

	AstraZeneca	Johnson & Johnson/ Janssen	Moderna	Pfizer-BioNTech
Authorization	United States: Not approved yet Canada: Authorization for use by Public Health Agency of Canada (PHAC)	United States: Emergency Use Authorization (EUA) in the U.S. Canada: Authorization for use by PHAC	United States: EUA in the U.S. Canada: Authorization for use by PHAC	United States: EUA in the U.S. Canada: Authorization for use by PHAC
Type	Adenovirus-based (Viral Vector)	Adenovirus-based (Viral Vector)	mRNA	mRNA
Number of Doses	2 shots, 4 to 12 weeks apart	1 shot	2 shots, 28 days apart	2 shots, 21 days apart
Common side effects	In shot site: <ul style="list-style-type: none"> • Pain • Redness • Swelling Rest of Body: <ul style="list-style-type: none"> • Tiredness • Headache • Muscle Pain • Chills • Fever • Nausea 	In shot site: <ul style="list-style-type: none"> • Pain • Redness • Swelling Rest of Body: <ul style="list-style-type: none"> • Tiredness • Headache • Muscle Pain • Chills • Fever • Nausea 	In shot site: <ul style="list-style-type: none"> • Pain • Redness • Swelling Rest of Body: <ul style="list-style-type: none"> • Tiredness • Headache • Muscle Pain • Chills • Fever • Nausea 	In shot site: <ul style="list-style-type: none"> • Pain • Redness • Swelling Rest of Body: <ul style="list-style-type: none"> • Tiredness • Headache • Muscle Pain • Chills • Fever • Nausea
Additional side effects (less common)	A small number of recipients developed blood clots.	A small number of recipients developed blood clots along with low levels of platelets 1-2 weeks post vaccination.	Anaphylaxis, a severe allergic reaction.	Anaphylaxis, a severe allergic reaction.
Who can Get	Recommended for individuals 40 years or older	Recommended for individuals 18 years or older	Recommended for individuals 18 years or older	Recommended for individuals 16 years or older
Efficacy	70-90% efficacy at preventing COVID-19. They are completing Phase 3 trials in US currently.	66.1% efficacy globally; 72% efficacy in the U.S.; 86% efficacy against severe disease.	94.1% efficacy at preventing COVID-19; efficacy rate drops to 86.4% for ages 65 and older.	95% efficacy at preventing COVID-19.
Efficacy preventing severe symptoms and hospitalization	N/A	86% efficacy against severe disease in the U.S.	100% at preventing hospitalization and death.	In clinical trials, the vaccine was 100% effective at preventing severe disease.
Effectiveness on Variants: <i>Studies suggest that antibodies generated through vaccination with currently authorized vaccines recognize these variants.</i>	74.6% efficacy against the B.1.1.7 variant. However, the vaccine did not protect as well against mild and moderate cases in people infected with the B.1.351 and P.1 variants.	Provides protection against the B.1.1.7 variant. According to the analyses the FDA released in late February, there was 82% efficacy against B.1.351 variant. Research suggests it protects against P.1 variant.	Some research has suggested the vaccine may provide protection against the B.1.1.7, B.1.351 and the P.1 variants. Researchers are still studying this.	Protect against the B.1.1.7 variant, but it may be less effective against the B.1.351 variant. Research suggests it protects against P.1 variant.

Sources:

1. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Pfizer-BioNTech.html>
2. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Moderna.html>
3. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/janssen.html>
4. <https://www.who.int/news-room/feature-stories/detail/the-oxford-astrazeneca-covid-19-vaccine-what-you-need-to-know>
5. <https://www.yalemedicine.org/news/covid-19-vaccine-comparison>