Deaths from bacterial infections in the heart are on the rise among young people who inject drugs
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Infective endocarditis (IE)—a bacterial infection in the heart or blood vessels—affects 40,000–50,000 patients in the United States per year and has a 1-year average mortality rate of 30%. People who inject drugs (PWID) tend to be younger and have a higher risk for IE due to the entrance of bacteria in the bloodstream. In fact, IE cases among younger patients and PWID have increased, likely as a result of the ongoing opioid epidemic. A recent analysis published in the *Journal of Internal Medicine* reveals that the risk of death from IE among young US residents aged 15–44 years old has doubled in the last 2 decades. Additionally, the percentage of PWID among young people who die of IE has reached almost 20%.

By examining US Center for Disease Control and Prevention data based on death certificates, investigators found the following (with age-adjusted rates per 100,000 persons):

- IE mortality rates for the entire US population decreased from 2.1 in 1999 to 1.8 in 2020; however, during that time, mortality rates among young US residents doubled, increasing from 0.3 in 1999 to 0.6 in 2020.
- Among people aged 15–34 years old, mortality rates tripled from 0.1 to 0.3.
- Young people comprised 10.0% of all IE deaths in 2020, an increase from 6.8% in 1999.
- The percent of PWID among all patients that died of IE increased from 1.1% in 1999 to 3.0% in 2020; the same percent among the young increased from 10.2% in 1999 to 19.5% in 2020.
- White Americans comprised almost 90% of all young US PWID that died of IE in 2020 compared with 77% in 1999.

"The number of young people in the US who die of infective endocarditis is increasing, and the ongoing opioid epidemic, specifically injectable drug abuse, appears to be a significant cause," said corresponding author Polydoros Kampaktsis, MD, Ph.D., of the Columbia University Irving Medical Center.


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