

# How to Use This Presentation



- To View the presentation as a slideshow with effects select “**View**” on the menu bar and click on “**Slide Show.**”
- To advance through the presentation, click the right arrow key or the space bar.
- From the resources slide, click on any resource to see a presentation for that resource.
- From the Chapter menu screen click on any lesson to go directly to that lesson’s presentation.
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# Quotes About Character



**“Character is the indelible mark that determines the only true value of all people and all their work.”**

**—Orison Swett Marden**



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### What's Your Health IQ?

#### BEHAVIOR

Indicate how frequently you engage in each of the following behaviors (1=never; 2=occasionally; 3=most of the time; 4=all of the time). Total your points, and then turn to p. 642.

1. I cover my mouth while sneezing or coughing.
2. I eat at least five servings of fruits and vegetables each day.
3. I exercise at least five times a week.
4. I have regular check-ups with my dentist and doctor.
5. I wash my hands before eating a meal.
6. When my doctor prescribes antibiotics, I follow and complete the prescription.
7. I drink 8 to 10 glasses of water each day.
8. I get extra sleep when I am sick.



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- **Section 1** What Are Infectious Diseases?
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# Chapter 13

## Section 1 What Are Infectious Diseases?



### Bellringer

- List ten ways a person might come into contact with infectious organisms.



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# Chapter 13

## Section 1 What Are Infectious Diseases?



### Objectives

- **Identify** five different agents that can cause infectious diseases.
- **List** four ways that infectious diseases spread.
- **Describe** two different treatments for infectious diseases.
- **Name** two ways you can help prevent the development of antibiotic resistant bacteria.



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### What Causes Infectious Diseases?

- **Infectious diseases** are diseases caused by agents invading the body.
- **Bacteria** are single-celled organisms, some of which cause disease. Other kinds of bacteria are harmless or even helpful to the body. Tetanus, tuberculosis, and sinus infections are bacterial diseases.







### What Causes Infectious Diseases?

- **Viruses** are tiny disease-causing particles made up of genetic material and a protein coat. Viruses survive and replicate inside living cells. Colds, the flu, measles, chicken pox, and AIDS are viral diseases.
- **Fungi** are organisms that absorb and use the nutrients of living or dead organisms. Some fungi cause diseases, such as athlete's foot and ringworm.





### What Causes Infectious Diseases?

- **Protozoans** are single-celled organisms that are larger and more complex than bacteria. They account for some of the leading causes of death worldwide, including malaria.
- **Parasites** get their energy and nutrients by feeding on other living things. Head lice, tapeworms, and some roundworms are parasites.



### How Infectious Diseases Are Spread



#### Person to Person

People's body fluids may contain pathogens. Sneezing, coughing, sharing drink containers, and having sexual contact can spread diseases from person to person.



**Environment** Look around you—almost everything you see is covered with microorganisms, a few of which can cause disease.

Western black legged tick



### How Infectious Diseases Are Spread

**Food and Water** Many types of food can contain pathogens. Without proper cooking or treatment of foods these pathogens can be passed on to the humans that eat the food. Unpurified water also carries pathogens.



**Animals** Like humans, animals can become sick and carry disease. When humans come into contact with infected animals, diseases can be spread.

