



Thunder Bay Regional
Health Sciences
Centre

CANADIAN NEUROLOGICAL SCALE

Place Patient Label with
Barcode Here

DATE:

TIME:

PUPILS	Size (right/left)																		
	Light Reaction B = Brisk, S = Sluggish, F = Fixed																		
MENTATION	Level of Consciousness	Alert 3.0																	
		Drowsy 1.5																	
SECTION A	Orientation	Oriented 1.0																	
		Disoriented or non applicable 0.0																	
	Speech	Receptive deficit 0.0 (Proceed to Section A2)																	
		Expressive deficit 0.5																	
		Normal 1.0																	
MOTOR FUNCTION	Face: Asymmetry	None 0.5																	
		Present 0.0																	
	Arm: Proximal	None 1.5																	
		Mild 1.0																	
		Significant 0.5																	
		Complete 0.0																	
	Arm: Distal	None 1.5																	
		Mild 1.0																	
		Significant 0.5																	
		Complete 0.0																	
	Leg: Proximal	None 1.5																	
		Mild 1.0																	
Significant 0.5																			
Complete 0.0																			
Leg: Distal	None 1.5																		
	Mild 1.0																		
	Significant 0.5																		
	Complete 0.0																		
MOTOR FUNCTION	Face:	Symmetrical 0.5																	
		Asymmetrical 0.0																	
	Arms:	Equal 1.5																	
		Unequal 0.0																	
	Legs:	Equal 1.5																	
		Unequal 0.0																	
SECTION A2	RECEPTIVE DEFICIT	A + A1 or A + A2 =	TOTAL																
	MAXIMUM SCORE = 11.5	Initials																	



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Barcode Here

CANADIAN NEUROLOGICAL SCALE (CNS) DOCUMENTATION GUIDELINES

Purpose: Monitor the alert and/or drowsy stroke patient. Exclude stuporous or comatose patients instead use the Adult Neurological Observation Record (CS-155)

Terminology: **ALERT:** Normal level of consciousness for patient. **DROWSY:** When stimulated verbally, the patient remains awake and alert for short periods, but tends to doze. **STUPOROUS:** Responds to loud verbal stimuli and/or strong touch; may vocalize, but does not completely wake up. **COMATOSE:** Responds to deep pain with purposeful movement, non-purposeful movement and/or no response.

PUPILS: Record size and reaction to light stimulus of each pupil.

SECTION A: MENTATION

Level of Consciousness:

- **Score = 3.0** Alert
- **Score = 1.5** Drowsy

Orientation: Speech may be slurred/mispronounced BUT must be intelligible for a score of 1.0. Ask the patient (repeat twice in necessary) "Where are you?" and "What is the month and year?" Appropriate non-verbal answers are acceptable.

- **Score = 1.0** both responses are correct
- **Score = 0.0** if any response is incorrect

Speech: Note that speech may be slurred (dysarthric) but must be intelligible to be scored as normal.

Receptive Language: Ask the patient to "close your eyes," "point to the ceiling" and "Does a stone sink in water?" Repeat the question twice, if necessary, but do NOT demonstrate.

- **Score = 0.0** any incorrect answer. **Proceed to Section A2 (do not complete Section A1)**

Expressive Language: Pay close attention to word pronunciation. With speech that is totally or partially unintelligible (severe dysarthria) an expressive deficit exists.

Using a pen, key and watch, ask the patient to name each object and then have the patient state what one does with each of the items.

- **Score = 1.0** normal (all 6 answers correct)
- **Score = 0.5** expressive deficit (any incorrect answer)

Proceed to Section A1

SECTION A1: MOTOR FUNCTION: EXPRESSIVE DEFICIT or NORMAL SPEECH

(Test both limbs and record the side with worst deficit.)

Face: Ask the patient to smile/grin. Observe for asymmetry.

- **Score = 0.5** smile/grin symmetrical
- **Score = 0.0** significant facial asymmetry

Arm (Proximal): Position sitting or lying. Ask the patient to lift arms to shoulder level (90°). Instruct the patient to resist as you apply pressure just above the elbows.

- **Score = 1.5** no weakness
- **Score = 1.0** able to move 90° but unable to resist pressure
- **Score = 0.5** able to move
- **Score = 0.0** absence of motion in arm

Arm (Distal): Position sitting or lying, with arms outstretched. Have patient flex "cock-back" wrist. While supporting patient's arms apply pressure between wrist and knuckles.

- **Score = 1.5** no weakness
- **Score = 1.0** unable to oppose pressure on wrist
- **Score = 0.5** some finger movement
- **Score = 0.0** absence of movement

Leg (Proximal): Position patient lying down. Bring thigh towards body; keep knee flexed and heel off bed. Now push down on thigh. Repeat with other leg.

- **Score = 1.5** no weakness
- **Score = 1.0** able to lift leg, but unable to resist pressure
- **Score = 0.5** only lateral leg movements
- **Score = 0.0** absence of all movement in leg

Leg (Distal): Position patient lying down with toes and feet pointed towards head. Push down on each foot.

- **Score = 1.5** no weakness
- **Score = 1.0** able to point foot/toes upward but cannot resist pressure.
- **Score = 0.5** cannot lift foot, but has some movement of toes
- **Score = 0.0** absence of all movement in foot.

SECTION A2: MOTOR FUNCTION: Receptive Deficit

(Test both limbs and record the side with worst deficit.)

Face: Have the patient mimic your own grin. If patient is unable to follow you, observe the facial response to pain when pressure applied to sternum.

- **Score = 0.5** smile/grin symmetrical
- **Score = 0.0** asymmetrical facial movements

Arms: Demonstrate or place patient's arms outstretched in front of him/her at 90°. If the patient is unable to cooperate compare responses to noxious stimulus (Example: when pressure is applied to nailbeds on each side.)

- **Score = 1.5** able to maintain position equally in both arms for 5 seconds or if the patient withdraws equally on both sides to noxious stimulus.
- **Score = 0.0** unable to maintain arm position and/or weakness is noted on one side. Unequal withdrawal to pain in response to noxious stimuli.

Legs: Position thighs toward trunk with knees flexed. If the patient is unable to cooperate, compare response when nailbed pressure is applied to each side.

- **Score = 1.5** able to maintain position for five seconds or withdraws equally to noxious stimulus on each side.
- **Score = 0.0** unable to maintain fixed position or withdraws unequally to noxious stimulus on each side.

SCORING:

A+A1 – Expressive Deficit or Normal Speech

A+A2 – Receptive Deficit

Minimum score = 1.5

Maximum score = 11.5

Guidelines: (1) Label form. (2) Form is filled out by Registered Nurse or Registered Practical Nurse when monitoring stroke patient. (3) Completed form to be filed on patient chart in Flowsheet Section.