

Unit 2: Lesson 4 – Vaccine History and Research

GLOSSARY

Cowpox

A virus that infects cows and is similar to smallpox. Milkmaids infected with this virus were immune to infection with smallpox. This realization led Edward Jenner to develop the first vaccine.

Eradication

A complete reduction of a disease so that none exists in the world.

Hepatitis B

A virus that infects people and can lead to liver disease and cancer. The virus is transmitted through blood.

Mumps

A virus that infects people and causes swelling of the glands just below the ear (parotid glands). If the virus infects the brain or spinal cord, a person can become deaf. If it infects a pregnant woman early during pregnancy, her unborn child may be harmed or she may be at risk for miscarriage. The virus spreads by coughing and sneezing.

Polio

A virus that infects people's intestines, and sometimes, the brain and spinal cord, leading to paralysis and in some cases, death. The virus spreads from hand to mouth.

Rabies

A virus that infects people by attacking the brain and spinal cord. It spreads through the bite of an infected animal. A person can be vaccinated after they are bitten and the vaccine still works because of the long time between exposure and illness. But, if a person is not vaccinated, they are almost certain to die from the infection.

Smallpox

A virus that killed about 3 of every 10 people infected. Survivors were often left with pox marks that were disfiguring. A vaccine led to the complete eradication of this virus. No one in the world has to worry about getting this disease unless a bioterrorist attack would re-introduce it.

Tissue culture

A lab method in which cells are grown in a lab to allow scientists to complete experimental procedures, such as growing viruses, without needing people or animals to do so.