

A Guide to Different Types of Immunity

What is Immunity?

Immunity is the term used to describe your body's ability to defend itself from an infectious disease or pathogen (like a virus or bacteria). There are different kinds of immunity – including innate, active, and passive immunity – and each play a distinct and important role in helping the body prevent or fight off disease.

Innate Immunity

Innate immunity is something you are born with, and it is the body's first line of defense against germs.¹ For example, your skin is part of innate immunity because it stops harmful germs from entering your body. Other examples include mucus in your nose, which traps germs, and specialized cells in your blood that attack harmful foreign germs.²

While innate immunity responds quickly, it isn't always strong enough or specific enough to fully protect you – especially against new or serious infections. That's where active and passive immunity come in, helping your body build stronger, more targeted defenses. These forms of immunity are acquired through antibodies, which are special proteins that fight off germs.³

Active Immunity

Active immunity occurs when you are exposed to a germ. This exposure triggers your immune system to create antibodies. If you come into contact with this germ again, these antibodies can help your body remember it and fight the germ off more quickly. Active immunity varies but it can be longer-lasting and, for some infections, it can even last a lifetime.⁴

You can acquire active immunity through:



Vaccines (before infection)

Vaccines safely teach your body how to fight infections. Some use a tiny, harmless piece of a germ or a weakened version of it. Others use instructions or proteins to help your body recognize and stop the real infection.⁵



Natural immunity (after infection)

Natural immunity provides protection *after* infection. Natural immunity occurs when your body fights off an illness on its own. In response to an infection, your body creates antibodies that it can use against that same illness in the future.⁶ While it is an important form of immunity, natural immunity comes with the risk of severe illness, hospitalization, and potential long-term side effects from the illness.⁷

Vaccine-induced immunity is safer than natural immunity because it provides protection without causing illness.⁸

Passive Immunity

Passive immunity occurs when you receive antibodies from another source rather than by producing them yourself in response to an infection. This type of protection works right away, but it only lasts a few weeks or months, unlike active immunity, which can last much longer.⁹

You can acquire passive immunity through:



Transmission from mother to child

The placenta: In the womb, the placenta continuously delivers the mother's antibodies to her growing fetus.¹⁰ These antibodies stay in the baby's body for a few months after birth and help protect the child once it is born.¹¹

Breastfeeding: A mother's breastmilk also contains antibodies to protect her infant from illness and infection. The milk delivered right after birth, known as colostrum, is most rich in these antibodies.¹²

While these forms of passive immunity provide immediate protection and are especially important for protecting newborns in the earliest weeks and months of life, they are temporary. Vaccines administered in childhood provide longer-lasting protection and a more predictable immune response.¹³



Monoclonal antibodies

Monoclonal antibodies are man-made medications that mimic real antibodies. They help to fight off serious illnesses or prevent them from occurring.¹⁴

They generally provide immunity for one to six months — vaccines can provide much longer protection.¹⁵

All forms of immunity help protect against disease, but vaccines offer the safest and most reliable protection against severe illness and hospitalization.

Unlike natural infection, which can be unpredictable and even dangerous, vaccines are carefully tested, monitored, and administered in a controlled way. This means they help your body build lasting immunity with far less risk of serious complications.¹⁶

Visit cveep.org to learn more about the [latest vaccine recommendations](#) and talk to your healthcare provider to ensure you are up to date.

¹ www.cancer.gov/publications/dictionaries/cancer-terms/def/immunity

² www.ncbi.nlm.nih.gov/books/NBK279396/

³ www.cdc.gov/vaccines/basics/immunity-types.html

⁴ www.cdc.gov/vaccines/basics/immunity-types.html

⁵ www.hhs.gov/immunization/basics/work/prevention/index.html

⁶ www.cdc.gov/vaccines/basics/immunity-types.html

⁷ vaccinateyourfamily.org/stay-safe-and-vaccinate-the-risks-of-natural-immunity/

⁸ www.hhs.gov/immunization/basics/work/prevention/index.html

⁹ www.cdc.gov/vaccines/basics/immunity-types.html

¹⁰ www.sciencedirect.com/science/article/abs/pii/S0165037810003542

¹¹ hillemanfilm.com/news/closer-look-maternal-antibodies-actively-providing-passive-immunity

¹² www.healthychildren.org/English/ages-stages/baby/breastfeeding/Pages/Breastfeeding-Benefits-Your-Babys-Immune-System.aspx

¹³ www.cdc.gov/vaccines/basics/immunity-types.html

¹⁴ my.clevelandclinic.org/health/treatments/22246-monoclonal-antibodies

¹⁵ www.nfid.org/wp-content/uploads/2023/06/mAbs-Fact-Sheet-English.pdf

¹⁶ vaccinateyourfamily.org/stay-safe-and-vaccinate-the-risks-of-natural-immunity/