Healthy Bones

Subtitle: The foundation of healthy bodies.

Published by the Bone Health and Osteoporosis Foundation, also known as BHOF.

About this accessible version

This is an accessibility-formatted version of the Healthy Bones infographic from the Bone Health and Osteoporosis Foundation. The original is a one-page visual infographic with a bone-density chart, statistic icons, and a QR code. This version replaces the chart with a plain-text description of how bone mass changes through life, spells out the statistics in full, transcribes the QR code destination as a readable web address, and uses proper heading levels so screen-reader users can jump between sections. Reproduced and adapted with permission from the Bone Health and Osteoporosis Foundation.

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Part 1: How your bones change over a lifetime

Our bones change a lot over our lifetime. Bone growth and bone loss are natural processes, but you are never too old or too young to improve your bone health.

The bone-density timeline

The original infographic shows a chart of bone mass against age, with the curve rising sharply through childhood and adolescence, leveling off in early adulthood, and then declining gradually after middle age. The chart marks five milestones, listed below in order.

Ages 9 to 14: Rapid growth

This is the period of rapid bone growth. More bone is built during these years than will ever be lost in a lifetime.

Age 30: Peak bone mass

By around age 30, you have hit your peak bone mass. The body stops adding new bone, and slow bone loss begins.

Age 50: Rapid loss begins for women

For women, rapid bone loss begins around age 50, generally tied to the hormonal changes of menopause.

Age 65: Loss slows for women

For women, the rate of bone loss slows after age 65, though loss continues.

Age 70: Rapid loss begins for men

For men, rapid bone loss begins around age 70, later than for women but following a similar pattern after that.

Part 2: What osteoporosis is, and who it affects

Definition

Osteoporosis is the most common bone disease. It occurs when bones lose minerals like calcium and become fragile, so they break easily.

Who is affected

Among people over age 50 who will break a bone due to osteoporosis:

- One out of every two women.
- One out of every four men.

In the original infographic, these figures are illustrated by icons: two woman silhouettes with one highlighted, and four man silhouettes with one highlighted. The statistics themselves are the same as written above.

Take action

Take care of your bones now to help prevent fractures later.

Part 3: Risk factors for weakened bones and fractures

Several factors can increase the risk of weakened bones or fractures. They are listed below.

Personal and family factors

- **Age.** Your risk increases as you get older.
- **Gender.** Women are more likely than men to develop osteoporosis.
- **Race.** All races are impacted. Being White or Asian puts you at increased risk.
- **Family history.** Your risk is higher if a parent or grandparent had osteoporosis or a hip fracture.
- **Personal fracture history.** A broken bone from bumping into something, or from falling from standing height (for example, tripping on something), is a warning sign.
- **Low body mass index.** Being underweight for your height increases risk.
- **Low bone density.** A diagnosis of low bone density (sometimes called osteopenia) is a direct risk factor.

Lifestyle factors

- **Limited physical activity.** Bones get stronger when they are loaded by movement and weight. Sedentary lifestyles weaken them.
- **Not getting enough calcium and vitamin D.** These nutrients are the raw materials your body uses to maintain bone mineral content.
- **Smoking.** Smoking is associated with lower bone density and a higher fracture risk.
- **Excess alcohol intake.** Heavy alcohol use interferes with bone metabolism and increases fall risk.

Medical conditions

Some medical conditions raise the risk of osteoporosis. Examples include rheumatoid arthritis, diabetes, cancer, thyroid disease, kidney disease,

chronic liver disease, eating disorders, malabsorption diseases such as celiac disease and Crohn's disease, HIV, Cushing's disease, organ transplant, and Relative Energy Deficiency in Sport, also known as RED-S.

Medications

Some medicines can also weaken bones. Examples include steroids, medicines that reduce the level of sex hormones, certain antidepressants, some stomach medicines, and some HIV medicines.

For more information about specific medical conditions and medications, visit the Bone Health and Osteoporosis Foundation website.

Website: https://www.bonehealthandosteoporosis.org

Part 4: Keeping your bones healthy

These habits help maintain bone strength at any age.

- Be active.
- Do weight-bearing and muscle-strengthening activities.
  Weight-bearing means activities where your bones support your body weight, such as walking, dancing, hiking, or stair climbing.
- Avoid smoking.
- Limit alcohol intake.
- Prevent falls. Keep walkways clear, use good lighting, and consider balance exercises.
- Eat a balanced diet. Get enough calcium, vitamin D, protein, and magnesium.
- Talk with your healthcare provider about your bone health at all ages, not just after age 50.

Part 5: For people age 45 and older. The Fracture Risk Calculator

If you are age 45 or older, you can use the American Bone Health Fracture Risk Calculator to learn your risk of breaking a bone in the next ten years. The calculator is free, and it takes just a few minutes to complete.

How to find it

Web address: https://americanbonehealth.org/bonecare

The original infographic also provides a QR code labeled "Scan Me" that leads to the same web address. The web address above is the destination of that QR code.

Part 6: Contact information and copyright

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