OBJECTIVE: To examine the relationship between arthritis and fracture.

METHODS: Women were classified into 3 self-reported groups at baseline: no arthritis (n = 83,295), osteoarthritis (OA; n = 63,402), and rheumatoid arthritis (RA; n = 960). Incident fractures were self-reported throughout followup. Age-adjusted fracture rates by arthritis category were generated, and the Cox proportional hazards model was used to test the association between arthritis and fracture.

RESULTS: After an average of 7.80 years, 24,137 total fractures were reported including 2559 self-reported clinical spinal fractures and 1698 adjudicated hip fractures. For each fracture type, age-adjusted fracture rates were highest in the RA group and lowest in the nonarthritic group. After adjustment for several covariates, report of arthritis was associated with increased risk for spine, hip, and any clinical fractures. Compared to the nonarthritic group, the risk of sustaining any clinical fracture in the OA group was HR 1.09 (95% CI 1.05, 1.13; p < 0.001) and HR 1.49 (95% CI 1.26, 1.75; p < 0.001) in the RA group. The risk of sustaining a hip fracture was not statistically increased in the OA group (HR 1.11; 95% CI 0.98, 1.25; p = 0.122) compared to the nonarthritic group; however, the risk of hip fracture increased significantly (HR 3.03; 95% CI 2.03, 4.51; p < 0.001) in the RA group compared to the nonarthritic group.

CONCLUSION: The increase in fracture risk
Arthritis increases the risk for fractures—results from the Women's Health Initiative. confims the importance of fracture prevention in patients with RA and OA.

DOI 10.3899/jrheum.101196
Alternate Journal J. Rheumatol.
PubMed ID 21572148
PubMed Central ID PMC3149716
Grant List 24152 / / PHS HHS / United States
32100-2 / / PHS HHS / United States
32105-6 / / PHS HHS / United States
32108-9 / / PHS HHS / United States
32111-13 / / PHS HHS / United States
32115 / / PHS HHS / United States
32118-32119 / / PHS HHS / United States
32122 / / PHS HHS / United States
42107-26 / / PHS HHS / United States
42129-32 / / PHS HHS / United States
4421 / / PHS HHS / United States
N01WH22110 / WH / WHI NIH HHS / United States
R01 AR049411-04S1 / AR / NIAMS NIH HHS / United States
R01 AR049411-04S1 / AR / NIAMS NIH HHS / United States
R21 AR060811 / AR / NIAMS NIH HHS / United States