Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Coronavirus Disease 2019 (COVID-19)

MENU

People with Certain Medical Conditions

Updated Aug. 14, 2020 Print

Summary of Recent Changes

Revisions were made on July 17, 2020 to reflect recent data supporting increased risk of severe COVID-19 among individuals with cancer. The listed underlying medical conditions in children were also revised to indicate that these conditions **might** increase risk to better reflect the quality of available data currently. We are learning more about COVID-19 every day, and as new information becomes available, CDC will update the information below.

People of any age with **certain underlying medical conditions** are at increased risk for severe illness from COVID-19:

People of any age with the following conditions **are at increased risk** of severe illness from COVID-19:

- Cancer
- Chronic kidney disease
- COPD (chronic obstructive pulmonary disease)
- Immunocompromised state (weakened immune system) from solid organ transplant
- Obesity (body mass index [BMI] of 30 or higher)
- Serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
- Sickle cell disease
- Type 2 diabetes mellitus

COVID-19 is a new disease. Currently there are limited data and information about the impact of underlying medical conditions and whether they increase the risk for severe illness from COVID-19. Based on what we know at this time, people with the following conditions **might be at an increased risk** for severe illness from COVID-19:

- Asthma (moderate-to-severe)

- Cerebrovascular disease (affects blood vessels and blood supply to the brain)
- Cystic fibrosis
- Hypertension or high blood pressure
- Immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines
- Neurologic conditions, such as dementia
- Liver disease
- Pregnancy
- Pulmonary fibrosis (having damaged or scarred lung tissues)
- Smoking
- Thalassemia (a type of blood disorder)
- Type 1 diabetes mellitus

Want to see the evidence behind these lists?

Children who have medical complexity, who have neurologic, genetic, metabolic conditions, or who have congenital heart disease might be at increased risk for severe illness from COVID-19 compared to other children.

The list of underlying conditions is meant to inform clinicians to help them provide the best care possible for patients, and to inform individuals as to what their level of risk may be so they can make individual decisions about illness prevention. We are learning more about COVID-19 every day. This list is a living document that may be updated at any time, subject to potentially rapid change as the science evolves.

Reduce your risk of getting COVID-19

It is especially important for people at increased risk of severe illness from COVID-19, and those who live with them, to protect themselves from getting COVID-19.

The best way to protect yourself and to help reduce the spread of the virus that causes COVID-19 is to:

- Limit your interactions with other people as much as possible.
- Take precautions to prevent getting COVID-19 when you do interact with others.

If you start feeling sick and think you may have COVID-19, get in touch with your healthcare provider within 24 hours.

Venturing out into a public setting? What to consider before you go.

As communities and businesses across the United States are opening, you may be thinking about resuming some activities, running errands, and attending events and gatherings. **There is no way to ensure you have zero risk of infection,** so it is important to understand the risks and know how to be as safe as possible.

People at increased risk of severe illness from COVID-19, and those who live with them, should consider their level of risk before deciding to go out and ensure they are taking steps to protect themselves. Consider avoiding activities where taking protective measures may be difficult, such as activities where social distancing can't be maintained. **Everyone should take steps to prevent getting and spreading COVID-19** to protect themselves, their communities, and people who are at increased risk of severe illness.

In general, **the more people you interact with, the more closely you interact with them, and the longer that interaction, the higher your risk of getting and spreading COVID-19.**

- If you decide to engage in public activities, continue to protect yourself by practicing everyday preventive actions.
- Keep these items on hand and use them when venturing out: a mask, tissues, and a hand sanitizer with at least 60% alcohol, if possible.
- If possible, avoid others who are not wearing masks or ask others around you to wear masks.

Are you considering in-person visits with family and friends? Here are some things to consider to help make your visit as safe as possible:

When to delay or cancel a visit

- Delay or cancel a visit if you or your visitors have symptoms of COVID-19 or have been exposed to someone with COVID-19 in the last 14 days.
- Anyone who has had close contact with a person with COVID-19 should stay home and monitor for symptoms.