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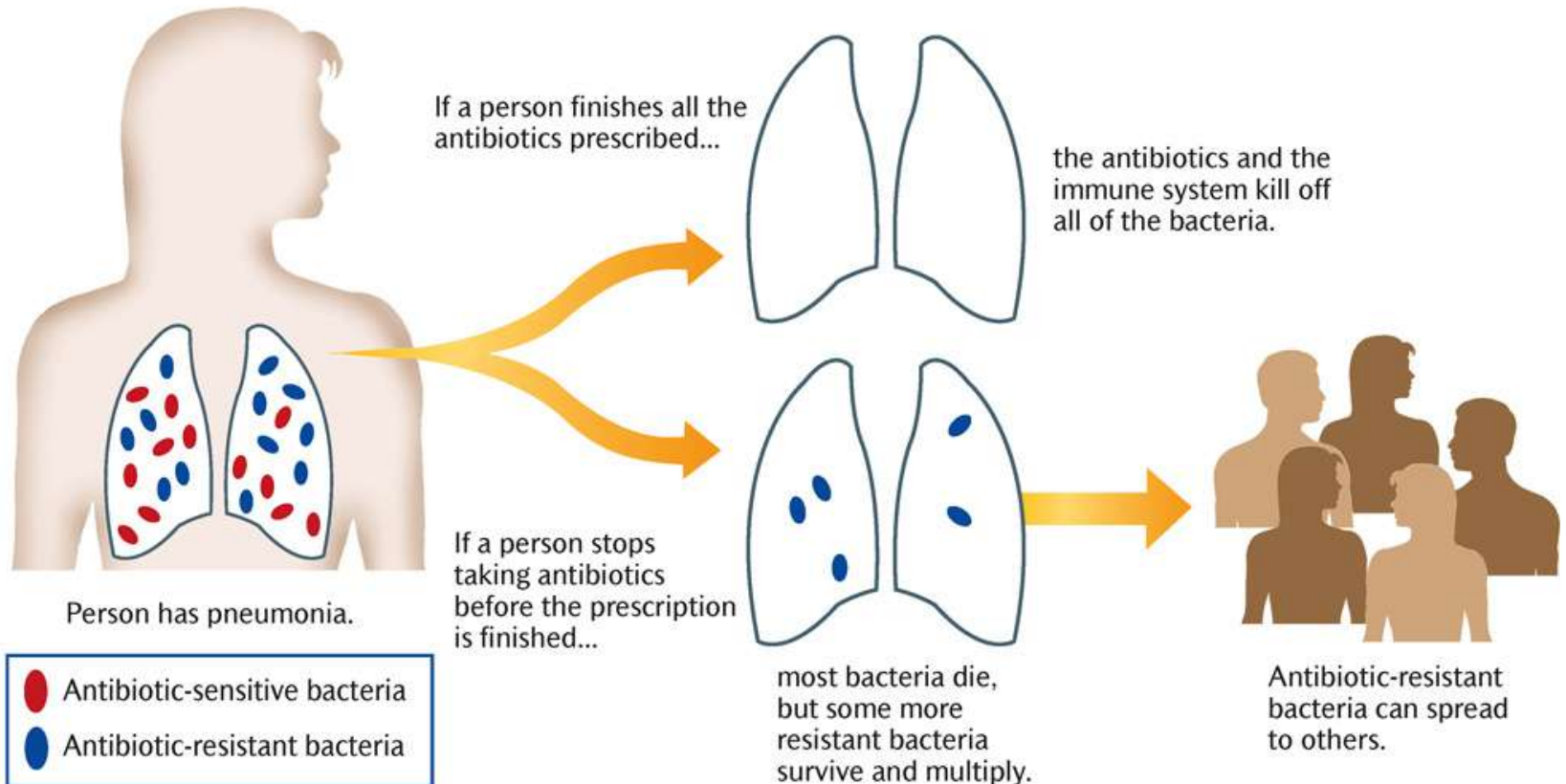
### How Are Infectious Diseases Treated?

- Antibiotics are medicines used to kill or slow the growth of bacteria. Examples include penicillin, tetracycline, and streptomycin.
- **Antibiotic resistance** is a condition in which bacteria can no longer be killed by a particular antibiotic.
- Improper use of antibiotics contributes to the growth of antibiotic-resistant bacteria.





### How Antibiotic Resistant Bacteria Can Multiply and Spread





### How Are Infectious Diseases Treated?

- **Treating Viral Diseases** Viral diseases are hard to treat. Most antiviral medications focus on relieving symptoms. Viruses are not affected by antibiotics.
- **Treating Fungal Infections** Some fungal infections can be treated with over-the-counter antifungal medications. Others require prescription medications.





### How Are Infectious Diseases Treated?

- **Treating Protozoan Infections** The best protection is prevention through good hygiene and sanitation.
- **Treating Parasites** Head lice can be treated with medicated shampoos.



