

# In Brazil number of hip fractures expected to increase 32 percent by 2050

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A new Audit report on fragility fractures, issued today by the International Osteoporosis Foundation (IOF), predicts that Brazil will experience an explosion in the number of fragility fractures due to osteoporosis in the coming decades.

Osteoporosis, a disease which weakens bones and makes them more likely to fracture, is thought to affect around 33% of [postmenopausal women](#) in Brazil. Fractures due to osteoporosis mostly affect [older adults](#), with fractures at the [spine](#) and hip causing the most suffering, disability and healthcare expenditure.

Currently, about 20% of Brazil's population is 50 years of age or over and 4.3% is aged 70 or over. With [average life expectancy](#) projected to rise to 80 years in 2050, it is estimated that the total population will increase to 260 million. Around 37% will then be over 50 years of age, and 14% (around 36 million people) aged 70 years or over.

These projections serve as a dire warning to [health authorities](#) as well as to social institutions which care for the aged. In Brazil, around 153 to 343 hip fractures occur among every 100,000 people aged 50 and over. While today there are an estimated 121, 700 annual hip fractures, these numbers are predicted to increase by 16% in 2020, and by 32% in 2050.

Hip fractures are a major cause of suffering, disability, and early death in seniors. Various international studies show that around 20% of [hip fracture](#) sufferers will die within the year of fracture, but one study

examining patients in various hospitals in [Rio de Janeiro](#) showed that as many as 35% died either in hospital or soon after discharge. Surviving hip fracture patients often remain disabled, and lose the inability to live productive and independent lives, thus becoming a burden on family or transferring to institutional care.

Dr. Bruno Muzzi Camargos, President of the Associação Brasileira da Avaliação da Saúde Óssea e Osteometabolismo (ABrASSO), stated, "Given the future projections, osteoporosis and [fragility fractures](#) have become a health issue of immediate concern. We must implement nation-wide measures for early prevention, while ensuring that people at risk –and especially people who have already suffered a fracture – are appropriately diagnosed and treated to prevent future fractures. This is the only way that we can slow the rising tide of costly fractures. "

The 'Latin America Audit: Epidemiology, Costs, and Burden of Osteoporosis 2012' was prepared by IOF in cooperation with IOF member societies . It includes data from 14 countries throughout Latin America, and reveals the following key findings in Brazil:

- A 2010 study of more than 4,300 women aged 50 and over found that 11.5% had sustained some kind of osteoporotic fracture and that 33% were osteoporotic.
- An estimated 2.9 million Brazilian women over the age of 50 may be living with vertebral fractures, mostly undiagnosed and untreated. Vertebral fractures cause pain and disability, often resulting in a stooped back.
- Vitamin D, made in the skin upon exposure to sunlight, is essential for bone and muscle strength. Yet despite Brazil's sunny climate, vitamin D deficiency is widespread throughout the population. In a recent study 60% of the healthy adolescent participants did not have adequate amounts of vitamin D.

- The cost of treating fractures is enormous and growing. The approximate direct cost of treating a hip fracture in Brazil ranges from 3900 to 12,000 USD in private hospitals, with an average 11 days spent in hospital. This does not include the indirect costs associated with post-fracture care, rehabilitation, loss of productivity and long-term need for nursing assistance.
- As in other countries around the world, there is a widespread problem of under diagnosis and under-treatment, even after fracture. A fragility fracture indicates a high risk of further fractures and should immediately trigger an assessment for osteoporosis. However, one study showed that, of 123 hospitalized hip fracture sufferers, not a single patient was discharged from the hospital with a referral for bone density testing or osteoporosis treatment.
- The urban- rural divide is reflected in both incidence of fractures and in accessibility to diagnosis and treatment. There is a higher incidence of fractures among women living in cities than in rural areas. On the other hand, people living in rural areas often have no access to bone densitometry for diagnostic testing.

On the positive side, Brazil is one of the few Latin American countries which has declared osteoporosis as a national health priority. Professor Christiano Zerbin, IOF Board Member and Director of the Paulista Clinical Research Center in Sao Paulo, commented, "Brazilian researchers and health professionals are working to find answers to the problem of osteoporosis and related musculoskeletal diseases. For example, an important new multicentre prospective study, BRAVOS (Brazilian Vertebral Osteoporosis Study), will gather much-needed epidemiological data from six research centres across the country. We hope this data will lead to the development of a WHO Fracture Risk Assessment model (FRAX) for Brazil – a tool to facilitate the identification of people at high risk of fracture. Among other necessary steps, this would be an important achievement in our efforts to reduce

the burden of future fractures."

The authors of the Audit report call for more public awareness campaigns, [osteoporosis](#) training programmes for doctors, better accessibility to low cost testing and treatment, and more epidemiological research.

IOF President John A. Kanis stated, "IOF joins concerned Brazilian doctors and patient societies to call for the channelling of health care resources towards the prevention and care of age-related musculoskeletal diseases and fragility [fractures](#). This is an important investment in Brazil's future."

**More information:** Information about the Latin American Audit is available in English, Portuguese and Spanish at [www.osteoporosisinlatinamerica.com](http://www.osteoporosisinlatinamerica.com)

The report can also be downloaded from the IOF website at [www.iofbonehealth.org/regional-audits](http://www.iofbonehealth.org/regional-audits)

Provided by International Osteoporosis Foundation

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