Care gap following osteoporosis-related fractures in Canada

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):¹

**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.

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<thead>
<tr>
<th>HIP FRACTURES:</th>
<th>Increase the risk of death</th>
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<td><strong>Affect Canadians aged 40+ differently depending on their age and sex</strong></td>
<td>1 in 5 Canadians aged 40+ died from any cause within the year of sustaining a hip fracture</td>
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<td>89% of the hip fractures were sustained by Canadians aged 65+ while 62% occurred after the age of 80</td>
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<td>Women were 2x more likely to sustain a hip fracture than men in all age groups and almost 3x when aged 80+</td>
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<td>Men were 1.6x more likely to die in the year following a hip fracture than women</td>
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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:\(^2\)

A bone mineral density (BMD) test in adults who had a fragility\(^3\) 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+ 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\(^2\)
Prior fragility fractures\(^3\)
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

References and notes

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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