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 all people age 6-months and older get vaccinated against COVID-19 and all people 2 years and older wear a mask indoors when in an area with high COVID-19 cases. (1-4) On June 18, 2022, children ages 6-months-4 years became eligible to be vaccinated. (4) As of July 28, 2022, only 67.2% of people ages 5 years or older in the U.S. are fully vaccinated, and rates of infections, hospitalizations, and deaths remain high. (5-8) In Texas, only 4.4% of children ages 5-11 years and 5.6% of children ages 12-15 years are fully vaccinated. (5-6)

This resource provides evidence-based 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. (9)

**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 child care settings. Masks do not make it harder to breathe, affect lung development, trap carbon dioxide, or weaken the immune system. (10)

**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. Early evidence suggests the **vaccine provides better protection from COVID-19** compared to natural immunity, and while it can be delayed, the CDC recommends vaccination 3 months after symptom onset. (11-13) The number of antibodies **increases for 100 days** after infection, and then steadily **decreases over the next 16 months.** (13) One study found that people who were not vaccinated had **2.3 times the odds of reinfection** compared to people fully vaccinated. (14)

**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. (3,5) The vaccines were developed under the same rigorous standards as other vaccines, and the technology used has been in development and studied by researchers for decades. (15) Both the Moderna and Pfizer COVID-19 vaccines are **fully approved** by the U.S. Food and Drug Administration (FDA). (16-17)
MYTH: The COVID-19 vaccines can cause infertility.

FACT: There is no evidence and no biological plausibility that any vaccines (including COVID-19 vaccines) 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. (18)

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. (19) 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. (18)

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. (3-4, 20) The vaccines also effectively reduce risk for mild or moderate disease, though more breakthrough COVID-19 infections are being reported (which could be from the Delta variant, waning immunity, or both). Everyone ages 6 months and older are now eligible for the vaccine (20). Those that are at least 5 years old should get at least 1 COVID-19 booster shot, and adults age 50 and older are now eligible for a second booster shot. (3,21-24)

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. (25-27) Monoclonal antibody treatment may be helpful to some patients, but it is expensive.

Between November 7, 2021-January 8, 2022, unvaccinated or partially vaccinated adults were 6.7 times more likely to be infected, 0.2 times more likely to be hospitalized, and 0.3 times more likely to die from COVID-19 compared to fully vaccinated people. (28)
# Staying up to date on your COVID-19 vaccine

<table>
<thead>
<tr>
<th>Adults 18 and Older</th>
<th>Pfizer-BioNTech</th>
<th>Moderna</th>
<th>Johnson &amp; Johnson’s Janssen</th>
<th>Novavax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully vaccinated 2 weeks after final dose in primary series</td>
<td>Fully vaccinated 2 weeks after final dose in primary series</td>
<td>Fully vaccinated 2 weeks after final dose in primary series</td>
<td>Fully vaccinated and up to date 2 weeks after final dose of primary series</td>
<td></td>
</tr>
<tr>
<td>1 booster with Pfizer or Moderna at least 5 months after primary series completion</td>
<td>1 booster with Pfizer or Moderna at least 5 months after primary series completion</td>
<td>1 booster with Pfizer or Moderna at least 5 months after primary series completion</td>
<td>No booster recommended at this time</td>
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</tr>
<tr>
<td>2nd booster with Pfizer or Moderna for those 50 years and older at least 4 months after 1st booster.</td>
<td>2nd booster with Pfizer or Moderna for those 50 years and older at least 4 months after 1st booster.</td>
<td>2nd booster with Pfizer or Moderna for those 50 years and older at least 4 months after 1st booster.</td>
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<tr>
<td>Up to date immediately after all recommended boosters</td>
<td>Up to date immediately after all recommended boosters</td>
<td>Up to date immediately after all recommended boosters</td>
<td>Up to date immediately after all recommended boosters</td>
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<thead>
<tr>
<th>Children and Teens 5-17 Years</th>
<th>Pfizer-BioNTech</th>
<th>Moderna</th>
<th>Johnson &amp; Johnson’s Janssen</th>
<th>Novavax</th>
</tr>
</thead>
<tbody>
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<td>Fully vaccinated and up to date 2 weeks after final dose in primary series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 booster of Pfizer 5 months after final primary series dose</td>
<td>No booster recommended at this time</td>
<td>No booster recommended at this time</td>
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<tr>
<td>Up to date immediately after booster.</td>
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<table>
<thead>
<tr>
<th>Children 6 months-4 years</th>
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<th>Moderna</th>
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## SUMMARY

- Vaccination is the best path to ending the COVID-19 pandemic.
- The FDA’s full approval of the first COVID-19 vaccine is an important milestone that should reassure anyone who has concerns about getting vaccinated. Go to vaccines.gov to schedule an appointment near you. (29)
- Children as young as 6 months are now eligible for the COVID-19 vaccine. (12)
- 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. (30)
- For adults, boosters can be Prizer-BioNTech or Moderna, regardless of who makes the primary doses.
Content development and research for this report was led by Dell Health Scholars, Amelia Roebuck, Marnie Moore, Brittany Buchanan, and TX RPC Project Staff. For further information, please contact TXRPCNetwork@uth.tmc.edu.

REFERENCES


References


REFERENCES
