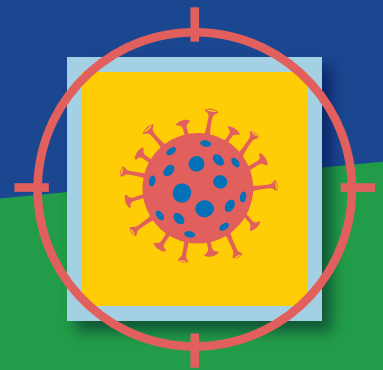


Vaccine effectiveness

Key questions answered



How do vaccines prevent diseases?

Most vaccines contain an antigen, which is a weakened or inactivated form of a virus or bacterium. When a person is vaccinated, their immune system recognises the antigen as foreign, and creates cells called antibodies which fight the virus or bacterium.

Vaccines allow the immune system to create memories of the viruses or bacteria contained in them. The next time a vaccinated person encounters that virus or bacterium, their immune system can recognise it, and quickly produce the right antibodies and immune cells to kill it.

What is 'herd' or 'community' immunity?

When people are vaccinated against an infectious disease, it becomes much less likely to spread from person to person. This shared protection is called 'herd' or 'community' immunity.

Community immunity helps protect those who are most vulnerable to disease:

- › Young children
- › Older people
- › Cancer patients
- › People with weak immune systems
- › People who cannot be vaccinated for medical reasons

What is 'natural immunity'?

'Natural immunity' is a name given to the immunity a person develops after they get a disease, and when their immune system has produced antibodies in response to it.



Can someone catch a disease, even if they've received a vaccine?

A person can still catch a disease even after receiving the recommended vaccine doses against it. This can happen if they do not develop sufficient protection against the disease, or if their immunity decreases over time.

In these cases, the person's symptoms are often milder than they would have been without vaccination. They are also less likely to infect others.

Are vaccines 100% effective?

No vaccine is 100% effective. A vaccine does not protect all people vaccinated. Whether vaccination protects an individual depends on several factors.

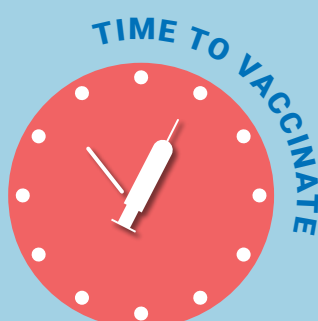
These include:

- › Their age
- › Other diseases or conditions they may have
- › Time since vaccination
- › Previous contact with the disease
- › The specific vaccine

For example, the vaccine against measles, mumps and rubella (MMR) is highly effective at preventing disease. It typically provides lifelong protection.



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