

# Epilepsy and Bone Health

## Protecting Bone Health

Bone health is an important part of your general health. When the structure of bone becomes weaker and less dense there is an increased risk of breaking. This is osteoporosis. It can lead to a higher risk of a bone breaking from a minor incident (such as a bump, fall or trip). Early diagnosis and management of osteoporosis can help protect bone health and reduce the risk of breaking a bone.

## About Epilepsy

Around a quarter of a million Australians are affected by epilepsy.

Epilepsy can lead to seizures, resulting from a disruption to the normal pattern of impulses in the brain. Seizures can be changes in sensation or behaviour and sometimes convulsions or muscle spasms, depending on where a seizure occurs in the brain.

Epilepsy can result from a range of clinical factors (for example a head injury, brain infection/tumor/hemorrhage, genetic factors or stroke) but for half the people living with epilepsy there is no known cause.

There are several common factors which can trigger a seizure and strategies can be followed to reduce the impact. Examples of triggers include lack of sleep, emotional stress, fever, flashing lights and missed medication.

## Epilepsy and bone health

Epilepsy is commonly treated with Anti-Epileptic Drugs (AEDs).

Some studies have indicated long-term treatment with certain AED medications can negatively impact bone health by reducing bone mineral density (BMD). The way AED medication impacts bones is not well understood. In some studies it has been suggested there is an impact on vitamin D processes in the body and on bone mineralisation.

Due to this association it is recommended adults living with epilepsy and receiving long term treatment with certain medications may need their bone health reviewed. If osteoporosis is diagnosed then treatment for osteoporosis may be commenced and bone health monitored.

Undiagnosed osteoporosis in adults who experience epilepsy seizures that lead to body convulsions may also be at risk of fracture. An early diagnosis of osteoporosis and treatment can protect bone health and reduce the risk of fracture.

## Other Common Risk Factors

Review other common risk factors for osteoporosis. If any risk factors apply to you – discuss these with your doctor.

Personal History	Medical Conditions	Medications
Previous fracture (from minor bump or fall)	Coeliac disease	Certain treatment for breast cancer
Family history of osteoporosis (parent/sibling)	Overactive thyroid or parathyroid	Certain treatment for prostate cancer
Loss of height (3 cm or more)	Rheumatoid arthritis	Glucocorticoids (steroids)
Smoking/Excessive alcohol	Early menopause/Low testosterone	Anti-epilepsy treatment
Inadequate calcium, vitamin D or lack of exercise	Chronic kidney disease or liver disease	
Age 70 years and over	Diabetes	

# Epilepsy and Bone Health cont.

## Calcium. Vitamin D. Exercise

Take simple steps to help support your bone health.

Focus On	Recommended
<b>Calcium</b>	<ul style="list-style-type: none"> <li>• 1,000 mg per day from the diet</li> <li>• Increasing to 1,300 mg for women over 50 years and men over 70 years</li> <li>• If dietary intake is low a supplement may be required</li> </ul>
<b>Vitamin D</b>	<ul style="list-style-type: none"> <li>• Limited sun exposure – in summer a few minutes per day, in winter slightly longer</li> <li>• Avoid UV index above 3</li> <li>• If vitamin D deficiency is confirmed by your doctor a supplement may be required</li> </ul>
<b>Exercise</b>	<ul style="list-style-type: none"> <li>• Specific mix of weight bearing, resistance training and balance exercises</li> </ul>

For more information on please visit **Epilepsy Australia** [www.epilepsyaustralia.net](http://www.epilepsyaustralia.net)

### For more information



Call our national toll-free number  
**1800 242 141**



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