

STROKE

Also known as cerebrovascular accident (CVA) occurs when there is loss of blood flow to a part of the brain. The brain relies on blood flow to get the oxygen and nutrients it needs to function. The lack of blood flow can cause brain damage that can be long lasting or even lead to death.

Types of strokes

- Ischemic stroke – This is the most common type, caused by a blood clot blocking blood flow in the brain.
- Transient ischemic attack (TIA) – This is also called a ministroke. A blood clot temporarily blocks blood flow to the brain, leading to symptoms that usually last less than 24 hours. This can be a warning sign of a major ischemic stroke in the future.
- Hemorrhagic stroke – Occurs when a blood vessel in the brain ruptures and bleeds.

Causes

Different conditions can increase your risk of stroke and include:

- High blood pressure (hypertension)
- Diabetes
- Heart diseases (e.g., atrial fibrillation)
- Smoking
- Alcohol and illegal drug use
- High cholesterol
- Unhealthy diet
- Obesity (having too much body fat)
- Prior stroke or TIA
- Family history of stroke or TIA
- Age (risk increases with age)
- Race (higher risk in African Americans)

Symptoms

Stroke symptoms are sudden changes in brain function:

- Numbness or weakness of the face, arm or leg on 1 side of the face/body
- Confusion, trouble speaking, or understanding speech
- Trouble seeing in 1 or both eyes
- Problems walking, dizziness, loss of balance or coordination
- Severe unexplained headache
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Call 911 immediately if you or someone you know is experiencing these symptoms. Time is critical.

Diagnosis

Stroke is diagnosed by you seeing a doctor who will ask about your symptoms and other health problems you have. Then they will do an exam to check the function of your brain. Imaging of the brain, CT scan and or MRI, is completed to see if there are areas of decreased blood flow or damage. Also, tests are done to look for heart problems including an echocardiogram or ultrasound of the heart and electrocardiogram (EKG) to determine if the heart is in a regular or irregular rhythm.

Treatment

Treatment varies by stroke type and setting

- Acute treatment for ischemic stroke in the hospital involves certain medicines and procedures -
 - You may receive a medicine called tPA (tissue plasminogen activator) to breakdown a clot
 - If you are unable to receive tPA, you will be given blood thinning medicines to stop platelets from clumping and decrease the blood clot from getting bigger
 - A procedure can be done to remove clot from the brain depending on its size and location
 - If you are found to have decreased blood flow in the carotid arteries, the blood vessels in the front of the neck, a procedure can be done improve blood flow to the brain
- Acute treatment for hemorrhagic stroke in the hospital is focused on stopping bleeding in the brain depending on the cause –
 - If blood pressure is high it is lowered to decrease the amount of bleeding
 - If a blood vessel in the brain is found to have an aneurysm, or outpouching that makes it weak and likely to break, it can be clipped or have a coil placed to seal it off
 - If an arteriovenous malformation (AVM), clump of abnormal blood vessels, breaks and causes a bleed, it can be repaired by surgery, injecting the vessels with a substance to block blood flow, or radiation to shrink the blood vessels
- Post-stroke care
 - Therapy is used to help restore function
 - Prevent another stroke by controlling blood sugar, blood pressure, and cholesterol
 - Take medicines as prescribed to prevent another stroke
- Common medications used to treat stroke include:
 - Anticoagulants (e.g. apixaban, dabigatran, rivaroxaban, warfarin) – blood thinners to decrease clotting in blood vessels especially if you have atrial fibrillation
 - Antiplatelet agents and dual antiplatelet therapy (DAPT) (e.g. aspirin, clopidogrel, prasugrel, ticagrelor) – keep blood clots from forming
 - Cholesterol lower medications (e.g. atorvastatin, rosuvastatin, pravastatin) – lower bad cholesterol (LDL)
 - Medicines to lower blood pressure (see hypertension section) and maintain blood pressure less than 130/80

Managing stroke involves a combination of lifestyle changes and medical care to reduce the risk of another stroke. Key components are:

Heart-Healthy Lifestyle:

1. **Healthy Eating:** Follow a diet like the DASH (Dietary Approaches to Stop Hypertension) eating plan or the Mediterranean diet.
2. **Limit Alcohol:** Reduce or avoid alcohol consumption.
3. **Regular Physical Activity:** Engage in regular exercise as recommended by your doctor.

4. **Stress Reduction:** Practice stress management techniques.
5. **Quit Smoking:** Stop smoking to improve heart health. [Quit Smoking - MyHealthfinder | odphp.health.gov](#)

See your doctor regularly

Take medications as prescribed to control blood pressure, cholesterol, diabetes and clotting risk

Work to regain function with physical therapy, occupational therapy, and/or speech therapy

Support Groups

American Heart Association [Stroke Support Group Finder](#) | [American Stroke Association](#)
<https://www.stroke.org/en/stroke-support-group-finder>

For additional information, check out:

[Stroke | CVA | Cerebrovascular Accident | MedlinePlus](#) <https://medlineplus.gov/stroke.html>
[Stroke | Aging & Health A-Z | American Geriatrics Society | HealthInAging.org](#)
<https://www.healthinaging.org/a-z-topic/stroke>