Chapter 18 & 19

Diseases

Lesson 1
Preventing the Spread of Disease

Lesson 2
The Body’s Defenses Against Infection

Lesson 3
Noncommunicable Diseases

Click for:
>> Main Menu
Learning Target:

I will **list and describe** pathogens.

Get your textbook, open to Chapter 18
Take out 18-1 worksheet and prepare to take notes.
# Communicable Diseases

## Preventing the Spread of Disease

### Building Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>disease</td>
<td>Any condition that interferes with the proper functioning of the body and mind</td>
</tr>
<tr>
<td>communicable disease</td>
<td>A disease that can be passed to a person from another person, animal, or object</td>
</tr>
<tr>
<td>pathogens</td>
<td>Disease-causing organisms that are so small they can only be seen through a microscope</td>
</tr>
<tr>
<td>infection</td>
<td>A condition that occurs when pathogens enter the body, multiply, and cause harm</td>
</tr>
</tbody>
</table>
## Organizing Information

Create a table like the one shown below. As you read, describe how pathogens spread in the first column. In the second column, describe ways you can prevent spreading pathogens.

<table>
<thead>
<tr>
<th>Pathogens</th>
<th>Preventing the Spread of Pathogens</th>
</tr>
</thead>
<tbody>
<tr>
<td>How Pathogens Spread</td>
<td></td>
</tr>
</tbody>
</table>
### Building Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>viruses</td>
<td>The smallest pathogens</td>
</tr>
<tr>
<td>bacteria</td>
<td>Tiny one-celled organisms</td>
</tr>
<tr>
<td>fungi</td>
<td>Organisms that are more complex than bacteria, but cannot make their own food</td>
</tr>
<tr>
<td>protozoa</td>
<td>One-celled organisms that are more complex than bacteria</td>
</tr>
</tbody>
</table>
Communicable Diseases

Preventing the Spread of Disease

Building Vocabulary

- **vector**: An organism, such as an insect, that transmits pathogens

- **hygiene**: Cleanliness
Common Diseases

A cold is one kind of disease.

disease  Any condition that interferes with the proper functioning of the body or mind

A cold is a communicable disease.

communicable disease  A disease that can be passed to a person from another person, animal, or object
Common Diseases

Pathogens are also known as germs.

Pathogens  Disease-causing organisms that are so small they can only be seen through a microscope

Germs can cause an infection.

Infection  A condition that occurs when pathogens enter the body, multiply, and cause harm
Types of Pathogens

**Viruses** cause common diseases, such as colds and the flu.

*viruses* The smallest pathogens
Types of Pathogens

**Bacteria** that live in your digestive tract help you digest food.

*Bacteria* Tiny one-celled organisms

Other bacteria are harmful.
Types of Pathogens

**Fungi** are primitive life forms that feed on organic materials.

*fungi* Organisms that are more complex than bacteria, but cannot make their own food

Fungi cause ringworm and athlete's foot.
Types of Pathogens

Malaria is a disease caused by a protozoa that can live in mosquitoes.

Protozoa: One-celled organisms that are more complex than bacteria.
## Types of Pathogens

<table>
<thead>
<tr>
<th>Pathogens</th>
<th>Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bacteria</strong></td>
<td>Pink eye, pertussis (whooping cough), strep throat, tuberculosis, Lyme disease, most foodborne illnesses, diphtheria, bacterial pneumonia, cholera</td>
</tr>
<tr>
<td><strong>Viruses</strong></td>
<td>Colds, influenza, hepatitis, chicken pox, measles, mumps, mononucleosis, herpes, HIV/AIDS, polio, rabies, viral pneumonia</td>
</tr>
<tr>
<td><strong>Fungi</strong></td>
<td>Athlete's foot, ringworm</td>
</tr>
<tr>
<td><strong>Protozoa</strong></td>
<td>Amoebic dysentery, malaria</td>
</tr>
</tbody>
</table>
How Do Pathogens Spread?

- Direct contact with others
- Indirect contact with others
- Contact with contaminated food and water
- Contact with animals or insects
How Do Pathogens Spread?

A pathogen-carrying mosquito is an example of a vector.

Vector

An organism, such as an insect, that transmits pathogens.
How to Keep Pathogens from Spreading

Practicing good personal **hygiene** is a good way to keep pathogens from spreading.
How to Keep Pathogens from Spreading

- Eat nutritious foods and get enough physical activity and rest.
- Avoid close contact with people infected with a communicable disease, especially if they are still contagious.
- Never share eating or drinking utensils.
How to Keep Pathogens from Spreading

- Do not share toothbrushes or other personal hygiene items.
- Wash your hands thoroughly in warm, soapy water.
- Avoid touching your mouth, nose, and eyes.
  Do not bite your nails.
How to Keep Pathogens from Spreading

Handle and prepare food safely, especially poultry and fish. Wash vegetables and cook meat thoroughly.

Wipe counters thoroughly with a clean sponge or cloth. Replace sponges and cloths often.

Keep your environment clean. Empty trash frequently and keep trash cans clean.
Helping Others Stay Healthy

If you are ill, stay home from school and other public places. Avoid contact with others.

When you sneeze, cover your mouth and nose, and turn your head away from others. Wash your hands right away.

Do not share eating utensils, drinking glasses, toothbrushes, or other personal items.
Helping Others Stay Healthy

If a health care professional prescribes medicine for you, follow the directions exactly. Take medicines as prescribed.

Prepare and store food safely.
Wash your hands before handling food.
Thinking Critically

Analyze  Why do you think it is important for teens to practice good personal hygiene?
Thinking Critically

Apply  Brendan is coughing and sneezing at school. What should Brendan do to help prevent the spread of pathogens? Explain your answer.