Coronavirus Disease

People with Certain Medical Conditions

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Updated Sept. 11, 2020

Summary of Recent Changes

Revisions were made on July 17, 2020 to reflect recent data supporting increased risk of severe illness in individuals with cancer. The listed underlying medical conditions in children were also revised.
conditions might increase risk to better reflect the quality of available data currently. With COVID-19 every day, and as new information becomes available, CDC will update the information on this page.

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

- 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 cardiomyopathy
- Sickle cell disease
- Type 2 diabetes mellitus

COVID-19 is a new disease. Currently there are limited data and information about the impact of these conditions and whether they increase the risk for severe illness from COVID-19. Based on the current evidence, 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 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 heart disease might be at increased risk for severe illness from COVID-19 compared to those with no underlying conditions.

The list of underlying conditions is meant to inform clinicians to help them provide the best care for their patients, and to inform individuals as to what their level of risk may be so they can make informed decisions about illness prevention. We are learning more about COVID-19 every day. This list is a living one and 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 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 or local health department.

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

As communities and businesses across the United States are opening, you may be thinking about activities, running errands, and attending events and gatherings. There is no way to ensure 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 the overall risk when deciding to go out and ensure they are taking steps to protect themselves. Consider
Taking protective measures may be difficult, such as activities where social distancing can’t be maintained. People who are at increased risk of severe illness should take steps to prevent getting and spreading COVID-19 to protect themselves.

In general, the more people you interact with, the more closely you interact with them, the 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
- Keep these items on hand and use them when venturing out: a mask, tissues, and a alcohol, if possible.
- If possible, avoid others who are not wearing masks or ask others around you to wea

Are you considering in-person visits with family or friends? Here are some things to consider to help make your visit 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 COVID-19 in the last 14 days.
- Anyone who has had close contact with a person with COVID-19 should stay home a

In general, the more people you interact with, the more closely you interact with them, 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 well-ventilated (for example, open windows or doors) and large enough to accommo
• Arrange tables and chairs to allow for social distancing. People from the same house and don’t need to be 6 feet apart from each other.

• Consider activities where social distancing can be maintained, like sidewalk chalk art.

• Try to avoid close contact with your visitors. For example, don’t shake hands, elbow bump, or 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; it can help with contact tracing if someone becomes sick.

Wear masks

• **Masks** should be worn over the nose and mouth. Masks are especially important when you are 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 transmitting it to others
  ○ Wearing a mask helps protects others in case you’re infected, while others wear masks to prevent them from being infected.

• **Who should NOT use masks**: Children under age 2 or anyone who has trouble breathing, 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 event; think your hands may have become contaminated.

• If soap and water are not readily available, such as with outdoor visits or activities, use an alcohol-based hand rub with at least 60% alcohol. Cover all surfaces of your hands and rub them together until they are 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 what 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) and sanitize them after the event.

If you are thinking about participating in an event

If you are at increased risk for severe illness, consider avoiding high-risk gatherings. The risk of COVID-19 transmission 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 are at least 6 feet apart, wear masks, do not share objects, and come from the same local area (city or county).

Higher risk: Medium-sized in-person gatherings that are adapted to allow individuals to remain 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 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 other preventive services are up to date to help prevent you from becoming ill with other

• It is particularly important for those at increased risk of severe illness, including older adults, recommended vaccinations against influenza and pneumococcal disease.
• Talk with your healthcare provider about maintaining preventive services like cancer screening during the pandemic.
• Remember the importance of staying physically active and practicing healthy habits.
• If you have a medical emergency, do not delay seeking emergency care.

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

Protect Your Health This Flu Season

Getting a flu vaccine during 2020-2021 is more important than ever because of the ong
vaccination is especially important for people who are at high risk from flu; many of wh
COVID-19 or serious outcomes.

People at High Risk For Flu Complications

COVID-19 Associated
Hospitalization Related
to Underlying Medical
Conditions

COVID-19 Hospitalization
and Death by Age

COVID-19 Cases by
Race/Ethnicity
Actions you can take based on your medical other risk factors

**Asthma (moderate-to-severe)**

Having moderate-to-severe asthma may increase your risk for severe illness from COVID-19. At this time, having a history of cancer increases your risk.

**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 (“steroid 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. 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 surfaces they use:
  - 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 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, 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 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 or if 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 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 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 symptoms.
  ○ Do NOT miss your treatments.
  ○ Plan to have enough food on hand to follow the [KCER 3-Day Emergency Diet Plan](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-chronic-conditions.html) in case you are unable to maintain your normal treatment schedule.


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

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

Actions to take

- Keep taking your current medicines, including those with steroids in them ("steroids' 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.

Learn more about COPD.

Diabetes

Having type 2 diabetes increases your risk of severe illness from COVID-19. Based on what we know about COVID-19, people with 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 diabetes guidelines.
- 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.
Hemoglobin disorders such as sickle cell disease and thalassemia

Having sickle cell disease (SCD) increases your risk for severe illness from COVID-19. 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 ken emergency department.
- Work with your healthcare provider to manage medicines and therapies for your disease, chelation therapy, blood transfusions, and prescriptions for pain management) and 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.
- 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.
- Find SCD resources and thalassemia resources to help navigate care and increase knowledge.
- Let friends and family know about the need for healthy blood donors.

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

Many conditions and treatments can cause a person to be immunocompromised or have weakened immune system. These include: having a solid organ transplant, blood, or bone marrow transplant with a low CD4 cell count or not on HIV treatment; prolonged use of corticosteroids; or weakening medicines. Having a weakened immune system may increase your risk of severe COVID-19 illness.
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 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 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 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 COVID-19 compared to non-pregnant people. Additionally, there may be an increased chance of 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 pandemic.
- If you don’t have a healthcare provider, contact your nearest community health center.
- 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 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:

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

Having other cardiovascular or cerebrovascular disease, such as hypertension (high blood pressure), increases 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 exercise while maintaining social distancing precautions.
Certain Medical Conditions and Risk for Severe COVID-19 Illness

- Continue angiotensin converting enzyme inhibitors (ACE-I) or angiotensin-II receptor blockers 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 blood pressure medications.
- 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.
- 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 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, including 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.

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.

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.**

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, double the chances of quitting smoking.
- **Counseling from a healthcare provider and Food and Drug Administration (FDA)-approved smoking cessation aids**
- 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.**
Children with Certain Underlying Conditions

While children have been less affected by COVID-19 compared to adults, children with certain underlying conditions might be at increased risk for severe illness. Children who are medically complex, who have serious 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 might be at increased risk for severe illness from COVID-19. CDC is investigating a rare illness associated with COVID-19 in children called Multisystem Inflammatory Syndrome in Children (MIS-C). Learn more about MIS-C and who is at increased risk for developing it.

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 health for severe illness from COVID-19.
- Well-child visits and vaccines are still important during the COVID-19 pandemic. Stay in touch with your child's healthcare provider and make sure your child is up to date with vaccines to prevent infections. Learn 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.

People with Multiple Underlying Conditions

The more underlying medical conditions someone has, the greater their risk is for severe COVID-19 illness. Learn about smoking and tobacco use. Learn about the health effects of cigarette smoking.
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 department.
- Do not delay emergency care.