

Myths about COVID-19 Vaccines

Los Angeles County Department of Public Health

Myth 1: The vaccine was developed too fast – I don't think they know enough about it.

The Facts: These vaccines could be made fast and still be safe for three simple reasons.

- There was a lot of research done on the kind of virus that causes COVID-19 before this virus showed up. So scientists had a big head start about the kind of vaccine that would work best to fight this virus.
- A lot of government money was spent to get many companies to work on this vaccine and to put all of their scientists to work on it around the clock. That helped speed everything up.
- While every step that has to be followed to make a new vaccine and be sure it is safe was followed, some of the steps were done at the same time instead of one after another. It is like cooking several parts of a meal at once instead of cooking one course at a time. You get done sooner but it's just as good.

In fact, the two vaccines that have been approved to protect against COVID-19 were studied on more than 70,000 volunteers, including adults of all ages and different racial and ethnic groups, and were found to work very well and be equally safe for all.

Myth 2: Only 1% of people who get COVID-19 die of it. Won't the vaccine kill more people than that?

The Facts: COVID-19 is a lethal disease. Seasonal flu can be very dangerous but it kills about one person in every thousand infected, while COVID-19 kills one out of a hundred people who are infected. No one has died from the two approved vaccines.

- Some people wonder if that could be just because volunteers who took part in vaccine trials were not tracked for long enough for us to know if there will be deaths. It's true that we only have 3 months of experience watching people who got these vaccines, but we do have experience with other vaccines and the vast majority of ill effects show up within hours or days. There is no basis for believing we will see something different here.

Myth 3: The vaccines can make you sick with COVID 19

The Facts: The current vaccines don't include the virus in any form – no live virus, no weakened virus, no dead virus. You just cannot get the disease from the vaccine.

- Some other vaccines use the virus they are fighting in some form to charge up an immune response. The current COVID-19 vaccines do not work that way so there is no way that they could give you COVID-19.
- It is possible to catch the disease in the first few days after your vaccination before the vaccine has a chance to work, but that would not mean you got sick from the vaccine. For most people, the vaccine needs 7 days before it starts to work. And both these vaccines require a second dose before a person is fully protected from getting sick from the virus.

It is easy to be confused about this, because you might feel some side effects for a while after getting the vaccine. In fact, about half of the volunteers who tested these vaccines experienced some side effects: most of these effects were mild and did not require any treatment or change in daily activity and lasted for 1-2 days. What they were feeling was not COVID-19, however, not even a mild case of COVID-19. They were feeling the symptoms of an

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immune response, which means that the vaccine was at work developing antibodies to protect them from COVID-19.

Myth 4: These vaccines use genetic material to fight the virus. That means they can affect our genes.

The Facts: These vaccines do use genetic material, called mRNA (that stands for “messenger” RNA) to fight the virus but it doesn’t do anything to your genes.

- Just as its name says, mRNA works like a messenger. In this case, the mRNA used in the vaccine tells your body to make a protein that kicks your immune system into action. The mRNA lets your body get a message from the virus without having to run into the virus directly.
- But it doesn’t affect your genes. Keep in mind that you encounter genetic material from other plants and animals all the time, when you eat them. Your body breaks them down into their basic chemicals, using the proteins and fats and carbohydrates they contain to give you energy and make your cells work.

Like the food you eat, the mRNA you get in a vaccine does have an affect on your health, but it doesn’t change your genes or your DNA.

Myth 5: They say that childhood vaccines can cause autism – don’t these vaccines contain dangerous chemicals that can have serious health effects?

The Facts: Not true on either count. Childhood vaccines are one of the best and safest protections against dangerous diseases that have been developed and these vaccines have been carefully tested for safety as well.

- First about the autism scare – it was started by an English doctor who was later shown to be a fraud. The lie lived on because some celebrities bought in and ran with it. The result? Millions of dollars wasted on proving the truth over and over (for example, one study looked at every single baby born in Denmark for 8 years and showed there was absolutely no link). Even so, some scared parents still avoid vaccines and we see deadly outbreaks of diseases we could totally prevent.
- The list of ingredients in the COVID vaccines is pretty simple – mRNA, plus some fats (called “lipids,” which is another word for fats) plus some salt and sugar to stabilize the mix. You can actually find the ingredients on the Food and Drug Administration’s COVID-19 vaccine [website](#). Nothing you’ll see is out of the ordinary.

Myth 6: The vaccine contains a micro chip that can be used to track my movements.

The Facts: The vaccine does not contain any kind of tracking device whatsoever.

