

Half of seniors who went to doctor for cold, bronchitis, sinusitis or laryngitis received unnecessary antibiotics

May 9 2017

High rate of unnecessary antibiotic prescribing for seniors in Ontario



Study shows antibiotics prescribed too often for non-bacterial infections, despite risk of adverse outcomes and increased antibiotic resistance

Study looked at **185,014** seniors in Ontario aged 65 and older who visited 8,990 primary care physicians in 2012 for a non-bacterial upper respiratory infection, such as the common cold, acute bronchitis, acute sinusitis, or acute laryngitis.

Nearly 1 in 2

seniors with a physician-diagnosed non-bacterial infection were prescribed an antibiotic



70%

of prescriptions were for broad-spectrum antibiotics, which are linked to more adverse outcomes and antibiotic resistance



Silverman M et al. *Ann Intern Med.* 2017.

Institute for Clinical Evaluative Sciences
ices.on.ca



2017

An infographic that highlights key findings from a study that showed nearly one in two seniors with a physician-diagnosed non-bacterial infection were prescribed an unnecessary antibiotic. Credit: The Institute for Clinical Evaluative Sciences (ICES)

Nearly one in two seniors in Ontario who visited a family doctor for a non-bacterial infection received an unnecessary antibiotic prescription, according to a new study from the Institute for Clinical Evaluative Sciences (ICES) Western site in London, Ontario and Lawson Health Research Institute.

The study published today in *Annals of Internal Medicine*, examined the rate of antibiotic prescribing for seniors who presented to a [primary care physician](#) in 2012 and the characteristics of the physicians prescribing the [antibiotics](#).

"Unnecessary antibiotic use, such as antibiotic use for viral infections, is a major public [health](#) concern associated with avoidable adverse drug events, increased [health care costs](#), and the emergence of antibiotic-resistant infections," says Dr. Marcus Povitz, author of the study, ICES Fellow, ICES Faculty Scholar, respirologist at London Health Sciences Centre (LHSC) and Assistant Professor in the Division of Respirology and Department of Epidemiology and Biostatistics at Western University's Schulich School of Medicine & Dentistry.

The study looked at 185,014 low-risk Ontarian seniors (65 years and older) for whom antibiotics would not be clinically appropriate; who visited 8,990 primary-care physicians for a non-bacterial upper respiratory [infection](#) such as the common cold (53 per cent), acute bronchitis (31 per cent), acute sinusitis (14 per cent) or acute laryngitis (2 per cent) and found:

- Nearly one in two (85,538; or 46 per cent) were prescribed an antibiotic.
- The majority of prescriptions were for broad-spectrum antibiotics (70 per cent), which are associated with a greater risk of adverse patient outcomes (such as *Clostridium difficile*, diarrhea, heart problems, tendon ruptures, allergic reactions, etc.)

and the development of antibiotic resistance.

"Our study shows that antibiotics are being prescribed too often for conditions that they cannot help despite published professional guidelines that discourage this practice. Unnecessary antibiotics can cause serious harm," says Dr. Michael Silverman, author of the study, Lawson scientist and Chair/Chief of Infectious Diseases for London Health Sciences Centre, St. Joseph's Health Care London and Western University.

The study also found that patients were more likely to receive prescriptions from physicians who have been in practice for more than a decade, those who trained outside of Canada and the U.S. and those who had higher patient volumes.

The researchers suggest that next steps would include targeted interventions to reduce inappropriate antibiotic prescribing which would require an understanding of the [physician](#) factors associated with this practice.

"Antibiotic prescribing for acute non-bacterial upper-respiratory infections in the elderly," is published in *Annals of Internal Medicine*.

More information: *Annals of Internal Medicine* (2017). [DOI: 10.7326/M16-1131](#) , [annals.org/aim/article/2625386...ions-elderly-persons](#)

Provided by Lawson Health Research Institute

Citation: Half of seniors who went to doctor for cold, bronchitis, sinusitis or laryngitis received unnecessary antibiotics (2017, May 9) retrieved 27 April 2024 from

<https://medicalxpress.com/news/2017-05-seniors-doctor-cold-bronchitis-sinusitis.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.