# Chapter 13

## Section 2 Protecting Yourself from Infectious Diseases



### Bellringer

- List ways that a pathogen might enter the body.



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# Chapter 13

## Section 2 Protecting Yourself from Infectious Diseases



### Objectives

- **Describe** how the body fights infectious diseases.
- **Summarize** five things a person can do to stay well.
- **Describe** how immunity to a disease develops.
- **State** three things you should do when you are sick.
- **List** three things you can do to prevent the spread of infectious diseases.



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### How Your Body Fights Disease

- **Physical barriers** to pathogens include:
  - Skin
  - Mucous membranes
  - Chemicals
- **Inflammation** is a reaction to injury or infection characterized by pain, redness, and swelling.





### How Your Body Fights Disease

- The immune system is the body's system for fighting disease once it is in the body.
- **White blood cells** are cells in the blood that defend the body against disease.
- **Antibodies** are proteins that mark pathogens to be destroyed by white blood cells.
- The **lymphatic system** is a network of vessels that carry lymph throughout the body, carrying viruses and bacteria back to the lymph nodes.



# Chapter 13

## Section 2 Protecting Yourself from Infectious Diseases



### What You Can Do to Stay Well

- Protect yourself.
- Eat a healthy, balanced diet.
- Drink plenty of water.
- Reduce your stress levels.
- Exercise regularly.
- Get regular medical checkups.
- Avoid close contact with sick people.
- Get enough sleep.
- Stay up to date on all available vaccines.



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# Chapter 13

## Section 2 Protecting Yourself from Infectious Diseases



### What to Do When You Are Sick

- Stay home and rest.
- Drink plenty of fluids.
- Throw away tissues you use right away.
- Follow all the directions your doctor gives.



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### How to Prevent the Spread of Disease

- Get vaccinated.
- Keep clean by washing with soap frequently.
- Don't share food, drinks, or personal items such as toothbrushes.
- Cover your mouth when you sneeze or cough.





### How to Prevent the Spread of Disease

- When you are outdoors:
  - wear long-sleeved shirts and pants in long grass
  - use insect repellent when necessary
  - avoid contact with animals that behave strangely
  - avoid drinking and swimming in remote waters





### Bellringer

- List as many infectious diseases as you can. What type of pathogen do you think causes each of the diseases in your list?







### Objectives

- **State** why diseases affect everybody.
- **Identify** two bacterial diseases, and describe their symptoms and ways that they are spread.
- **Identify** two viral diseases, and describe their symptoms and ways that they are spread.
- **List** examples of fungal, protozoan, and parasitic infections, and describe their symptoms.
- **Name** two organizations in your community that help treat and prevent the spread of infectious diseases.





### Diseases Affect Everybody

- No matter how healthy we are, we all become ill from diseases sometimes.
- There are so many pathogens in so many places it is impossible to avoid them.
- The best defense against pathogens is avoiding behaviors that increase our chances of infection.



### statistically speaking...

The number of school days missed each year in the United States because of the flu:

**38 million**

The amount that is spent in medical costs and lost work each year in the United States because of foodborne illnesses:

**\$5 to \$6 billion**

The amount the United States spends each year to treat infectious diseases:

**\$120 billion**



### Common Bacterial Diseases

- **Tetanus** causes severe muscle spasms. It can enter the body through cuts or wounds. Vaccinations are the best form of prevention.
- **Strep throat** causes a sore throat and spots on the tonsils. It is spread by contact with mucus. The best prevention is avoiding contact with infected people.





### Common Bacterial Diseases

- **Meningitis** causes inflammation of membranes around the brain and spinal cord. It is spread by contact with mucus or saliva. There are some vaccines for meningitis.
- **Sinus infections** cause headaches, mucus, and pressure in the head. They are spread by contact with mucus. Prevention includes avoiding infected people and avoiding irritants and allergens in the air.





