

Osteoporosis Education and Fracture Prevention Program

**Presented in Partnership by
Couchiching Family Health Team,
and**

Osteoporosis Canada

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About Osteoporosis Canada

- Osteoporosis Canada educates, empowers and supports individuals and communities in the risk reduction and treatment of osteoporosis and the prevention of fractures.
- A **Scientific Advisory Council** made up of more than 54 medical and scientific experts from across the country provides guidance in all medical matters
- Lead stakeholder in the Ontario Osteoporosis Strategy



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About Couchiching FHT

- 19 family physicians
- Approximately 19,000 patients
- Covers- city of Orillia, Oro-Medonte, Washago, Gravenhurst and Coldwater
- Variety of programs available at a single site

location



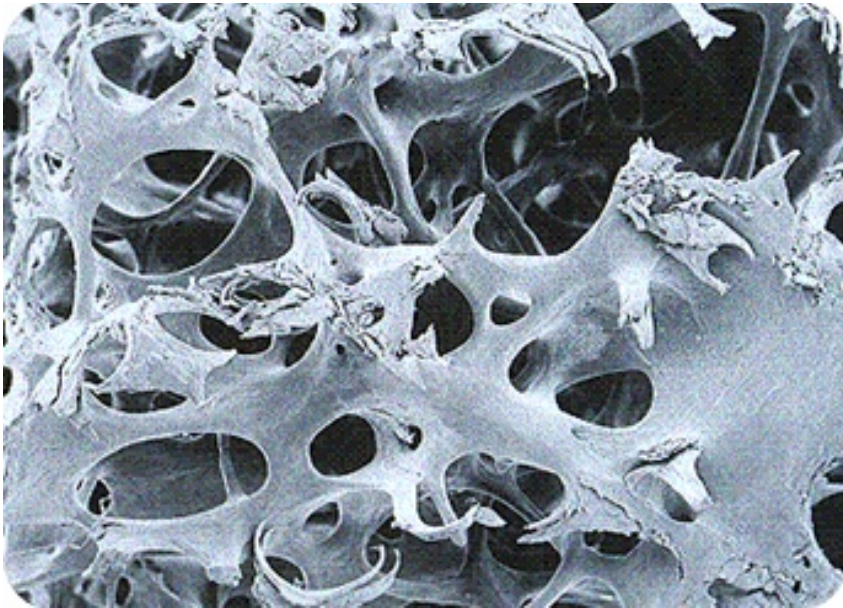
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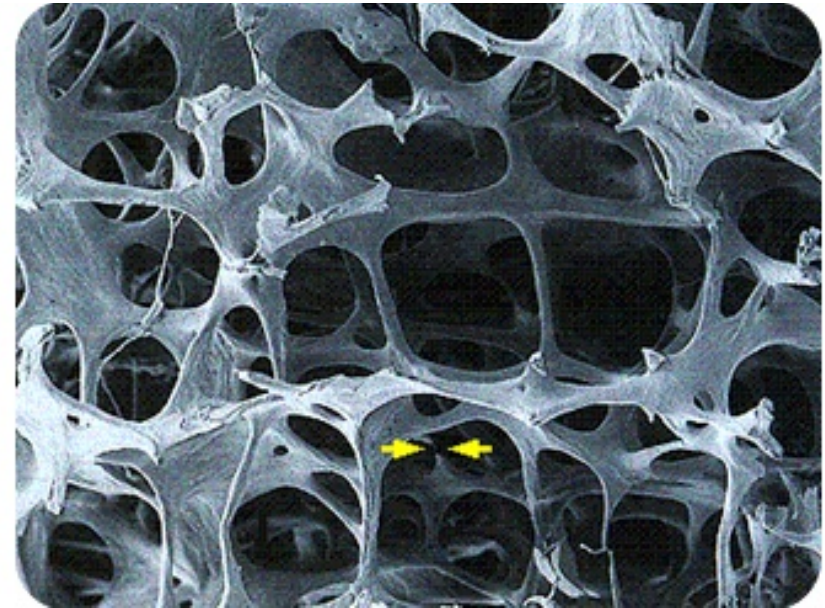


What Is Osteoporosis?

“Osteoporosis is a skeletal disorder characterized by compromised **bone strength** predisposing a person to an increased risk of fracture.”



Normal Bone



Osteoporosis- (Porous Bone)



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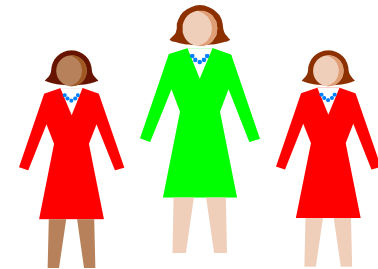
1. Consensus Development Conference, JAMA 2001;
285: 785-95.



