

October 2020 ~ Resource #361001

FAQs: Immunizations During COVID-19

There are lots of questions popping up about vaccinations in light of the COVID-19 pandemic. There are also many similarities between flu and COVID-19. The chart below answers common questions about vaccinations during the COVID-19 pandemic. The last page of the document helps to clarify similarities and differences between influenza and COVID-19.

Question	Answer/Pertinent Information
Should vaccinations be delayed due to the COVID-19 pandemic?	<ul style="list-style-type: none"> • Defer outpatient vaccinations of ALL people with known or suspected COVID-19 until they meet criteria to stop isolation. This is to avoid exposing healthcare workers or other people to SARS-CoV-2.¹ Hospitalized patients may be vaccinated prior to discharge, as they are already interacting with healthcare workers. <ul style="list-style-type: none"> ○ Follow current government guidance on isolation recommendations (e.g., until at least ten days after COVID-19 symptoms began, AND fever-free for 24 hours [without fever-reducing meds], AND other symptoms improving per CDC).¹³ • Do NOT delay routine vaccinations in non-infected people simply because of the COVID-19 pandemic (even if patients are complying with social distancing recommendations).¹ <ul style="list-style-type: none"> ○ Reassure patients that vaccines do not weaken the immune system. ○ Staying current with recommended vaccines can conserve healthcare resources by reducing illnesses.³ • Guidance for vaccinations during the pandemic can be found at: <ul style="list-style-type: none"> ○ U.S.: http://www.cdc.gov/vaccines/pandemic-guidance/index.html ○ Canada: https://immunize.ca/sites/default/files/Resource%20and%20Product%20Uploads%20(PDFs)/Media%20and%20News%20Releases/2020/ic_smt_maintaining_imm_covid_e.pdf • Access current vaccination schedules here: <ul style="list-style-type: none"> ○ U.S.: https://www.cdc.gov/vaccines/schedules/index.html ○ Canada: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-1-key-immunization-information/page-13-recommended-immunization-schedules.html
Why is it important to get the influenza vaccine during COVID-19?	<ul style="list-style-type: none"> • In light of COVID-19, it's more important than ever to get a flu vaccine, even if social distancing.³ <ul style="list-style-type: none"> ○ It is not known how long social distancing will be recommended, so it's best to provide protection. ○ The flu vaccine won't protect against COVID-19, but getting the flu vaccine can help conserve healthcare resources, by reducing the risk of flu illnesses, hospitalizations, and death.³ ○ Getting the flu vaccine may reduce office or emergency department visits, which might also reduce SARS-CoV-2 exposure. • Use our resource, <i>Vaccine Adherence: Addressing Myths and Hesitancy</i>, to help encourage vaccination. • In addition, getting the flu vaccine can help reduce symptom confusion between flu and COVID-19.¹⁸ See the last page of this document for a comparison of symptoms, contagiousness, and complications for flu and COVID-19.

