Massachusetts 2025-2026 Respiratory Illness Season

COVID-19 Vaccine Recommendations

COVID-19 is an easily transmitted and potentially dangerous respiratory disease caused by the SARS-CoV-2 virus. COVID-19 vaccines are critical tools to reduce public health burden of COVID-19 disease. COVID-19 vaccines have been shown to be safe and provide effective protection against serious outcomes, including hospitalization and death. Populations at higher risk for severe COVID-19 outcomes benefit most from vaccination.

The Massachusetts Department of Public Health (DPH) is committed to providing resourced, evidence-based recommendations to guide the use of vaccines to protect our communities. DPH conferred with scientists and physicians across the northeast region to collaboratively develop recommendations for the use of the 2025-2026 COVID-19 vaccines.

The DPH 2025–2026 COVID-19 vaccine recommendations align with those of the Northeast Public Health Collaborative Recommendations for the 2025-2026 COVID-19 Vaccine and leading physician professional organizations, including the American Academy of Pediatrics (AAP), the American College of Obstetricians and Gynecologists (ACOG), and the American Academy of Family Physicians (AAFP). The table below summarizes the DPH COVID-19 vaccine recommendations for the 2025-2026 respiratory season.

Children and adolescents

- All children 6-23 months of age should receive age appropriate 2025-2026
 COVID-19 vaccination.
 - Those who are unvaccinated or did not complete a primary vaccination series should complete their initial vaccine series.
 - Those who have completed a primary vaccination series should receive a single dose of 2025-2026 COVID-19 vaccine. This dose should be administered at least 8 weeks after the last dose was received.
- Children and adolescents age 2 to 18 years of age with medical conditions associated with higher risk^b of severe COVID-19 and those whose household contacts are at higher risk for severe COVID-19 should receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.
- Children and adolescents 2 to 18 years of age who are residents of long-term care facilities or other congregate settings should receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.
- Healthy children and adolescents 2 to 18 years of age who have never been vaccinated against COVID-19 should receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.

 Healthy children and adolescents 2 to 18 years of age, who do not fall into the categories above, may receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.

Adults

- Adults ages 65 years and older should receive two doses of a 2025-2026 vaccine COVID-19 vaccine, with the second dose administered 6 months after the first.
- Adults 19 to 64 years of age with medical conditions associated with higher risk^b of severe COVID-19 and those whose household contacts are at higher risk for severe COVID-19 should receive one dose of a 2025-2026 COVID-19 vaccine.
- Healthy adults 19 to 64 years of age may receive one dose of a 2025-2026 COVID-19 vaccine.

Special populations

- People with moderate to severe immunocompromise should receive two doses of a 2025-2026 vaccine COVID-19 vaccine with the second dose administered 6 months after the first.
- People with moderate to severe immunocompromise may receive additional doses of 2025–2026 COVID-19 vaccine (i.e., a total of ≥3 doses of 2025–2026 COVID-19 vaccine) at a minimum interval of 2 months.^c
- People who are **pregnant**, contemplating pregnancy, have recently been pregnant or who are lactating **should receive** one dose of a 2025-2026 COVID-19 vaccine.
- All healthcare workers should receive one dose of a 2025-2026 COVID-19 vaccine, independent of age or underlying medical conditions.

Background

Vaccines are among the most important tools available to prevent serious consequences associated with COVID-19 disease, caused by the SARS-CoV-2 virus. COVID-19 vaccines were instrumental in mitigating the impacts of disease in the throughout the pandemic. Though estimates of reductions in morbidity and mortality associated with COVID-19 vaccines vary, evidence shows that from December 2020 through November 2022, the COVID-19 vaccination program in the U.S. prevented more than 18.5 million additional hospitalizations and 3.2 million additional deaths, as well as saved the U.S. \$1.15 trillion in medical costs that otherwise would have been incurred.

Now, the COVID-19 disease burden is much lower when compared to points at the height of the pandemic. Currently, most U.S. residents now have some level of immunity to SARS-CoV-2 either through vaccination, infection or both, yet COVID-19 remains a significant public health concern. Preliminary estimates from the CDC during the 2024-2025 respiratory season shows that there were 2.4 to 3.8 million outpatient visits, 270,000-440,000 hospitalizations and 32,000-51,000 deaths caused by COVID-19.² In

Massachusetts, COVID-19 led to 35,566 emergency department visits, over12,700 hospitalizations and over 650 deaths during the 2024-2025 season.

