

# Antimicrobial Resistance:

## WHAT YOU NEED TO KNOW

PRESENTED BY:



WORKING TO FIGHT  
**AMR**



**Biotechnology**  
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Infectious Diseases Society of America



**SEPSIS**  
ALLIANCE



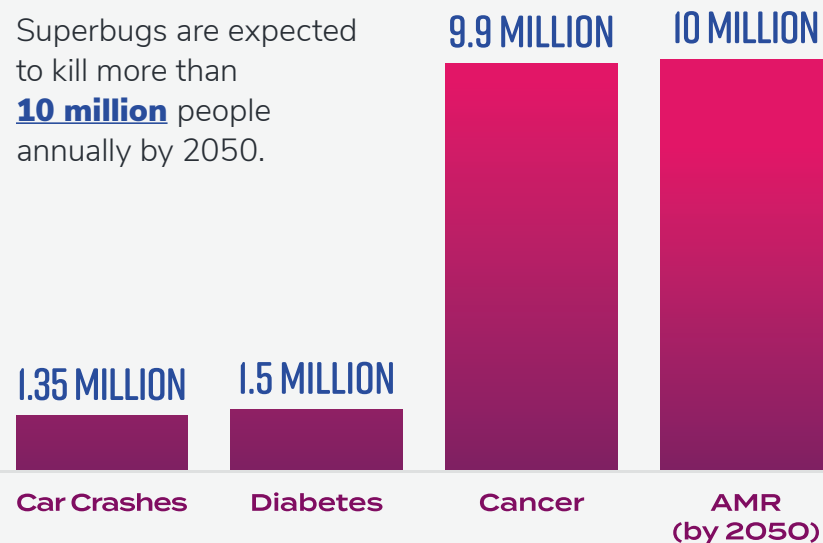
**Peggy Lillis**  
Foundation  
For C. diff Education & Advocacy

## What is the superbug crisis?

Superbugs are bacteria or fungi that are resistant to antibiotics and other treatments, a process that's often referred to as antimicrobial resistance or AMR. Globally, drug-resistant bacterial infections killed over **1.2 million people** and played a part in 4.95 million deaths in 2019.

The most alarming antibiotic resistance threats, as identified by the CDC, are responsible for at least **\$5.7 billion** in U.S. healthcare costs annually.

Superbugs are expected to kill more than **10 million** people annually by 2050.



Older Americans (65+) account for **1 in 3** superbug deaths.



**1 in 5** cancer patients who died in the ICU lost their lives to an infection acquired at the hospital.

In the U.S., Black patients are **twice as likely** to die from complications of severe infections driven by antibiotic resistance, including sepsis, than white patients.

Infection or sepsis is the **second-leading cause** of pregnancy-related death, which disproportionately impacts **Black maternal patients**.

# How do superbugs impact pandemic preparedness?

## Drug-resistant infections exacerbate public health emergencies.

Any event involving mass hospitalizations or high levels of ventilator use carries a significant risk of secondary infections, particularly for patients with weakened immune systems. While COVID-19 was a viral public health emergency, the next pandemic could be bacterial or fungal in nature.



In one study, nearly half of COVID-19 patients with a secondary bacterial infection, such as pneumonia, died.



**3 in 4** patients who had more than one infection died.

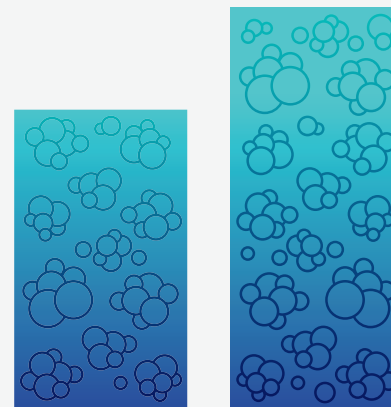
DRUG-RESISTANT BLOOD INFECTIONS



Q4 2019

Q4 2020

DRUG-RESISTANT STAPH INFECTIONS



Q4 2019

Q4 2020

Drug-resistant blood infections were up **47%** in the fourth quarter of 2020 compared to 2019. Drug-resistant staph infections jumped **34%** in the same period.

