



let's talk about

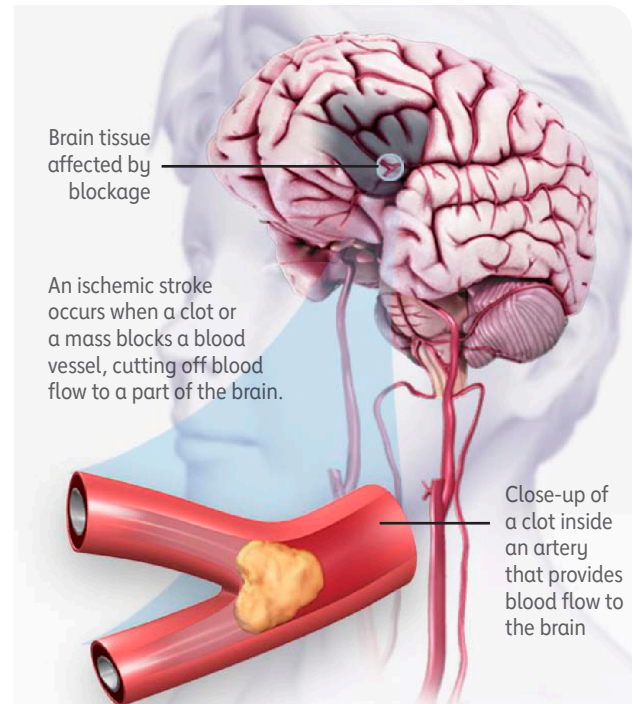
## Children and Stroke

Stroke is a potential risk for everyone, including children. Strokes may occur at any age and can even occur before birth. Stroke in children can be put into two categories:

**Perinatal or neonatal stroke** happens in a fetus during the later part of a pregnancy or in the first month after a baby is born. These strokes are often missed because the signs and symptoms are subtle. In most cases, the cause of these strokes can't be determined.

**Childhood stroke** occurs between 1 month old to 18 years of age. In younger children, strokes may be misdiagnosed due to lack of awareness that children can have strokes. In older children, strokes present in a similar way as they do in adults.

Stroke is an emergency, so if you think your child may be having a stroke, call 911 immediately. Prompt medical treatment and rehabilitation therapy can maximize recovery. However, currently there is no established immediate treatment for perinatal stroke.



### What causes ischemic stroke in children?

Finding the cause of a stroke is critical to providing the right treatment and preventing further injury. The most common cause of ischemic strokes in children is when a blood clot forms in the heart and travels to the brain. This can be caused by congenital heart problems such as abnormal valves or infections. In these cases, children may need surgery or antibiotics.

Ischemic stroke is also more common in children with sickle cell disease, a blood disorder where the red blood cells can't carry oxygen to the brain. This causes the blood vessels leading to the brain to become narrowed or closed.

Additionally, ischemic strokes also can be caused by trauma that injures large arteries and causes a loss of blood flow. For example, a large artery might be injured when a child experiences a neck injury.

### What causes hemorrhagic stroke in children?

When a blood vessel on top of or in the brain ruptures, blood flows into brain areas where it's not supposed to go. It may pool in brain tissue, resulting in a blood clot. When blood isn't transported where it should go to support brain function, the brain doesn't get the oxygen it needs. This may lead to permanent brain injury. Hemorrhagic strokes are most often caused by rupturing or weakened or malformed arteries known as AVMs (arteriovenous malformations).

The risk of hemorrhage is higher with certain illnesses such as hemophilia. Hemophilia is a rare condition in which the blood doesn't clot normally.

Strokes caused by bleeding are hemorrhagic strokes. If an artery wall is weak, an aneurysm (a blood-filled pouch that balloons out from the artery wall) may form at the weakened spot and rupture (hemorrhage).

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### Will my child get better?

Recovery from stroke is different with each child. Early diagnosis can lead to earlier treatment when brain plasticity may be greatest. Rehabilitation therapy may include physical, occupational and speech therapy, and can lead to better outcomes over the long term.

Treatment will depend on the type of stroke, the short- and long-term effects of stroke and any underlying conditions that might have caused your child's stroke. Stroke guidelines now include recommendations for treatment in children with acute ischemic stroke. They emphasize early stroke recognition and suggest that some catheter based treatments may be safe and helpful for some children.



These recommendations guide emergency stroke care for children and support advances in treatment.

In general, most young people will recover more abilities than older people will. Children often recover the use of their arms and legs and their ability to speak after a stroke.

### What are the effects of stroke in children?

The effects of stroke in a child are generally the same as in an adult and can include:

- Weakness or paralysis on one side of the body.
- One-sided neglect, which causes a person to ignore or forget their weaker side (usually related to a right-brain stroke, causing left-sided neglect).
- Difficulty with speech and language or trouble swallowing.
- Decreased field of vision and trouble with visual perception.
- Loss of emotional control and changes in mood.
- Cognitive changes or problems with memory, judgment and problem-solving.
- Behavior changes or personality changes, or improper language or actions.

### HOW CAN I LEARN MORE?

- 1** Call 1-888-4-STROKE (1-888-478-7653) or visit [stroke.org](https://stroke.org) to learn more about stroke or find local support groups.
- 2** Sign up for our monthly *Stroke Connection* e-news for stroke survivors and caregivers at [StrokeConnection.org](https://StrokeConnection.org).
- 3** Connect with others who have also had an experience with stroke by joining our Support Network at [stroke.org/SupportNetwork](https://stroke.org/SupportNetwork).

### Do you have questions for your doctor or nurse?

Take a few minutes to write down your questions for the next time you see your health care professional.

For example:

**Are the tests harmful to my child?**

**What can be done to prevent another stroke?**

### MY QUESTIONS:

We have many other fact sheets to help you make healthier choices, manage your condition or care for a loved one. Visit [stroke.org/LetsTalkAboutStroke](https://stroke.org/LetsTalkAboutStroke) to learn more.