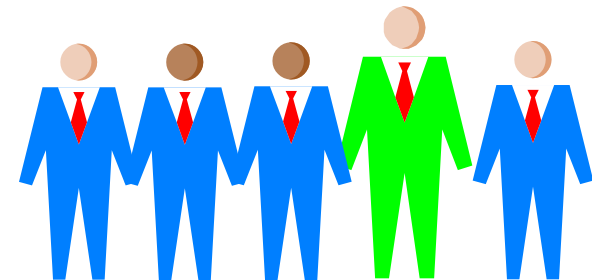
- 1 in 3 women and 1 in 5 men will suffer from an **osteoporotic fracture** in their lifetime

- Approx. 2 million Canadians live with osteoporosis

- 57,000 osteoporotic fractures in Ontario each year



1 in 3 women



1 in 5 men



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- Over 80% of all fractures in Canada after age 50, are caused by osteoporosis.
- **28%** of women and **37%** of men who have had an OP related hip fracture will die of complications in following year.
- Osteoporotic fractures are **more common** than heart attack, stroke and breast cancer combined
- Fracture predicts future fracture

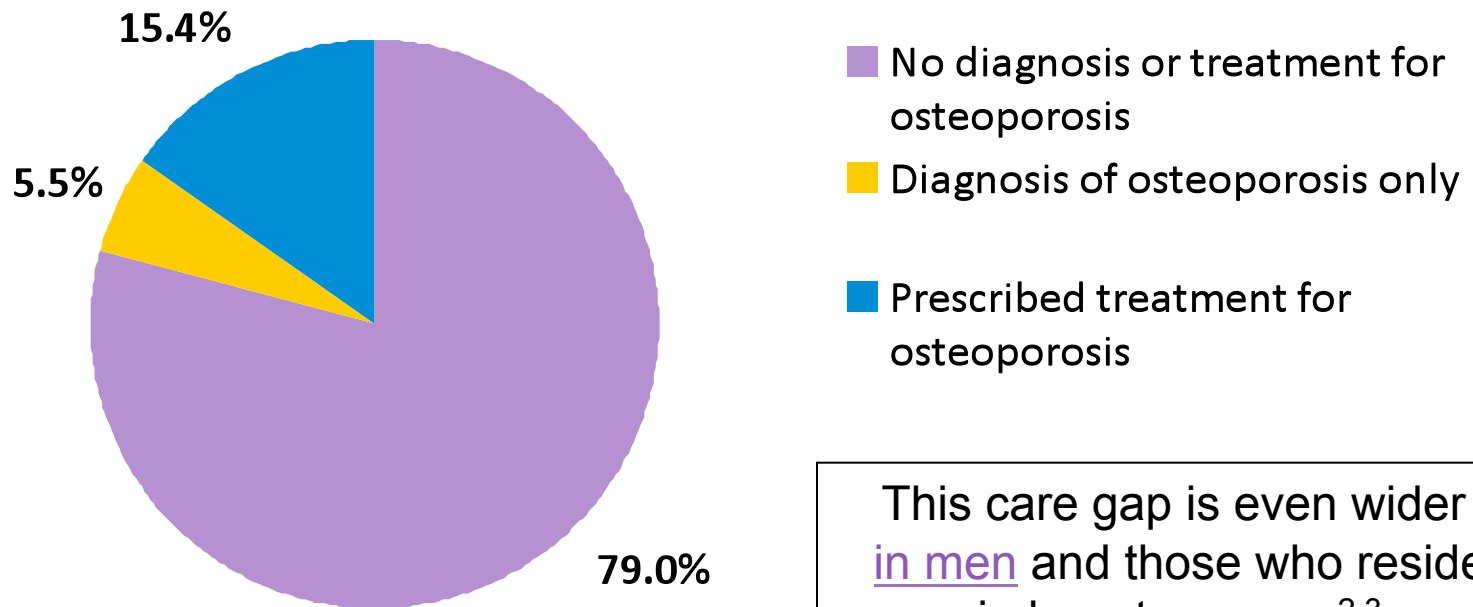


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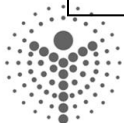


Undertreatment of Osteoporosis Post Fracture in Women¹



This care gap is even wider in men and those who reside in long-term care^{2,3}

A fracture is to osteoporosis what a heart attack is to cardiovascular disease. **BUT...** The treatment gap is far wider post fracture than post MI.^{1,4}



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1. Bessette L, et al. *Osteoporos Int* 2008; 19:79-86.
2. Papaioannou A, et al. *Osteoporos Int* 2008; 19(4):581-587.
3. Giangregorio L, *Osteoporos Int* 2009; 20(9):1471-8.
4. Austin PC, et al. *CMAJ* 2008; 179(9):901-908.

