

0478 **FALL-RELATED HIP FRACTURE TRENDS 1991–2008:  
REDUCTION OF FALLS OR INCREASE IN BONE  
RESISTANCE?**

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**Background** Hip fractures (HF) are one of the most serious consequences of falls. In several countries, the incidence of HF has declined in recent decades. Primary factors responsible for this downward trend are unknown, but a reduction in exposure (falls) or increased resistance (bones and body mass index (BMI)) may have had an impact.

**Objectives** (1) Examine fall-related HF trends in women  $\geq 50$  years from 1991–2008 in Quebec, Canada; (2) Examine trends in other severe fall-related injuries non-related to bone fragility, for example, traumatic brain injury (TBI).

**Methods** Hospital admissions following falls (E880-E888; W00-W19, X59.0) with HF, TBI or other severe diagnosis (diagnosis survival probability  $< 0.95$ ) were selected. We used negative binomial regression models with annual percent change (APC) to assess trends in each of these fall-related injuries. Both age-specific (50–64, 65–74, 75–84 and  $\geq 85$ ) and age-adjusted incidence rates were calculated.

**Results** The age-standardised rate for fall-related HF decreased (APC:  $-1.6\%$ ) from 292 to 237 per 100 000 in women  $\geq 50$  years between 1991–2008. HF rates declined in each age group. In contrast, the age-adjusted rate for severe fall-related TBI and other injuries increased throughout the study period (APC:  $+6.5\%$  and  $+3.8\%$ , respectively). These upward trends were observed for all age groups.

**Discussion/Conclusion** The downward trend of HF seems to point towards increased bone/BMI resistance, since other severe fall-related injury rates (not related to such resistance) have increased.