

2. Principles of Vaccination

2a. Immunity

Immunity is the ability of the human body to tolerate the presence of material indigenous to the body (“self”), and to eliminate foreign (“nonself”) material. This ability allows us to be protected from infectious diseases

There are two basic ways to acquire immunity, **active** and **passive**.

2a.i Active immunity

- Protection produced by the person’s own immune system
- Usually permanent
- Acquired by
 - having the natural disease
 - vaccination

2a.ii Passive immunity

- Protection transferred from another human or animal
- Temporary protection that wanes (goes away) with time, usually within a few weeks or months
- Most common form of passive immunity is that which an infant receives from its mother (antibodies are transported across the placenta during the last 1-2 months of pregnancy)
- Infant protected from certain diseases for up to a year – better against some diseases (measles, rubella, tetanus) than others (polio, pertussis)