What is a seizure in a newborn baby?
The brain is made up of millions of nerve cells (neurons) that are connected together and control many functions in the body (like brain activity). A seizure happens when the brain activity becomes disturbed in some way.

What are other names for seizures?
Seizures are also called convulsions or fits.

Seizures in the newborn period are not the same as epilepsy seen in older children and adults. Very few babies who have seizures when they are newborn go on to have seizures later in life. Even fewer will have epilepsy.

What happens when your baby has a seizure?
Your baby may:

- have unusual movements such as moving one arm or leg repeatedly
- stiffen their muscles or they may twitch
- have changes to their breathing, or their skin colour may become pale or bluish
- smack their lips together or have chewing movements
- have unusual or staring eye movements, or eye lid fluttering

Your healthcare providers may suggest videoing your baby when they are having seizures (with your permission). This helps specialist doctors diagnose the type of seizures your baby is having.

An EEG (electroencephalogram) may also be recommended. Your baby may have to go to another hospital for investigation and management of the seizures.

What is an EEG?
An EEG records the electrical activity in your baby’s brain and can show why seizures might be happening. Wires are taped to your baby’s scalp with special tape, and these are then attached to the EEG machine—this is painless for your baby. Often a video recording is made at the same time to see if your baby’s unusual movements and brain activity match. Your permission will be asked to do this.

An EEG is not always needed if a cause is easily found and treated.

How often do babies have seizures?
Seizures occur more often in the newborn period (mostly the first week of life) than at any other time. They occur in one to three babies for every 1000 born. This means seizures are uncommon but not rare.

Is jitteriness the same as seizures?
Jitteriness is common in newborn babies and does not cause any harm to your baby. It happens mostly in the first weeks after birth. It can occur when they are sleeping, awake or crying. Jittery movements stop when you hold the moving arm or leg, or when you pick up your baby.

Some babies have repeated limb jerks while they are asleep. These are not seizures and will stop when the baby wakes up.
Why is your baby having seizures?
The developing brain in a baby is more at risk of having a seizure. Some of the causes (there are others) are:

- extreme prematurity
- lack of oxygen at or around the time of birth
- abnormal brain development
- a disorder of the chemicals in the baby such as low levels of sugar, salt or calcium
- a genetic change that increases the risk of having seizures

How are seizures in babies treated?
Your baby will be admitted to the neonatal unit. They are closely watched, and tests are done to find out the cause of the seizures.

Most seizures in babies stop by themselves or respond well to treatment. This depends on the reason the seizures have happened. If there is a cause that can be treated, such as a low blood sugar level, then treatment will usually stop the seizures.

Sometimes your baby needs medicine to help control the seizures. These are usually only given for a short time. These medicines do not ‘cure’ the seizures, they treat the signs your baby is showing.

What is the outlook for your baby?
Mild, short lived seizures do not cause any lasting health problems. However, long and untreated seizures may cause brain damage. This is because not enough oxygen goes to the baby’s brain during a long seizure. As seizures may be as a sign of more serious problems, it is very important your baby receives urgent specialised care.

Special follow-up treatment may be needed. This will depend on the cause of the seizures and how well your baby responds to treatment. Your healthcare provider will talk with you before your baby goes home from hospital.

Will your baby need medicines at home?
Some babies require medicine to manage the seizures. However this is usually for a short time only. The amount of medicine will be reduced and then stopped if all is well with your baby.

What should you do if your baby has a seizure at home?
Your healthcare provider will tell you what you should do at home if your baby has a seizure. If your baby has a seizure that lasts a few seconds you do not have to do anything other than stay with them.

If the seizure lasts longer than five minutes you may need to call an ambulance (phone 000). You may need to give your baby other help. This includes giving basic life support (CPR) and giving them medicine. Your healthcare provider will talk to you about this before you go home from hospital.

Support & Information
Lifeline (13 11 14) telephone crisis support service. [www.lifeline.org.au](http://www.lifeline.org.au)
Preterm Infant’s Parent Association (PIPA) (1300 773 672) [www.pipa.org.au](http://www.pipa.org.au)
Women’s Health Queensland Wide (1800 017 676) offers health promotion, information and education service for women and health professionals throughout Queensland. [www.womhealth.org.au](http://www.womhealth.org.au)
Australian Breastfeeding Association (1800 686 268) Community based self-help group offers information, counselling, and support services, on breastfeeding issues [www.breastfeeding.asn.au](http://www.breastfeeding.asn.au)