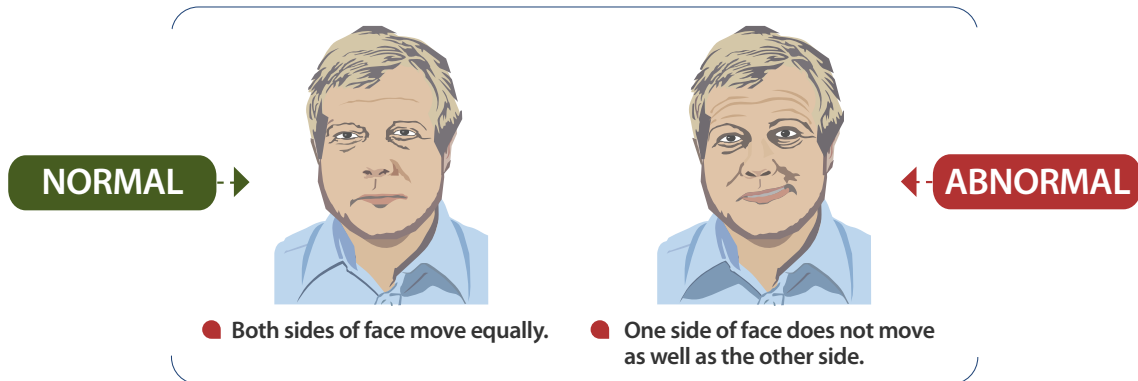


The Cincinnati Prehospital Stroke Scale

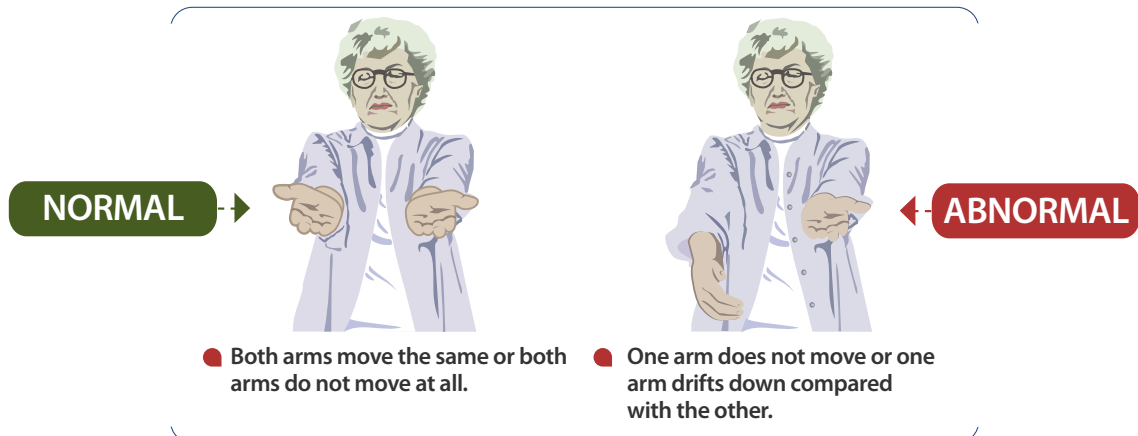
Facial droop

(have patient show teeth or smile)



Arm drift

(patient closes eyes and extends both arms straight out, with palms up for 10 seconds)



Abnormal speech

(have the patient say “you can’t teach an old dog new tricks”)

● Normal — Patient uses correct words with no slurring.

● Abnormal — Patient slurs words, uses the wrong words, or is unable to speak.

If any 1 of these 3 signs is abnormal, the probability of a stroke is 72%.

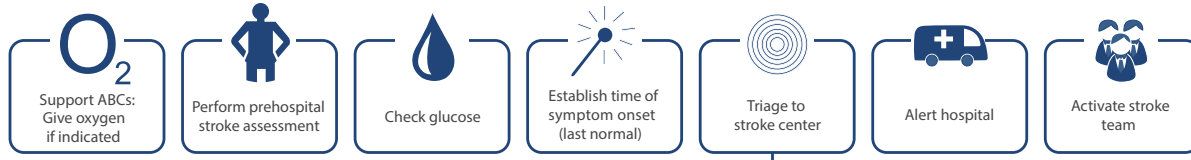


Suspected stroke algorithm: Goals for management of stroke



Identify signs and symptoms of possible stroke active emergency response

Critical EMS assessments and actions



If onset > 3 hours OR large vessel occlusion

Immediate general assessment and stabilization*

Immediate neurologic assessment by stroke team or designee

TIME GOALS

Within 10 min of ED arrival physician evaluation



- Assess ABCs, vital signs
- Provide **oxygen**, if hypoxic
- Obtain IV access and perform laboratory assessments
- Check glucose; treat if indicated
- Obtain 12-lead ECG
- Perform neurologic screening assessment
- Order emergent CT brain without contrast or MRI scan

- Review patient history
- Establish time of symptom onset or last known normal
- Perform neurologic examination (NIH Stroke Scale or Canadian Neurological Scale)

Within 20 min of ED arrival CT scan of head



Does CT scan show hemorrhage?

No hemorrhage

Hemorrhage

Probably acute ischemic stroke; consider fibrinolytic therapy

Consult neurologist or neurosurgeon; consider transfer if not available.

Within 45 min of ED arrival results of CT scan



- Check fibrinolytic exclusions
- Repeat neurologic exam: are deficits rapidly improving to normal?

- Begin stroke or hemorrhage pathway
- Admit to stroke unit or intensive care unit

Within 60 min of ED arrival administration of TPA



Patient remains candidate for fibrinolytic therapy?

Not a candidate

Consider EVT transfer within 60 minutes

Candidate*

Stroke admission within 3 hours



- Review risks/benefits with patient & family. If acceptable:**
- Give tenecteplase or r-tPA**
 - No anticoagulants or antiplatelet treatment for 24 hours

- Begin post thrombolytic agent care
- Aggressively monitor:
 - BP per protocol
 - For neurologic deterioration
- Emergent admission to stroke unit or intensive care unit

* Jauch EC, Cucchiara B, Adeoye O, Meurer W, Brice J, Chan Y-F, Gentile N, Hazinski MF. "Part 11: adult stroke: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care". *Circulation*. 2010;122(suppl 3):S818-S828. http://circ.ahajournals.org/content/122/18_suppl_3/S818 ** Tissue Plasminogen Activator for Acute Ischemic Stroke. *N Engl J Med*. 1995;333(24):1581-1587. AHA (2025) BLS Provider Manual; BLS Blended Learning Student Workbook.

