

Safety Corner

Is vaccination safe?

Vaccines work by making our body produce antibodies to fight the specific diseases without actually infected with the disease. If the vaccinated person comes into contact with the disease itself, their immune system will recognise it and produce the antibodies needed to fight it.

All vaccines undergo extensive testing on safety and effectiveness before they can be brought to market. And once vaccines are on the market, there are several systems in place to monitor the safety of the treatments within the general population. Some vaccines provide very high levels of protection for a long period of time. Others are targeted with a specific effective period; for example, typhoid vaccine provides around 70% protection over three years. Some vaccination programmes are targeted at older people, as with the shingles vaccine, or certain risk groups, as with the hepatitis B vaccine.

Due to the success of immunization, some diseases are no longer perceived as a threat. For example, polio has been vaccinated almost out of existence. Despite the success of vaccination programmes in controlling diseases, certain religious and social groups have questioned the utility of vaccination. In recent years, a number of web sites provide unbalanced, misleading and alarming vaccine safety information, which can lead to undue fears, particularly among parents and patients. A closer look and you will see that none of their claims are backing up with numbers.

Most people react very well to vaccinations and have an adequate immune response against the pathogens. The lack of response to vaccines, so-called vaccine failure, can occur when some people fail to develop a protective immune response, despite having been vaccinated. Primary vaccine failure occurs when an organism's immune system does not produce antibodies when first vaccinated. This can be due to a variety of reasons ranging from individual variations in immune response to manufacturing errors.

All medicines have side effects. However, vaccines are among the safest and the benefits of vaccinations far outweigh the risk of side effects. It may be tempting to say "no" to vaccination and "leave it to nature"; however, deciding not to vaccinate your children puts them at risk of catching a range of potentially serious, even fatal, diseases.

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