# What are policymakers saying about antimicrobial resistance?



PACCARB

"We continue to face a critical deficit in our battle against AMR — a severe lack of new antimicrobial drugs. The time to develop these new drugs is now."

PRESIDENTIAL ADVISORY COUNCIL ON COMBATING  
ANTIBIOTIC-RESISTANT BACTERIA



"Addressing antimicrobial resistance is key to our future pandemic preparedness."

XAVIER BECERRA, U.S. SECRETARY OF HEALTH AND  
HUMAN SERVICES



"We now need to work together to ensure that combating microbial resistance is an integral part of all pandemic preparedness efforts."

ADM. RACHEL LEVINE, ASSISTANT SECRETARY FOR  
HEALTH, HHS



"We will work together to explore proposals for strengthening market incentives for antibiotic drug development to help tackle antimicrobial resistance — the 'silent pandemic.'"

G7 FINANCE MINISTERS



"After witnessing the COVID-19 pandemic, it has never been more clear that we need to invest in research to prepare for the next public health crisis."

SEN. MICHAEL BENNET (D-CO)



"Antimicrobial resistance has become a growing crisis. Market failures have resulted in a lack of needed research and development in this field which is a threat to public health."

SEN. TODD YOUNG (R-IN)



"We must bring together the unique capabilities of the public and private sectors to solve the market failures impeding the development of new antibiotics."

REP. DREW FERGUSON (R-GA)

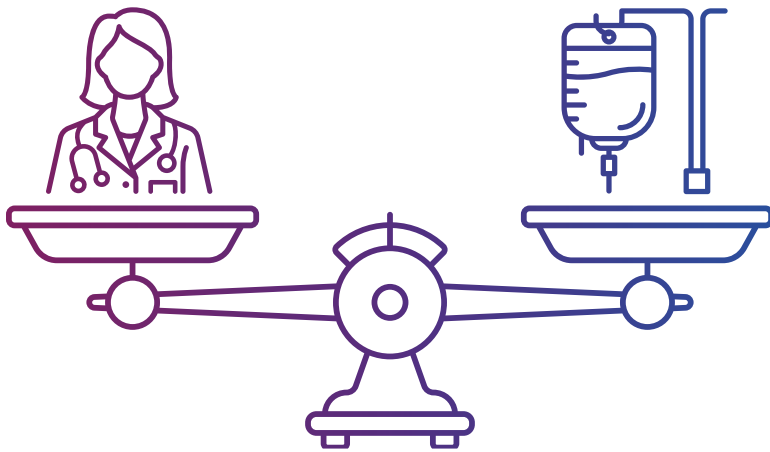


"The PASTEUR Act will help scientists and researchers bring better antimicrobials to market, and it will help hospitals and doctors ensure these drugs are used properly."

REP. MIKE DOYLE (D-PA)

# What can we do to address the threat of superbugs?

- 1** Enact policy reforms that help create a robust pipeline for new antimicrobials to help patients for whom existing treatments don't work.
- 2** Increase resources for antimicrobial stewardship programs, which help clinicians prescribe treatments judiciously and monitor their use.



**Only 15** new antimicrobials won FDA approval between 2010 and 2020, down from previous decades. **1 in 3** of the companies behind those drugs have since gone bankrupt or exited the market.

## Government intervention is necessary to realign market incentives with public health:

**The PASTEUR Act ([H.R.3932](#), [S.2076](#))** would increase resources for antibiotic stewardship programs and **establish a subscription-style model**, where the government would pay upfront for access to antimicrobials.

» Rather than tying payment to sales volume, PASTEUR ties payment to the valuable impact that innovative treatments have on public health.

**The DISARM Act ([H.R.4127](#))** would **modify Medicare payments to hospitals** that appropriately use newer antibiotics and adhere to an antimicrobial stewardship program.

» This will improve patient access to novel antimicrobials when needed and encourage investment in research for new treatments.

FOR MORE INFORMATION, VISIT:

**[www.workingtofightamr.org](http://www.workingtofightamr.org)**