



Physical Education

9-12/Health

April 14, 2020



9-12 Health

Lesson: April 14, 2020

Objective/Learning Target:

Chapter 12.2 Transmission, Treatment, and Prevention of Infectious Diseases

- Differentiate between methods of disease transmission
- Explain the various patterns of infectious disease occurrence
- Practice effective methods of infectious disease prevention
- Compare treatments for bacterial and viral infections

Bell Work

What do you touch?

List all the objects you touch each day.

It is likely these objects are touched by other as well. Touching these items increases the likelihood for contact with pathogens and the chances that they could enter your body.

Brainstorm ways to avoid contracting an infectious disease from the surfaces you touch daily.

Methods of Transmission

- Direct Transmission
 - Direct Contact
 - Droplet Spread
- Indirect Transmission
 - By Animal
 - By Contaminated Objects
 - By Airborne Means

Direct Transmission

Direct Contact -
microorganisms are passed
during physical intimacy or
contact

Droplet Spread - when an
individual is within a few feet
of an infected person who is
coughing, sneezing, or
speaking

Indirect Transmission

- By Animal - sometimes pathogens use animals as transportation to a human victim
 - Vectors - mosquitoes, flies, ticks, fleas and lice
- Contaminated Animals
- By Airborne Means

Occurrence of Infectious Disease

- Epidemic - infection happens in unexpectedly large numbers over a particular area
- Pandemic - infection affects an enormous number of people and spreads from one country to much of the world
- Endemic - infection naturally occurs at low levels in a particular area

Prevention of Infectious Diseases

- Hand Washing
- Respiratory Etiquette
- Food Sanitation
 - Pasteurization - kills pathogens in milk, juice and other foods
- Vaccines - a dead or nontoxic part of a pathogen that is injected into a person to train their immune system to eliminate that live pathogen

Treatment for Infectious Diseases

- Antibiotics - substances that target and kill pathogenic bacteria
 - Some bacteria have developed antibiotic resistance
 - MRSA cannot be contained with antibiotics

Activity

Real World Health

In this lesson, you learned the spread of infectious disease can be prevented by washing your hands. In this activity, you will practice this important method of prevention. With a partner, review the proper methods for hand washing. Wash your hands using warm, soapy water for at least 20 seconds. (Singing "Happy Birthday" twice takes roughly 20 seconds.) Discuss alternative methods to use when water is not available.