases

- **Pathogen** is an \_\_\_\_\_
- **There are five common pathogens**

Def: **infection**: a condition \_\_\_\_\_

- **If a body cannot fight infection a DISEASE develops**

#### Common pathogens are

1. **Virus**: Inactive alone; needs a host cell to reproduce itself  
Takes over the DNA of a cell and when it bursts killing the host cell  
Are usually killed by our immune system

1. **Bacteria**-single celled
  - Many are needed for life-ex: those that help digest food
  - Multiply by cell division
  - Are treated with antibiotics / killed by our immune system

1. **Fungi**- any plant like organism
  - Single-celled or multinucleate organisms that live by decomposing and absorbing the organic material in which they grow (comprising the mushrooms, molds, mildews, smuts, rusts, and yeasts).
  - Cause athletes foot, skin disease, disease of the mucous membranes or in the lungs

1. **Protozoan**- is primarily unicellular, existing singly or aggregating into colonies–are usually non-photosynthetic

1. **Rickettsias**-rod shaped microorganism that resembles bacteria- but can be as small as a large virus and reproduce only inside a living cell (but can be as small as a large virus and **reproduce only inside a living cell**)

### 2. Strategies for preventing Communicable Disease

#### 1 Wash hands-single most effective strategy

1. **Handling food properly**-Prevent foodborne illness by:
  - a. Wash hands
  - b. Use paper towels rather than dishcloths or sponges to clean cooking surfaces
  - c. Cook at proper temperature
  - d. Chill leftovers and cold food quickly

**e. Keep raw meat separate from other food**

- 1. Keep your immune system strong**
  - a. Eat balanced meals and exercise**
  - b. Don't share eating utensils**
  - c. Stay away from ill people**
  - d. Cover mouth when sneeze or cough**
  - e. Use mosquito repellent during summer rain months and avoid contact with dead birds**
  - f. Abstain from sexual activity**
  - g. Manage stress**

**Lesson 2**

**3. Preventing communicable diseases**

**Def: immune system: a network of cells, \_\_\_\_\_**

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**2. Physical and Chemical Barriers**

- 1. Skin**
- 1. Tears and saliva**
- 1. Mucous membranes including your \_\_\_\_\_**
- 1. Cilia**
- 1. Gastric juices in the \_\_\_\_\_**

**2. The immune system**

**Def: inflammatory response: a reaction to \_\_\_\_\_**

- 2. Purpose is to prevent further \_\_\_\_\_**

**Example: a splinter in your finger- your body will**

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**Def: phagocyte: a white blood cell that**

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## 2. Specific defenses

**During the immune response, certain types of white blood cells react to antigens**

**Def: antigens: substance that is capable of \_\_\_\_\_**

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### 1. Lymphocytes

- a. T-Cells and B cells
    - Helper T cells
    - Killer T cells
    - Suppressive T cells
  - B cells produce \_\_\_\_\_ which are proteins that act against a specific antigen (a B-cell that kills a strep bacteria will not kill a pneumonia bacteria)
  - Some antibodies attach \_\_\_\_\_
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### 2. The role of memory Lymphocytes

- Circulate in your bloodstream and \_\_\_\_\_

#### 1. Active immunity

- Vaccine-a preparation of
- Cause the body to
- More than 20 human diseases

#### 1. Passive immunity-receiving antibodies from another person or animal

- Is short lived - lasting only weeks to months
- Natural passive immunity from mother to baby during pregnancy or childbirth
- Artificial passive immunity

**1. Immunity and the lymphatic system**

**Def: Lymphatic system is part of your \_\_\_\_\_**

- **Includes your tonsils, \_\_\_\_\_**

- **Lymph nodes can become enlarged when your body is**  
\_\_\_\_\_  
\_\_\_\_\_

- **Lymphocytes: are produced by**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2. Care of the Immune Systems**

- **Follow a sensible eating plan to maintain**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- **Plenty of rest**
- **Physical activity**
- **Avoid**
- **Avoid**
- **Avoid**
- **Keep**

**2. Vaccines to aid the Body's Defenses**

- 1. Live virus vaccines**
- 2. \_\_\_\_\_**  
\_\_\_\_\_  
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Chapter 24 -lesson 1

**1. Killed-virus vaccines**

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**1. Toxoids**

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**New and second-generation vaccines**

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**List of some common diseases prevented by vaccines:**

**Chicken pox**

**Hepatitis B**

**Measles**

**2. Immunization for all**

- Shows you know strategies for
  
- It is necessary to be revaccinated \_\_\_\_\_ years
- Colleges make you show proof of \_\_\_\_\_
- Each state has its own laws about \_\_\_\_\_

**Lesson 3**

**3. Common Communicable Diseases**

**2. Respiratory infections**

**1. common cold**

Chapter 24 -lesson 1

**1. Influenza**

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**1. Pneumonia**

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**1. Strep Throat**

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**1. Tuberculosis**

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**2. Hepatitis**

**1. Hepatitis A**

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**1. Hepatitis B**

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Chapter 24 -lesson 1

**1. Hepatitis C**

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**2. Other diseases & Emerging Infections**

<b>Disease</b>	<b>Cause/transmission</b>	<b>Symptoms</b>	<b>Treatment/ prevention</b>
<b>1. Mononucleosis</b>		<b>Chills , fever, sore throat, swollen lymph nodes</b>	
<b>1. Measles</b>		<b>High fever, red eyes, runny nose, cough, bumpy red rash usually starting on head or face</b>	
<b>1. Encephalitis</b>		<b>Headache, fever, hallucinations, confusion, paralysis, disturbances in speech, memory , behavior and eye movement</b>	
<b>1. Meningitis</b>		<b>Fever, severe headache, nausea, vomiting, sensitivity to light stiff neck</b>	

**1. Transport across borders**

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Chapter 24 -lesson 1

**1. Population movement**

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**1. Resistance to antibiotics**

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**1. Change in food technology**

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**1. Agents in bioterrorism**

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