

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	<b>Document #</b>	<b>8060.16</b>
	<u>PROGRAM DOCUMENT:</u>  <b>Stroke</b>	<b>Draft Date:</b>	<b>11/20/96</b>
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 EMS Medical Director

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 EMS Administrator

**Purpose:**

To serve as treatment standard for Emergency Medical Technicians and Paramedics in treating patients showing signs or symptoms of a suspected stroke.

**Authority:**

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

**Definitions:**

- A. **Stroke:** A condition of impaired blood flow to a patients brain resulting in brain dysfunction, most commonly through occlusion or hemorrhage.
- B. **Onset of Symptoms:** The specific date and time when current symptoms were known to have started.
- C. **Last Known Normal/Well:** When the “onset of symptom” cannot be reliably determined (no witness, or poor historian), the Last Known Well time is the most recent time a reliable historian can say the patient was at their baseline health without current symptoms.
- D. **Wake Up Stroke:** Patient awakens with stroke symptoms that were not present prior to falling asleep.

**Protocol:**

- A. If possible, document a reliable time of day that the patient was last observed to be normal either from the patient or witness. A patient who woke up with symptoms is considered as having an UNKNOWN time of onset.
  - 1. Suspected Stroke: Suspected Stroke with one (1) new onset of lateralizing neurological signs; and/or two (2) unexplained new altered level of consciousness (Glasgow Coma Scale < 14) without response to Glucose, Glucagon or Naloxone (excluding head injury).

<b>BLS</b>		
I.	Ensure patent airway.	
II.	Supplemental O2 as necessary to maintain SPO2 ≥ 94%. Use the lowest concentration and flow rate of O2 as possible.	
III.	Perform Blood Sugar determination.	
IV.	Transport.	
<b>ALS</b>		
I.	Advanced airway adjuncts as needed.	
II.	Cardiac Monitoring.	
III.	Determine Cincinnati Prehospital Stroke Scale (CPSS). Normal response is 0, Abnormal is 1, Maximum Score is 3.	
IV.	Initiate <del>Intravenous (IV)</del> <b>vascular</b> access <del>with saline lock</del> . <b>If time allows, without delaying transport, initiate a second access line.</b>	
V.	If CPSS is >0, and “last seen normal” *time, <b>including wake-up stroke</b> , is twenty-four (24) hours or less, patient is to be taken to a certified stroke center.	
VI.	Prehospital personal will contact the receiving hospital and clearly announce: “Stroke Alert” and give the following information if available: <ul style="list-style-type: none"> <li>• Last time of day observed to be normal” reported by bystanders.</li> <li>• Patient’s name, date of birth or medical record number, if known.</li> <li>• Baseline Mental Status.</li> </ul>	
VII.	<b>When possible, transport a family member or medical power of attorney (POA) or obtain and relay to the receiving hospital the name/contact information of the individual(s) who can verify the time of onset of symptoms or last known normal/well time.</b>	
<b><del>Whenever possible, transport a family member or medical power of attorney (POA) with the patient to the ED.</del></b>		
*If CPSS is=0, OR “last seen normal” time is > twenty-four (24) hours, the patient is NOT a “stroke alert”, and destination is per Destination Policy PD#5050.		
<del>*NOTE: “Last seen normal” time— Time the patient was witnessed by another party to have been at their prior baseline. If no reliable history is available, the onset of symptoms is “unwitnessed.” For patients who wake up with a neurologic deficit, the “last seen normal” time is NOT when they awoke, and additional history must be gathered to determine “last seen normal” time.</del>		
<b>Cross Reference</b>	Hospital Services Hospital Diversion EMS Radio Report Format	PD #2060 PD #5060 PD #2525

<b>Cincinnati Prehospital Stroke Scale (CPSS)</b>			
<b>Sign / Symptom</b>	<b>How tested</b>	<b>Normal 0</b>	<b>Abnormal + 1</b>
Facial Droop	Have the patient show their teeth or smile	Both sides of the face move equally	One side of the face does not move as well as the other
Arm Drift	The patient closes their eyes and extends both arms straight out for 10 seconds	Both arms move the same, or both do not move at all	One arm either does not move, or one arm drifts downward compared to the other
Speech	The patient repeats "The sky is blue in Cincinnati"	The patient says correct words with no slurring of words	The patient slurs words, says the wrong words, or is unable to speak

If any of these tests are "abnormal," there is a 72% chance of a stroke.