

# NOGG 2017:

## Information for patients and the public on the **NOGG** Clinical Guideline for the Prevention and Treatment of Osteoporosis

*Updated March 2017*



NICE has accredited the process used by the **National Osteoporosis Guideline Group** to produce **Clinical guideline for the prevention and treatment of osteoporosis**. Accreditation is valid for 5 years from **7 March 2017**.

[www.shef.ac.uk/NOGG](http://www.shef.ac.uk/NOGG)



## Introduction

This information leaflet is written for patients and the public. It provides you with a simple, plain language summary of the Clinical Guideline written by the UK National Osteoporosis Guideline Group (NOGG). It tells you how the Guideline affects you, what it says, and who uses it. Links to further information are provided at the end.

## What is osteoporosis?

**Osteoporosis is a condition in which bones lose their strength, and are more likely to break when we have a minor bump or fall. A break like this is called a fragility fracture.**

As we get older, from around 40 onwards, our bones gradually get weaker as part of the natural ageing process. For both women and men there is a steady decline in bone strength, and in women there is a bigger drop after the menopause due to hormonal changes. There are also other medical conditions and treatments that may affect our bones. This loss in strength is a combination of the density (quantity) and the structure (quality) of our bones; it varies from one person to another for many reasons.

The World Health Organization (WHO) defines osteoporosis using a T-score, which is a measure of bone density compared to the average healthy woman in her 20s. This applies to men and women. Osteoporosis is defined as a T-score of -2.5 or less.

**The effects of osteoporosis vary considerably from no symptoms at all, through fracture-and-recovery, to life-changing mobility issues and chronic pain due to fractures.**

## Why has NOGG written a clinical guideline?

A clinical guideline is written by health specialists, using evidence from research. It is a set of information and advice for use by all health professionals who are working with a specific condition. In this case, that means the prevention, diagnosis and treatment of osteoporosis and the prevention of fragility fractures.

## How does this Guideline affect me?

Osteoporosis affects around 3 million people in the UK. Half of all women and 1 in 5 men over the age of 50 will have a fragility fracture. There are over 500,000 fractures every year which costs the NHS over £4 billion. This means there are a lot of health professionals working in this area. The Guideline helps them to provide you with consistent and up-to-date prevention, diagnosis and treatment.

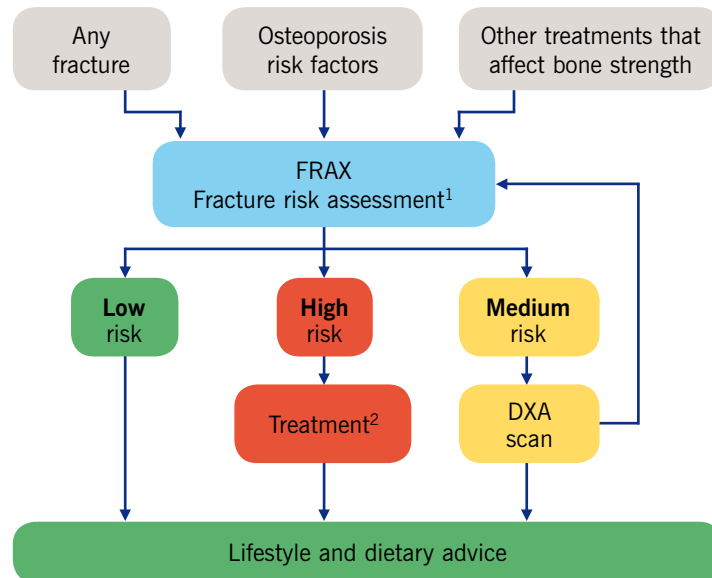
**Health professionals such as your GP, or a nurse, doctor or consultant at a clinic or hospital will ask you about risk factors. These are things in your life that could mean you are more likely to have a fragility fracture. They use this Guideline to help them decide on what is best for you, as an individual, to reduce your risk.**

## What does this Guideline say?

The Guideline contains a lot of technical details about identifying who is at risk, assessing the risk of having a fracture, actions on lifestyle and diet, and which drugs to use and when. The most important points for patients are:

