

# Bone Density And Health

- **Polio can increase the risk of osteopenia, osteoporosis and osteoarthritis**
- **Bone density scans and reducing risk of falls are important considerations with medical management of polio survivors**
- **A common effect of the “stronger” limb is the development of osteoarthritis**

The Late Effects of Polio can contribute to:

- Osteoporosis
- Osteopenia
- Osteoarthritis

## Osteoporosis And Osteopenia

In limbs that are most effected by the poliovirus, there is reduced bone density. This can lead to:

- **Osteoporosis:** very weak bones, high risk of breaking
- **Osteopenia:** weakened bones, but not likely to break easily

Bone density refers to how much calcium and other minerals are in your bones. Bone density shows how strong and healthy your bones are.



## Prevention And Management

Polio survivors often have reduced balance and muscle strength. This may increase their likelihood for falling, and the amount of falls they have. See Polio Australia's [Falls Prevention fact sheet](#).

[Nutrition](#) and [exercise](#) can help prevent osteoporosis and osteopenia, specifically:

- [the right amount of calcium](#)
- [the right amount of vitamin D \(helps absorb calcium\)](#)
- [exercise](#)

(Source: [Osteoporosis Australia](#))

**A bone mineral density scans (“DEXA” scan)** can assess bone strength. It will show differences in strength in each side of the body.

Talk to your general practitioner to discuss prevention and management of these conditions. You may wish to consider:

- weakness or paralysis in a limb
- menopause (approaching or past)
- how to maintain bone strength
- reducing the risk of falling
- improving balance and muscle strength
- getting a bone mineral density/DEXA scan

## Osteoarthritis

Osteoarthritis is a condition that affects the whole joint including bone, cartilage, ligaments and muscles.

Often polio survivors experience osteoarthritis in limbs that are relied on for strength and movement. i.e. if your left leg was mainly affected by polio, you regularly rely on your right leg. Osteoarthritis may develop in your “stronger” right leg.

### Prevention And Management

Maintaining good posture and supporting joints are very important to prevent or manage osteoarthritis. These things can be challenging for you:

- **Posture:** maintaining good posture can be a challenge as your body weight shifts to areas that have muscle strength to support the body. This can lead to spinal changes such as kyphosis (“hunching” of the spine) or scoliosis (an “s” or “c” curve in the spine).



- **Joint Support:** As a result of polio, you may have more rotation or extension in your joints. For example, knee hyperextension, where the knee travels back and “locks” into position whilst walking. This means joints may change quicker, create pain either at the joint, or at same joint on the other side of the body.

Bracing and other support of joints will help support the body and prevent osteoarthritis.

Talk to your general practitioner to discuss prevention and management of these conditions. You may wish to consider:

- weight management
- appropriate exercise or activity
- joint replacement needs
- pain management
- assistive devices / bracing

### More Information

- [Osteoporosis Australia](#)
- [Arthritis Australia](#)
- [Australian Orthotic and Prosthetic Association](#)

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