

A Public Health Crisis and Broken Market, “Superbugs” Cost the United States At Least \$5.7 Billion a Year

“Superbugs” – types of bacteria or fungi resistant to standard antibiotics – represent a significant threat to Americans’ lives. According to the latest [estimate](#) from the Centers for Disease Control and Prevention (CDC), superbugs – also called antimicrobial resistance – infect more than 2.8 million people each year in the U.S., and more than 35,000 people die as a result.

These outbreaks also place a significant financial burden on patients and the overall health care system, with the latest **CDC [estimate](#) putting the annual cost at \$5.7 billion in today’s dollars.** The true annual cost is almost certainly higher than this, as discussed in this fact sheet. Costs can be particularly high for hard-hit groups like older Americans, people with serious health conditions, low-income Americans, and those in rural communities. As the number of hard-to-treat infections grows each year, development of new antibiotics has also slowed to a trickle, which in turn means that doctors have fewer options to fight superbugs. Public policy must change to make sure that we can combat these devastating infections.

Superbugs strain the U.S. health care system, costing the U.S. billions per year

Given superbugs’ resistance to standard treatments, several [studies](#) find that they are linked to longer hospital stays, higher health costs, higher mortality rates, and other negative consequences compared to other infections. **The CDC [estimates](#) that these and other costs add up to \$4.6 billion annually as of 2017, which is \$5.7 billion in today’s dollars.** This figure [accounts](#) for the total cost of medical personnel, equipment, and the space necessary to treat superbug patients. Another study [found](#) that superbug infections among older veterans at VA hospitals alone costs U.S. health care systems \$1.9 billion a year in 2017, which is \$2.4 billion in today’s dollars.

However, the \$5.7 billion annual cost is likely an underestimate of what these outbreaks cost the U.S. This analysis only looked at six superbugs and did not account for follow-up health care costs after the first hospitalization, the economic [impact](#) on patients through lost work time, patient out-of-pocket expenses, diminished productivity, mortality, or any long-term health issues related to the infection.

Older Americans, people with serious health conditions, low-income Americans, and those in rural communities are at particular risk from superbugs

Bacteria can develop resistance to antibiotics in a setting where there is a lot of antibiotic use, as the organism adapts to survive exposure to the treatment. As a result, people who spend

significant time in hospitals or other health care settings are often most at risk of contracting a superbug infection. This includes [older](#) Americans who use a lot of health care services and those who live in [long-term](#) care [facilities](#). One [study](#) found that Americans ages 65 and older account for about 40 percent of deaths by superbugs. Superbugs also pose a significant risk to Americans who have weak or compromised immune systems, including those with cancer or who have [received](#) an organ transplant. One [study](#) found that hospitalized cancer patients are as much as two times more likely to get a superbug infection than hospitalized patients without cancer.

Superbugs are also common among people who are unable to access treatment for infections. One [study](#) finds that neighborhoods with higher poverty rates, less educational attainment, and less housing and employment opportunities had higher rates of superbug infections. People who live in rural communities are also at [risk](#) given that their health care systems are less likely to have the resources and expertise needed to prevent and treat superbug infections.

Superbugs are both a public health crisis and a sign that the broken market for pharmaceuticals cannot currently address patient needs

Since superbugs often resist one or more of our existing antibiotics, doctors and hospitals need new antibiotic options that they could try when existing antibiotics fail. However, antibiotics are complex to create and costly to test in clinical trials because infections are time sensitive and life threatening. As a result, scientific research to help create new [antibiotics](#) and study superbugs has been declining. This includes at the earliest stages of academic research: the number of authors who published research papers on superbugs [declined](#) from 3,599 in 1995 to about 1,827 in 2020. This accompanies an overall [decline](#) in superbug research.

Because most existing, older antibiotics are [off-patent](#), multiple manufacturers can produce them. This creates a competitive market that helps drive down prices. New antibiotics are expensive to create, and companies generally cannot launch their products at a price that competes with existing generic antibiotics. Antibiotics are also generally short-course therapies compared to other treatments, meaning patients don't purchase them for a long period of time. Doctors also practice antibiotic [stewardship](#) and only prescribe the treatment when necessary to prevent resistance from building faster.

As a result, antibiotics are highly valuable for society yet risky and costly to develop. [Research](#) from the U.S. Department of Health and Human Services even found a negative return on investment for some antibiotics. Some pharmaceutical companies even go [bankrupt](#) as a result. This mismatch between the massive costs due to superbugs and the challenges in the private sector to address them warrants federal action to fill the gap.