- the preferred method for assessing fracture risk is an internet-based system called FRAX; this is a questionnaire about risk factors that calculates your risk of fracture over the next 10 years
- FRAX can be used by a health professional to assess any postmenopausal woman, or man over 50, who has risk factors including older age, previous fractures, parents' fractures, low body weight, smoking, alcohol, rheumatoid arthritis and taking glucocorticoid tablets (frequently called steroids)
- FRAX indicates whether lifestyle and dietary advice is sufficient, or whether you should start treatment, depending on whether your risk is low or high
- if your risk is medium, a bone density scan (called DXA) can be used to get a more accurate assessment, by measuring bone density in the hip and the spine
- postmenopausal women with a fragility fracture may be offered treatment without assessing their risk, although a DXA scan is sometimes advised before making a decision
- vertebral fracture assessment (VFA) is another type of scan, carried out on the same equipment as the DXA scan; it can look for fractures in the spine if your bone density is low, you have lost height (usually more than 4cm), or have certain other medical conditions
- lifestyle and diet advice includes daily intake of calcium and vitamin D, regular weight-bearing exercise, and measures to reduce your risk of falls

- the main treatments for men and women are alendronate and risedronate tablets; there are other drugs available where these are not suitable
- most treatments can be taken for 5 years before your individual review is required, or up to 10 years if you are over 75 or have broken bones in the past; if the treatment is stopped, you should have a new assessment of your fracture risk within 3 years or immediately if you have a new fracture
- your hospital or clinic should have access to a Fracture Liaison Service unit that assesses anyone who suffers a fragility fracture.



<sup>1</sup> when DXA scan results are available, FRAX predicts risk as low or high only; so a medium risk is translated into low or high with the DXA data

<sup>2</sup> Treatment includes DXA scans and other diagnostic and monitoring procedures as appropriate to the individual

## What can I do to help myself and others?

These important actions can reduce some of the risk factors listed earlier:

- a healthy diet, with supplements of calcium and vitamin D if necessary
- stopping smoking and reducing alcohol
- taking regular exercise that is suitable for you.

**If you are taking medication, follow the instructions and take it regularly.**

It can help if you know something about the condition, and if you can talk to others about it. One way to do this is to join a relevant charity and get involved in supporting it. See Further Information below.

## Who are NOGG?

The National Osteoporosis Guideline Group (NOGG) was formed in 2007 by a group of osteoporosis experts, to update the previous guidelines from the Royal College of Physicians. The first NOGG guideline was produced in 2008, with updates in 2013. This version in March 2017 is a substantial update, taking into account the latest research findings. It is Accredited by NICE, the main body in the NHS that manages health guidelines and quality standards.

## Who supports this Guideline?

In addition to the 12 specialists who advised on and wrote the Guideline, the following organisations are supporting it: Bone Research Society, British Geriatrics Society, British Orthopaedic Association, British Orthopaedic Research Society, National Osteoporosis Society, Osteoporosis 2000, Osteoporosis Dorset, Primary Care Rheumatology Society, Royal College of General Practitioners, Royal Pharmaceutical Society, Society for Endocrinology

In Scotland there is an osteoporosis guideline provided by SIGN (Scottish Intercollegiate Guidelines Network) which advises use of a different risk factor assessment system and has different thresholds for treatment.

## Further information

The national charity specialising in osteoporosis, with comprehensive information and support is:

### **National Osteoporosis Society**

[www.nos.org.uk](http://www.nos.org.uk)  
0808 800 0035

Two regional charities also providing osteoporosis support to patients are:

### **Osteoporosis 2000 (Sheffield)**

[www.osteoporosis2000.org](http://www.osteoporosis2000.org)  
0114 234 4433

### **Osteoporosis Dorset**

[www.ostedorset.org.uk](http://www.ostedorset.org.uk)  
01202 443064

For information on a balanced diet, calcium-rich foods, and a calcium calculator:

[www.nos.org.uk/for-people-and-families/healthy-living-and-risk/healthy-eating](http://www.nos.org.uk/for-people-and-families/healthy-living-and-risk/healthy-eating)

Further information on NOGG, with links to all supporting organisations, is available online:

[www.shef.ac.uk/NOGG](http://www.shef.ac.uk/NOGG)