

How aging affects your immune system

Healthy older adults and families of healthy older adults may wonder why they remain in a category of greater risk for contracting COVID-19. According to the Centers for Disease Control, the risk of the coronavirus and death is higher starting at age 65, with the highest risk of serious illness and death for people 80 or more years old (2020). Older adults face increased risk of contracting the coronavirus because of naturally weakened immune systems that come with normal aging. When age is combined with chronic disease, people are especially vulnerable.

The immune system acts as our bodyguard — it makes cells and antibodies that get rid of infectious agents such as bacteria, viruses, and other invaders that are not supposed to be in the body (WebMD, 2019). We are born with a certain level of immunity, but over time, our system grows stronger and creates a store of antibodies as we are introduced to illnesses and toxins. Vaccines help stimulate the immune response and contribute to the bank of antibodies. They introduce small amounts of a virus so your body can make the proper antibodies to protect itself for when you actually are exposed to the virus. But, over time, the immune system naturally becomes less effective, leaving older adults more prone to infection and getting sick (WebMD, 2019). COVID-19 is a new virus to which people have never been exposed and therefore do not have immunity. As scientists work to learn more about it, they recognize that nearly everyone will be exposed to it at some point, but that most people will not develop a serious or life-threatening illness (CDC, 2020). Like any illness affecting older adults and people with compromised immune systems, however, COVID-19 becomes even harder to fight. It leaves older adults who become infected more susceptible to serious complications, like pneumonia, making it even more difficult to recover.

The CDC recognizes these natural age-related changes in an older adult's immune system.

- **Slower and weaker immune response.** When immune systems are slower to react, your chances of getting sick increase.
- **Greater risk of developing autoimmune disorders.** Autoimmune disorders, such as rheumatoid arthritis, type 1 diabetes and multiple sclerosis, occur when the immune system mistakes healthy tissues and cells for harmful ones and attacks.
- **Healing time slows down.** With fewer immune cells, the body takes more time to heal.
- **Detection and correction of defected cells declines.** This can result in an increased risk for cancer.

The National Institute of Health and the CDC (2020) recommend several things to boost an older immune system.

- Receive vaccinations recommended by your health-care provider.
- Stay physically active.
- Eat healthy.
- Do not smoke.
- Limit alcohol.
- Stay safe and accident free.

To help reduce the risk of illness, the CDC (2020) provides special guidance to combat coronavirus for older adults and those with chronic conditions.

- “**Stay home** if possible.”
- “**Wash your hands** often.”
- “**Avoid close contact** (6 feet, which is about two arm lengths) with people who are sick.”
- “**Clean and disinfect** frequently touched surfaces.”
- “**Avoid all cruise travel** and nonessential air travel.”
- “Call your health-care professional if you have concerns about COVID-19 and your underlying condition or if you are sick.”

References

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Source:

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