Even in the current context of high levels of immunity to SARS-CoV-2 in the general population, COVID-19 vaccines still show benefit in reducing illness, morbidity, and mortality. The CDC estimates that vaccine effectiveness of the 2024–2025 COVID-19 vaccine was 33% against COVID-19—associated emergency department or urgent care visits among adults aged ≥18 years and 45%–46% against hospitalizations among immunocompetent older adults aged ≥65 years, compared with not receiving a 2024–2025 vaccine dose.³ Additionally, COVID-19 vaccines were estimated to have averted >6,000 inhospital deaths, >100,000 hospitalizations and >18,000 ICU admissions associated with COVID-19 during the 2023-2024 respiratory season.⁴ There is also evidence that COVID-19 vaccines have beneficial effects on other important outcomes including reduction in COVID-19 disease severity, reduced risk of Long COVID in adults and children, improved pregnancy outcomes and reduced transmission of infection.⁵-8

There are currently four COVID-19 vaccines licensed for use in the U.S. for 2025-2026:

mRNA vaccines

- 1. Moderna SPIKEVAX FDA approved for:
 - 65 years of age and older, or
 - 6 months through 64 years of age at high risk for severe COVID-19.
- 2. Moderna mNEXSPIKE FDA approved for:
 - 65 years of age and older, or
 - 12 years through 64 years of age at high risk for severe COVID-19.
- 3. Pfizer COMIRNATY FDA approved for:
 - 65 years of age and older, or
 - 5 years through 64 years of age at high risk for severe COVID-19.

Protein subunit

- 4. Novavax Nuvaxoid FDA approved for:
 - adults 65 years and older
 - 12 to 64 years at high risk for severe COVID-19

Though COVID-19 vaccines have been proven to be effective against several outcomes, the benefits of vaccination are likely to vary with age and medical conditions.

COVID-19 Vaccine Recommendations by Age:

Older Adults (65 years and older) - Rates of COVID-19–associated hospitalization and deaths are highest among the oldest adult age groups.⁹ COVID-19 vaccines provide protection against COVID associated emergency department/urgent care visits and hospitalization in this age group, but protection wanes over time. Some data suggest that semi-annual dosing of COVID-19 vaccine is most cost-effective in older adults in whom disease burden is highest.^{10,11}

DPH has the following recommendations for those 65 and older, independent of underlying conditions:

- Adults ages 65 years and older should receive two doses of a 2025-2026 vaccine COVID-19 vaccine, with the second dose administered 6 months after the first.
- Adults (19- 64 years) Rates of COVID-19 associated hospitalizations and deaths are lower in this age group when compared to older age groups, however severe disease and outcomes also continue to occur in this age group, especially in those with health conditions that put them at increased risk of severe disease. While the absolute risk for severe outcomes is lower in younger adults, COVID-19 vaccines provide similar protection across age groups. Younger adults may also find benefit in reduction in time away from usual activities caused by COVID-19, reduced severity of symptoms, reduced risk of Long COVID and reduced transmission of SARS-CoV-2 that may be associated with COVID-19 vaccination.^{5,7,12,13}

DPH has the following recommendations for adults 19 to 64 years of age:

- Adults 19 to 64 years of age with medical conditions associated with higher risk^b of severe COVID-19 and those whose household contacts are at higher risk for severe COVID-19 should receive a dose of a 2025-2026 COVID-19 vaccine.
- Healthy adults 19 to 64 years of age may receive a dose of a 2025-2026
 COVID-19 vaccine.^a
- Children (6 months to 18 years) Severe COVID-19 disease can occur in children and is particularly prevalent in younger children. Rates of COVID-19-associated hospitalizations among infants ages 6-23 months are comparable to rates among adults aged 50-64 years. Children aged 6-23 months comprise 41% of pediatric COVID-19 associated hospitalizations. Additionally, the majority (54%) of children aged 6-23 months hospitalized for COVID-19 had no underlying medical conditions.

