

# Researchers identify 86% increase in infective endocarditis in England

April 24 2020

---



Credit: CC0 Public Domain

A new study published in *The Lancet* today has found an alarming increase in cases of the deadly heart condition infective endocarditis (IE) in England since 2009.

University of Sheffield experts found incidence of IE was stable between 1998 and 2009, with 27 cases per million of the population, but

since then it has increased by 86 percent, to 50 cases per million of the population by 2018/19.

The source of the bacteria that cause IE is often unknown, but around 30 percent of cases are caused by bacteria from the mouth that enter the bloodstream and settle on the [heart valves](#) of those at increased risk. This may occur as a result of daily activities in those with poor oral hygiene or during invasive dental procedures.

Most healthy individuals are at low risk of IE, but those with artificial or repaired [heart](#) valves, certain congenital heart problems or a previous history of IE are at particularly high risk.

In Europe and the US, patients at high risk are given antibiotics to protect them when they undergo invasive dental procedures, but this ceased being part of the recommended guidance for the UK in 2008.

The study highlights that there are a number of possible reasons why cases of IE might be increasing, including: an aging population, increasing use of artificial heart valves and other cardiac and vascular devices to treat diseases, changes in the type of bacteria that cause IE, increased injection drug use, greater clinical awareness of IE and the changes in prevention guidelines.

Dr. Martin Thornhill, Professor of Translational Research in Dentistry at the University of Sheffield and senior author of the paper, said: "It is notable that incidence of IE is falling in the US and is stable or rising more slowly in the rest of Europe, where many of the factors that might explain an increase in IE are similar to here.

"One big difference between the situation in England and other countries like the US and the rest of Europe is that patients at high risk of IE are given antibiotics to protect them when they undergo invasive dental

procedures—so called [antibiotic prophylaxis](#), but the National Institute for Health and Care Excellence recommended that this should stop being used in the UK in 2008.

"We cannot be sure what part this recommendation, or any of these other factors, has played in the large increase in IE cases we have seen in England, but the increase is very worrying and we need to thoroughly investigate all the possible reasons for the increase so that the cause can be identified and appropriate action taken to protect those at high risk of IE."

**More information:** Martin H Thornhill et al. An alarming rise in incidence of infective endocarditis in England since 2009: why?, *The Lancet* (2020). [DOI: 10.1016/S0140-6736\(20\)30530-4](https://doi.org/10.1016/S0140-6736(20)30530-4)

Provided by University of Sheffield

Citation: Researchers identify 86% increase in infective endocarditis in England (2020, April 24) retrieved 27 April 2024 from <https://medicalxpress.com/news/2020-04-infective-endocarditis-england.html>

<p>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.</p>
--