

## **Lung Disease and Osteoporosis**

Osteoporosis is a disease of the bones. Taking steroids increases the risk of developing osteoporosis. Steroid medicine is commonly used in the treatment and control of certain lung diseases such as asthma or COPD.

### **Should I Take Steroids for My Breathing?**

**Yes!** Steroids reduce inflammation. They are used in patients with lung disease to treat the inflammation in the breathing tubes (airways) to make breathing easier. Steroids are usually taken orally (pill) or inhaled into the lungs. **Inhaled** steroids are preferred because of fewer side effects and **less** chance of osteoporosis than with oral steroids. Your provider will use the lowest dose of steroids to control your breathing symptoms. If oral steroids are needed they will be given for the shortest amount of time possible.

### **What is Osteoporosis?**



Osteoporosis, or porous bone, is a disease that results in the loss of bone mass and bone tissue. Porous bone leads to a greater risk of fractures of the hip, spine, and wrist because the bones break more easily.

### **Who Gets Osteoporosis?**

Osteoporosis affects more than 25 million Americans. One out of every two women over age 50 has a fracture from osteoporosis. By age 75, one third of all men will have osteoporosis. Osteoporosis is thought of as an older person's disease but it can strike at any age. Your chance of developing osteoporosis increases if you have any of the following:

- Family history of osteoporosis
- Race – Caucasians and Asians are at a higher risk than African Americans
- Low calcium intake
- Lack of physical activity
- Cigarette smoking
- Excessive alcohol intake
- Low body weight - thin
- Low estrogen conditions like menopause
- Certain medicines like steroids

### **What Are the Symptoms of Osteoporosis?**



Osteoporosis is called the “silent disease” because bone loss causes no symptoms. The first sign of osteoporosis may be a broken bone after a fall or bump.

### **How Is Osteoporosis Diagnosed?**

Bone density can be measured by a DEXA Scan. A DEXA scan is a computer that takes pictures of your bones and measures how “hard” or dense the bones are.

### **How Is Osteoporosis Treated?**

Medicines can be prescribed by your provider to treat osteoporosis. However, it is best to **prevent osteoporosis** before it occurs.

### **Preventing Osteoporosis**

1. Keep your **breathing controlled** by taking your medicines regularly and avoiding triggers – this will reduce your need for oral steroids.
2. Get enough **calcium** in your diet. Calcium is found naturally in dairy foods like milk, yogurt, or cheese. It is also in non-dairy foods like tofu, collards, and sardines with bones. If you do not get enough calcium in the foods you eat during the day, a calcium supplement may be needed. The recommended daily allowance for calcium is:
  - 1,200mg every day for 11-24 years of age
  - 1,200mg every day during pregnancy and breast feeding
  - 1,000mg every day adults over 24 years of age
  - 1,500mg every day for postmenopausal women
  - 1,500mg every day for adults at risk for osteoporosis
3. Get enough **vitamin D** in your diet. Vitamin D improves calcium absorption into the body and is found naturally in dairy foods, egg yolks, salt-water fish, cow liver and sun light. If your diet does not contain enough vitamin D (400 units every day) in the foods you eat during the day, a vitamin D supplement may be needed.
4. **Exercise** 3-4 times a week for 30 minutes. Weight-bearing exercise like walking, hiking, stair climbing, dancing is best to keep bones strong. Talk to your health care provider before starting an exercise program if you have been inactive.
5. **Do not smoke** and **limit** the amount of **alcohol** you drink. Smoking and alcohol speeds up bone loss.
6. **Hormone changes** in the body can speed up bone loss. There is some risk to taking hormone replacement. Talk to your health care provider about the risks and benefits of these medicines.
7. **Talk to your provider** if you have questions or concerns.