

MULTIDRUG-RESISTANT *PSEUDOMONAS AERUGINOSA*

THREAT LEVEL **SERIOUS**



32,600
Estimated cases
in hospitalized
patients in 2017



2,700
Estimated
deaths in 2017



\$767M
Estimated attributable
healthcare costs in 2017

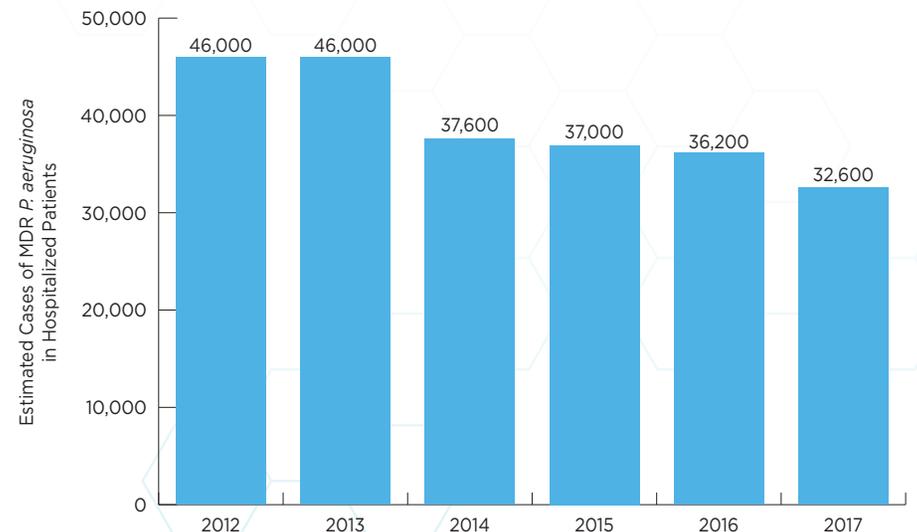
Pseudomonas aeruginosa (*P. aeruginosa*) causes many types of healthcare-associated infections, including pneumonia, bloodstream infections, urinary tract infections, and surgical site infections.

WHAT YOU NEED TO KNOW

- *P. aeruginosa* infections usually occur in people in the hospital or with weakened immune systems. It is particularly dangerous for patients with chronic lung diseases.
- Some types of multidrug-resistant (MDR) *P. aeruginosa* are resistant to nearly all antibiotics, including carbapenems.
- Two to 3% of carbapenem-resistant *P. aeruginosa* carry a mobile genetic element that makes a carbapenemase enzyme. This enzyme makes carbapenem antibiotics ineffective. Mobile genetic elements are easily shared between bacteria, rapidly spreading resistance that destroys these important drugs.

CASES OVER TIME

Continued infection control and appropriate antibiotic use are important to maintain decreases in MDR *P. aeruginosa* infections.



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

STOPPING SPREAD

In 2018, CDC's Antibiotic Resistance Laboratory Network identified an outbreak of carbapenem-resistant *P. aeruginosa* with an unusual form of resistance. The outbreak included more than 20 people across several states. Health departments reviewed the patients' medical histories, determining that many had undergone surgery at one hospital in Mexico. Most of the patients had surgical site infections and some required prolonged hospitalization in the United States.

CDC and partners took immediate action to implement the Containment Strategy. CDC coordinated a patient notification to U.S. health departments, Canadian and Mexican public health authorities, and the World Health Organization. Hundreds of patients were notified of their risk for possible exposure to carbapenem-resistant *P. aeruginosa*, helping to protect these patients and contain spread.

CDC'S CONTAINMENT STRATEGY

CDC's Containment Strategy helps public health teams launch early, aggressive responses at the first sign of new or unusual resistance.



ONLINE RESOURCES

About *P. aeruginosa* in Healthcare Settings

www.cdc.gov/hai/organisms/pseudomonas.html

Tracking Resistant *P. aeruginosa* in the United States

www.cdc.gov/hai/organisms/pseudomonas/tracking.html