

Unit 2: Lesson 4 – Vaccine History and Research

Activity 3: Hepatitis B Vaccine – A Tale of Two Vaccines

The purpose of this activity is to understand that as science evolves, better solutions may present themselves and to consider the communications and ethical balance involved in scientific progress.

1. After reading excerpts of Chapter 8 of *Vaccinated: One Man’s Quest to Defeat the World’s Deadliest Diseases*, titled “Blood”, complete the table below.

Question	Hepatitis B vaccine derived from blood	Hepatitis B vaccine made using genetic engineering
What was the problem that Dr. Hilleman faced?		
What discoveries preceded the creation of the vaccine?		
How did Dr. Hilleman discover a solution to the problem?		
How did society react to the new discovery?		

2. Write an essay titled: “Use of blood-derived hepatitis B vaccine—methods and ethics.” Be sure to address the ethics (right or wrong) related to using blood from infected individuals to make a vaccine, considered from these points of view:
 - a. Someone whose blood was used to make the vaccine, but could not benefit
 - b. Someone whose child was at risk of liver cancer from hepatitis B infection
 - c. Whether or not you would be vaccinated with such a vaccine or risk hepatitis B infection