In general, the more people you interact with, the more closely you interact with them, and the longer that interaction, the higher the risk of COVID-19 spread. So, think about:

- How many people will you interact with?
- Can you keep 6 feet of space between you and others?
- Will you be outdoors or indoors?
- What's the length of time that you will be interacting with people?

Encourage social distancing during your visit

- Visit with your friends and family **outdoors**, when possible. If this is not feasible, make sure the room or space is well-ventilated (for example, open windows or doors) and large enough to accommodate social distancing.
- Arrange tables and chairs to allow for social distancing. People from the same household can be in groups together and don't need to be 6 feet apart from each other.
- Consider activities where social distancing can be maintained, like sidewalk chalk art or yard games.
- Try to avoid close contact with your visitors. For example, don't shake hands, elbow bump, or hug. Instead wave and verbally greet them.
- If possible, avoid others who are not wearing masks or ask others around you to wear masks.
- Consider keeping a list of people you visited or who visited you and when the visit occurred. This will help with contact tracing if someone becomes sick.

Wear masks

- Masks should be worn over the nose and mouth. Masks are especially important when it is difficult to stay at least 6 feet apart from others or when people are indoors to help protect each other.

- Masks may slow the spread of the virus and help people who may have the virus and do not know it from transmitting it to others
  - Wearing a mask helps protects others in case you're infected, while others wear one to protect you should they be infected.
- **Who should NOT use masks**: Children under age 2 or anyone who has trouble breathing, is unconscious, or is incapacitated or otherwise unable to remove the mask without assistance.

Wash hands often

- Everyone should wash their hands for at least 20 seconds at the beginning and end of the visit and whenever you think your hands may have become contaminated.
- If soap and water are not readily available, such as with outdoor visits or activities, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- Remind guests to wash or sanitize their hands before serving or eating food.
- Use single-use hand towels or paper towels for drying hands so visitors do not share towels. Have a no-touch trash can available for guests to use.

Limit contact with commonly touched surfaces or shared items

- Encourage your visitors to bring their own food and drinks.
- Clean and disinfect commonly touched surfaces and any shared items between use.
- If you choose to use any shared items that are reusable (e.g., seating covers, tablecloths, linen napkins), wash, clean, and sanitize them after the event.

If you are thinking about participating in an event or gathering:

If you are at increased risk for severe illness, consider avoiding high-risk gatherings. The risk of COVID-19 spreading at events and gatherings increases as follows:

Lowest risk: Virtual-only activities, events, and gatherings.

More risk: Smaller outdoor and in-person gatherings in which individuals from different households remain spaced at least 6 feet apart, wear masks, do not share objects, and come from the same local area (e.g., community, town, city, or county).

Higher risk: Medium-sized in-person gatherings that are adapted to allow individuals to remain spaced at least 6 feet apart and with attendees coming from outside the local area.

Highest risk: Large in-person gatherings where it is difficult for individuals to remain spaced at least 6 feet apart and attendees travel from outside the local area.

Stay healthy during the COVID-19 pandemic

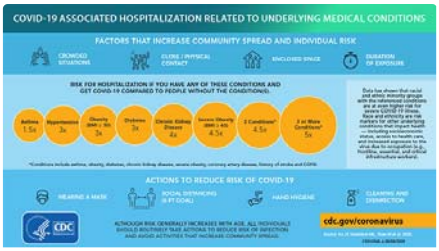
Staying healthy during the pandemic is important. Talk to your healthcare provider about whether your vaccinations and other preventive services are up to date to help prevent you from becoming ill with other diseases.

- It is particularly important for those at increased risk of severe illness, including older adults, to receive recommended vaccinations against influenza and pneumococcal disease.
- Talk with your healthcare provider about maintaining preventive services like cancer screenings during the pandemic.

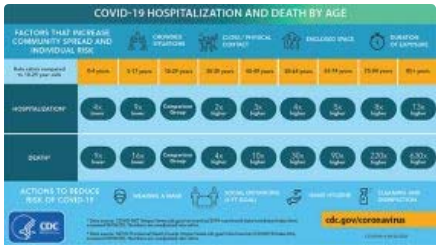
- Remember the importance of staying physically active and practicing healthy habits to cope with stress.
- If you have a medical emergency, do not delay seeking emergency care.

