Progress Against Antimicrobial Resistance Has Slipped

Illnesses and deaths caused by hospital-acquired antimicrobial-resistant infections increased by 15% each during the first year of the COVID-19 pandemic, according to a special report from the CDC.

The new data mark a significant setback from the CDC's 2019 report, which heralded a 27% reduction in antimicrobial-resistant infections in hospitals between 2012 and 2017. Conversely, the new report documents a 78% surge in carbapenem-resistant *Acinetobacter* infections and a 60% increase in antifungal-resistant *Candida auris* infections between 2019 and 2020. Infections with carbapenem-resistant Enterobacterales, extended spectrum β-lactamase–producing Enterobacterales, and multidrug-resistant *Pseudomonas aeruginosa* each increased by about one-third during the same period. Vancomycin-resistant Enterococcus infections increased by 14%, and methicillin-resistant *Staphylococcus aureus* infections increased by 13%. Data on 9 other resistant microbes were unavailable because of pandemic-related delays or disruptions.

According to the report, a host of factors likely contributed to a reversal in progress against antibacterial-resistant infections, including large numbers of sicker patients, staff shortages, and shortages of protective equipment. In another study, nearly 80% of patients with COVID-19 received antibiotics between March and October 2020, with most starting the medication on their first day of admission.

The CDC report suggested that such high level of use may reflect how difficult it can be to distinguish COVID-19 from community-acquired pneumonia or fungal infections. The pandemic also disrupted some infection surveillance and treatment programs. For example, the report noted that many public health departments redeployed staff and resources from sexually transmitted disease programs to COVID-19 efforts, and laboratories experienced shortages of testing supplies.

“This setback can and must be temporary,” Michael Craig, MPP, director of CDC’s Antibiotic Resistance Coordination & Strategy Unit, said in a statement. “The COVID-19 pandemic has unmistakably shown us that antimicrobial resistance will not stop if we let down our guard; there is no time to waste.”

To rebound from the recent setback, the CDC recommends a multipronged approach. The agency said it plans to enhance national systems for sharing information and ensuring uninterrupted access to laboratory supplies and equipment for patient care and infection control. Clinicians are encouraged to follow the core elements of antibiotic stewardship and participate in infection control training such as Project Firstline.

The authors urge health care facilities to monitor their wastewater for antibiotic-resistant microbes to identify cases quickly and prevent spread. The CDC also said it plans to expand the capacity of the National Wastewater Surveillance System, which it has used to help provide early warning of COVID-19 surges. The CDC also plans to partner with other agencies like the US Food and Drug Administration to develop new antibiotics, decolonization approaches, and more vaccines.

Black Individuals Are Hardest Hit by Drug Overdose Death Increases

Nearly 92,000 US lives were lost to drug overdoses in 2020, a 30% increase over the previous year, according to State Unintentional Drug Overdose Reporting System data from 25 states and the District of Columbia. The toll was greatest among racial and ethnic minority populations, the study’s authors reported.

Fueled largely by illicit fentanyl or fentanyl analogues, the relative overdose
death rate increased by 44% among Black people and by 39% among American Indian and Alaska Native individuals—the largest increases of the population groups studied. In comparison, the data showed a 22% relative rate increase among White people.

Disparities were even more stark for some age and sex groups. Black men aged 65 years or older had relative overdose rates 7 times higher than their White peers, whereas the relative rate among American Indian and Alaska Native women aged 25 through 44 years was almost twice that of their White peers.

Income inequality and treatment access also appeared to factor into the rising death rates. Counties with the highest mental health treatment capacity had the highest number of overdose deaths. In addition, the highest overdose death rates were in counties with the largest income gaps between wealthy people and those with fewer resources, particularly among Black and Hispanic individuals.

Most of those who died had a documented history of substance abuse. Among them, about 8% of Black people and about 10% of American Indian and Alaska Native people received substance use treatment compared with about 16% of White individuals. Use of the opioid overdose antidote naloxone was low, administered to just 1 in 5 of all who died.

The authors recommend improving access to culturally tailored substance use treatment as well as raising awareness about illegally manufactured substances and the risk of using multiple substances. They also recommend increased access to harm reduction services, including naloxone, and efforts to reduce the stigma surrounding treatment and recovery.

"Overdose deaths are preventable, and we must redouble our efforts to make overdose prevention a priority," CDC Acting Principal Deputy Director Debra Houry, MD, MPH, said in a statement. 

~ Bridget M. Kuehn, MSJ

Note: Source references are available through embedded hyperlinks in the article text online.