

High points of Similarity & Differences between Moderna & Pfizer vaccines

	Moderna	Pfizer
Clinical/Patient Factors		
Clinically equivalent	94% effective at preventing COVID-19 infection	95% effective at preventing COVID-19 infection
Side effects are very similar *more common after second dose	Pain at injection site, fatigue*, headache*, muscle pain*, chills*	Pain at injection site, fatigue*, headache*, muscle pain*, chills*
Dosing differs	0.5 ml dose, repeat at 28 days	0.3 ml dose, repeat at 21 days
Age groups differ	18 years and up	16 years and up
Operational/Logistics Factors		
Storage differs		
Frozen	Long term storage at -20° Celsius	Long term storage at -70° Celsius
Refrigerated	Use within 30 days	Use within 5 days (undiluted)
Room temperature	Use within 12 hours (unpunctured)	Use within 2 hours (undiluted)
Once punctured (same for both)	Use within 6 hours	Use within 6 hours
Thawing time	2.5 hrs. under refrigeration, 60 min. at room temp.	2 hrs. under refrigeration, 30 min. at room temp.
Preparation differs	Suspension, ready to use (no dilution required)	Solution, requires dilution with 1.8 mL of NS
Doses per vial differs	10 doses/vial	5 doses/vial (sites reporting 5-7 doses per vial)

Pfizer and Moderna appear to be clinically equivalent, though there are a few non-clinical differences

	Moderna	Pfizer
Formal name	mRNA-1273	mRNA-BNT162b2
How supplied	Suspension, ready to use (no dilution required)	Solution, requires dilution with 1.8 mL of NS
Dose volume	0.5 mL	0.3 mL
Time between doses	28 days	21 days
Adverse effects noted in clinical trials	Pain at the injection site, fatigue, chills, headache, myalgia	Pain at injection site, fatigue, headache
Storage Considerations		
Frozen	Long term storage at -20° Celsius	Long term storage at -70° Celsius
Refrigerated	Use within 30 days	Use within 5 days (undiluted)
Room temperature	Use within 12 hours (unpunctured)	Use within 2 hours (undiluted)
Once punctured	Use within 6 hours	Use within 6 hours
Thawing time	2.5 hrs. under refrigeration, 60 min. at room temp.	2 hrs. under refrigeration, 30 min. at room temp.
Age range	18 years and older	16 years and older
Multidose vial	10 doses/vial	5 doses/vial (sites reporting 5-7 doses per vial)
Preparation	<ul style="list-style-type: none"> ▪ Swirl vial gently between each withdrawal ▪ Do not shake. Do not dilute the vaccine ▪ Vaccine is a white to off-white suspension ▪ It may contain white or translucent product-related particulates ▪ Prior to administration, confirm no other particulates and no discoloration observed 	<ul style="list-style-type: none"> ▪ Before dilution, invert vial 10 times. Do not shake ▪ Liquid is a white to off white suspension and may contain white to off-white opaque amorphous particles ▪ Inspect the liquid in the vial prior to dilution ▪ Dilute the vial contents using 1.8 mL of 0.9% sodium chloride injection ▪ Equalize vial pressure before removing the needle from the vial by withdrawing 1.8 mL air into the empty diluent syringe ▪ Gently invert the vial 10 times. Do not shake