Looking Beyond BMD

- Currently, low BMD is the primary trigger for initiation of therapy¹⁻⁵ . . . **HOWEVER,**
- Most fragility fractures occur in those with a BMD in the non-osteoporotic range (T-score higher than -2.5)⁶

There is a missed opportunity to prevent future fractures due to over-reliance on BMD.^{6,7}

1. Bessette L, et al. *Osteoporos Int* 2008; 19:79-86.

2. Papaioannou A, et al. *BMC Musculoskelet Disord* 2004; 5:11.

3. Elliot-Gibson V, et al. *Osteoporos Int* 2004; 15:767-778.

4. Papaioannou A, et al. *Osteoporos Int* 2008; 19(4):581-587.

5. Cranney A, et al. *Osteoporos Int* 2009; 20(9):1621-1625.

6. Cranney A, et al. *CMAJ* 2007; 177(6):575-580.

7. Langsetmo L, et al. *J Bone Miner Res* 2009; 24(9):1515-1522.

Recommendations for Clinical Assessment

Assessment	Recommended Elements of Clinical Assessment
History	<p><u>Identify risk factors</u> for low bone-mineral density (BMD), future fractures, and falls</p> <ul style="list-style-type: none"><input type="checkbox"/> Prior fragility fractures<input type="checkbox"/> Parental hip fracture<input type="checkbox"/> Glucocorticoid use<input type="checkbox"/> Current smoking<input type="checkbox"/> High alcohol intake (≥ 3 units per day)<input type="checkbox"/> Rheumatoid arthritis<input type="checkbox"/> Inquire about falls in the previous 12 months<input type="checkbox"/> Inquire about gait and balance



Background on the OP Education Program at CFHT

- Started May 2010- offered 4 times a year
- Diagnosed with osteoporosis
- Focus on education of osteoporosis and fracture prevention
- 3 hours
- Binder that contains resources



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Team- Stakeholders

FHT members

Receptionist- poster and registration

Team (physicians/front line)- referrals

Dietitian- Nutrition section

Health Promotion/Kin- physical activity section

Pharmacist- Drug therapy section

Others- Osteoporosis Canada, Integrated Regional Falls Program, and community partners



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Components of the Program

Intro and what do the attendees want to know

- Know Your Bones *(and fracture risk assessment)*
- Build and Protect Your Bones
- Feed Your Bones
- Treat Your Bones *(if moderate/high risk of fracture)*
- Own Your Bones



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Brief Falls Risk Screen

- Have you had a fall within the past 12 months?
 - Have you sought medical attention as a result of this fall?
- Have you experienced a near fall within the past 3 months?
- Do you have a fear of falling?

If you have answered yes to any of the above questions, you may be at increased risk of experiencing a fall- speak to your health care provider



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Referrals/Resources

- Take charge of your health- CDSMP
- Internal FHT programs and services
- External programs (*fall prevention programs, geriatric day hospital program, VON SMART program etc.*)
- Coping with pain (programs and resources)
- Bone Fit- Learn how to manage difficult movements
- Support groups
- COPN – Canadian Osteoporosis Patient Network
- Osteoporosis Canada website and 1-800 line
- Assistive Devices and therapists
- Osteoporosis Clinics and Women’s College Telemedicine Program



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Summary of the Results

- 10 classes with 131 participants (9 males) + 4 spouses and 96% of the evaluations were returned
- 96% said that as a result of the program they would make changes in managing their osteoporosis- “So much useful info. I will be watching my proper food intake and will work on exercise, my balance and muscle strength.”
- 83% have been diagnosed longer than 5 years
- 88% would like to take a refresher program



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Other Outcomes

- 86% agreed/strongly agreed that the session met their expectations
- 100% agreed/strongly agreed the information was helpful
- Lunch and Learn for family doctors and staff on osteoporosis
- Self-management introduction
- Available now to non-rostered FHT patients
- Information tracked on EMR



Improvements of the Program

- Nutrition- preparation of healthy greens, less usual food and vegetarian recipes
- Exercises- more time
- 3 hours at once- overwhelming- different way to roll it



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Next Steps

- Phone follow up in 3 months- what action was taken- joined COPN, attended further programs, stayed on or started medication, refresher program, 1-on-1 support from FHT HCP
- tracking the number who went to CDSMP
- Target patients who are at high risk of a fracture
- Post/refresher follow up program



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Thank You!

- Questions?
- Comments?



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Appropriate Measurement of Height

- Use a wall-mounted stadiometer
- Instructions for subjects:
 - Shoes off
 - Heels, buttocks, and back against the upright board
 - Face directly forward, head stable
- Record height after exhalation



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