The number of COVID-19 associated deaths occurring in the United States last respiratory season in children under the age of 2 years was almost the same as the number of influenza-associated deaths occurring in this age group (45 COVID-19 deaths, 44 influenza deaths). During the past respiratory season in Massachusetts, there were 4 pediatric deaths from COVID-19 and 10 from influenza. (Annual influenza vaccination has been recommended for all children 6 months of age and older since the 2010-2011 respiratory season.) Children aged 5-18 years are the age group with the lowest risk of severe COVID-19, but benefits to vaccination in this age group include reduced time away from school and reduced risk of Long COVID. Additionally, children frequently live and interact with people at higher risk for severe COVID-19 (i.e. family members and teachers). Vaccination of children may lead to reduced transmission of SARS-CoV-2 to higher risk people in their family and community.

DPH has the following recommendations for children and adolescents 6 months to 18 years of age:

- All children 6-23 months of age should receive age appropriate 2025-2026 COVID-19 vaccination. Those who are unvaccinated or did not complete a primary vaccination series should complete their initial vaccine series.
 Those who have completed an initial vaccination series, should receive a single dose of 2025-2026 COVID-19 vaccine. This dose should be administered at least 8 weeks after the last dose was received.
- Children and adolescents age 2 to 18 years of age with medical conditions associated with higher risk^b of severe COVID-19 and those whose household contacts are at higher risk for severe COVID-19 should receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.
- Children and adolescents 2 to 18 years of age who are residents of long-term care facilities or other congregate settings should receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.
- Healthy children and adolescents 2 to 18 years of age who have never been vaccinated against COVID-19 should receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.
- Healthy children and adolescents 2 to 18 years of age, who do not fall into the categories above, may receive one dose of an age appropriate 2025-2026 COVID-19 vaccination.^a

2025-2026 Respiratory Illness Season COVID-19 Vaccine Recommendations by Medical Condition:

• Immunocompromising conditions - Individuals who are immunocompromised are at risk of more severe and protracted COVID-19 disease. COVID-19 vaccines have been shown to provide protection for both persons with and without immunocompromise. However, some data suggest that people with immunocompromising conditions generally had lower vaccine effectiveness compared to non-immunocompromised and that protection against hospitalization in immunocompromised waned to 0 by about 4-6 months.¹⁴ Based on modeling data, annual and semiannual COVID-19 vaccine doses are likely to have the largest benefit in people ages ≥65 years and for people who are immunocompromised.¹⁰

DPH has the following recommendations for people who are moderately to severely immunocompromised:

- People with moderate to severe immunocompromise should receive two doses of a 2025-2026 vaccine COVID-19 vaccine with the second dose administered 6 months after the first.
- People with moderate to severe immunocompromise may receive additional doses of 2025–2026 COVID-19 vaccine (i.e., a total of ≥3 doses of 2025–2026 COVID-19 vaccine) at a minimum interval of 2 months.°
- **Pregnancy** While the absolute risk of severe COVID-19 outcomes is low in pregnant people, pregnant individuals have an elevated relative risk of COVID-19-associated hospitalization and ICU admission compared to those who are not pregnant. There are also data suggesting that SARS-CoV-2 infection is associated with increased risk of pregnancy complications such as preeclampsia and preterm birth. Importantly, COVID-19 vaccination during pregnancy not only protects the pregnant person but also confers protection to the infant once born. Rates of COVID-19-associated hospitalizations among infants ages <6 months are high and are comparable to rates among adults ages 65–74 years. The majority (71%) of infants <6 months of age hospitalized for COVID-19 do not have underlying medical conditions. No COVID-19 vaccine products are approved for infants <6 months of age. Thus, any immunologic protection must come from transfer of maternal antibodies, either from vaccination during pregnancy or prior infection. Maternal COVID-19 vaccination during pregnancy can reduce the risk of COVID-19-related hospitalization for infants by more than half during the first three months of life. The pregnancy of the products of the pregnancy of the products of the pregnancy of the pregnancy of the products of the pregnancy of the pregna

There is no evidence of adverse maternal or fetal effects from vaccinating pregnant individuals with the COVID-19 vaccine.^{18,19}

DPH has the following recommendations for pregnant people:

 People who are pregnant, contemplating pregnancy or have recently been pregnant should receive a dose of a 2025-2026 COVID-19 vaccine.^d

<u>2025-2026 Respiratory Illness Season COVID-19 Vaccine Recommendations for</u> Healthcare Workers

Vaccination of healthcare professionals is an important component of the strategy
to protect Massachusetts residents from morbidity and mortality from respiratory
infections. Vaccinated healthcare workers are less likely to transmit SARS-CoV-2 to
vulnerable patients.²⁰ Healthcare workers are also at higher risk of exposure and
infection with SARS-CoV-2. Prevention of COVID-19 in healthcare workers is vital to
maintaining healthcare capacity and protecting their patients.

