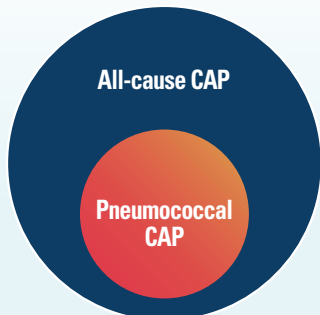


# COMMUNITY-ACQUIRED PNEUMONIA IN ADULTS

## WHAT IS COMMUNITY-ACQUIRED PNEUMONIA?



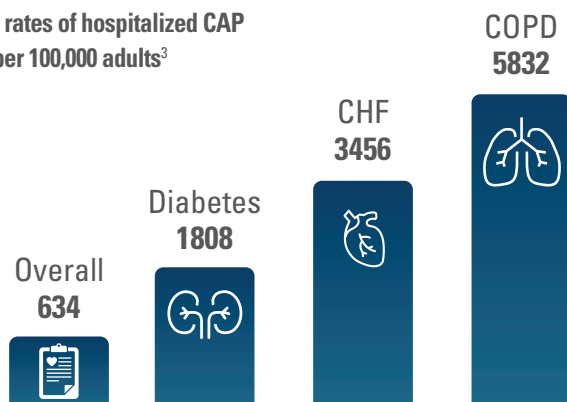
Community-Acquired Pneumonia (CAP) is a common **lung infection** that can be serious and sometimes fatal.<sup>1</sup> Older adults, those with a compromised immune system or living with chronic conditions such as cardiovascular disease, diabetes or chronic obstructive pulmonary disease (COPD) are at higher risk of contracting CAP.<sup>2</sup>

Pneumonia is mainly caused by **bacterial and viral infections**. *Streptococcus pneumoniae* is the most common cause of bacterial pneumonia.<sup>1</sup> Pneumonia caused by this bacterium is referred to as pneumococcal CAP.

## WHO IS AT RISK OF CAP OR PNEUMOCOCCAL CAP?

ADULTS WITH COMMON CHRONIC CONDITIONS ARE **3X-9X MORE LIKELY TO BE HOSPITALIZED FOR CAP**<sup>3</sup>

Annual rates of hospitalized CAP cases per 100,000 adults<sup>3</sup>



CHF=congestive heart failure; COPD=chronic obstructive pulmonary disease.

US, prospective, population-based, cohort study in adults  $\geq 18$  years hospitalized with CAP, Louisville, KY, June 2014-May 2016 (N=7449).

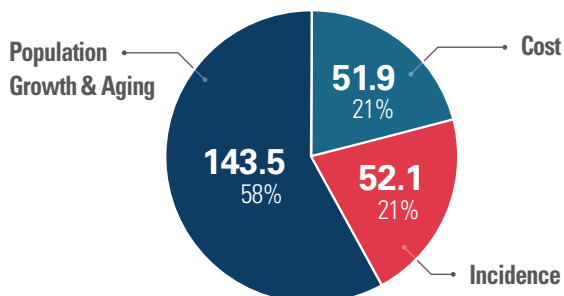


ANYONE CAN POTENTIALLY DEVELOP **PNEUMOCOCCAL CAP**, BUT THE RISK INCREASES WITH AGE AND UNDERLYING CHRONIC MEDICAL CONDITIONS.<sup>4</sup>



Immunocompetent **adults  $\geq 65$  years** with  **$\geq 1$  chronic condition** have a rate of pneumococcal infection at least **3X higher** than healthy people of the same age – **up to 8X** for those with chronic lung disease.<sup>4</sup>

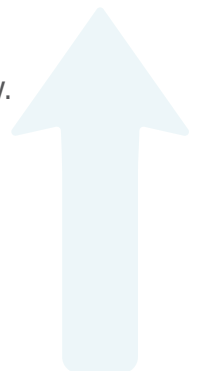
## CAP economic burden cost drivers (\$ millions)<sup>5</sup>



Historical cost trends (i.e. 2010-2014) were applied to forecast the average cost per case from 2015-2025, expressed in 2017 Canadian dollars.


As the population ages, the number of patients presenting with CAP is expected to rise concomitantly. The number of hospitalized pneumonia cases among the **population  $\geq 65$  years in Canada** is forecasted to double between 2010 and 2025.<sup>5</sup>


Population growth and aging of the population are responsible for **58%** of the predicted overall cost increase of \$247.6 million from 2015 to 2025.




# BURDEN OF CAP

## HOSPITALIZATION BURDEN

 **45%-80%**  
of the cases of CAP  
in adults ≥ 50 years require  
hospitalization<sup>6</sup>


**2.5X INCREASE**   
Risk of developing moderate-to-severe  
cognitive impairment associated with  
hospitalization for CAP<sup>7</sup>


 **11.5  
DAYS**  
Mean hospital length  
of stay for individuals  
≥ 16 years hospitalized  
for pneumonia<sup>1</sup>

 **\$10,000-\$15,000**  
Cost of 1 hospitalization for CAP<sup>8</sup>

 One of the **TOP 10 REASONS**  
for visits to the Emergency Departments (ED) in Canada - with  
**135,000 pneumonia-related ED** visits in 2017-2018<sup>9</sup>

## MORTALITY

 **12%**  
30-day mortality rate following  
hospitalization for CAP for patients  
≥ 16 years<sup>1</sup>  
(15% mortality rate for patients ≥ 65 years<sup>1</sup>)

 **Up to 10 YEARS**  
During which the **risk of death remains higher**  
following an episode of pneumococcal CAP<sup>10</sup>



**CAP, including Pneumococcal CAP  
may be vaccine-preventable<sup>11</sup>**



Unless CAP is specified as pneumococcal (pneumococcal CAP), mention of CAP refers to all-cause CAP.

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