

Instructions & Scoring:

Rapid Arterial oCclusion Evaluation (RACE) Stroke Severity Scale

Stroke is a leading cause of serious long-term disability and the fifth leading cause of death in the United States. Learning to recognize stroke, rate its severity, and transport a patient to the proper hospital is a fundamental contribution EMS can make in stroke management. Several stroke severity scales have been developed to help EMS do just this.

If a prehospital stroke screen is positive, EMS providers should assess severity by using a stroke severity scale. The RACE Stroke Severity Scale is one of several nationally recognized stroke severity scale options. Like all stroke severity scales, the purpose of the RACE Scale is to help EMS identify patients whose symptoms may be due to a Large Vessel Occlusion (LVO), and may benefit from mechanical thrombectomy – an endovascular therapy shown to improve outcomes for select LVO patients.

| Item | Instruction | Result | Score |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| | Ask the patient to show | Absent facial palsy (Facial movement symmetrical) | 0 |
| Facial Palsy | his or her teeth, or to | Mild facial palsy (Facial movement slightly asymmetrical) | 1 |
| | smile. | Moderate/severe facial palsy (Facial movement completely asymmetrical) | 2 |
| Arm Motor Function | Patient extends his or her arms, to 90 degrees if sitting or 45 degrees if lying on his or her back*. | Normal/mild arm motor dysfunction (Upholds both arms <a>\sigma 10 \text{ seconds}\) Moderate arm motor dysfunction (Upholds either arm <10 \text{ seconds}\) Severe arm motor dysfunction (Unable to raise either arm against gravity) | 0 1 2 |
| Leg Motor Function | Patient separately raises his or her legs 30 degrees from the supine (lying on back) position*. | Normal/mild leg motor dysfunction (Upholds each leg ≥5 seconds) Moderate leg motor dysfunction (Upholds either leg <5 seconds) Severe leg motor dysfunction (Unable to raise either leg against gravity) | 0 1 2 |
| Head & Gaze Deviation | Ask the patient to look to the left, then to the right. | Absent: head & gaze deviation absent (Eye movement to both sides w/o head deviation) Present: head & gaze deviation present (Patient's eyes or head deviate to one side) | 0 |
| Aphasia (if right hemiparesis) | If right hemiparesis or without motor impairment: First ask the patient to close his or her eyes; Second ask the patient to make a fist with his or her left hand. | Absent aphasia (Performs both tasks correctly) Moderate aphasia (Performs one of two tasks correctly) Severe aphasia (Unable to perform either task correctly) | 0 1 2 |
| -OR- | -OR- | -OR- | -OR- |
| Agnosia (if left hemiparesis) | If left hemiparesis: First show the patient his or her left arm and ask, "Whose arm is this?"; Second ask the patient, "Can you move your arms and clap your hands?" | Absent agnosia (Recognizes arm and attempts to move weakened arm) Moderate agnosia (Does not recognize arm <u>or</u> is unaware of arm weakness) Severe agnosia (Does not recognize arm <u>and</u> is unaware of arm weakness) | 0 1 2 |
| Total Score | | | = Sum of items |

^{*}If the patient cannot lift his or her limbs, raise his or her limbs. Score according to the time the patient can maintain his or her limbs against gravity, without touching the bed or surface.

Pérez de la Ossa N, Carrera D, Gorchs M, et al. Design and validation of a prehospital stroke scale to predict large arterial occlusion: The Rapid Arterial Occlusion Evaluation Scale. Stroke. 2014; 45: 87-91.