DPH has the following recommendations for healthcare workers:

 All healthcare workers should receive one dose of a 2025-2026 COVID-19 vaccine, independent of age or underlying medical conditions.

COVID-19 Vaccine Safety

The safety of COVID-19 vaccines has been closely monitored under the most extensive vaccine monitoring program in U.S. history. Safety surveillance identified and characterized the elevated risk of myocarditis and pericarditis after mRNA COVID-19 vaccination. Cases of myocarditis and pericarditis are rarely observed following receipt of a COVID-19 vaccine. Cases have occurred most frequently in adolescent and young adult males within 7 days after receiving a second dose of an mRNA COVID-19 vaccine. However, studies demonstrate that the risk of myocarditis is actually substantially higher immediately after being infected with COVID-19 than it is in the weeks following COVID-19 vaccination. When myocarditis has been observed after vaccination, the condition typically mild and resolves completely within weeks. The National Academies of Sciences, Engineering, and Medicine (NASEM) was commissioned by the Health Resources and Services Administration to conduct an evidence review of the relationship between COVID-19 vaccines and specific adverse events. NASEM reviewed nearly 600 studies on safety of COVID-19 vaccines and concluded that the evidence supported causal association

between mRNA COVID-19 vaccines and myocarditis. NASEM reported that there was no evidence of a causal relationship between mRNA COVID-19 vaccines and thrombosis with thrombocytopenia syndrome, infertility, Guillain-Barré syndrome, Bell's palsy, and myocardial infarction. After reviewing available data, the June 2024 Advisory Committee on Immunization Practices (ACIP) and CDC acknowledged the very low risk of myocarditis and pericarditis associated with COVID-19 vaccination but determined that the benefits of COVID-19 vaccination outweigh these low risks associated with vaccination in all populations recommended for vaccination. No other risks associated with the vaccines currently licensed in the U.S. have been confirmed except those seen with other vaccines (e.g., local and systemic reactions, allergic reactions).

Coadministration of Vaccines

The administration of COVID-19 vaccine at the same time as other immunizations such as flu and RSV is acceptable for both children and adults and is often recommended to reduce missed opportunities for vaccination. There are limited data specifically addressing coadministration of vaccines, but no serious concerns have been identified. One study led by CDC suggests that simultaneous administration of COVID-19 mRNA vaccine and influenza vaccine may be associated with a small increase in the likelihood of post vaccination reactogenic symptoms in adults, but that these symptoms were short lived.²⁴ A randomized controlled trial of adults aged ≥50 years found that co-administering an RSV vaccine with a seasonal influenza or COVID-19 vaccine was safe and produced mostly noninferior immune responses.²⁵

^aPeople should consider consulting with their health care provider to discuss the benefits and risks of vaccination and/or receiving a second dose, taking into consideration their individual circumstances and preferences.

^bCDC list of medical conditions associated with elevated risk of severe COVID-19 outcomes can be found <u>here</u> and are also listed in the appendix table 1 at the end of this document.

^cAfter consulting with their healthcare provider, people who are moderately or severely immunocompromised may get more additional doses of the 2025-2026 COVID-19 vaccine at least 2 months after their last dose.

^dCOVID-19 vaccine may be administered to pregnant people during any trimester of pregnancy.

