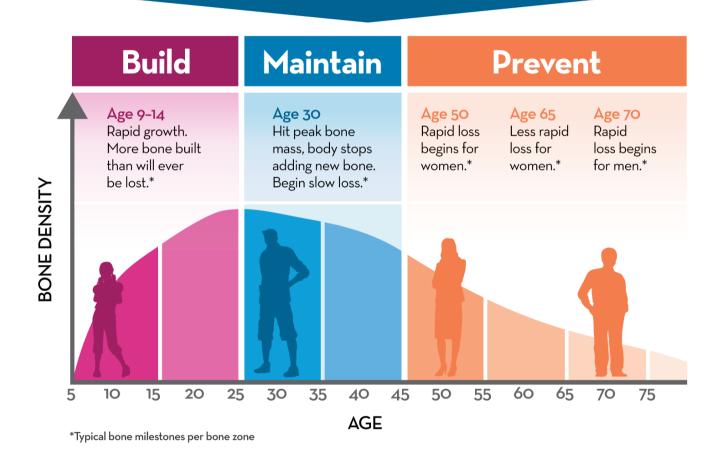


KNOW YOUR BONE ZONE

By understanding the typical milestones in your bone lifecycle, you can take steps to maximize your bone density at all stages of your life.

WHICH BONE ZONE ARE YOU IN, RIGHT NOW?



Bone is living tissue. To keep bones strong, your body naturally breaks down old bone and replaces it with new bone, typically over a 6-month remodelling cycle. As a result, your entire skeleton is remodeled every 7-10 years, a process which can be impacted by healthy choices you make, as well as risk factors for weakened or broken bones.

What's typically happening during this stage?

Build

- · Throughout childhood, bone-forming osteoblast cells work faster than osteoclast cells, which break down bone.
- At around age 10, the skeleton grows very rapidly until around age 20. These are a person's peak bone-building years.

Maintain

After reaching peak bone mass, osteoblast and osteoclast activity is balanced, so bone mass stays relatively stable.

Prevent

- Estrogen regulates the bone cells and how bone tissue is broken down and rebuilt.
- A loss of estrogen at menopause, at any age, results in rapid bone loss, because osteoclast cells are then working faster than osteoblast cells.
- During the five years around menopause, women can lose as much as 15-20% of their bone mass.
- Men lose bone density at a steady and slower rate than women.
- Around age 70, the reduction in men's hormone levels begins to cause more rapid bone loss.
- Around age 70, men and women lose bone at the same pace.

What are some of the risk factors that can impact bone density during this stage?

- Inactivity: anything that "unloads" the skeleton, such as prolonged bedrest or inactivity, weakens the bones
- Athletic Energy Deficit (AED), when teenagers in active sport programs (like ballet, running gymnastics) burn up so may calories that even a "normal" caloric intake is not enough to meet their energy requirements
- Poor nutrition (e.g., eating disorder or low calcium or vitamin D)
- No period by age 15 or three consecutive periods missed

- Early menopause
- Low testosterone
- · Certain health conditions or medications (such as diabetes, cancer, malabsorption, rheumatoid arthritis...)
- Poor nutrition (e.g., eating disorder or low calcium or vitamin D)
- Inactivity

- Falls can lead to fractures, loss of mobility or abnormal gait
- Low testosterone
- Health conditions or medications (such as diabetes, cancer, malabsorption, rheumatoid arthritis...)
- · Poor nutrition (e.g., eating disorder or low calcium or vitamin D)
- Inactivity

>>> For a more comprehensive list of risk factors for weakened or broken bones, download the handout, HEALTHY BONES: The Foundation of Healthy Bodies.

What are the first steps in creating a **Bone Health** Plan to maximize bone density during this stage?

If you have risk factors, ask health care provider about a DXA bone density test and TBS (trabecular bone score) analysis

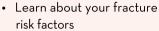
• Take the Bone Health Quiz on the American Bone Health website to learn about your fracture risk factors



• If you have risk factors, ask health care provider about a DXA bone density test and TBS analysis



Use the American Bone Health Fracture Risk Calculator™





- · Understand your risk level for breaking a bone during the next 10 years.
- If you have risk factors, ask health care provider about a DXA bone density test and TBS analysis



${\sf AmericanBoneHealth.org}$

