

Seizures in newborn babies

This information sheet aims to answer some commonly asked questions about seizures in newborn babies.

IMPORTANT: This is general information only. It is not intended as advice for your individual circumstances. Ask your health care provider for more information.

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 (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
- have unusual or staring eye movements or eye lid fluttering

Your baby's doctor may recommend an EEG (electroencephalogram) to help determine if your baby is having seizures and why this is happening. An EEG is not always needed if a cause is easily found and treated. Your baby may have to go to another hospital for an EEG.

An EEG records the electrical activity in your baby's brain and can show when this is not normal. Wires are taped to your baby's scalp with special tape and these are then attached to the EEG machine. Often a video recording is made at the same time to see if your baby's unusual movements and brain activity match.

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 and can occur when they are sleeping, awake and 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.



Photograph of baby

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.

Why is your baby having seizures?

The young 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 seizure

How are seizures in newborn babies treated?

Your baby will be admitted to the special care or intensive care nursery. 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 that will usually stop the seizures also. 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.

Depending on the cause of the seizures and how well your baby responds to treatment they may need special follow up. You will be told about this before your baby goes home from hospital.

Will your baby need medicine 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 (fit, convulsion) at home?

Your health care professional 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 last longer you may need to start basic life support.

If the seizure lasts longer than five minutes you may need to call the ambulance and give them other help. This includes continuing with basic life support and giving them medicine. Your healthcare provider will talk to you about this before you go home from hospital.

Support & Information

13HEALTH (13 432584) is a phone line that provides health information, referral and services to the public.

Pregnancy, Birth & Baby Helpline 1800 882 436 (free call) offers free, confidential, professional information and counselling for women, their partners and families relating to issues of conception, pregnancy, birthing and postnatal care www.health.gov.au/pregnancyhelpline

Preterm Infant's Parent Association (PIPA) 1300 773 672 www.pipa.org.au

Lifeline 13 11 14 Lifeline offers a telephone crisis support service to anyone www.lifeline.org.au

Queensland Clinical Guidelines Access the clinical guideline *Neonatal seizures* aligned with this information www.health.qld.gov.au/qcg