

HIV and osteoporosis

Consumer Factsheet



HIV and osteoporosis

Osteoporosis is a condition in which the bones become fragile and brittle, leading to a higher risk of breaks or fractures. A minor bump or fall can be enough to cause a break in someone with osteoporosis. Scientific advances and new treatments are allowing people with HIV to live longer than ever before. This means that diseases that are associated with ageing, such as osteoporosis, are becoming more common in people with HIV infection.

This factsheet is about the different ways that HIV infection, and its treatment, can increase your risk of developing osteoporosis, and what you can do to help keep your bones as healthy as possible if you are living with HIV.

How does HIV infection affect the bones?

Some well-known risk factors for osteoporosis are especially important for people with HIV. HIV-related illness can make eating difficult, or you may have problems absorbing your food. Poor nutrition and being underweight can weaken bones, especially if your diet is very low in calcium. You may find it difficult to go out in the sunshine to get your daily dose of vitamin D, or to exercise regularly. Steroid drugs (also called corticosteroids or glucocorticoids), used to treat HIV and many other diseases, can weaken bones if used for long periods. All these factors are known to increase the risk of osteoporosis in the general population, but they are more common in people with HIV infection.

The HIV virus can affect the bones in other ways. Untreated HIV infection can damage the natural ability of bone to maintain and repair itself, causing the bones to gradually become more fragile. In men, HIV infection may reduce the levels of testosterone produced by the body. Low testosterone is a known risk factor for osteoporosis.

HIV medication and osteoporosis

New anti-retroviral treatments (usually called ART, ARVs, HAART or CART) have allowed people with HIV to lead longer and healthier lives. These treatments are safer than ever before, but they are known to affect bone strength in some people. The extent of bone loss depends on the type (class) of HIV medication used. Usually, more than one class of HIV medication is taken at any particular time, so most people on HIV medication can be considered to be at higher risk of osteoporosis. Bone loss is most likely to occur during the first two years of treatment. After this time, the bones recover at least some of their strength, even while treatment continues.

I'm HIV positive – could I have osteoporosis?

If you have HIV infection, your risk of developing osteoporosis depends on many factors, not just your medications and how your bones are affected in the early stages of treatment. How well your HIV infection is controlled and how it is treated over the long term is also important. Nutrition, exercise and lifestyle have an impact on your bone health. General risk factors such as family history of osteoporosis or menopause may mean you are already more at risk of developing osteoporosis. It is important to discuss your osteoporosis risk factors with your doctor as soon as possible.

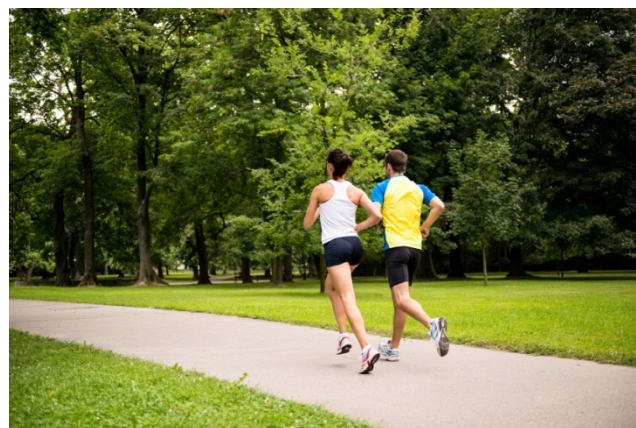
Your doctor may refer you for a bone density test. This simple scan measures the density of the bones in the hip and spine. The results will indicate if your bone density is normal, mildly reduced (osteopenia) or if you have osteoporosis.

Most people don't know that they have osteoporosis until they have had a fracture. That's why it's important to discuss your bone health with your doctor so that you can take action to help prevent fractures before they occur.



Can osteoporosis be treated?

There are several safe and effective [medications](#) available for the treatment of osteoporosis. If you are diagnosed with osteoporosis or are at increased risk of breaking a bone, your doctor will determine the best treatment for you. Osteoporosis medications have been shown to reduce the risk of fracture by up to 60%, but to work effectively, they usually need to be taken over several years. If you have been prescribed osteoporosis medication, it is important to keep taking it. If you are concerned about any aspect of your osteoporosis treatment, you should discuss this with your doctor as soon as possible.



What can I do to protect my bones?

There are some other simple but very important things you can do to help protect your bone health if you are living with HIV.

Ensure you have adequate:

- [Calcium](#)
- [Vitamin D](#)
- [Exercise](#)

Healthy lifestyle habits are also important for keeping bones strong. Don't smoke, keep your alcohol intake low and try to stay active in your daily life.

