

Coronavirus strikes men, older people the hardest

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It's too soon to know exactly why this happens, but experts say a combination of gender and age differences could be affecting how well some people respond to infection with the virus.

As of Thursday, there have been roughly 83,000 confirmed coronavirus infections around the world and nearly 3,000 deaths, the *Associated Press* reported.

China is the epicenter of the potential pandemic, with 78,824 confirmed cases and 2,788 deaths, the WHO says.

Generally, young children and seniors are the age groups most severely affected by influenza and other viral infections, said Dr. Sean O'Leary, an associate professor of pediatric infectious [disease](#) at the University of Colorado School of Medicine.

(HealthDay)—The coronavirus is on the cusp of becoming a global pandemic and experts say that if it does, older people and men could be most at risk for serious illness and death.

Men have died from coronavirus at nearly twice the rate as women, and the virus has been shown to sicken and kill older folks at a greater rate than [young people](#), according to data from China.

The coronavirus death rate among men in China stands at 2.8%, compared with 1.7% among women, according to a report last week from the Chinese Center for Disease Control and Prevention.

About 80% of people who have died from the virus in China were over 60 years of age, China's National Health Commission has reported. Studies in *The Lancet* found an average age of 55 among Chinese citizens who've developed pneumonia as a result of coronavirus infection.

Kids have young immune systems that are only beginning to learn how to protect against infection, while older people have immune systems that are winding down and becoming less effective, experts say.

And according to Dr. Lona Mody, associate division chief of geriatric and palliative care medicine at the University of Michigan Medical School, "Older adults, we know, are more susceptible to all infections in general and [viral infections](#) in particular because our immune systems become less powerful as we age. This makes us more prone to dangerous viral strains."

Seniors also have bodies that are more prone to chronic illnesses caused by the wear and tear of aging, O'Leary said, and that could be the crucial factor that leaves older people more at risk for serious illness and death from coronavirus than kids.

Conditions like arthritis, diabetes, heart disease and cancer are known to leave the body less able to

cope with infection, the experts explained.

"We certainly see more impact from viruses in people who have some kind of underlying chronic disease," O'Leary said. "Children tend to do better with these diseases than [older adults](#) because, in general, they tend to be a healthier population."

Women also appear to have an immune advantage over men when it comes to coronavirus, and this could be because women tend to have more robust immune systems than men.

Dr. Greg Poland is a vaccine researcher and infectious disease specialist with the Mayo Clinic, in Rochester, Minn. He said, "In general, females respond better to infectious diseases than males. That's even known with influenza virus. Men are sicker than women when they get influenza."

The [immune system](#) in females is so primed that they are far more susceptible to autoimmune diseases like lupus and rheumatoid arthritis than men, Dr. Janine Clayton, director of the Office of Research on Women's Health at the U.S. National Institutes of Health, told *The New York Times*. Nearly four of five people with autoimmune diseases are women.

But differences between men and women extend beyond biology and into lifestyle, and that might also influence the risk of a coronavirus [infection](#) becoming deadly, the experts added.

For example, men in China smoke at a much higher rate than women, research has shown. More than half of Chinese men smoke, compared with around 3% of women.

It turns out smoking activates a receptor used by the coronavirus to infect human cells, ACE-2, Poland said.

"That is the speculation behind why we are seeing such an unreasonably high severe case and fatality rate inside China," Poland noted.

If this is so, then gender differences in coronavirus illness and death might not be as striking in the United States, where around 15% of men smoke

compared with 12% of [women](#).

Poland and the other experts cautioned that it's too soon to know whether any of these early differences will bear out over time, and whether these explanations are anything more than guesswork.

"We're building the airplane while we're flying it," Poland said of the research response to coronavirus.

More information: The World Health Organization has more about [the potential coronavirus pandemic](#).

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