



American Heart Association® | American Stroke Association®

Learn and Live.

Let's Talk About Children and Stroke

Even though it's considered an older person's disease, stroke is a potential risk for everyone, including children. If you think your child

may be having a stroke, call 9-1-1 or go to a hospital emergency department right away

What causes ischemic stroke in children?

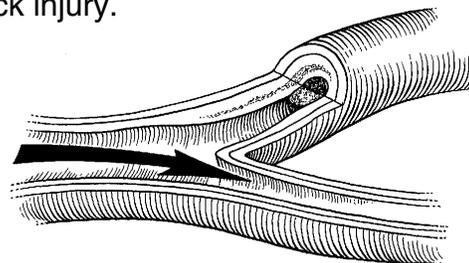
Finding the cause of a stroke is vital to providing the right treatment and preventing more injury. Doctors can find a cause in about two-thirds of the cases.

The most common cause of ischemic (clot-caused) strokes is that 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.

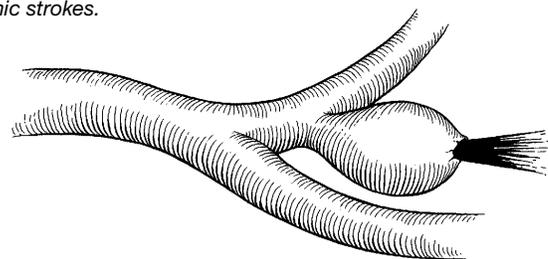
Sickle cell disease is a blood disorder that's associated with ischemic stroke. In sickle cell disease, the blood cell can't carry oxygen to the brain, and blood vessels leading to the brain may have narrowed or closed.

About 10 percent of children with sickle cell disease suffer a stroke. There is a high risk of repeat strokes, but this can be reduced by blood transfusions.

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



Blood flows through a branching artery, but a clot has formed in the narrowed top branch, stopping blood flow. Strokes caused by blood clots blocking a blood vessel in or leading to the brain are called ischemic strokes.



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 tissues, resulting in a blood clot. When the blood vessel is ruptured, blood isn't transported where it should go to support brain function. As a result, the brain is deprived of oxygen, and 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.

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). Strokes caused by bleeding are hemorrhagic strokes.

Will my child get better?

Recovery from stroke is different with each child. Prompt medical treatment and rehabilitation therapy can maximize recovery. 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. The most common effects are:

- Weakness on one side of the body, or paralysis on one side of the body.
- One-sided neglect, which causes stroke survivors 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, improper language or actions.

How can I learn more?

- Talk to your doctor, nurse or other healthcare professionals. Ask about other stroke topics. This is one of many *Let's Talk About Stroke* fact sheets.
- For more information about stroke, or to get more fact sheets, call the American Stroke Association at 1-888-4-STROKE (1-888-478-7653) or visit us online at StrokeAssociation.org.
- If you or someone you know has had a stroke, call the American

Stroke Association's "Warmline" at 1-888-4-STROKE (1-888-478-7653) and:

- ✓ Speak with other stroke survivors and caregivers trained to answer your questions and offer support.
- ✓ Get information on stroke support groups in your area.
- ✓ Sign up to get *Stroke Connection*, a free magazine for stroke survivors and caregivers.

Do you have questions for your doctor or nurse?

Take a few minutes to write your own questions for the next time you see your healthcare provider:

Are the tests harmful to my child?

How important are medicines that help prevent stroke?

What can be done to prevent another stroke?

