Osteoporosis is a chronic condition in which bones become weak and brittle, leading to fractures and breaks which often carry life-debilitating consequences.

As well as causing considerable mental and psychological distress, they also severely impair people’s abilities to participate in normal life and their ability to work.

In the EU alone, it’s estimated that 22 million women and 5.5 million men suffer from the bone condition, resulting in 3.5 million fractures a year, which costs an estimated €37 billion, or around 3% of overall healthcare costs.

But osteoporosis is often wrongly assumed to be a natural consequence of ageing, rather than a preventable disease.

In this event report, EURACTIV takes a closer look at the bone condition and ways in which it can be prevented.
Contents

Osteoporosis prevention can start in the womb, says health expert 4
Broken bones, shattered lives: call for action as EU faces rise in osteoporosis 6
Osteoporosis and fragility fractures: An urgent priority for European policymakers 8
The narrative that osteoporosis is a natural consequence of ageing must be challenged and emphasis must be given to a smarter way of screening to reduce the risk of fracture and the associated costs, the president of the International Osteoporosis Foundation, told EURACTIV in an interview.

Professor Cyrus Cooper outlined a three-step strategy for effective and cost-efficient osteoporosis-related fracture prevention, something he says is well-substantiated in scientific literature.

Osteoporosis is a chronic condition in which bones become weak and brittle, leading to fractures and breaks which often carry life-debilitating consequences.

“These fractures are a huge public health problem,” Cooper stressed, highlighting that there are 3.5 million osteoporosis-related fragility fractures in the EU each year, which cost an estimated €37 billion, or around 3% of overall healthcare costs.

As populations age, this cost is predicted to increase by 25% by 2025, with fracture-related costs projected to increase to €47.4 billion by 2030.
However, osteoporosis is often incorrectly assumed to be a natural part of ageing, rather than a preventable disease.

“When I started out, osteoporosis was seen as an inevitable consequence of ageing, like grey hair,” Cooper said, emphasising that research over the ensuing decades has now identified its risk assessment and treatment.

This must now be reflected in the way in which we approach osteoporosis care, he said, both for the human cost and the economic burden of the condition.

“Osteoporosis should join hypertension, diabetes, and high cholesterol as one of the disorders where you’ve got a known risk factor and a load of interventions, and you need to link data so that the interventions can be used most effectively for those at a higher risk,” he said.

These risk factors, he added, should be seen in the same way that blood pressure is related to stroke risk.

Early preventative action is therefore of paramount importance, Cooper underlined, saying that, thanks to in-depth research, screening programmes have been refined to offer optimal outcomes.

He highlighted a three-pronged approach: secondary prevention, focusing on appropriate post-fracture care; primary prevention, which involves the implementation of screening programmes to detect those most at risk; and prevention over the whole life course, which can start from pregnancy.

“There are parts of the environment which influence bone density from before you’re born and from a very young age,” he said, adding that vitamin D supplementation in pregnant women during winter months and maintaining calcium levels in young children has been shown to give children a better trajectory.

Whereas secondary prevention is already practised to a greater or lesser extent across EU member states, Cooper stressed that more emphasis must also be given to primary prevention.

In the past, screening practices have been shown to be inefficient, costing around €100,000 pounds per quality-adjusted life-year (QALY), something Cooper says is “economically unjustifiable”.

QALY is a generic measure of disease burden, with one QALY equalling one year in perfect health, used in economic evaluation to assess the value of medical interventions.

The average willingness-to-pay threshold is valued between €20,000-30,000 per QALY in the EU.

However, Cooper cited new studies which have demonstrated promising results by increasing the average age in which people are screened from 50-64 to 70-85, and introducing a simple questionnaire, known as a Fracture Risk Assessment Tool (FRAX), to evaluate the 10-year risk of fracture as a basis for further intervention.

By altering the screening approach in this way, three major studies conducted in the EU demonstrated a considerable benefit.

One British study found that this led to a 26% reduction in hip fractures across 5 years, while all studies showed a reduction in osteoporotic fractures.

Later screening was also found to reduce the associated costs to as little as £10,000 per QALY.

