Adult Suspected Stroke Algorithm

American Heart Association.

Advanced Cardiovascular Life Support

Identify signs and symptoms of possible stroke
Activate emergency response

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Critical EMS assessments and actions

- Assess ABCs; give oxygen if needed
- Initiate stroke protocol
- Perform physical exam
- Perform validated prehospital stroke screen and stroke severity tool
- Establish time of symptom onset (last known normal)
- Triage to most appropriate stroke center
- Check glucose; treat if indicated
- Provide prehospital notification; on arrival, transport to brain imaging suite

Note: Refer to the expanded EMS stroke algorithm.

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ED or brain imaging suite*
Immediate general and neurologic assessment by hospital or stroke team

- Activate stroke team upon EMS notification
- Prepare for emergent CT scan or MRI of brain upon arrival
- Stroke team meets EMS on arrival
- Assess ABCs; give oxygen if needed
- Obtain IV access and perform laboratory assessments
- Check glucose; treat if indicated
- Review patient history, medications, and procedures
- Establish time of symptom onset or last known normal
- Perform physical exam and neurologic examination, including NIH Stroke Scale or Canadian Neurological Scale

*Best practice is to bypass the ED and go straight to the brain imaging suite.

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Does brain imaging show hemorrhage?

- **Yes** → **Initiate intracranial hemorrhage protocol**
- **No** ↓

Consider thrombolytics

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Thrombolytics candidate?

- **Yes** → **Administer thrombolytic** → **Consider EVT**
- **No** ↓

Consider EVT

- Perform CTA
- Perform CTP as indicated

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EVT candidate?

- **Yes** → **Rapidly transport to cath lab or transfer to EVT-capable center** → **Admit to neurological ICU**
- **No** → **Admit to stroke unit or neurological ICU, or transfer to higher level of care**

25-1111 (3 of 10) ISBN 978-1-68472-300-3 10/25 © 2025 American Heart Association Printed in the USA Printed on 10% PC fiber.