### Common Bacterial Diseases

- **Salmonellosis** causes headaches, stomach cramps, diarrhea, and nausea. It is spread by eating food from an infected animal or food contaminated by an infected person. Prevention involves proper refrigeration, cooking, and handling of food.





### Common Viral Diseases

Type	Symptoms	Transmission	Prevention	Treatment
<b>Flu</b>	headache, sore muscles, sore throat, fever, vomiting, fatigue, and cough	spread by contact with saliva or mucus of an infected person and by personal contact	vaccination and avoiding contact with infected person	rest and plenty of fluids; no specific treatments; see doctor if symptoms become severe
<b>Cold</b>	scratchy, sore throat; sneezing and runny nose; and mild cough	spread by contact with saliva or mucus of an infected person	washing hands regularly and avoiding contact with infected person	rest and plenty of fluids; no specific treatments; see doctor if symptoms become severe
<b>Mumps</b>	pain and swelling of glands in the throat, fever, and headache	spread by contact with infected airborne droplets and personal contact	vaccination	see doctor; rest and plenty of fluids; no specific treatments



### Common Viral Diseases

Type	Symptoms	Transmission	Prevention	Treatment
<b>Measles</b>	fatigue, runny nose, cough, slight fever, small white dots in mouth, and rash covering body	spread by contact with saliva or mucus of infected person	vaccination	see doctor; rest and plenty of fluids; no specific treatments
<b>Mononucleosis</b>	fever, swollen lymph nodes, sore throat, and weakness	spread by contact with saliva or mucus of an infected person	avoiding drinking from the same glass and eating from the same food as other people	see doctor; rest and plenty of fluids; no specific treatments
<b>Hepatitis</b>	inflammation of the liver, jaundice (yellowing of the skin), fever, and darkening of the urine	spread by contact with bodily fluids of infected person and by eating infected food or water	vaccination for hepatitis A and B, washing hands regularly, and avoiding contact with infected person	see doctor; rest and medications for hepatitis A; no cure for hepatitis B and C





### Other Common Diseases

- **Fungal infections** include Athlete's foot, jock itch, and ringworm. These often occur when the fungus contacts warm, moist skin. Prevention involves good personal hygiene and keeping clothes dry.
- **Malaria** is the most widespread and serious protozoan disease. It is spread from person to person via mosquitoes. Malaria can be prevented and treated with antimalarial medicines.





### Other Common Infections

- **Parasitic infections** include hookworms and tapeworms inside the body, and lice, leeches, ticks, and fleas on the body.
- A person can contract parasites by eating infected food, drinking infected water, contacting infected soil, and by being bitten by infected insects.





### Working Toward a Healthy Future

- International air travel has made it easier for diseases to spread from country to country.
- The National Institute of Health (NIH) and Centers for Disease Control (CDC) track the spread of diseases and watch for new diseases entering the country.
- Public health organizations throughout the world fight diseases through vaccinations and treatments.



# Brain Food Video Quiz



Click below to watch the Brain Food Video Quiz that accompanies this chapter.

[Brain Food Video Quiz](#)

You may stop the video at any time by pressing the **Esc** key.



