

# Acute Stroke Screening Tools

To be utilized with Emergency Department Algorithm

## Complete FAST

Screening tool used for stroke recognition  
ONE positive screen is considered a positive FAST result



### FACE Unilateral facial droop

Ask the patient to smile

#### Positive Screen:

- Patient has a facial droop to one side



### ARM Unilateral arm/leg weakness or drift\*

Ask the patient to raise both of their arms, or walk a short distance

#### Positive Screen:

- Patient has arm/leg weakness on one side



### SPEECH Slurred speech, difficulty expressing words, word finding, or difficulty understanding

Ask the patient to repeat a simple phrase or follow a simple command

#### Positive Screen:

- Patient has slurred speech; difficulty expressing/finding words
- Patient has difficulty understanding simple phrases/commands



### TIME Time of last known well

Ask when was the last time someone saw or spoke with the patient before symptoms started or they were at their baseline state of health?

## Complete ACT-FAST

Screening tool used for stroke severity caused by large vessel occlusions  
Must complete all steps to be considered a positive ACT-FAST result

### Step One



Proceed if  
POSITIVE

If negative  
STOP

Notify ED  
Physician and  
continue with  
usual care



### ARM Unilateral Arm Weakness

Position both arms with elbows straight (45 degrees if supine, 90 degrees if sitting)

#### Positive Screen:

- One arm falls completely within 10 seconds
- For patients who are uncooperative or cannot follow commands: if you witness minimal or no movement in one arm and normal movement in the other

### Step Two



Proceed if  
POSITIVE

If negative  
STOP

Notify ED  
Physician and  
continue with  
usual care

### Unilateral RIGHT arm weakness?



### CHAT Severe Language Deficit

Ask patient to repeat a phrase or perform simple tasks

#### Positive Screen:

- Patient is mute, speaking gibberish and/or incomprehensible
- Patient is unable to follow simple commands

### Unilateral LEFT arm weakness?

### TAP Gaze and Shoulder Tap Test



Stand on patients weak side while assessing

#### Positive Screen:

- Patient has consistent gaze away from weak side
- Patient does not quickly turn head/eyes to you when shoulder tapped twice and first name called

### Step Three



If POSITIVE,  
potential LVO

### Eligibility for EVT

#### Positive screen: (if all criteria met)

- Deficits are NOT pre-existing (mild deficits now worse are acceptable as true deficits)
- Living at home independently with only minor assistance – must be independent with hygiene, personal care, walking (walking aids not included)
- Does NOT have stroke mimics: seizure preceding symptoms, hypoglycemia (glucose less than 2.8 mmol/L), active malignancy with brain lesions

### Supporting Information

- **Adapted from:** Ambulance Clinical Triage for Acute Stroke Treatment – Zhao et al. Stroke 2018;49:945-951
- **Acute Stroke Toolkit Education Resources:** Reference FAST\*; Last Known Well; Large Vessel Occlusion Screening Tools
- **Acronyms:** ED: Emergency Department; LVO: Large Vessel Occlusion; EVT: Endovascular Thrombectomy
- **Canadian Stroke Best Practice Recommendations:** Acute Stroke Management, 6<sup>th</sup> Edition, Update 2018