

A RESOURCE FOR IMPROVING MEASURABLE IMPACT

COVID-19 Myth vs. Fact

A guide for data-driven information

Getting vaccinated, wearing a mask, and social distancing are proven methods to slow the spread of COVID-19 and emerging variants. The Centers for Disease Control and Prevention (CDC) recommends that all people 5 years and older get vaccinated against COVID-19 and that all people 2 years and older wear a mask indoors when in public. (1-3) As of September 30, 2022, only 67.8% of people ages 5 years or older in the U.S. are fully vaccinated, and rates of infections, hospitalizations, and deaths remain high. (4-6)

This resource provides data-driven information about several misconceptions about the safety and effectiveness of masks and vaccines for protection from COVID-19.

MYTH: Masks do not prevent the spread of COVID-19.



FACT: Virus particles do not travel alone - they travel inside droplets or aerosols. **Masks help block droplets and aerosols**, significantly slowing and reducing the spread of COVID-19. (7)

MYTH: Wearing a mask for long periods of time is not safe for children.

FACT: There are **no safety concerns** for children wearing masks for prolonged periods in school or childcare settings. Masks **do not** make it harder to breathe, affect lung development, trap carbon dioxide, or weaken the immune system. (8)

MYTH: People who have recovered from COVID-19 do not benefit from vaccination.

FACT: Immunity acquired from natural infection is not as good as vaccine-induced immunity. The CDC recommends vaccination even for people who have previously been infected with COVID-19. It is still unclear how long protection lasts after you recover from COVID-19, and early evidence suggests the **vaccine provides better protection from COVID-19** compared to natural immunity. (9) One study found that people who were not vaccinated had **2.3 times the odds of reinfection** compared to people fully vaccinated. (10)

MYTH: The COVID-19 vaccines are not safe and were developed too rapidly.

FACT: The COVID-19 vaccines are **safe and effective**, and the risks from the vaccines are extremely rare. (3-4)



The vaccines were developed under the same rigorous standards as other vaccines, and the technology used has been developed and studied by researchers for decades. (11) Both the Moderna and Pfizer COVID-19 vaccines are **fully approved** by the U.S. Food and Drug Administration (FDA). (12-13)

MYTH: The COVID-19 vaccines can cause infertility.

FACT: There is **no evidence** or biological plausibility that any vaccines (including COVID-19) affect fertility in men or women. Additionally, the vaccines do not affect puberty or reproductive development in children. The COVID-19 vaccines are **safe and effective** for pregnant women and for any woman who wants to become pregnant in the future. (14)

MYTH: The COVID-19 vaccines do not prevent infection.

FACT: All COVID-19 vaccines are **highly protective** against severe disease, hospitalization, and death from COVID-19. (3,16) The vaccines also effectively reduce the risk for mild or moderate disease, though more breakthrough COVID-19 infections are reported (which could be from the Delta variant, waning immunity, or both). **Everyone ages 6 months and older are eligible for the vaccine (17). Children ages 5-11 should get at least 1 COVID-19 monovalent booster shot. All individuals ages 12+ are now eligible to receive the "updated" (bivalent) booster.** (3,18-21, 27)

MYTH: The vaccine is not necessary because there are effective treatments available for COVID-19.

FACT: Treatments such as ivermectin, zinc, and vitamin D are **not approved** by the FDA or CDC. Research studies investigating whether these treatment strategies are effective are unconvincing, and taking large doses of supplements or unapproved medications can cause **serious harm**. (22-24) Monoclonal antibody treatment may be helpful to some patients, but it is expensive.

MYTH: The COVID-19 vaccines are not safe during pregnancy.

FACT: The CDC recommends vaccination against COVID-19 for anyone who is pregnant, breastfeeding, or trying to get pregnant. (15)



Based on real-world data, the COVID-19 vaccine **does not cause miscarriage or other safety concerns** for pregnant women and their babies. Pregnant women who contract COVID-19 are more likely to experience severe outcomes compared to those who are not pregnant, including intensive care unit (ICU) admission, preeclampsia, death, and preterm or stillborn birth. (15)

MYTH: Vaccinated people get sicker with COVID-19 than people who are not vaccinated.

FACT: The vast majority of current hospitalizations and deaths from COVID-19 are among unvaccinated people.

Hospitalization rates among unvaccinated adults are currently **3 times as high** as those who were vaccinated. (25) Over the course of the pandemic, the risk of infection and COVID-associated death among unvaccinated adults has been as high as **13 and 52 times** that of vaccinated adults, respectively. More recently, the risk of infection among unvaccinated adults is about **5 times** that of vaccinated adults. (26)

SUMMARY

- Vaccination is the best path to ending the COVID-19 pandemic.
- The FDA's full approval of the first COVID-19 vaccine and the subsequent monovalent and "updated" bivalent boosters are important milestones that should reassure anyone concerned about getting vaccinated. Go to [vaccines.gov](https://www.vaccines.gov) to schedule an appointment near you. (28)
- Get vaccinated and continue to wear a mask based on personal and community level of risk, social distance, avoid crowds and poorly ventilated spaces, and wash your hands often. (29)

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