



Superbugs

part one

Antimicrobial resistance happens when microorganisms (such as bacteria, fungi, viruses, and parasites) change when they are exposed to antimicrobial drugs (such as antibiotics, antifungals, antivirals, antimalarials, and anthelmintics). **Microorganisms that develop antimicrobial resistance are sometimes referred to as “superbugs”**. As a result, the medicines become ineffective and infections persist in the body, increasing the risk of spread to others.

World Health Organization | October 2017



The World Bank projects that without intervention **more than 10 million people will be killed by superbug infections by 2050** and over the same time period healthcare costs will increase from \$300 billion per year to \$1 trillion per year. In their report, the World Bank notes, “humans live in a permanent arms race with harmful microbes.”

Rodney E. Rohde, PhD

Infection Control Today | September 2017



Former World Health Organization (WHO) director-general Margaret Chan has said the rise of antibiotic resistance could lead “to the end of modern medicine as we know it,” where **things as common as strep throat or a child’s scratched knee could once again kill**. A BBC report notes that while Chan’s comment may sound alarmist, “it may not be alarmist enough.”

Rodney E. Rohde, PhD

Infection Control Today | September 2017

“C. auris acts more like a type of bacteria called a nosocomial bacteria, which sticks to surfaces, so it can spread from patient to patient or from healthcare provider to a patient,” explains Cornelius Clancy, M.D., director of the mycology program at the University of Pittsburgh School of Medicine. “That makes it hard to get rid of, even in hospitals that have excellent infection-control methods.”

Hallie Levine

Consumer Reports | April 2017



In 2011, the CDC estimated **C. diff** claimed the lives of about 29,000 people and caused nearly 500,000 illnesses in the U.S., over three times the number in 2000.

Angus Chen

NPR | KPBS | July 2017



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

SUPERBUGS PART 2:

Stay tuned for who is susceptible and what you can do to keep yourself and your loved ones safe in the face of Superbugs.

Sources:

Angus Chen | NPR | KPBS | “C. Diff Infections Are Falling, Thanks To Better Cleaning and Fewer Antibiotics” | July 2017 | <http://www.kpbs.org/news/2017/jun/29/c-diff-infections-are-falling-thanks-to-better/>

Hallie Levine | Consumer Reports | How to Protect Yourself from the Candida Auris Fungal Infection | April 2017 | <http://www.consumerreports.org/medical-conditions/candida-auris-fungal-infection-protect-yourself/>

Rodney E. Rohde, PhD | Infection Control Today | “To Better Target HAIs and Superbugs, Let’s Set Our Sights on the Unsung, Everyday Heroes of EVS” | September 2017