

HOW VACCINES CREATE IMMUNITY



How does disease immunity work?

A person develops disease immunity by being infected with a disease or vaccinated against it.¹ When the body comes across an unknown germ, its immune response creates antibodies — specialized tools that mark germs as targets and defend against them. The next time the germ comes around, the body remembers it and has the tools to fight it right away.²

How do vaccines produce immunity?

Vaccines expose the body to weakened or dead germs, or just a portion of them, so that the body develops an immune response to a disease without getting infected with it.

Do natural infections create better immunity than vaccines?

Vaccines are generally just as effective — and often more so — at producing an immune response than a mild infection. By reducing infection and disease spread, vaccines also prevent the severe illness and long-lasting complications that can result from outbreaks of diseases, like respiratory illness, neurological disorder, paralysis or even death.^{3,4}

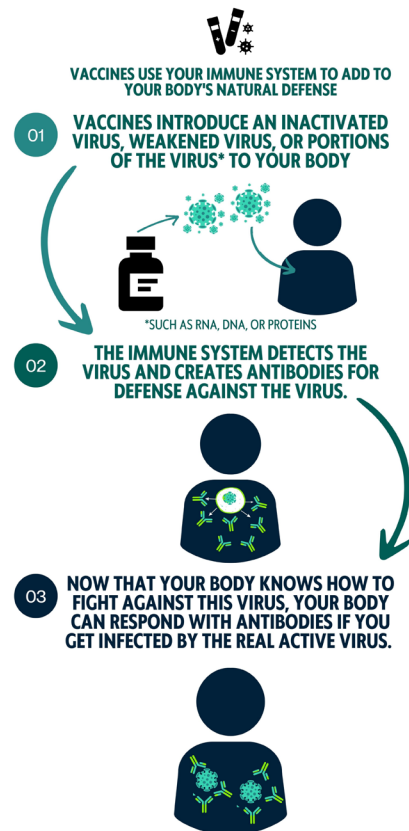
When enough people in a community are immune to a disease, vaccines also protect vulnerable people at higher risk of developing disease complications. People who choose not to get vaccinated risk helping disease spread more easily — potentially hurting other

people's health, disrupting regular activities and even overwhelming health care services.⁵

How has vaccine-acquired immunity helped in the United States?

In the U.S., vaccines for diseases including smallpox, polio, diphtheria and rubella have all reduced the frequency and severity of outbreaks, as well as the deaths and debilitating injuries these diseases cause.⁶

HOW DO VACCINES WORK?



¹ Centers for Disease Control and Prevention, <http://bit.ly/3FI19Z9>.

² The University of Chicago Medical Center, <http://bit.ly/3LFJgg3>.

³ Centers for Disease Control and Prevention, <http://bit.ly/3Hdvn4S>.

⁴ Mayo Clinic, <http://bit.ly/3yVc6l0>.

⁵ Mayo Clinic, <http://bit.ly/3WKLEEb>.

⁶ Mayo Clinic, <http://bit.ly/3Z2Pfp7>.

For more information on vaccines, visit the Vaccines Cause Adults page at: bakerinstitute.org/vaccines-cause-adults.

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**VACCINES
CAUSE
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