

Broken bones: Know your risk, protect your frame

By Natalie McGill

From a tumble from a bike ride to a fall in your own home, there are many ways that a bad turn may land you with a broken bone.

A bone break can happen at any age, according to Sundeep Khosla, MD, director of the Mayo Clinic Center for Clinical and Translational Science and a council member of the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

As children hit adolescence and continue growing, so does the risk for breaks, particularly forearm fractures. In young adulthood, bone breaks may be linked to traumatic events, such as car crashes. And overall, both women and men face higher levels of bone loss with age. That can lead to breaks, particularly hip fractures in seniors, which can be "devastating," Khosla says.

Signs of broken bones are bruising, pain and possibly deformity, which may be obvious after breaks such as a hip or wrist fracture following a fall, Khosla says. However, Khosla says there are more subtle fractures that increase with age. They may be disguised as back pain with few symptoms. A fracture may not be noticed until a health professional does an X-ray.

"I think people, particularly as they get older, need to be mindful that if they get severe back pain after heavy lifting or things like that, or have chronic back pain, then it may be



worthwhile to at least have an X-ray to see if this is due to a vertebral fracture," Khosla says.

Women are especially at risk for broken bones during menopause because they lose estrogen. Estrogen loss is linked to osteoporosis, a weakening of the bones that occurs more often in women than men, according to the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

"That often results in dramatic bone loss the first 10 to 15 years after the menopause," Khosla says. "That's when you really start to see an increase in forearm fractures, spine fractures and, later in life, hip fractures."

Existing health conditions can also mean an increased risk for broken bones, Khosla says.

"For example, rheumatoid arthritis can increase fracture risk, or medications such as cortisone and other corticoid medicines," Khosla says. "Those are happening pretty much at any age. Those diseases and drugs tend to get more prevalent as you get older."

If you have the misfortune of breaking a bone, seek immediate care from a health care professional to set you on the right path toward healing. Khosla recommends getting an adequate amount of calcium and vitamin D and avoiding behaviors that harm your bones.

"Smoking, for example, and high alcohol intake are both known to impair fracture healing," Khosla says.

Many of the healthy habits to help broken



>> For more information about bone health, visit www.niams.nih.gov.

bones heal are the same ones that could help prevent breaks from happening in the first place. And experts say those habits should start in early childhood.

One of those healthy habits is making sure to eat a diet rich in calcium. Calcium is a mineral that can help strengthen your bones and can be found in dairy products such as milk and cheese and vegetables such as broccoli and kale, according to the National Institutes of Health.

Children ages 1 to 3 should consume 700 milligrams of calcium a day, according to the National Institute of Child Health and Human Development. Between ages 4 and 8, they should get 1,000 milligrams a day. Children and teens ages 9 to 18 should get 1,300 milligrams of calcium a day.

Vitamin D intake is also essential to strong bones and can be found in foods fortified with the nutrient, such as milk, orange juice and cereal, according to NIH. Children and teens need 600 units of vitamin D starting as early as age 1.

"For most adults, somewhere between 600 to 1,000 units of vitamin D are probably what you need, which is what most multi-vitamins have now," Khosla says.

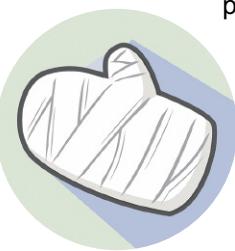
Staying clear of smoking and drinking too much alcohol is also helpful to bone health, as well as avoiding too much caffeine and certain drugs, such as cortisone or glucocorticoids.

Khosla says load-bearing physical activity, such as walking or running, can promote stronger bones as well.

NIH also recommends activities such as lifting weights, climbing stairs and hiking to build up your bone strength.



Graphics courtesy iStockphoto: Girl with milk, Shironosov; three women, Kazakova; smiling man, Shironosov; woman, Ziemannz



Keeping up with bone density

Because they face higher rates of bone loss, women should take even larger precautions in preventive care to promote bone health. Most women ages 65 and older should get regular bone density exams, according to the National Osteoporosis Foundation.

Men ages 70 and older, as well as men ages 50 to 69 with risk factors, should also get bone density exams.

