

# Care gap following osteoporosis-related fractures in Canada

2021



Osteoporosis-related fractures most commonly occur in the forearm, hip, spine, upper arm and pelvis. These are fracture sites most commonly affected by osteoporosis, a condition causing bones to become weak and fracture easily.



Many osteoporosis-related fractures occur with a fall, but simple movements like bending, sneezing, and coughing can also lead to a fracture. Individuals with these fractures have an increased risk of further fractures and often face life changing impacts or even death. The older population and those with a hip fracture are particularly impacted.



The care received in the year following an osteoporosis-related fracture—including screening and treatment—is critical in preventing future fractures. In Canada, and other countries, there is a gap between the recommended care practices and the care provided. Closing this gap would help lower the health impacts and deaths associated with osteoporosis-related fractures, especially with hip fractures, and help prevent future fractures.

According to the data from the Public Health Agency of Canada's Canadian Chronic Disease Surveillance System (CCDSS):<sup>1</sup>

## THE FRACTURE BURDEN

In 2016–2017, there were 671 osteoporosis-related fractures per 100,000 Canadians aged 40+. Of these fractures, 150 occurred in the hip. Hip fractures are the most serious and most fatal osteoporosis-related fracture.

### HIP FRACTURES:

Affect Canadians aged 40+ differently depending on their age and sex



**89%** of the hip fractures were sustained by Canadians aged **65+** while **62%** occurred after the **age of 80**



Women were **2x** more likely to sustain a hip fracture than men in all age groups and **almost 3x** when aged 80+



Men were **1.6x** more likely to die in the year following a hip fracture than women

Increase the risk of death

**1 in 5** Canadians aged 40+ died from any cause within the year of sustaining a hip fracture



## THE CARE GAP: BEST PRACTICES VERSUS ACTUAL CARE

In an effort to reduce the risk of future fractures, the Canadian clinical practice guidelines on the diagnosis and management of osteoporosis recommend:<sup>2</sup>



A **bone mineral density (BMD) test** in adults who had a fragility<sup>3</sup> fracture after age 40



**Anti-osteoporosis medication** for all adults aged 50+ who have experienced a fragility fracture of the hip or the spine, or more than one fracture



In 2015–2016, the majority of Canadians who sustained any osteoporosis-related fractures **did not receive adequate osteoporosis management** within the year following their fracture

- Less than **10%** aged 40+ had a **BMD test**
- Less than **20%** aged 65+<sup>4</sup> received a **prescription** for anti-osteoporosis medication



Among the Canadians who received osteoporosis management care, **men were:**

- **3.6x** less likely to have a BMD test than women
- **4x** less likely to receive anti-osteoporosis medication than women

## KNOW YOUR FRACTURE RISK FACTORS



**Sex: Female**



**Age: 50+**



**Body mass index: low, under 19 kg/m<sup>2</sup>**



**Prior fragility fractures<sup>3</sup>**



**Family history: parent had a hip fracture**



**Prolonged glucocorticoids use**



**Rheumatoid arthritis**



**Current smoker**



**Daily alcohol intake: high, 3+ drinks per day**



**Bone mineral density measure: low**

### LEARN MORE ABOUT THE OSTEOPOROSIS-RELATED FRACTURE CARE GAP

Visit [Canada.ca](https://Canada.ca) - **Osteoporosis** and search 'Osteoporosis and care gap'

Explore the latest data **Canadian Chronic Disease Surveillance System**

More **Osteoporosis Canada** and **Fracture Risk Assessment Tool**

#### References and notes

1. Public Health Agency of Canada, Canadian Chronic Disease Surveillance System (CCDSS), August 2019. Available from: <https://health-infobase.canada.ca/ccdss/data-tool/>.
2. Papaioannou A, Morin S, Cheung AM, Atkinson S, Brown JP, Feldman S, et al. 2010 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: summary. CMAJ 2010 Nov; 182(17):1864-73.
3. Fragility fractures occur during activities such as reaching, bending, twisting, coughing or sneezing or following a minor trauma such as falling from a standing height or at walking speed.
4. The information on anti-osteoporosis medication prescription claims varied extensively across the Canadian provinces and territories and was only available nationally in adults aged 65+.

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