

OSTEOSCOOP

News on current events in osteoporosis and rheumatology

Effect of seasonality and weather on fracture risk in individuals 65 years and older

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Excess winter morbidity and mortality continue to be important public health problems, especially among older persons. In addition to clear seasonal variations in respiratory and cardiovascular diseases, fractures of the hip and distal forearm contribute to high winter morbidity rates in older persons. The objective of this large population-based study [1] was to investigate seasonal variation in the incidence of four common fractures (hips, distal forearms, proximal humeri, and ankles), and explore the association of weather with risk.

For all fractures, rates were highest in winter and lowest in summer. Winter peaks were more pronounced in warm climate states, in men, and in those younger than 80 years old. In winter, total snowfall was associated with a reduced risk of hip fracture but an increased risk of non-hip fractures. In summer, hip fracture risk tended to be lower during sunny weather, while other fractures were increased in sunny weather.

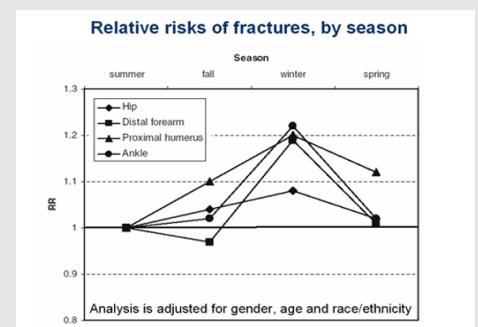
In conclusion, fractures contribute considerably to winter morbidity in older individuals. Younger age between 65 and 80, living in warmer states and male gender are risk factors for increased winter morbidity due to fractures. Weather affects hip fracture risk differently than the other fractures studied.

1. Bischoff-Ferrari HA et al. *Osteoporos Int* 2007;18:1225-1233.

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