References

- 1. Fitzpatrick MC, Moghadas SM, Pandey A, Galvani AP. Two Years of U.S. COVID-19 Vaccines Have Prevented Millions of Deaths and Hospitalizations. Published online 2022. doi:10.26099/WHSF-FP90
- 2. Preliminary Estimates of COVID-19 Burden for 2024-2025 | COVID-19 | CDC. Accessed July 29, 2025. https://www.cdc.gov/covid/php/surveillance/burdenestimates.html
- 3. Link-Gelles R. Interim Estimates of 2024–2025 COVID-19 Vaccine Effectiveness Among Adults Aged ≥18 Years VISION and IVY Networks, September 2024–January 2025. MMWR Morb Mortal Wkly Rep. 2025;74. doi:10.15585/mmwr.mm7406a1
- 4. Wiegand RE, Devine O, Wallace M, et al. Estimating COVID-19 associated hospitalizations, ICU admissions, and in-hospital deaths averted in the United States by 2023–2024 COVID-19 vaccination: A conditional probability, causal inference, and multiplier-based approach. *Vaccine*. 2025;49:126808. doi:10.1016/j.vaccine.2025.126808
- 5. Multi-omics analysis reveals COVID-19 vaccine induced attenuation of inflammatory responses during breakthrough disease | Nature Communications. Accessed July 29, 2025. https://www.nature.com/articles/s41467-024-47463-6
- 6. DeSisto CL, Wallace B, Simeone RM, et al. Risk for Stillbirth Among Women With and Without COVID-19 at Delivery Hospitalization United States, March 2020–September 2021. *MMWR Morb Mortal Wkly Rep.* 2021;70(47):1640-1645. doi:10.15585/mmwr.mm7047e1
- 7. Rolfes MA, Talbot HK, Morrissey KG, et al. Reduced risk of SARS-CoV-2 infection among household contacts with recent vaccination and past COVID-19 infection: results

from 2 multisite case-ascertained household transmission studies. *Am J Epidemiol*. 2025;194(6):1603-1610. doi:10.1093/aje/kwae334

- 8. Piekos SN, Hwang YM, Roper RT, et al. The effect of COVID-19 vaccination and booster on maternal-fetal outcomes: a retrospective multicenter cohort study. *Obstetrics and Gynecology*. Preprint posted online August 16, 2022. doi:10.1101/2022.08.12.22278727
- 9. National Center for Immunization and Respiratory Diseases C and ORVD. Current Epidemiology of COVID-19. Presented at: Advisory Committee on Immunization Practices (ACIP); June 25, 202 AD; Atlanta, GA. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cdc.gov/acip/downloads/slides-2025-06-25-26/02-MacNeil-COVID-508.pdf
- 10. Park HJ, Gonsalves GS, Tan ST, et al. Comparing frequency of booster vaccination to prevent severe COVID-19 by risk group in the United States. *Nat Commun*. 2024;15(1):1883. doi:10.1038/s41467-024-45549-9
- 11. Miranda RN, Simmons AE, Li MWZ, et al. Cost-Utility Analysis of COVID-19 Vaccination Strategies for Endemic SARS-CoV-2. *JAMA Netw Open*. 2025;8(6):e2515534. doi:10.1001/jamanetworkopen.2025.15534
- 12. Hedberg P, Van Der Werff SD, Nauclér P. The Effect of COVID-19 Vaccination on the Risk of Persistent Post–COVID-19 Condition: Cohort Study. *J Infect Dis.* 2025;231(5):e941-e944. doi:10.1093/infdis/jiaf133
- 13. Tan ST, Rodríguez-Barraquer I, Kwan AT, et al. Strength and durability of indirect protection against SARS-CoV-2 infection through vaccine and infection-acquired immunity. *Nat Commun*. 2025;16(1):1090. doi:10.1038/s41467-024-55029-9
- 14. Link-Gelles R. Effectiveness of COVID-19 vaccines. Presented at: ACIP; October 23, 2024. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cdc.gov/acip/downloads/slides-2024-10-23-24/04-COVID-Link-Gelles-508.pdf
- 15. Delahoy MJ, Whitaker M, O'Halloran A, et al. Characteristics and Maternal and Birth Outcomes of Hospitalized Pregnant Women with Laboratory-Confirmed COVID-19 COVID-NET, 13 States, March 1–August 22, 2020. MMWR Morb Mortal Wkly Rep. 2020;69(38):1347-1354. doi:10.15585/mmwr.mm6938e1
- 16. Villar J, Ariff S, Gunier RB, et al. Maternal and Neonatal Morbidity and Mortality Among Pregnant Women With and Without COVID-19 Infection: The INTERCOVID

Multinational Cohort Study. *JAMA Pediatr*. 2021;175(8):817. doi:10.1001/jamapediatrics.2021.1050