Cooper said that on the back of this new research, experts working in the specialty agree that a stronger focus must be given to screening practices, although he stressed that getting a consensus from national screening councils is a “big challenge”.

One way which Cooper thinks could help improve osteoporosis care and prevention is via the use of data and digital technologies.

“I think that the use of big data is an absolute priority and must be used more,” he said, adding that this must be facilitated at the EU level.

“EU policy can definitely enhance the sharing of routine health statistics, amalgamation of risk models across EU countries, standardisation of integrated care pathways and electronic health records. All could be facilitated by current EU harmonisation programmes,” he said.
EU policy action on osteoporosis is lagging behind, even though methods already exist to prevent the chronic bone disease. But a new policy toolkit aims to help change this.

In an effort to align health policy with the latest tools and procedures, the new toolkit, developed by health policy consultancy, the Health Policy Partnership in conjunction with a group of experts, aims to better manage osteoporosis and its related complications.

By summarising the key actions for policymakers alongside country-specific resources, the report aims to ensure that EU policy helps those suffering from the condition access the care and support they need.

“The time has come for urgent action on osteoporosis, uniting patient, carer and clinical leadership with wider societal and political advocacy actors in order to strengthen the call for change,” the report urges.

Osteoporosis is a chronic condition
in which bones become weak and brittle, leading to fractures, known as ‘fragility fractures’, and breaks which often carry life-debilitating consequences.

These fractures are a major cause of disability and early death in older adults. As well as causing considerable mental and psychological distress, they also severely impair people’s abilities to participate in normal life and their ability to work.

With a hip fracture, for example, 40% of patients cannot walk independently, while 10–20% need permanent residential care.

In the EU alone, it’s estimated that 22 million women and 5.5 million men suffer from the bone condition, resulting in 3.5 million fractures a year, which costs an estimated €37 billion, or around 3% of overall healthcare costs.

This number is set to increase dramatically in the coming decades due to ageing populations and lifestyle changes, with fracture-related costs projected to increase to €47.4 billion by 2030.

However, clear, actionable steps have been identified in order to slow, or even reverse, bone weakening, subsequently reducing the risk of a fracture.

“We now know what works in a clinical setting for osteoporosis, we’ve identified a means of predicting fracture risk, we have a panoply of interventions that reduce fractures in those who are high risk, and that is the basis that we need to communicate as the evidence to policy makers,” Professor Cyrus Cooper, President of the International Osteoporosis Foundation, stressed during a recent event marking the launch of the toolkit.

Despite this, EU policy has been slow to keep pace with medical and clinical advancements, leaving millions of people – mostly older women – without access to the care and support they need to live full, independent lives.

As it currently stands, across Europe, almost 70% of women over 70 who have osteoporosis have not been diagnosed, and even after a fracture, 60–85% of women do not receive treatment to prevent subsequent fractures from occurring.

Cooper emphasised that effective clinical practice is “at the heart of effective policy change,” but that “the assembly of a robust clinical evidence base must antecede translation through the implementation of policy change”.

“We have proved that this is a cost-effective use of healthcare resources that works in the UK, and now we want to bring post-fracture care on a larger scale to European policy,” he added.

Ed Harding, managing director at the Health Policy Partnership, said that he hoped this toolkit would enable advocates to communicate the urgency for action on osteoporosis and fragility fractures, adding that the costs of inaction on this matter make a clear economic case for change.

“Osteoporosis and fragility fractures need to be framed as part of a solution for wider health system priorities and societal interests,” he said, stressing its importance in response to health system pressures and contributing to the effective use of resources.
To find out more information, download the ‘Osteoporosis and fragility fractures’ policy toolkit at [https://www.osteopolicynetwork.org/](https://www.osteopolicynetwork.org/)
From London to...
the Amsterdam
Metropolitan Area

Contact us
Natasha FOOTE
Reporter, Agriculture & Health
natasha.foote@euractiv.com
tel. +33 (0) 76 969 5136

Teresa DOMINGUEZ
EU Affairs Manager
teresa.dominguez@euractiv.com
tel. +32 (0) 2 788 3693

For information on
EURACTIV Special Reports...