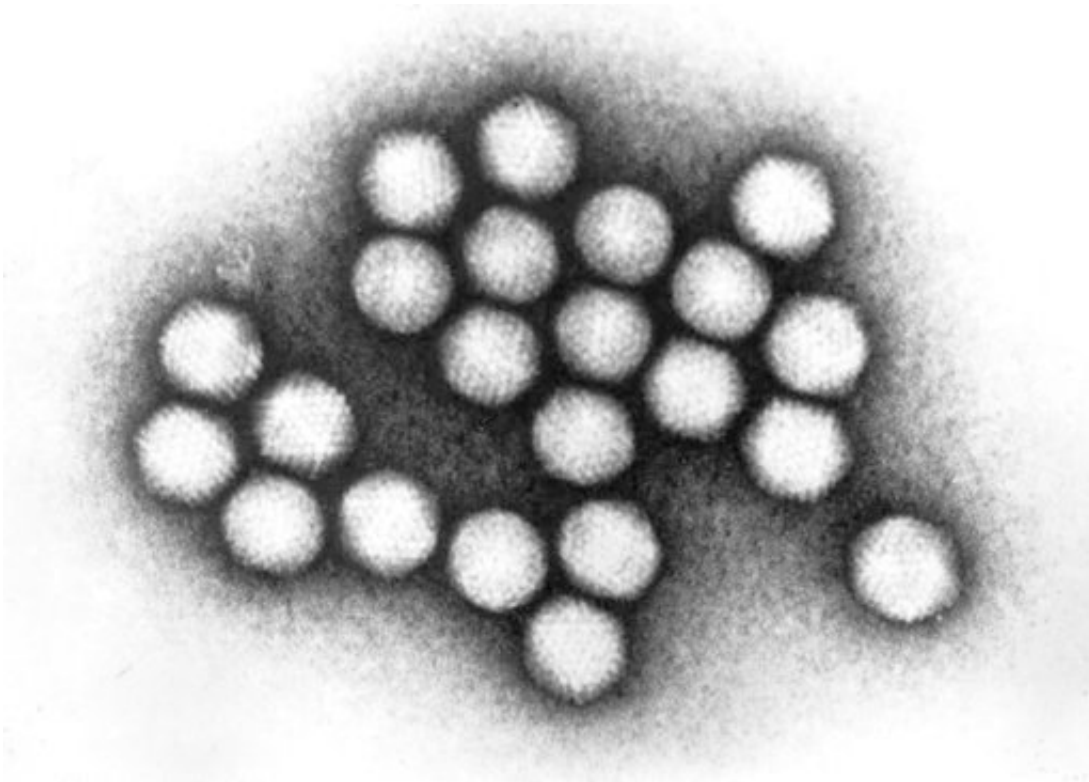


# Science Says: Fatal outbreak germ a threat to frail patients

October 24 2018, by Lindsey Tanner

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This 1981 electron microscope image made available by the Centers for Disease Control and Prevention shows a group of adenovirus virions. The adenovirus 7 strain, a common virus blamed for a deadly outbreak at a New Jersey children's rehabilitation center in October 2018, usually poses little risk for healthy people but can lead to dangerous pneumonia in already frail patients. (CDC via AP)

A common virus blamed for a deadly outbreak at a New Jersey

children's rehabilitation center usually poses little risk for healthy people but can lead to dangerous pneumonia in already frail patients.

The patients, most younger than 18, were infected by a germ called [adenovirus 7](#), a strain that is among the more potent of these types of viruses. While it usually causes cold or flu-like symptoms, it can sometimes cause more serious respiratory illness, particularly in people with weak immune systems or who have lung conditions.

The patients at the New Jersey center were "medically fragile" according to a statement from the New Jersey health department. Authorities disclosed few details on the patients but the center advertises that it is equipped to handle children who require ventilators to breathe.

Of the 18 patients sickened, seven have died, an extremely high rate—likely a result of the strain of adenovirus and the medical condition of the kids, said Dr. David van Duin, an infectious disease specialist at the University of North Carolina's school of medicine in Chapel Hill.

"It's very alarming, very worrisome," van Duin said. He said death rates of under 20 percent have occurred in previous outbreaks, compared with almost half of patients affected this month at the Wanaque Nursing and Rehabilitation Center in Haskell, New Jersey.

Strict [infection](#) control measures, including careful hand-washing and isolating infected patients, can usually contain outbreaks.

Here are more details about adenoviruses and the New Jersey [outbreak](#).

Q: What are these germs?

A: Adenoviruses are a group of common contagious bugs that typically

cause mild cold or flu symptoms, including sore throats, fever, coughs and sneezes. Some strains also cause diarrhea and conjunctivitis or pink eye. These viruses spread through the air or from touching objects or surfaces used by an infected person. Unlike influenza, adenoviruses are not seasonal, and infections occur throughout the year.

Q: Who usually gets sick?

A: Healthy people usually aren't severely affected. Most U.S. adults have likely had cold or flu symptoms caused by an [adenovirus infection](#) but never knew it. Adenovirus is not a nationally notifiable disease in the United States, meaning doctors aren't required to test for or report cases to the federal Centers for Disease Control and Prevention.

Q: What about the strain involved in the New Jersey outbreak?

A: The CDC says adenovirus 7 has been associated with more severe outcomes—including deaths—than other [strains](#). A few fatal outbreaks involving that strain have occurred in the United States over the past 20 years.

Q: How do adenovirus infections become deadly?

A: In vulnerable people, upper respiratory infections can worsen rapidly, spreading to the lungs and causing inflammation, severe pneumonia and ultimately respiratory failure, said Dr. Flor Munoz-Rivas, an infectious disease expert at Texas Children's Hospital in Houston.

Q: Is the New Jersey outbreak likely to spread to the community?

A: No. Outbreaks typically occur among people living in close quarters—hospital [patients](#), military recruits, kids at summer camp.

Q: Can adenovirus infections be prevented or cured?

A: Vigilant hand-washing can help prevent infections from spreading but there is no cure. Symptoms can be treated the way colds and flu are managed—with fluids and over-the-counter medicines, but most people recover quickly.

While there is no vaccine available to the general public, an adenovirus vaccine was developed and approved for use in the U.S. military after adenovirus outbreaks including strain 7 illness infected recruits in the 1950s and 1960s.

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Citation: Science Says: Fatal outbreak germ a threat to frail patients (2018, October 24) retrieved 26 April 2024 from

<https://medicalxpress.com/news/2018-10-science-fatal-outbreak-germ-threat.html>

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