

## FLUORIDATION AND HIP FRACTURES [JAMA]

Although oral fluoride is sometimes used to treat osteoporosis, recent studies suggest that fluoride may increase the risk of hip fracture. This cohort study compared the incidence of femoral neck fractures in a community with longstanding water fluoridation (to 1 ppm) with the incidence in two communities without water fluoridation (less than 0.3 ppm). The authors identified cases of first hip fractures in persons at least 65 years old from a database of all Medicare discharges in Utah between 1984 and 1990. Excluded were subjects with surgical revisions of hip fractures or fractures secondary to metastatic disease. The relative risks of fracture in fluoridated areas, compared with nonfluoridated areas, were 1.27 for women and 1.41 for men. In the fluoridated community, women under age 79 had a higher rate of hip fracture than older women. In contrast, increased risk for men occurred after age 75. The findings of this report support other epidemiologic studies suggesting that fluoride increases the risk of hip fracture. However, the multiple causes of hip fracture make it difficult to interpret single-factor studies and to establish cause-and-effect relations. These results should not be used as an argument against water fluoridation, which has benefits in controlling tooth decay, but should encourage further study of the risks and benefits of fluoride in the elderly. - COM. TITLE: Danielson C et al; Hip fractures and fluoridation in Utah's elderly population. AUTHORS: REFERENCE: JAMA 1992 Aug 12; 268:746-8.