STROKE 101
American Stroke Association
KNOW STROKE & SAVE A LIFE

• What is stroke?
• What are the types of stroke?
• What causes stroke?
• What are transient ischemic attacks?
• How can you reduce your risk of stroke?
• What are the stroke risk factors that can’t be changed?
• What are the stroke warning signs?
• How is ischemic stroke treated?
WHAT IS A STROKE?

A brain injury caused when a blood vessel to the brain becomes blocked or bursts, cutting off blood flow and oxygen to the brain.
WHAT ARE THE TYPES OF STROKE?

<table>
<thead>
<tr>
<th>Ischemic Stroke (Blockage)</th>
<th>Hemorrhagic Stroke (Bleeding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 87%</td>
<td>• 13%</td>
</tr>
<tr>
<td>• Caused by a blockage (clot) in the blood vessels to the brain</td>
<td>• Caused by burst or leaking blood vessels in the brain</td>
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[Images of Ischemic Stroke and Hemorrhagic Stroke] © American Heart Association
WHAT CAUSES ISCHEMIC STROKE?

Thrombus or Embolus can occur at the fatty deposits which line the blood vessel wall.

- **Thrombus**: A blood clot forms at the fatty deposit
- **Embolus**: A traveling particle gets stuck in a small vessel
WHAT CAUSES HEMORRHAGIC STROKE?

• A Hemorrhagic Stroke is when a weakened blood vessel ruptures.

• Aneurysms: Ballooning of a weakened spot of a blood vessel

• Arteriovenous Malformations (AVMs): Cluster of abnormal blood vessels
WHAT ARE TRANSIENT ISCHEMIC ATTACKS?

- TIAs are “warning strokes” that can happen before a major stroke
- Blood flow through a brain artery is briefly blocked or reduced
- Symptoms are temporary but similar to those of a full-fledged stroke
- A TIA is a medical emergency
HOW CAN YOU REDUCE YOUR RISK OF STROKE?

- Control high blood pressure
- Don’t smoke
- Consume less sodium
- Lower cholesterol
- Lose excess weight
- Get physically active
WHAT ARE THE STROKE RISK FACTORS THAT CAN’T BE CHANGED?

- Age
- Sex (gender)
- Heredity (family history)
- Race
- Prior stroke, TIA or heart attack
WHAT ARE THE STROKE WARNING SIGNS?

- **Sudden** weakness or numbness of the face, arm or leg, especially on one side of the body
- **Sudden** confusion, trouble speaking or understanding
- **Sudden** trouble seeing in one or both eyes
- **Sudden** trouble walking, dizziness, loss of balance or coordination
- **Sudden** severe headaches with no known cause
RECOGNIZE F.A.S.T

SPOT A STROKE

Stroke Warning Signs and Symptoms

FACE DROOPING
ARM WEAKNESS
SPEECH DIFFICULTY
TIME TO CALL 911
WHEN STROKE OCCURS, TIMELY TREATMENT IMPROVES RECOVERY

Every second counts in preventing brain damage!
ISCHEMIC STROKE TREATMENT: DISSOLVE CLOT WITH ALTEPLASE (IV R-TPA)

The benefits of IV alteplase are greatest when given as quickly as possible. Time is brain!

Benefits

- For patients who can be treated within 3 hours of stroke onset, alteplase (IVr-tPA) can lead to better recovery after stroke
- For select patients who are eligible to be treated up to 4.5 hours after stroke onset, alteplase (IVr-tPA) can also improve outcomes
- Alteplase (IVr-tPA) has been proven to save lives and decrease disability when administered in a timely manner

Risks

- Bleeding of the brain, gums or other tissues are major risks
ISCHEMIC STROKE TREATMENT: REMOVE CLOT WITH STENT RETRIEVER

If eligible, patients should receive alteplase (IV r-tPA) before being considered for mechanical thrombectomy treatment (use of stent retriever). Mechanical thrombectomy removes large blood clots that cause ischemic stroke.

Benefits

- For select patients who are eligible to be treated up to 24 hours after stroke onset, mechanical thrombectomy has proven to be effective in lowering disability from stroke.

Risks

- Bleeding (the most common associated risk)
- Tearing of the inner lining of the blood vessel
LEARN MORE

• Share ASA stroke prevention, treatment, & recovery resources with family, friends, colleagues & neighbors

• Join the conversation!

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