- This story seems to have spread on the Internet based on a Facebook post that said Bill Gates was planning to use a microchip to identify people who have been tested for COVID-19. In fact, Mr. Gates had commented on a research study that had nothing to do with COVID-19 and nothing to do with anything being implanted. The study was about a method

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to be sure who has gotten vaccinated in countries that have high death rates from vaccine preventable diseases and poor health data systems. Like the story about autism, this is a story that is hard to stop even after it has been debunked over and over.

Myth 7: The vaccine is being pushed on people against their will.

The Facts: Getting the vaccine is totally voluntary. Doctors and public health officials are trying to provide people with good information on the safety and effectiveness of these vaccines so that they can make an informed decision when it is their turn to be offered the vaccine. No one is required to get vaccinated.

Myth 8: You can't trust the people who made these vaccines. Big Pharma –the people who developed these vaccines, are just out to make money, and they pay doctors to say their products are safe.

The Facts: While there are terrible examples of drug companies putting profit before safety (for example, by aggressively promoting highly addictive opioid painkillers), the process for developing these vaccines and the make-up of the products themselves has been transparent, with more information available to independent scientists than ever before.

- The development of these vaccines has been carried out in the public eye. In fact, reviews of vaccine safety and efficacy (a term used to mean that the vaccines work) have been published for anyone to read. That means you or your doctor can read the reviews and decide whether the research seems solid and the findings are believable.
- The people reviewing the research include medical leaders from diverse settings all over the country and observers (non-voting members) representing a wide range of medical groups, including some that have fought hard against medical racism. They have not been paid for this work – they have been involved to verify the quality of the research and to assure that equity is protected throughout the process. For a list of names of the reviewers and the places they work, visit the Advisory Committee on Immunization Practices (ACIP) [website](#). You can learn more about these people by looking them up online.
- Doctors do not make extra money for giving vaccines. They are paid for a medical visit, same as any other primary care visit.

Myth 9: Black and Latinx communities are being singled out to get the vaccine because it hasn't really been proven to be safe.

The facts: There are certainly historical reasons for Black and Latinx communities to fear being singled out. The concern is justified because people of color and marginalized groups have, in the past, been coerced and subjugated to participating in drug trials and medical procedures without informed consent, patient protections, or ethical practices. That is not the case here, however. Black and Latinx communities have not been singled out to get the vaccine. But groups are being offered the vaccine based on the risks faced by the people in the group. So, the answer is NO to singling anyone out but YES, Black and Latinx communities could be

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offered the vaccines earlier than other communities where infection, hospitalization and death rates have not been as high.

Consider the following:

- The two vaccines now available were tested on diverse populations. In fact, efforts were made to assure inclusion of Black and Latinx volunteers in proportions equal to their proportion in the population just to make sure there weren't factors that would make a vaccine less effective or less safe in either of those groups. A big effort was made to include members of those groups, to assure that they would not be victims of medical neglect, which is the other side of the coin in regard to medical racism.
- The very top priority for getting vaccinated now that the vaccines are available are frontline workers in healthcare. This includes clinical staff such as doctors, nurses, and therapists as well as people who work in other areas like laboratories and hospital environmental services. They are prioritized because they are at higher risk of being exposed to the virus and they are critical to keeping other people alive. These same criteria are being used to decide who is next in line, as we need to prioritize vaccinating some people before others while there is limited supply of the vaccine. Once there is plenty of vaccine available, everyone who wants to get vaccinated should have easy access to the vaccine.
- There is good reason for Black and Latinx communities to demand equal and early access to vaccination. Black and Latinx residents, along with Native Americans and Native Hawaiians, have been most likely to be infected (often as a result of poor working or living conditions), most likely to require hospitalization if infected, and most likely to die from COVID-19. They're also the communities that suffer most severe consequences if illness excludes them from the workforce. If you see billboards or hear advertising encouraging Black and Latinx residents of LA to opt for vaccination, it reflects these concerns. LA wants those who have been hardest hit to have the opportunity to be vaccinated as soon as possible.

The stakes for Black and Latinx residents of LA are high. Please read what you can about the vaccines from reliable sources and talk to well-informed people you trust – your doctor, a science teacher you know, a pharmacist – and ask them to respond to your questions and concerns. Your questions are important and deserve to be answered by knowledgeable and trusted individuals.

Myth 10: I don't need the vaccine if I already had COVID-19.

The Facts: We don't know how long natural immunity – the immunity you get from having been sick – lasts. We also don't know if it is complete. There have been a few well-documented cases of people being infected twice. So even if you have had COVID-19 and recovered, you will benefit from the vaccine.