



**Oakland County Medical Control Authority**  
**ADULT SPECIFIC**  
**STROKE OR SUSPECTED STROKE**

Last Updated: November 2022

Section 3-2

## Stroke or Suspected Stroke Protocol

1. Follow 1-1 **General Pre-Hospital Care Protocol**.
2. **Screen for stroke.** If the patient presents with a new onset neurological complaint, utilize the Cincinnati Pre-hospital Stroke Scale (CPSS) to screen for stroke. *Any deficit in the CPSS is considered positive for stroke.*
  - A. **Facial palsy:** Ask the patient to show you their teeth or smile.
  - B. **Arm weakness:** Ask the patient to extend both arms with palms up out in front of them, close their eyes, and hold them there for a count of 10.
  - C. **Speech changes:** Check for slurred speech or an inability to speak or understand speech by asking the patient to repeat a simple phrase.

If **ALL** stroke signs or symptoms are **ABSENT** end the stroke assessment and continue to the appropriate patient care protocol

3. **Time:** If signs of stroke are present, identify and document the **date and time**:
  - A. The patient was **last known well**.
  - B. **Signs and symptoms of stroke** were first discovered.
4. FAST-ED LSAs only, calculate a FAST-ED score using the **OCMCA FAST-ED Stroke Severity Scale Checklist** (see page 3)
5. **Rule out stroke mimics**  
Establish a differential diagnosis of stroke by attempting to rule out stroke mimics, including, but not limited to:
  - Hypoglycemia, if blood glucose less than 60 mg/dL treat for hypoglycemia.
  - Todd's paralysis following a seizure. If seizure, follow **3.4 Seizure Protocol**.
  - Drug and/or ETOH intoxication
  - Migraines
  - Infection
6. **Obtain a SAMPLE history, including:**
  - A. **Blood thinner medication usage.** Document the name of the medication and the date and time of the patient's last dose.
  - B. **Stroke risk factors:** Identify if the patient possesses predisposing stroke risk factors.



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**7. Priority 1 treatment and transport** All stroke patients with a new onset of stroke signs and symptoms of  $\leq 24$  hours are Priority 1 patients. Transport per the **8.33.1 OCMCA Hospital Transportation Matrix**

**A. On-scene treatments**

- i. Keep on scene time to a minimum, ideally  $< 15$  minutes.
- ii. Limit on-scene treatment to critical interventions only.
- iii. If stroke is suspected, position patient supine to support collateral blood flow.
- iv. Use minimum O<sub>2</sub> necessary to maintain SPO<sub>2</sub> of  $\geq 94\%$ .

**B. Treatments during transport**

- i. Initiate vascular access but **DO NOT delay scene time for IV**. Preferred IV is 18-gauge catheter in an AC vein.
- ii. 12-lead ECG. **DO NOT delay scene time to obtain a 12-lead ECG**.

**8. STROKE ALERT**

**A. Verbal report or e-Bridge notification.** Provide a verbal “**STROKE ALERT**,” per **8.8 Communications with Emergency Facilities Protocol**, to the receiving hospital as soon as possible once a differential diagnosis of stroke is established. All stroke alerts should include the following:

- i. FAST-ED score and list the neuro deficits identified
- ii. Last known well date and time.
- iii. Date and time of symptom discovery
- iv. Blood thinner usage. Include name of medication and date/time of last dosage, if available.
- v. Vital signs
- vi. Estimated time of arrival (ETA)
- vii. It is recommended to video record the stroke assessment/deficits and send directly to the receiving stroke center per an OCMCA approved application.

**9. Patient Care Report**

Assure the following key elements are documented in your PCR:

- FAST-ED score and deficits noted.
- Last known well date and time.
- Date and time of sign and symptom discovery.
- Blood thinner medication name, as well as the date and time of last dosage.
- Next of kin information (name and phone), if available.



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**OCMCA FAST-ED Stroke Severity Scale Checklist**  
**(FAST-ED LSAs only)**

<b>Facial Palsy</b> – Ask the patient to show their teeth or smile.		
1. Both sides of the face move equally or not at all.		<b>0</b>
2. One side of the face droops or is clearly asymmetric.		<b>1</b>
<b>Arm Weakness</b> – Ask the patient to extend both arms with palms up out in front of them, close their eyes, and hold them there for a count of 10.		
1. Both arms remain up for >10 seconds or slowly move down equally.		<b>0</b>
2. Patient can raise arms but one arm drifts down in <10 seconds.		<b>1</b>
3. One or both arms fall rapidly, cannot be lifted, or no movement occurs at all.		<b>2</b>
<b>Speech Changes</b>		
<b>Expressive Aphasia</b> – Ask the patient to name 3 common items.		
1. Names 2 to 3 items correctly.		<b>0</b>
2. Names only 0 - 1 items correctly.		<b>1</b>
<b>Receptive Aphasia</b> – Ask the patient to perform a simple command. Example: Ask the patient, “ <i>show me two fingers.</i> ”		
1. Normal, patient can follow the simple command.		<b>0</b>
2. Unable to follow the simple command.		<b>1</b>
<b>Eye Deviation</b>		
1. No deviation, eyes move equally to both sides.		<b>0</b>
2. Patient has clear difficulty when looking to one side (left or right).		<b>1</b>
3. Eyes are deviated to one side and do not move to the other side.		<b>2</b>
<b>Denial/Neglect</b> – (Do not perform if expressive or receptive aphasia is present)		
<b>Anosognosia</b> – Show the patient their affected arm and ask, “ <i>Do you feel weakness in this arm?</i> ”		
1. Patient recognizes the weakness in their weak arm.		<b>0</b>
2. Patient does NOT recognize the weakness in their weak arm.		<b>1</b>
<b>Asomatognosia</b> – Show the patient their affected arm and ask, “ <i>Whose arm is this?</i> ”		
1. Patient recognizes their weak arm.		<b>0</b>
2. Patient does NOT recognize their weak arm.		<b>1</b>
<b>A FAST-ED score <math>\geq 4</math></b> <b>indicates a high likelihood of a severe stroke</b>	<b>Total Score</b>	<b>(0-9)</b>