If you have an underlying medical condition, you should continue to follow your treatment plan:

- **Continue your medicines** and do not change your treatment plan without talking to your healthcare provider.
- **Have at least a 30-day supply** of prescription and non-prescription medicines. Talk to a healthcare provider, insurer, and pharmacist about getting an extra supply (i.e., more than 30 days) of prescription medicines, if possible, to reduce your trips to the pharmacy.
- **Do not delay getting emergency care for your underlying medical condition** because of COVID-19. Emergency departments have contingency infection prevention plans to protect you from getting COVID-19 if you need care.
- **Call your healthcare provider if you have any concerns** about your underlying medical conditions or if you get sick and think that you may have COVID-19. If you need emergency help, call 911 right away.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.



COVID-19 Associated Hospitalization Related to Underlying Medical Conditions



COVID-19 Hospitalization and Death by Age

COVID-19 Hospitalization and Death by Race/Ethnicity

Actions you can take based on your medical conditions and other risk factors

Asthma (moderate-to-severe)

Having moderate-to-severe asthma may increase your risk for severe illness from COVID-19.

Actions to take

- Keep your asthma under control by following your Asthma Action Plan.
- Continue your current medicines, including any inhalers with steroids in them ("steroids" is another word for corticosteroids). Know how to use your inhaler. Avoid your asthma triggers.

- Make sure that you have at least a 30-day supply of your medicines.
- Call your healthcare provider if you have concerns about your condition or feel sick. **If you don't have a healthcare provider,** contact your nearest community health center or health department.
- Have another member of your household who doesn't have asthma clean and disinfect your house for you. When they use cleaning and disinfecting products, have them:
  - Make sure that people with asthma are not in the room.
  - Avoid using disinfectants known to trigger asthma attacks.
  - Open windows or doors and use a fan that blows air outdoors.
  - Always follow the instructions on the product label.
  - Spray or pour spray products onto a cleaning cloth or paper towel instead of spraying the product directly onto the cleaning surface (if the product label allows).

Learn more about asthma.

Cancer

Having cancer currently increases your risk of severe illness from COVID-19. At this time, it is not known whether having a history of cancer increases your risk.

Actions to take:

- Have a conversation with your healthcare provider or care team to discuss your individual level of risk based on your condition, your treatment, and the level of transmission in your community.
- Do not stop taking your medicines or alter your treatment plan without talking to your healthcare provider.
- Make sure that you have at least a 30-day supply of your medicines.
- Do not delay life-saving treatment or emergency care.
- Call your healthcare provider or care team if you have concerns about your condition, your treatment, think you may have been exposed to COVID-19, or any other questions.
- For more information on preventing infections for people with cancer.

Chronic kidney disease

Having chronic kidney disease of any stage increases your risk for severe illness from COVID-19.

Actions to take

- Continue your medicines and your diet as directed by your healthcare provider.
- Make sure that you have at least a 30-day supply of your medicines.
- Stay in contact with your healthcare team as often as possible, especially if you have any new signs or symptoms of illness. Also reach out to them if you can't get the medicines or foods you need.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.
- Have shelf-stable food choices to help you follow your kidney diet.
- If you are on dialysis:
  - Contact your dialysis clinic and your healthcare provider if you feel sick or have concerns.

- Do NOT miss your treatments.
- Plan to have enough food on hand to follow the KCER 3-Day Emergency Diet Plan for dialysis patients in case you are unable to maintain your normal treatment schedule.

Learn more about kidney disease.

Learn how to take care of your kidneys.

COPD, cystic fibrosis, pulmonary fibrosis, and other chronic lung diseases

Having COPD (including emphysema and chronic bronchitis) is known to increase your risk of severe illness from COVID-19. Other chronic lung diseases, such as idiopathic pulmonary fibrosis and cystic fibrosis, may increase your risk of severe illness from COVID-19.

