

<b>COURSE:</b> Health	<b>GRADE(S):</b> 6 <sup>th</sup> Grade
<b>UNIT:</b> Disease	<b>TIMEFRAME:</b> 6 Lessons

<p><b>NATIONAL HEALTH EDUCATION STANDARDS:</b></p> <p><b>STANDARD 1:</b> Students will comprehend concepts related to health promotion and disease prevention to enhance health.</p> <p><b>STANDARD 3:</b> Students will demonstrate the ability to access valid information and products and services to enhance health.</p> <p><b>STANDARD 4:</b> Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.</p> <p><b>STANDARD 7:</b> Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.</p> <p><b>STANDARD 8:</b> Students will demonstrate the ability to advocate for personal, family and community health.</p>
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<p><b>STATE STANDARDS:</b></p> <p><b>10.1. Concepts of Health</b>  10.1.6.E. Identify health problems that can occur throughout life and describe ways to prevent them.</p> <p><b>10.2. Healthful Living</b>  10.2.6.A. Explain the relationship between personal health practices and individual well-being.</p> <p><i>Reading Assessment Anchors:</i></p> <p><b>R6.A.2.1 Understand nonfiction appropriate to grade level.</b>  R6.A.2.1 Identify and apply the meaning of vocabulary in nonfiction.  R6.A.2.3 Make inferences, draw conclusions, and make generalizations based on text.  R6.A.2.4 Identify and explain main ideas and relevant details.</p> <p><b>R6.B.3 Identify and interpret concepts and organization of non-fictional text.</b>  R6.B.3.2 Distinguish between essential and nonessential information within or between text.</p>
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<p><b>UNIT OBJECTIVES:</b></p> <p>Examine communicable and non-communicable diseases</p>	<p><b>CONTENT:</b></p> <p>I. Disease-An illness that affects the proper functioning of the body or mind.</p> <p>- Communicable Disease- Spread from person to person</p> <ul style="list-style-type: none"> <li>o Common communicable diseases <ul style="list-style-type: none"> <li>▪ Cold</li> <li>▪ Chicken Pox</li> <li>▪ HIV/AIDS</li> <li>▪ Influenza</li> <li>▪ Pneumonia</li> <li>▪ STD's</li> </ul> </li> </ul>
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Identify the types of germs.

Recognize ways that germs are spread and methods used to prevent disease.

- Non-communicable Disease- Does not spread from person to person.
  - o Common non-communicable diseases
    - Cancer
    - Heart Disease
    - Arthritis
    - Diabetes
    - Asthma
    - Allergies

## II. Types of Germs

- *Bacteria*: Tiny one-celled organisms that grow virtually everywhere.
    - o Strep throat
    - o Tuberculosis
  - *Viruses*: Smallest and simplest form of life.
    - o Common cold
    - o HIV/AIDS
  - *Rickettsias*: Small bacteria that are spread by the bites of insects, such as:
    - o Ticks and lice.
    - o Lyme disease
    - o Rocky Mountain spotted fever
  - *Fungi*: Simple life forms that, are unable to make their own food.
    - o Athlete's foot
    - o Ringworm
    - o Protozoa
- Simple animal-like organisms:
- o Malaria
  - o Giardiasis

## III. How Germs are Spread

- Indirect contact: sneeze
- Direct contact: shake hands
- Contact with animals: bite
- Other contacts: food poisoning, contaminated water

## IV. Disease Prevention

- Health Habits to Protect Yourself
  - o Eat a balanced diet
  - o Exercise regularly
  - o Rest
  - o Avoid risky behaviors – remain abstinent, don't share utensils.
- Health Habits to Protect Others
  - o Cover your mouth and nose when you sneeze.
  - o Seek medical treatment.
  - o Avoid spreading your germs during

