

# COVID-19 Vaccine Considerations for Parents and Guardians

This document provides information to parents and caregivers regarding COVID-19 vaccines. COVID-19 vaccines are critical in preventing future disease outbreaks.<sup>1</sup> Multiple companies including, Pfizer-BioNTech, Moderna, and Johnson & Johnson's Janssen (J&J's), have developed vaccines and currently have emergency use approval from the U.S. Food and Drug Administration (FDA).

## How do the vaccines work?

The COVID-19 vaccines vary by manufacturer.<sup>2</sup> The active ingredient in the current Pfizer and Moderna vaccines is mRNA, which contains genetic information on the virus.<sup>4</sup> J&J's vaccine includes a viral vector, which uses a modified virus to deliver genetic information.<sup>6</sup> The immune system recognizes the "foreign objects" from the mRNA and creates antibodies.<sup>4</sup> This process is similar to the natural immune response to an infection.<sup>4</sup> There is no risk of becoming infected with COVID-19 from this vaccine.<sup>4</sup>

## How are the vaccines administered?

Pfizer and Moderna vaccines are administered in two doses, injected into the upper arm, and administered 3-4 weeks apart.<sup>4,7</sup> J&J's vaccine is injected into the upper arm in a single dose.<sup>8</sup>

## COVID-19 vaccines were developed so quickly. Are they safe?

The development of vaccines includes a number of standard phases.<sup>5</sup> The COVID-19 vaccines have followed this same process.

- 1) Lab research testing of the vaccine candidate [Research and Discovery phase].
- 2) Lab testing with animals [Pre-Clinical phase].
- 3) FDA evaluation of the phase 1 & 2 data for safety to start human trials.
- 4) Testing with human participants. [Clinical Development phase]. There are three phases:
  - a) Phase 1 includes 20-100 volunteers.
  - b) Phase 2 includes 100s of volunteers while varying the dosages of the vaccine.
  - c) Phase 3 includes thousands of volunteers.
- 5) FDA approval of the vaccine, analyzing benefits and risk.
- 6) Continued FDA oversight after the approval process. The goal of this oversight is to monitor for uncommon reactions and/or long-term problems.

In public health emergencies, this process may move more quickly due to various investments (ex: financial contributions, volunteers).<sup>5</sup> There is not a standard timeline as this process is guided by scientific knowledge.<sup>5</sup>

The Center for Disease Control and Prevention (CDC) states that mRNA vaccines such as the COVID-19 vaccine are being held to the same rigorous standards as all other types of vaccines.<sup>4</sup> The only COVID-19 vaccines the FDA will make available for use are those that meet their standards.<sup>4,5</sup>

## Who is paying for the vaccine?

The vaccine will be provided at no cost, but administration fees for giving the shot could be charged by the clinic or pharmacy.<sup>9</sup>

## When can I get vaccinated?

Supply of the COVID-19 vaccine is limited at this time, but it is anticipated to become widely available soon.<sup>9</sup> Follow the recommendations from the Centers for Disease Control (CDC) for vaccine timelines.<sup>9</sup>

## What are the side effects?

Common side effects of the COVID-19 vaccines include<sup>1,2</sup>:

- Injection site reactions
- Fatigue
- Headache
- Muscle pain
- Chills
- Joint pain
- Fever
- Nausea

Adverse reactions have been low ( $\leq 0.5\%$ ).<sup>1</sup> Reactions will continue to be monitored.<sup>7</sup> If you or your child is allergic to any of the ingredients in the COVID-19 vaccine, you or your child should not be vaccinated.<sup>7</sup>

## Is the vaccine safe for kids?

Early clinical trials have focused on establishing safety and efficacy in adults.<sup>7</sup> Pfizer is approved for individuals 16 years old and older and approval is currently being sought for children 12-16 years of age. Moderna and J&J vaccines are approved for individuals ages 18 and up.<sup>10</sup> At this time, it is not recommended that children under 16 years of age receive the vaccine.<sup>11</sup> Clinical trials are ongoing, and these guidelines may change as more information is gathered on the safety of the COVID-19 vaccine for children.<sup>7,11</sup>

## What do I do if my child cannot be vaccinated?<sup>10</sup>

Ensure the adults in contact with your child have been vaccinated.<sup>12</sup> Continue practicing safe behaviors, including wearing a mask, self-quarantining at home if anyone in the family is sick, practicing proper hand hygiene/washing, practicing physical distancing, and limiting time in places you or your child may be exposed to COVID-19. Continue to communicate with your child's doctor. They should be informed on the current data and safety of vaccination as more information becomes available.

## If someone in my family has had COVID-19/has antibodies, should they still get vaccinated?<sup>13</sup>

Antibodies are the part of your immune system that fights off an infection you've had before. Current studies show that these antibodies for COVID-19 can last for 3-4 months. This varies between people. Although it is rare, it is still possible to become re-infected with COVID-19. Even if you previously had COVID-19 or has shown antibodies, you may still be advised to get the vaccine because of COVID-19's severe health risk.

## How effective is the vaccine and how long does it last?

The Pfizer and Moderna vaccines are 95% and 94% effective two weeks following the second dose, respectively.<sup>10</sup> After one week, J&J's is effective against moderate to severe (72%) and severe disease (85%).<sup>10</sup> Current data is incomplete and still being gathered on how long this lasts.<sup>9,10</sup>

## Does it prevent or cure COVID-19 infection?

The COVID-19 vaccines can prevent becoming infected with COVID-19, because it prepares the immune system.<sup>12,14</sup> Current COVID-19 infections cannot be cured with the vaccine.<sup>14</sup>

## Can we return to normal activities after being vaccinated?

The CDC has released recommendations for [activities post-vaccination](#). You should continue to practice safe behaviors such as wearing a mask, washing hands frequently, and practicing physical distancing after vaccination.<sup>2,10</sup>

## Should my child and I wear masks when receiving a COVID-19 vaccine?

Yes, the CDC recommends wearing a mask when outside the home, including when receiving a vaccine.<sup>2</sup>

## References

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