Actions to take

- Keep taking your current medicines, including those with steroids in them ("steroids" is another word for corticosteroids).
- Make sure that you have at least a 30-day supply of your medicines.
- Avoid triggers that make your symptoms worse.
- Call your healthcare provider if you have concerns about your condition or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn more about COPD.

Diabetes

Having type 2 diabetes increases your risk of severe illness from COVID-19. Based on what we know at this time, having type 1 or gestational diabetes may increase your risk of severe illness from COVID-19.

Actions to take

- Continue taking your diabetes pills and insulin as usual.
- Test your blood sugar and keep track of the results, as directed by your healthcare provider.
- Make sure that you have at least a 30-day supply of your diabetes medicines, including insulin.
- Follow your healthcare provider's instructions if you are feeling ill as well as the sick day tips for people with diabetes.
- Call your healthcare provider if you have concerns about your condition or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn more about diabetes.

Hemoglobin disorders such as sickle cell disease and thalassemia

Having sickle cell disease (SCD) increases your risk for severe illness from COVID-19. Having other hemoglobin disorders, like thalassemia, may increase your risk for severe illness from COVID-19.

Actions to take

- Ask your healthcare provider about telemedicine or remote healthcare visits, and know when to go to the emergency department.
- Work with your healthcare provider to manage medicines and therapies for your disorder (including hydroxyurea, chelation therapy, blood transfusions, and prescriptions for pain management) and any other health condition you may have (such as diabetes, high blood pressure, and arthritis).
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.
- Try to prevent vaso-occlusive episodes or pain crises by avoiding possible triggers.
- Review CDC's healthy living with SCD guide or our healthy living with thalassemia guide for tips to help you stay healthy.
- Find SCD resources and thalassemia resources to help navigate care and increase knowledge and awareness of SCD and thalassemia.
- Let friends and family know about the need for healthy blood donors.

Immunocompromised state (weakened immune system) from blood, bone marrow, or organ transplant; HIV; use of corticosteroids; or use of other immune weakening medicines

Many conditions and treatments can cause a person to be immunocompromised or have a weakened immune system. These include: having a solid organ transplant, blood, or bone marrow transplant; immune deficiencies; HIV with a low CD4 cell count or not on HIV treatment; prolonged use of corticosteroids; or use of other immune weakening medicines. Having a weakened immune system may increase your risk of severe illness from COVID-19.

Actions to take

- Continue any recommended medicines or treatments and follow the advice of your healthcare provider.
- Do not stop taking your medicines without talking to your healthcare provider.
- Make sure that you have at least a 30-day supply of your medicines.
- Do not delay life-saving treatment or emergency care.
- Call your healthcare provider if you have concerns about your condition or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Information for people living with HIV.

Liver disease

Having chronic liver disease, especially cirrhosis (scarring of the liver), may increase your risk for severe illness from COVID-19.

Actions to take

- Take your medicines exactly as prescribed.

- Make sure that you have at least a 30-day supply of your medicines.
- Call your healthcare provider if you have concerns about your condition or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn more about chronic liver disease.

Pregnancy

Based on what we know at this time, **pregnant people might be at an increased risk for severe illness from COVID-19** compared to non-pregnant people. Additionally, there may be an increased risk of adverse pregnancy outcomes, such as preterm birth, among pregnant people with COVID-19.

Actions to take

- Do not skip your prenatal care appointments.
- Make sure that you have at least a 30-day supply of your medicines.
- Talk to your healthcare provider about how to stay healthy and take care of yourself during the COVID-19 pandemic.
- If you don't have a healthcare provider, contact your nearest community health center or health department.
- Call your healthcare provider if you have any questions related to your health.
- Seek care immediately if you have a medical emergency.
- You may feel increased stress during this pandemic. Fear and anxiety can be overwhelming and cause strong emotions. Learn about stress and coping.

Learn more about pregnancy and COVID-19.

