INDICATION

- Signs and symptoms consistent with a stroke.

- Follow General Medical Care M-01.
- If blood glucose < 60 mg/dL, refer to Altered Mental Status M-05.
- Perform Cincinnati Stroke Scale, visual field assessment and finger-to-nose test

CINCINNATI PREHOSPITAL STROKE SCALE

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
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<tbody>
<tr>
<td>Facial Droop</td>
<td>Ask patient to smile or grimace. Symmetrical smile or face is normal. Asymmetry is abnormal.</td>
</tr>
<tr>
<td>Arm Drift</td>
<td>Have the person close their eyes and hold their arms straight out in front for about 10 seconds. If both arms stay still or move equally, this is normal. If one arm does not move, or one arm drifts down more than the other, this is abnormal.</td>
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<tr>
<td>Speech Abnormalities</td>
<td>Have the person say, &quot;You can't teach an old dog new tricks,&quot; or some other simple, familiar saying. If the person slurs the words, gets some words wrong, or is unable to speak, this is abnormal.</td>
</tr>
</tbody>
</table>

VISUAL FIELDS/CEREBRAL FUNCTION EVALUATION

<table>
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| Visual Fields              | - Face the patient.  
- Ask the patient to look straight ahead or at your nose.  
- Move your fingers in each of four visual field quadrants (upper right, upper left, lower right, lower left).  
- Ask the patient to point to the side that they see the fingers moving.  
- If you are moving your fingers and they do not see one side (e.g., upper right), test again on the same side but opposite quadrant (e.g., lower right).  
- Note any field without vision. |
| Finger-to-Nose test        | - Patient holds arms at their shoulder to 90 degrees with elbows flexed to 90 degrees.  
- Place your index finger at various locations in front of the patient at a distance that requires patient to extend their elbow to reach your finger.  
- Ask patient to use their index finger on one hand to touch their index finger to your finger, then touch their index finger to their own nose, then to your finger.  
- Repeat several times with the examiner moving their target finger each time.  
- Patient repeats the process using the opposite hand's index finger. |
### BLS

- If any one of these tests is abnormal and is a new finding, this may indicate an acute stroke and the following action should occur:
  - Identify and Document Time Last Known Well and Time of Symptom Discovery (Clock Time).
  - Last Known Well < 4 hours? – Yes.
    - Declare “STROKE ALERT” to the receiving facility.
    - Document “STROKE ALERT” in the PCR.
    - If “STROKE ALERT” declared and time allows.
    - ID family/historian. Document contact information or encourage them to accompany patient.
- Document and report use of anticoagulants (e.g. Coumadin (warfarin), Pradaxa (dabigatran), Xarelto (rivaroxaban), Eliquis (apixaban), Lovenox (enoxaparin), Arixtra (fondaparinux)).

### ALS

- All specific ALS treatment is identified in General Medical Care M-01.

### KEY CONCEPTS

- Signs and symptoms of stroke include:
  - Altered mental status
  - Weakness or paralysis
  - Visual disturbance
  - Sensory loss
  - Aphasia or dysarthria
  - Syncope
  - Dizziness/Vertigo
  - Nausea/Vomiting
  - Headache
  - Seizure
  - Respiratory pattern change
  - Hypertension/hypotension

- With suspected stroke, when possible, bring a family member or other on-scene historian to the receiving facility.
- If exact time of onset of symptoms is unclear, use last time patient known to be at baseline for time of onset.
- EMS personnel should initiate rapid transport if the interval from the onset of Stroke symptoms to arrival at receiving facility will be 4 hours or less.
- Keep on scene time to a minimum, without sacrificing a complete history including Last Known Well Time.
- With suspected stroke, after the first IV is established, a second should be attempted when resources are available. Scene time should not be delayed for additional IV placement.