



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
2007 Volume V: Health and the Human Machine

---

## **Infectious Diseases: Hepatitis B and Tuberculosis**

Guide for Curriculum Unit 07.05.11  
by Rosey Rawle-Pitter

The issue of infectious diseases in our society is of great concern to our well being. The control and prevention of the spread of infectious diseases have improved over the years with the development of vaccines and working knowledge of how infectious diseases are spread. The main focus of the unit is to compare and contrast the infectious diseases of hepatitis b and tuberculosis. Hepatitis b is caused by a virus, and tuberculosis is caused by bacteria. Not all infectious diseases are the same depending on the type of pathogen that causes the disease. Most infectious diseases are caused by either a virus or bacteria. This unit covers the topics of pathogens, immune system, antibodies, vaccines, antibiotics, tuberculosis, and hepatitis b. There are different types of pathogens such as a virus, bacterium, fungus, and protozoan. The immune system is the body's defense against pathogens that invade the body. Humans have created ways to protect themselves against infectious diseases by development of vaccines and antibiotics, which are used on various diseases. The lessons in this unit are designed to explore how infectious diseases are spread through an interactive lab. The students will have the opportunity to figure out how antibiotics are used and for what type of infection. The students will use the knowledge about vaccines to create a pamphlet about childhood vaccinations. At the end of this unit the students will explore different types of infectious diseases.

(Developed for Biology, grade 10; recommended for Biology, grade 10, Human Physiology, grades 11-12, and Health, grades 9-12)

---

<https://teachersinstitute.yale.edu>

©2021 by the Yale-New Haven Teachers Institute, Yale University  
For terms of use visit <https://teachersinstitute.yale.edu/terms>