Serious Heart Conditions and Other Cardiovascular and Cerebrovascular Diseases

Having any of the following serious heart conditions increases your risk of severe illness from COVID-19:

- Heart failure
- Coronary artery disease
- Cardiomyopathies
- Pulmonary hypertension

Having other cardiovascular or cerebrovascular disease, such as hypertension (high blood pressure) or stroke, may increase your risk of severe illness from COVID-19.

Learn more about serious heart conditions

Actions to take

- Take your medicines exactly as prescribed and follow your healthcare provider's recommendations for diet and exercise while maintaining social distancing precautions.

- Continue angiotensin converting enzyme inhibitors (ACE-I) or angiotensin-II receptor blockers (ARB) as prescribed by your healthcare provider for indications such as heart failure or high blood pressure.
- Make sure that you have at least a 30-day supply of your heart disease medicines, including high cholesterol and high blood pressure medicines.
- Call your healthcare provider if you have concerns about your condition or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.
- Do not delay life-saving treatment or emergency care.

Learn more about heart disease.

Learn more about stroke.

Learn more about high blood pressure.

Obesity

Having obesity, defined as a body mass index (BMI) of 30 or above, increases your risk of severe illness from COVID-19.

Actions to take

- Take your medicines for any underlying health conditions exactly as prescribed.
- Follow your healthcare provider's recommendations for nutrition and physical activity, while maintaining social distancing precautions.
- Call your healthcare provider if you have concerns or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn more about obesity in adults.

Learn about obesity in children.

Neurologic conditions such as dementia

Having neurologic conditions such as dementia may increase your risk of severe illness from COVID-19.

Actions to take

- Take your medicines as prescribed.
- Make sure that you have at least a 30-day supply of your medicines.
- Call your healthcare provider if you have concerns about your condition or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn more about dementia.

Learn about caring for people living with dementia during COVID-19.

Learn about amyotrophic lateral sclerosis (ALS).

Smoking

Being a current or former cigarette smoker may increase your risk of severe illness from COVID-19.

Actions to take

- If you currently smoke, quit. If you used to smoke, don't start again. If you've never smoked, don't start.
- Counseling from a healthcare provider and Food and Drug Administration (FDA)-approved medications can double the chances of quitting smoking.
- For help quitting smoking, call 1-800-QUIT-NOW or visit smokefree.gov .
- Call your healthcare provider if you have concerns or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn about smoking and tobacco use.

Learn about the health effects of cigarette smoking.

Children with Certain Underlying Conditions

While children have been less affected by COVID-19 compared to adults, children with certain conditions may be at increased risk for severe illness. Children who are medically complex, who have serious genetic, neurologic, metabolic disorders, and with congenital (since birth) heart disease might be at increased risk for severe illness from COVID-19. Similar to adults, children with obesity, diabetes, asthma and chronic lung disease, or immunosuppression might be at increased risk for severe illness from COVID-19. CDC is investigating a rare but serious complication associated with COVID-19 in children called Multisystem Inflammatory Syndrome in Children (MIS-C). We do not yet know what causes MIS-C and who is at increased risk for developing it. Learn about MIS-C.

Actions to take

- Give medicines as prescribed for your child's underlying conditions.
- Make sure that you have at least a 30-day supply of your child's medicines.
- Call your child's healthcare provider if you have concerns and to discuss your child's specific conditions and risk for severe illness from COVID-19.
- Well-child visits and vaccines are still important during the COVID-19 pandemic. Stay in contact with your child's healthcare provider and make sure your child is up to date with vaccines to prevent other diseases. Learn more about how to protect yourself and your family during the COVID-19 pandemic.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.

Learn about preventing illness in your children.

Learn more about congenital heart disease and specific genetic and neurologic disorders in children.

People with Multiple Underlying Conditions

The more underlying medical conditions someone has, the greater their risk is for severe illness from COVID-19.

Actions to take

- Continue your medicines and treatment plans as directed by your healthcare provider.
- Make sure that you have at least a 30-day supply of your medicines.
- Call your healthcare provider if you have any concerns or feel sick.
- **If you don't have a healthcare provider,** contact your nearest community health center or health department.
- Do not delay emergency care.

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