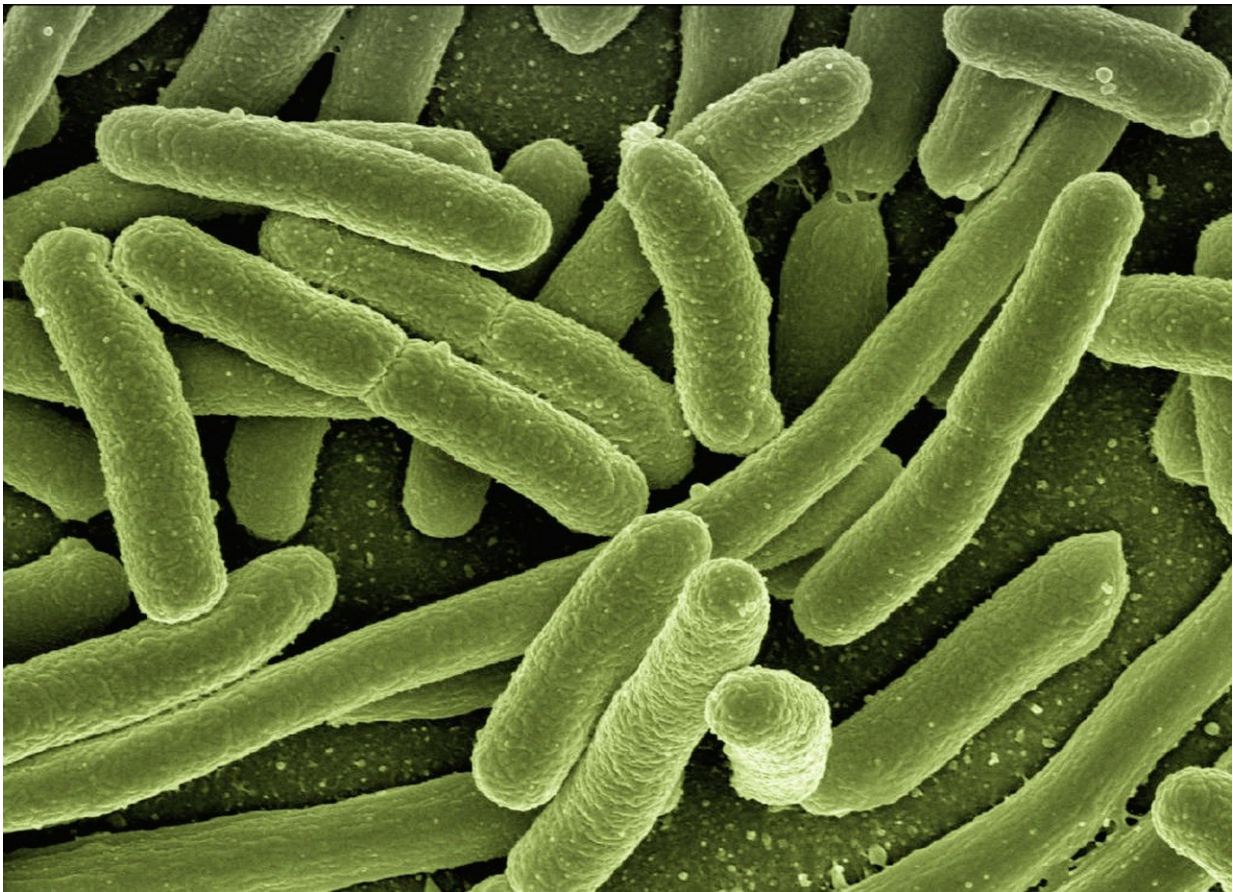


Infective endocarditis increases more than tenfold in North Carolina

December 5 2018



Credit: CC0 Public Domain

The number of hospitalizations and surgeries to treat drug-associated infective endocarditis have both increased more than tenfold in North

Carolina, according to doctors at the University of North Carolina School of Medicine who published their research in the *Annals of Internal Medicine*.

Endocarditis is an infection of one or more [heart valves](#). Usually, this condition is seen in [older patients](#) with damaged heart valves. Yet, bacteria introduced into the body through injection [drug use](#) can also cause endocarditis, a phenomenon doctors around the state are seeing in startling rates.

"Drug use-associated infective endocarditis is markedly increasing across North Carolina," said Asher Schranz, MD, the study's author and a fellow in the UNC Division of Infectious Diseases. "It causes severe illness, and treatment is expensive. This condition has been somewhat overlooked, but it is a significant emerging concern that needs appropriate attention."

In collaboration with colleagues at Duke University and the N.C. Division of Public Health, Schranz studied state data on endocarditis hospitalizations from 2007 to 2017. They found a tenfold increase in the number of hospitalizations and heart valve surgeries for [drug](#) use-associated infective endocarditis, with the most significant spike in the past four years. As recently as mid-2013, less than 10 heart valve replacement surgeries were done to treat drug use-associated endocarditis. In the most recent year examined, mid-2016 to mid-2017, 109 surgeries were done in North Carolina to treat drug use-associated endocarditis and they overwhelmingly occurred in young people. The median age of patients undergoing surgery for this condition was 33.

These surgeries come with an expensive price tag. The median hospital charge for the entire hospitalization with valve replacement surgery was \$251,000. More than 280 drug-associated endocarditis valve replacement surgeries were performed in North Carolina over the past

10 years, totaling about \$78 million.

"We found that 73 percent of patients with drug use-associated infective endocarditis were uninsured or on Medicaid," Schranz said. "This means the costs of the surgery and hospitalization are absorbed by patients, individual hospitals, and government budgets, which finance Medicaid."

The increase in the number of hospitalizations and surgeries for drug use-associated infective endocarditis, as well as the burden the high cost of treatment has on hospitals and Medicaid, are the key takeaways from Schranz and his colleagues' research. They would like future studies to focus on the long-term outcomes of valve replacement [surgery](#), including reinfection, repeat surgeries, and drug overdose. The team would also like to explore ways to enhance delivery of addiction care services to patients while they are in the hospital and after discharge.

"Drug use-associated [infective endocarditis](#) is a severe aspect of the opioid epidemic impacting North Carolina and likely many other states," Schranz said. "Our findings add to the urgency to enhance the resources for addressing [substance use disorders](#), which can include improving access to the medications to treat opioid use disorder and linking patients to harm reduction services."

More information: Asher J. Schranz et al. Trends in Drug Use–Associated Infective Endocarditis and Heart Valve Surgery, 2007 to 2017, *Annals of Internal Medicine* (2018). [DOI: 10.7326/M18-2124](https://doi.org/10.7326/M18-2124)

Provided by University of North Carolina at Chapel Hill School of Medicine

Citation: Infective endocarditis increases more than tenfold in North Carolina (2018, December

5) retrieved 25 April 2024 from

<https://medicalxpress.com/news/2018-12-infective-endocarditis-tenfold-north-carolina.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.