IMPACT OF OSTEOPOROSIS AND BONE HEALTH ON WOMEN ACROSS THE UNITED STATES

- Each year an estimated **1.5 million** individuals suffer a fracture due to bone disease. The risk of a fracture increases with age and is greatest in women.
- Women account for **80**% of the estimated 10 million Americans with osteoporosis.
- Only **5**% of patients with osteoporotic fractures are referred for an osteoporosis evaluation and medical treatment.



Osteoporosis is a medical condition where bones become weak and more prone to fractures, especially of the hip, spine, and wrist.

This "silent disease" is more common in women. It affects almost 20% (1 in 5) of women aged 50 and over and almost 5% (1 in 20) of men aged 50 and over. Many people with osteoporosis do not know they have it until they break a bone. Nearly 1 in 5 Medicare beneficiaries have died from complications within 12 months after an osteoporotic fracture — and more than 60% were women. Screening is important to help individuals take steps to decrease the effects of osteoporosis.

Percentage of Women Aged 50 and Older with Osteoporosis by Race and Ethnicity (CDC)









Non-Hispanic white and Hispanic women have the highest risk for fracture, followed by Native American, African-American, and Asian American women. Fracture risk is strongly influenced by bone mineral density (BMD) in each group. A BMD test is the best way to determine bone health. BMD tests can identify osteoporosis, determine risk for fractures and measure response to treatment. Osteoporosis shows no symptoms in the early stages, but as bones lose more mass, the symptoms begin to present.

Women in rural communities reportedly underestimate their risk for osteoporosis, and their preferred source of information is health care providers. Studies show nurses have changed attitudes on bone health, osteoporosis, and fracture risk across communities by taking a long-term view of bone health from conception to older life and using a public health approach in a variety of settings.

CONSEQUENCES OF FRACTURES

Approximately two million fractures, a burden of osteoporosis, occur in the United States each year. Among those who sustain a hip fracture, up to 75% require nursing home placement for rehabilitation or long-term care. Many of the remainder receive home health care, resulting in over two million home health care visits for post-hospitalization fracture care annually. Caregivers provide services in the form of fall and fracture prevention, good nutrition, lifestyle assistance, and care following fractures and medical procedures. In-home health professionals and caregivers help those with osteoporosis manage their pain, become physically active again, and improve their well-being. Treatments, weight bearing exercises, and fall prevention strategies are recommended to improve the quality of care for older adults with osteoporosis.



Common Symptoms

- Curved spine
- Frequent fractures
- Height loss
- Persistent pain
- Stooped posture

Risk Factors

A number of factors can increase the likelihood of developing osteoporosis — including age, gender, race, family history, lifestyle choices, body frame size, and medical conditions and treatments. Low calcium intake increases the risk of osteoporosis.

MEDICAL CONDITIONS

The risk of osteoporosis is higher in people who have certain medical problems, including:

- Cancer
- Celiac disease
- Inflammatory bowel disease
- Kidney or liver disease
- Multiple myeloma
- Rheumatoid arthritis

Barriers to Care/Access

- Bias
- Cultural competency of clinicians
- Health literacy
- Lack of trust in health care
- Language
- Technology (Digital and Generational Divide)
- Uninsured or underinsured

Healthcare Disparities

African-American Medicare beneficiaries have higher hospitalization rates, higher death rates following fractures, and lower bone mineral density screening rates. Screening rates for Native American (6%) and Hispanic beneficiaries (7%) were also below the national average, while rates for Asian (9%) and non-Hispanic white beneficiaries (8%) were, respectively, above and at the national average.



Economic Impact

Estimated costs of providing care for osteoporotic fractures among Medicare beneficiaries are \$57 billion, including direct medical costs and indirect societal costs related to productivity losses and informal caregiving. By 2040, experts predict that osteoporosis will be responsible for more than three million fractures annually, resulting in \$95 billion in costs.



The Society for Women's Health Research (SWHR) Women's Health Equity Initiative highlights statistics on women's health in the United States and aims to engage communities on solutions to improve health equity with the treatment of osteoporosis and other medical conditions.

Health Equity Roadmap

The roadmap features U.S. data on the disproportionate impact of Alzheimer's disease, bone health. maternal health, and menopause.

www.swhr.org/healthequity



HEALTH EQUITY ROADMAP

This roadmap features U.S. data on the disproportionate impact of four diseases on women's health based on race and ethnicity, geography, age, and role as a caregiver. SWHR plans to add additional disease states, life stages and issues to this map in the future. Download the fact sheets for more information.

• Alzheimer's Disease

Approximately **5.8 million** people in the U.S. have Alzheimer's disease - two-thirds of them are women

Bone Health

Women account for 80% of the estimated 10 million Americans with osteoporosis and experience bone loss at an earlier age than men.

Maternal Health

Black women are three to four times more likely to die from childbirth than non-Hispanic white women.

Menopause

34% of women with menopause symptoms are not diagnosed and do not know they are in the menopause transition, while **20%** of women go 12+ months before it is formally identified by their health care provider.

References

Aging Care: A Caregiver's Guide to Osteoporosis, Fractures and Senior Bone Health

https://www.agingcare.com/articles/caregiversguide-osteoporosis-fractures-and-senior-bonehealth-133150.htm

Centers for Disease Control and Prevention: Genomics & Precision Health

 $\underline{\text{https://www.cdc.gov/genomics/disease/}}$ osteoporosis.htm

Elizabeth Barrett-Connor MD, et. al., Osteoporosis and Fracture Risk in Women of Different Ethnic Groups, Journal of Bone and Mineral Research,

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Mayo Clinic: Diseases & Conditios: Osteoporosis https://www.mayoclinic.org/diseases-conditions/osteoporosis/symptoms-causes/syc-20351968

National Conference of State Legislators Women's Bone Health: Reducing Costs and Promoting Screening, Aug. 30, 2021 https://www.ncsl.org/blog/2021/08/30/womensbone-health-reducing-costs-and-promotingscreening.aspx

24hour Home Care: How Can Home Care Help Seniors with Osteoporosis?

https://www.24hrcares.com/resource-center/ disease-specific-care/osteoporosis/home-care/

Additional Resources

Society for Women's Health Research: Exploring the Connection Between Psoriatic Arthritis and Bone Health

https://swhr.org/exploring-the-connection-between-

Society for Women's Health Research: Managing Bone Health for Endometriosis and Fibroid Patients https://swhr.org/managing-bone-health-forendometriosis-and-fibroid-patients/

Society for Women's Health Research: Report on Osteoporosis-Related Bone Fractures Reveals High Burden on Women and Society

https://swhr.org/report-on-osteoporosis-related-bonefractures-reveals-high-burden-on-women-and-society/