

# Facts about vaccines and what people need to know

4 September 2020, by From Mayo Clinic News Network



Credit: CC0 Public Domain

Vaccines save lives. That's the message Dr. Priya Sampathkumar, an infectious diseases specialist at Mayo Clinic, wants the public to know.

With the ongoing COVID-19 pandemic, Dr. Sampathkumar says it is doubly important that everyone get a [flu vaccine](#). While getting a [flu vaccine](#) won't protect against COVID-19, flu vaccines have been shown to reduce the risk of flu illness, hospitalization and death.

In this Q&A, Dr. Sampathkumar answers questions about vaccines, why immunizations are important and what parents and caregivers should do if they have concerns:

**Q.** What are the current flu vaccine recommendations?

**A.** The current recommendation is that everyone over the age of 6 months should get the flu vaccine. This year it is doubly important that everyone get the flu vaccine because if people have fever and respiratory symptoms in the fall, the first concern is going to be COVID-19. The symptoms of the two diseases are hard to tell apart. If you get the flu vaccine, you are less likely

to get the flu and less likely to be thought of as a possible COVID-19 case.

**Q.** Why are vaccines so important to public health?

**A.** Vaccines have been hailed as the biggest public health achievement of the 20th century. We have been so fortunate to live in an age where so many diseases that were once so common are now almost eliminated. In the U.S., for instance, we don't see polio, we don't see tetanus, we don't see diphtheria cases. And many other diseases have been reduced to low levels. This is all due to vaccines because many diseases are preventable through vaccination.

It's estimated that in the world, vaccines prevent about 285 deaths an hour. They are a powerful health tool. Vaccines are effective, they have a good safety record and they do a lot of good. They save lives.

**Q.** How are vaccines tested for safety?

**A.** Typically, it takes six to eight years to bring a vaccine to market. The first step in developing a vaccine is to do phase 1 trials, where the vaccine is tested in laboratory settings to make sure the vaccine works against the disease it is intended to protect against. The next step is phase 2 trials. This is where the vaccine is tested on a small group of volunteers - usually 10 to 20 people - to see what the optimal dose is after the vaccine has been shown to be safe for humans. The third step is phase 3 trials. Here we test many more people and look at how effective the vaccine is in real-life situations and how safe the vaccine is for humans. And then there are multiple reviews of the vaccine by [regulatory agencies](#). In the U.S., it's the Food and Drug Administration that reviews the data and approves the vaccine. And then the vaccine is licensed, and allowed to be sold and used in people. The whole vaccine testing process doesn't end there, even when the vaccine is used in

people. There is post-marketing surveillance. Government agencies and private agencies are looking to see if there are any new safety signals when the vaccine is used in thousands of people. Vaccines are rigorously vetted, and I would say they are much safer than many drugs on the market.

Q. What is your recommendation to parents who have questions or concerns about vaccinating their child?

A. As a parent, it is understandable that you always want to do what's best for you child. Vaccines are the best thing you can do to protect your child from illness. If you have questions, there are so many sources of credible information out there, including the American Academy of Pediatrics and the Centers for Disease Control and Prevention (CDC), but nothing beats talking with your child's health care provider. He or she will guide you and help you make decisions.

Q. What are good sources of information about vaccine safety?

A. There is a lot of unreliable information out there, so it is easy to get lost in social media posts that highlight misinformation about vaccines. If you have questions, talk with your health care provider. That's probably the most reliable source of information.

©2020 Mayo Foundation for Medical Education and Research

Distributed by Tribune Content Agency, LLC.

APA citation: Facts about vaccines and what people need to know (2020, September 4) retrieved 3 May 2021 from <https://medicalxpress.com/news/2020-09-facts-vaccines-people.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*