

# Spine fracture prevalence in a nationally representative sample of US women and men aged 40 years: results from the National Health and Nutrition Examination Survey (NHANES) 2013-2014

F. Cosman, J. H. Krege, A. C. Looker, J. T. Schousboe, B. Fan, N. Sarafrazi Isfahani, J. A. Shepherd, K. D. Krohn, P. Steiger, K. E. Wilson, H. K. Genant  
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## Objective

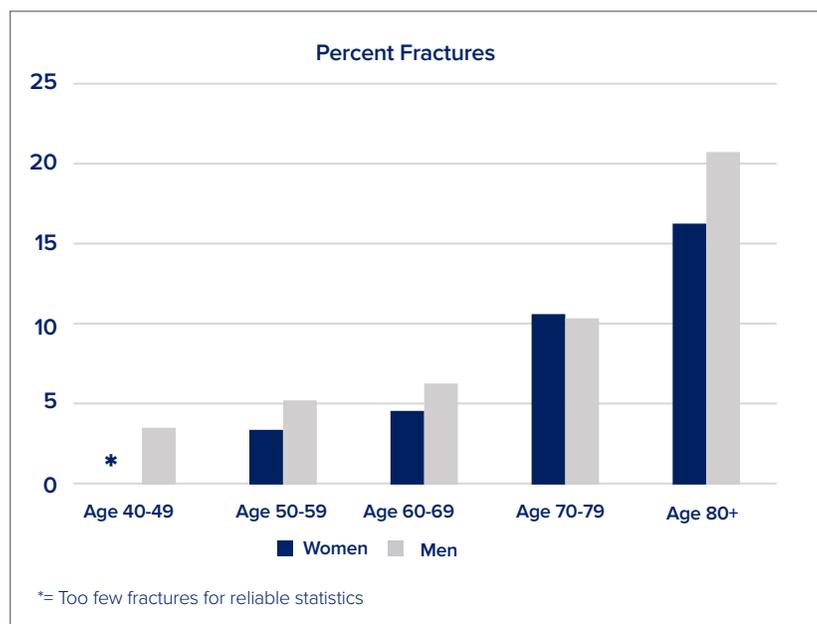
The purpose of this study was to identify spinal fracture prevalence in men and women over the age of 40. Often, spinal fractures are overlooked or not recognized and these types of fractures are frequently of substantial medical significance. This is the first study to assess the prevalence of spine fractures in a nationally representative sample of the United States.

## Methods

The data was collected in 2013-2014 from 3330 US adults who participated in the NHANES Vertebral Fracture Assessment (VFA) study. Subjects completed an osteoporosis questionnaire and had hip and spine BMD and VFA using a Hologic Discovery™ densitometer.

## Results

The general spine fracture prevalence of 5.4%, was similar in men and women, and increased with age. For those in the 70-79 age range, the spine fracture prevalence was 11%, and it increased to 18% in those age 80. 97% of IVA scans could be interpreted. Only 8% of the people with spine fracture knew they had suffered a fracture. Conversely, only 21% of people who said they had a spine fracture, actually did. Thus, self-report of spine fracture is unreliable. Fractures were more common in non-Hispanic whites and in people with lower body mass index and BMD. However, only 38% of those over age 65 who had a spine fracture were classified by BMD as osteoporotic (T-score <-2.5). One in seven people meeting NOF criteria for spine fracture screening, had a spine fracture.



**8%**

Number of people who knew they had a spine fracture

**21%**

Number of people who reported a spine fracture and actually had one.

**1 in 7**

Could have a change in treatment pathway if NOF/ISCD Guidelines followed

## Summary

The study concluded that spinal fracture prevalence increased with age, lower BMD and previous fracture. More than 90% of the participants who had a spine fracture were unaware of their fracture. Though it was previously thought that women have a much higher prevalence of spine fracture, this study found that men have a similar prevalence of spinal fractures as women with a similar age related pattern of increase. Finding a vertebral fracture typically changes the clinical management of the patient. Following NOF/ISCD guidelines regarding when to do lateral spine imaging with VFA, will result in clinically significant information in 1 out of 7 patients with a possible change in treatment path for those patients

Summary presented by Hologic Medical Education

hologic.com | info@hologic.com | +1.781.999.7300