Question	Answer/Pertinent Information
Do any vaccines help to boost immunity against COVID-19?	<ul style="list-style-type: none"> • Some experts theorize that live vaccines (e.g., MMR) may provide some protection against COVID-19. The theory is that live-attenuated vaccines lead to induction of interferons and activated natural killer cells leading to “natural immunity” against COVID-19.^{2,8} <ul style="list-style-type: none"> ○ However, there are NOT data available to confirm that MMR or any other live vaccine actually protects against COVID-19.⁸ Clinical trials are planned and ongoing.^{11,12} • Currently available and commonly used live vaccines include measles, mumps, and rubella (MMR); measles, mumps, rubella, and varicella (MMRV); varicella; zoster; <i>FluMist</i>; and rotavirus.
Do the pneumococcal vaccines protect against pulmonary aspects of COVID-19?	<ul style="list-style-type: none"> • The SARS-CoV-2 virus can lead to lung complications, such as pneumonia.⁶ • Vaccines against pneumonia (e.g., <i>Pneumovax 23</i>, <i>Prevnar 13</i>) protect against bacterial pneumonia and do NOT provide protection against COVID-19, viral pneumonia, or pneumonia caused by COVID-19.^{4,6} However, some patients with COVID-19 may get a secondary pneumococcal pneumonia.⁷ • Ensure patients are current with their pneumococcal vaccine. Pneumococcal vaccination may reduce the risk of secondary bacterial pneumonia in patients with COVID-19 or influenza. See our pneumococcal vaccination charts (U.S.; Canada) to find out which adults should get which pneumococcal vaccine and when.
How should patients be counseled who experience a “flu-like” reaction to a vaccine during the COVID-19 pandemic?	<ul style="list-style-type: none"> • Any vaccine can cause side effects, including fever.¹⁴ <ul style="list-style-type: none"> ○ Vaccine-associated fever usually begins within 12 hours of vaccination and can last up to three days.^{1,15} <ul style="list-style-type: none"> ▪ Fever typically resolves within one to two days for most vaccines (e.g., diphtheria/tetanus/pertussis [DTaP], hepatitis A, influenza, pneumococcal).²⁰ ▪ Fever can last for up to three days after receiving certain vaccines (e.g., <i>Shingrix</i>).¹ ○ Advise giving acetaminophen or ibuprofen as needed for fever, especially if higher than 102°F (39°C).¹⁵ • Advise people who develop fever after a vaccine to stay home until the fever goes away. Patients should contact their prescriber if they develop new symptoms (e.g., cough, shortness of breath, loss of taste or smell) or fever persists for more than a day or so after vaccination.¹
What can we expect with the COVID-19 vaccine?	<ul style="list-style-type: none"> • At the time of publication, there are not any COVID-19 vaccines available. However, current information about ongoing COVID-19 vaccine trials can be found at https://clinicaltrials.gov/ or https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines. • It is currently expected that a COVID-19 vaccine will likely be an intramuscular (IM) injection, probably require two doses to complete the vaccination, and possibly require reconstitution or frozen storage. • Some COVID-19 vaccines in the pipeline use new technology such as genetically engineered ribonucleic acid (RNA) or deoxyribonucleic acid (DNA) to trigger an immune response. • Review the CDC’s COVID-19 Vaccination Program Interim Playbook for Jurisdiction Operations to start planning for COVID-19 vaccine administration (https://www.cdc.gov/vaccines/imz-managers/downloads/COVID-19-Vaccination-Program-Interim_Playbook.pdf).

~Continue to the next page for a comparison of symptoms, contagiousness, and complications for flu and COVID-19~

Flu vs COVID-19

	Flu ^{9,10,17,19}	COVID-19 ^{9,10,16,19}
Shared symptoms	<ul style="list-style-type: none"> • fever/chills • cough • shortness of breath/difficulty breathing <ul style="list-style-type: none"> • fatigue (feeling tired) • sore throat • runny/stuffy nose • muscle pain/body aches/headache • vomiting/diarrhea (less common, though more common in kids vs adults) 	
Unique symptoms	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Loss of taste or smell
Symptom onset	<ul style="list-style-type: none"> • ~1 to 4 days after being infected 	<ul style="list-style-type: none"> • ~5 days after being infected (ranges from ~2 to 14 days)
Contagious	<ul style="list-style-type: none"> • Virus can spread from about ~1 day before symptoms appear through ~7 days (most contagious in first 3 to 4 days; infants and people with a weakened immune system may be contagious even longer). 	<ul style="list-style-type: none"> • Virus can spread from ~2 days before symptoms appear through as long as 10 days after testing positive for, or first symptoms of, COVID-19. • More contagious among certain populations/age groups than flu. • More prone to “super spreading” (i.e., transmission to an unusually large number of people by a relatively small number of highly contagious people).
Unique severe complications	<ul style="list-style-type: none"> • Long-term inflammatory complications: <ul style="list-style-type: none"> ○ myocarditis ○ encephalitis ○ myositis/rhabdomyolysis ○ multiorgan failure 	<p>We are still learning about COVID-19 complications. Currently we know COVID-19 can lead to:</p> <ul style="list-style-type: none"> • Blood clots • Long-term damage to: <ul style="list-style-type: none"> ○ heart ○ lungs ○ kidneys ○ brain • School-aged children rarely develop Multisystem Inflammatory Syndrome in Children (MIS-C)

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

Prepared by the Editors of Therapeutic Research Center (361001).

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