

COVID-19 Vaccine Review

Prepared by the Northwest Portland Area Indian Health Board (NPAIHB) Updated 7/21/2021



| Vaccine developer: | Pfizer | Moderna | Johnson & Johnson | AstraZeneca | Novavax | | | |
|---|---|--|--|---|--|--|--|--|
| How it works | Messenger RNA | Messenger RNA | Inactivated Adenovirus base (Nonreplicating vector vaccine) | Inactivated Adeno-virus base (Non-replicating vector vaccine) | Protein-based (recombinant nanoparticle tech) | | | |
| Date approved/ Expected approval | December 11, 2020 (approval for age 16 years and older); May 10, 2021 (approval for age 12 -15 years) | December 18, 2020 | February 27, 2021 | Has not submitted application for EUA in U.S. yet, but possibly in April | Has not submitted application for EUA in U.S. yet, but possibly in April | | | |
| Efficacy in preventing COVID-19 related hospitalization and death | All five vaccines (Pfizer, Moderna, Johnson & Johnson, AstraZeneca and Novavax) have demonstrated efficacy in preventing severe COVID-19 disease, hospitalizations and deaths. Out of 75,000 people who have received these vaccines as part of research studies, no one, has died from COVID-19. | | | | | | | |
| What percentage of people did it protect from getting infected in clinical studies? | 95% efficacy to prevent symptomatic COVID-19 infection after 2 doses | 94.1% efficacy to prevent symptomatic COVID-19 infection after 2 doses; 86.4% for those ≥65 | 66-72% efficacy to prevent symptomatic COVID-19 infection after 1 dose; 85% efficacy in preventing severe disease | 78.9% efficacy to prevent symptomatic COVID-19 infection after 2 doses | 96.4% efficacy to prevent symptomatic COVID-19 infection after 2 doses in UK, 86.3% for B.117 variant, 48.6% where majority of strains are B1.351 variants | | | |
| How many shots do you need? | Two doses, 3 weeks (or 21 days) apart | Two doses, 4 weeks (or 28 days) apart | One dose | Two doses, 4 weeks (or 28 days) apart | Two doses, 3 weeks (or 21 days) apart | | | |
| What are the potential side effects? | Fatigue, headache, chills, muscle aches, especially after the second dose | Fever, muscle aches, headaches lasting a few days. Effects worse after second dose | Fatigue, headache, muscle aches, nausea and injection site pain | Injection site pain, fever, muscle aches, headache | Fatigue, headache, muscle aches and injection site pain | | | |
| Storage | -112°F to -76°F (before mixing, vaccine may be stored at 36°F to 46°F for up to 120 | -13°F to 5°F (vaccine vials may be stored at 36°F to 40°F for 1 month or 30 days) | 36° to 46°F (may be stored at 36° to 46°F for at least 3 months) | 36°F to 46°F (may be stored at 36°F to 46°F for at least 6 months) | 36°F to 46°F (ready to use) | | | |

hours or 5 days)



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|---|---|---|---|--|-----------------------|
| Who can receive this vaccine? | 12 years and older | 18 years and older | 18 years and older; FDA fact sheet and warning | 18 years and older | 18 years and older |
| What about pregnant and breastfeeding women? | The vaccine has not yet been studied in pregnant or lactating women. Pregnant women are allowed to get the vaccine, but should first consult with their doctor. mRNA vaccines are not thought to be a risk to the breastfeeding infant | The vaccine has not yet been studied in pregnant or lactating women. Pregnant women are allowed to get the vaccine, but should first consult with their doctor. mRNA vaccines are not thought to be a risk to the breastfeeding infant | The vaccine has not yet been studied in pregnant or lactating women. Pregnant women are allowed to get the vaccine, but should first consult with their doctor. | The vaccine has not yet been studied in pregnant or lactating women. Pregnant women are allowed to get the vaccine, but should first consult with their doctor. The vaccine is not considered to be a risk to the breastfeeding infant | Not yet available |
| Who should not get this vaccine? | Caution and consultation should be taken with persons who have a history of serious allergic reactions. Contraindicated in people with prior reactions to vaccine ingredients | Caution and consultation should be taken with persons who have a history of serious allergic reactions. Contraindicated in people with prior reactions to vaccine ingredients | Contraindicated in people with prior reactions to vaccine ingredients | The vaccine should not be given to those who have had a previous severe allergic reaction to a previous dose of the same COVID-19 vaccine or an ingredient in the COVID-19 vaccine | Not yet available |
| Any significant side effects? | During December 14–23, 2020, there were 21 cases of anaphylaxis after the first dose. 4 cases of Bell's palsy in clinical trial vaccine group | During December 21, 2020–January 10, 2021, there were 10 cases of anaphylaxis after the first dose. 3 cases of Bell's palsy in clinical trial vaccine group | Based on an analysis of Vaccine Adverse Event Reporting data, there have been 100 preliminary reports of Guillain-Barré syndrome; Blood clots with low levels of platelets, have occurred | Four total serious adverse events, including one case of transverse myelitis | Not yet available |
| What about people with lowered immune function and autoimmune diseases? | Ok for people whose immune function is lowered by HIV, immunosuppressing drugs, or autoimmune disease. People with these conditions may still get the vaccine if they have no other contraindications. There is limited safety data in this group | Ok for people whose immune function is lowered by HIV, immunosuppressing drugs, or autoimmune disease. People with these conditions may still get the vaccine if they have no other contraindications. There is limited safety data in this group | Ok for people whose immune function is lowered by HIV, immunosuppressing drugs, or autoimmune disease. People with these conditions may still get the vaccine if they have no other contraindications. There is limited safety data in this group | Not yet available | Not yet available |