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# Quotes About Character



**“If you stand straight, do not fear a crooked shadow.”**

**—Chinese Proverb**



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# Quotes About Character



**“One falsehood spoils a thousand truths.”**

**—African Proverb**



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# Quotes About Character



**“A man cannot be comfortable without his own approval.”**

**—Mark Twain**



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# Quotes About Character

**“Our reverence is good for nothing if it does not begin with self-respect.”**

**—Oliver Wendell Holmes**



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# Quotes About Character



**“When the character of a man is not clear to you,  
look at his friends.”**

**—Japanese Proverb**



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# Quotes About Character



**“What lies behind us and what lies before us are small matters compared to what lies within us.”**

**—Ralph Waldo Emerson**



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# Quotes About Character



**“A good name, like good will, is got by many actions and lost by one.”**

**—Lord Jeffrey**



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# Quotes About Character



**“To enjoy the things we ought and to hate the things we ought has the greatest bearing on excellence of character.”**

**—Aristotle**



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# Quotes About Character



**“He that respects himself is safe from others; He wears a coat of mail that none can pierce.”**

**—Henry Wadsworth Longfellow**



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# Quotes About Character



**“The reputation of a thousand years may be determined by the conduct of one hour.”**

**—Japanese Proverb**



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# Quotes About Character



**“Dreams are the touchstones of our character.”**

**—Henry David Thoreau**



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# Quotes About Character



**“A man’s character is his fate.”**

**—Heraclitus**



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# Quotes About Character



**“Character is that which reveals moral purpose, exposing the class of things a man chooses and avoids.”**

**—Aristotle**



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# Quotes About Character



**“What you do speaks so loud that I cannot hear what you say.”**

**—Ralph Waldo Emerson**



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# Quotes About Character



**“Abstinence is the surety of temperance.”**

**—Plato**



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# Quotes About Character



**“This above all, to thine own self be true/And it must follow, as the night the day/ Thou canst not then be false to any man.”**

**—William Shakespeare**



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# Quotes About Character



**“No change of circumstances can repair a defect of character .”**

**—Ralph Waldo Emerson**



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# Quotes About Character



**“Men acquire a particular quality by constantly acting a particular way . . . you become just by performing just actions, temperate by performing temperate actions, brave by performing brave actions.”**

**—Aristotle**



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# Quotes About Character



**“The way to gain a good reputation is to endeavor to be what you desire to appear.”**

**—Socrates**



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# Quotes About Character



**“Do what you know and perception is converted into character.”**

**—Ralph Waldo Emerson**



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# Quotes About Character



**“Rather fail with honor than succeed by fraud.”**

**—Sophocles**



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# Quotes About Character



**“Character is higher than intellect.”**

**—Ralph Waldo Emerson**



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# Quotes About Character



**“To know what is right and not do it is the worst cowardice.”**

**—Confucius**



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# Quotes About Character



**“It takes less time to do a thing right, than it does to explain why you did it wrong.”**

**—Henry Wadsworth Longfellow**



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# Quotes About Character



**“Nature magically suits a man to his fortunes, by making them the fruit of his character.”**

**—Ralph Waldo Emerson**



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# Quotes About Character



**“That soul that can be honest is the only perfect man.”**

**—John Fletcher**



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# Quotes About Character



**“One does evil enough when one does nothing good.”**

**—German Proverb**



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# Quotes About Character



**“There is no pillow so soft as a clear conscience.”**

**—French Proverb**



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# Quotes About Character



**“Don't forget to love yourself.”**

**—Soren Kierkegaard**



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# Quotes About Character



**“Character is the indelible mark that determines the only true value of all people and all their work.”**

**—Orison Swett Marden**



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# Quotes About Character



**“What we think or what we believe is, in the end, of little consequence. The only thing of consequence is what we do.”**

**—John Ruskin**



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# Quotes About Character



**“Fame is vapor, popularity an accident, riches take wing, and only character endures.”**

**—Horace Greeley**



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# Quotes About Character



**“You can easily judge the character of a man by how he treats those who can do nothing for him.”**

**—James D. Miles**



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# Quotes About Character



**“Right is right, even if everyone is against it; and wrong is wrong, even if everyone is for it.”**

**—William Penn**



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# Quotes About Character



**“Our deeds determine us, as much as we determine our deeds.”**

**—George Eliot**



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# Quotes About Character



**“Character is the result of two things: mental attitude and the way we spend our time.”**

**—Elbert Hubbard**



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# Quotes About Character



**“A man without character is like a ship without a rudder.”**

**—Karl G. Maeser**



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# Quotes About Character



**“Character is much easier kept than recovered.”**

**—Thomas Paine**



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# Quotes About Character



**“Character is power.”**

**—Booker T. Washington**



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# Quotes About Character



**“An individual step in character training is to put responsibility on the individual.”**

**—Robert Baden-Powell**



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# Quotes About Character



**“Character is a by-product; it is produced in the great manufacture of daily duty.”**

**—Woodrow T. Wilson**



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