

With World Immunization week falling on the 23rd to the 29th of April, here are some interesting facts about immunisation.

Where do immunisations come from?

In 1796 Edward Jenner, a British physician, discovered that dairymaids who had caught cowpox (a minor disease), did not catch smallpox (a fatal disease). Jenner took diseased matter from the hand of Sarah Nelmes, a local dairymaid who had become infected with cowpox, and inserted this matter into the cut arm of James Phipps, a healthy eight-year-old boy. The boy then caught cowpox.

48 days later Jenner injected smallpox matter into the boy. It had no effect. This was the first recorded vaccination.

Immunisations protect children and adults from some diseases that can be serious and even fatal. Immunisations also protect other people from these diseases as they prevent the disease from spreading. If a disease is immunised against, it may be eradicated or no longer be a threat to the population.

How do immunisations work?

The immunisation allows the body to defend itself against bacteria and viruses that cause disease. By exposing the body to a tiny amount of the disease, it stimulates the immune system to respond and build defences against it. Because the immune system then recognises the invasion, if there were to be a larger exposure, it would not cause as much devastation as it would if the immune system had never seen it before.

A vaccine is not a cure, but ideally prevents infection or slows disease progression.

One such vaccine is the flu vaccine. Before flu season, many people get a flu vaccine. This is a denatured form of the influenza virus that cannot cause disease. Sometimes a mild fever, swollen joints or stiffness occur after having a flu vaccination because the immune system is working hard to make antibodies.

This is a sign that the immune system is learning how to recognise and respond to the virus.