<p>Analyze the immune system's response to a germ</p>	<p>contagious periods.</p> <p>V. The Body's Defenses Against Germs</p> <ul style="list-style-type: none"> <li>- Immunity: Your body's resistance to germs and the harmful substances they produce. <ul style="list-style-type: none"> <li>o First Lines of Defense <ul style="list-style-type: none"> <li>▪ Tears: Wash germs from eyes</li> <li>▪ Skin: Carrier to the germ</li> <li>▪ <i>Mucous membranes</i>: Traps germs</li> <li>▪ <i>Saliva</i>: Washes germs</li> <li>▪ <i>Gastric juices</i>: Destroy germs</li> </ul> </li> </ul> </li> <li>- How the Immune System Responds <ul style="list-style-type: none"> <li>o Germs enter the body</li> <li>o T-cells: a type of white blood cell, identify the germ.</li> <li>o T-cells: activate B-cells, another type of white blood cell.</li> <li>o B-cells multiply.</li> <li>o B-cells produce antibodies which neutralize the germ. <ul style="list-style-type: none"> <li>▪ Special T-cells bind and destroy remaining germs</li> <li>▪ Memory B-cells and T-cells remain in the bloodstream in case the same germ invades again.</li> </ul> </li> </ul> </li> <li>- Vaccines <ul style="list-style-type: none"> <li>o A preparation of dead or weakened germs injected into the body to cause the immune system to produce antibodies.</li> <li>o If these germs then enter the body the antibodies recognize and destroy them.</li> </ul> </li> </ul>
<p><b>ACTIVITIES:</b></p> <p>Lecture and Discussion:</p> <ul style="list-style-type: none"> <li>✧ Definition of disease</li> <li>✧ Communicable vs. non-communicable disease</li> <li>✧ Types of germs</li> <li>✧ Disease prevention</li> <li>✧ The body's defense system</li> </ul> <p>T-Chart comparing communicable and non-communicable diseases. (Interpersonal Communication)</p> <p>Students are given time to access health websites to gain valid health information. (Accessing Information)</p> <p>Create a mind-map on the 5 types of germs. Include definition, methods of transmission, and common diseases. (Accessing Information)</p>	<p><b>ASSESSMENTS:</b></p> <p>Student-designed brochure/poster about a communicable or non-communicable disease. <i>Student includes:</i> nature of the disease, methods of transmission, symptoms, and treatments. Student-designed illustration of the immune system's response to a germ. (Advocacy)</p> <p>Given a worksheet, students will critique health related websites.</p> <p>Using a rubric, students will explain the immune system's response to germs.</p> <p>Students will score a 70% or more on a teacher designed disease unit test.</p>

*Ways Germs Spread Activities*

- ✧ Place glitter in 4 students' hands
- ✧ Students shake hands with class
- ✧ All students check hands (direct contact)
- ✧ Bring in scented spray
- ✧ Spray bottle
- ✧ Students smell scent (indirect contact)

(Interpersonal Communication)

Create an illustration or story of the immune system's response.

(Interpersonal Communication)

*Teacher directed differentiated instructional projects and activities are ongoing and based on student need.*

**RESOURCES:**

*Teen Health Course 3* Glencoe/McGraw Hill Companies

*Comprehensive School Health Education*, by Meeks Heit, /pp. 273-294

*Totally Awesome Healt*, by Meeks Heit, pp. 536-542

*How to Survive Teaching Health*, by Tilman and Toner, pp. 243-260

Pennsylvania Department of Health (2006)  
Retrieved on July 12, 2006 from:  
<http://www.health.state.pa.us>

McGraw Hill Company (2006)  
Retrieved on July 12, 2006 from:  
[http://www.glencoe.com/sites/pennsylvania/teacher/health\\_fitness/index.html](http://www.glencoe.com/sites/pennsylvania/teacher/health_fitness/index.html)

**REMEDIATION:**

Test adaptations

Handouts accompanying class notes

Peer Teaching

One-on-one with teacher

**ENRICHMENT:**

Class presentation of their brochure or poster on communicable or non-communicable disease

Ask your local health department what vaccinations are required to travel to those countries. Write a report explaining why each one is needed.

Find informative web sites on communicable and non-communicable diseases.

*Suggested Reading:*

"Drinking Fountain Joe", by Justin Matott  
Clove Publications

