



Natural immunity is an immune response that occurs naturally in the body in response to a pathogen. This occurs when a person is exposed to the pathogen causing a disease.

Advantages: the development of life-long immunity and the avoidance of possible vaccines' side effects .

Disadvantages: There is a great risk for some highly contagious diseases to lead to severe, long lasting complications, illness or even death.

Herd Immunity in a natural way ,is more difficult and slower to achieve because a large number of people have to get sick and recover.

Herd Immunity is a process to develop **immunity in a large number of people** so as to reduce the chances of the people with less Immunity getting infected by a virus or disease.

Artificial Immunity is protection produced by intentional exposure of a person to antigens in a **vaccine**, so as to produce an active and lasting immune response.

Advantages: Vaccines create immunity without causing disease.

Disadvantages: Vaccines rarely make someone seriously ill. Many of them can cause side effects like: mild fever, red, tender skin at the place of the shot and occasionally, a reaction that includes fever, rash, joint pain, and swollen lymph nodes.

Herd Immunity is achieved by **vaccinating** a large bunch of people, quickly and safely.

Both **Natural immunity** and **Artificial Immunity** constitute the **Active Immunity**. If an immune person comes into contact with that disease in the future, their immune system will recognize it and immediately produce the antibodies needed to fight it. Active immunity is long-lasting, and sometimes life-long.

<https://www.cdc.gov/vaccines/vac-gen/immunity-types.htm>

<https://www.javatpoint.com/herd-immunity-vs-natural-immunity>