



# Antibiotic overuse in Ontario's long-term care homes

## What is the problem?

**50%**

of antibiotic courses  
are unnecessary<sup>1</sup>

**78%**

of residents receive at least one  
antibiotic course each year<sup>2</sup>

## How are antibiotics overused?

There is variability in prescribing:

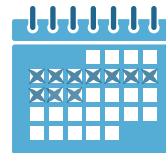


**10x**



Homes with the highest use are using 10x more  
antibiotics than homes with the lowest use

Prescriber preference is the key reason for  
differences - not resident characteristics<sup>2</sup>



Duration of therapy  
is often longer than  
necessary<sup>2</sup>

## Why is this important?

Residents in homes with higher antibiotic use  
experience more harm:

**24%**

increased risk of *Clostridium difficile* infection, diarrhea, allergic reactions  
and antibiotic-resistant organisms<sup>3</sup>

## What can you do?

Practice antibiotic stewardship:



reduce unnecessary  
antibiotic prescriptions



re-assess the need  
for antibiotics regularly



use the shortest  
effective duration possible

For more information regarding antimicrobial stewardship: [www.publichealthontario.ca/asp](http://www.publichealthontario.ca/asp)

1. Loeb M, Simor AE, Landry L, Walter S, McArthur M, Duffy J, et al. Antibiotic use in Ontario facilities that provide chronic care. *J Gen Intern Med.* 2001;16:376-83.

2. Daneman N, Gruneir A, Bronskill SE, Newman A, Fischer HD, Rochon PA, et al. Prolonged antibiotic treatment in long-term care: role of the prescriber. *JAMA Intern Med.* 2013;173(8):673-82.

3. Daneman N, Bronskill SE, Gruneir A, Newman AM, Fischer HD, Rochon PA, et al. Variability in antibiotic use across nursing homes and the risk of antibiotic-related adverse outcomes for individual residents. *JAMA Intern Med.* 2015;175(8):1331-9.