2.2: What is a Vaccine-Preventable Disease (VPD)?

Vaccines are our best defense against many diseases. **Vaccine-preventable diseases (VPDs)** are diseases caused by bacteria and viruses that can be prevented by vaccines. VPDs can spread through different routes such as the air, respiratory droplets, and bodily contact. Some diseases, such as measles, are extremely contagious. For example, it is possible to contract measles two hours after a person with measles has left the room.

Many of the diseases prevented by vaccines have dramatically declined since the introduction of vaccination programs. However, awareness of VPDs continues to be a priority so that members of the public and health professionals understand why it is important to keep vaccinating against those diseases. When people stop vaccinating, VPDs, such as measles, can recur and spread rapidly around the world.

**Image 2.1: Vaccine-Preventable Diseases**
When a disease is eradicated around the world, vaccines are no longer needed. For example, smallpox was **eradicated** in 1979. As a result, the smallpox vaccine is no longer provided in routine vaccination programs. Diseases are **eliminated** when the disease is reduced to zero, or close to zero, in a defined geographical area. Polio, for example, is eliminated in North America and South America.