- 17. Simeone RM, Zambrano LD, Halasa NB, et al. Effectiveness of Maternal mRNA COVID-19 Vaccination During Pregnancy Against COVID-19—Associated Hospitalizations in Infants Aged <6 Months During SARS-CoV-2 Omicron Predominance 20 States, March 9, 2022—May 31, 2023. MMWR Morb Mortal Wkly Rep. 2023;72(39):1057-1064. doi:10.15585/mmwr.mm7239a3
- 18. Norman M, Magnus MC, Söderling J, et al. Neonatal Outcomes After COVID-19 Vaccination in Pregnancy. *JAMA*. 2024;331(5):396. doi:10.1001/jama.2023.26945
- 19. Jaswa EG, Cedars MI, Lindquist KJ, et al. In Utero Exposure to Maternal COVID-19 Vaccination and Offspring Neurodevelopment at 12 and 18 Months. *JAMA Pediatr*. 2024;178(3):258. doi:10.1001/jamapediatrics.2023.5743
- 20. Klompas M, Pearson M, Morris C. The Case for Mandating COVID-19 Vaccines for Health Care Workers. *Ann Intern Med.* 2021;174(9):1305-1307. doi:10.7326/M21-2366
- 21. Buoninfante A, Andeweg A, Genov G, Cavaleri M. Myocarditis associated with COVID-19 vaccination. *Npj Vaccines*. 2024;9(1):122. doi:10.1038/s41541-024-00893-1
- 22. Block JP. Cardiac Complications After SARS-CoV-2 Infection and mRNA COVID-19 Vaccination PCORnet, United States, January 2021–January 2022. *MMWR Morb Mortal Wkly Rep.* 2022;71. doi:10.15585/mmwr.mm7114e1
- 23. Committee to Review Relevant Literature Regarding Adverse Events Associated with Vaccines, Board on Population Health and Public Health Practice, Health and Medicine Division, National Academies of Sciences, Engineering, and Medicine. *Evidence Review of the Adverse Effects of COVID-19 Vaccination and Intramuscular Vaccine Administration*. (Bass AR, Stratton K, Kumova OK, Rosenberg D, eds.). National Academies Press; 2024:27746. doi:10.17226/27746
- 24. Reactogenicity of Simultaneous COVID-19 mRNA Booster and Influenza Vaccination in the US | Infectious Diseases | JAMA Network Open | JAMA Network. Accessed July 30, 2025. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794318
- 25. Dacso CC, ACP Journal Club Editorial Team at McMaster University.

 Coadministration of RSV + influenza or COVID-19 vaccines was noninferior to separate

administration for immune responses in adults aged ≥50 y. *Ann Intern Med*. 2025;178(4):JC41. doi:10.7326/ANNALS-25-00904-JC

<u>Appendix Table 1</u>: CDC 2025 List of Underlying Medical Conditions That Increase a Person's Risk of Severe COVID-19[¥]

Adults ages 18-64 years at higher risk of exposure (e.g., healthcare workers, congregate care settings)

Adults ages 18-64 who are who are household contacts of persons at high risk of severe disease

Asthma

Cancer

Hematologic malignancies

Cerebrovascular disease

Chronic kidney disease

People receiving dialysis

Chronic lung diseases limited to the following:

- Bronchiectasis
- COPD (chronic obstructive pulmonary disease)
- Interstitial lung disease
- Pulmonary embolism
- Pulmonary hypertension

Chronic liver disease limited to the following:

- Cirrhosis
- Nonalcoholic fatty liver disease
- Alcoholic liver disease
- Autoimmune hepatitis

Cystic Fibrosis

Diabetes mellitus, type 1

Diabetes mellitus, type 2

Disabilities, including Down's syndrome Epilepsy Hemophilia Heart conditions (such as heart failure, coronary artery disease, or cardiomyopathies) HIV (human immunodeficiency virus) Mental health conditions limited to the following: Mood disorders, including depression Schizophrenia spectrum disorders Neurologic conditions limited to dementia and Parkinson's disease Obesity (BMI \geq 30 or \geq 95th percentile in children) Overweight (BMI > 25 kg/m² but < 30kg/m²) Physical inactivity Pregnancy (pregnant, postpartum, lactating, or planning pregnancy) Primary immunodeficiencies Sickle cell disease Smoking, current and former Substance use disorders Solid-organ or blood stem-cell transplantation Tuberculosis Use of corticosteroids or other immunosuppressive medications

*Centers for Disease Control and Prevention. Underlying Medical Conditions Associated with Higher Risk for Severe COVID-19. *CDC*. Published June 11, 2025. Accessed September 4, 2025. https://www.cdc.gov/covid/hcp/clinical-care/underlying-conditions.html. This resource provides detailed evidence grading for each clinical condition listed in the table.