

● DIANE'S NGN NCLEX 2026 VISUAL STUDY LIBRARY ● NEUROLOGICAL CLUSTER · CARD 11

The Glasgow *Coma Scale*

A standardized 15-point neurologic assessment of consciousness — built on three pillars: Eye opening, Verbal response, and Motor response. The lower the score, the higher the priority.

SYSTEM: NEURO

HIGH-YIELD · NGN 2026

CLINICAL JUDGMENT

PRIORITY SETTING

Source Note: This topic is not present in Diane's uploaded reference notes. Content is drawn from standard NGN NCLEX 2026 references — Saunders Comprehensive Review (8th ed.), ATI Adult Medical-Surgical Nursing, Lippincott Manual of Nursing Practice, and AANN Neuroscience Nursing Core Curriculum.

1 Definition & Overview

WHAT IT IS · WHY IT MATTERS

- The **Glasgow Coma Scale (GCS)** is a **standardized objective tool** used to assess and monitor a client's level of consciousness following brain injury, stroke, or any altered mental status.
- It scores **three independent components** — Eye opening, Verbal response, and Motor response — that are summed for a total ranging from **3 (deep coma)** to **15 (fully alert)**.
- **Why it matters:** GCS drives priority decisions. A score of **8 or less = intubate**. Trends are more important than a single number — a falling GCS signals deterioration.

THE 3-15 SCORING BAND

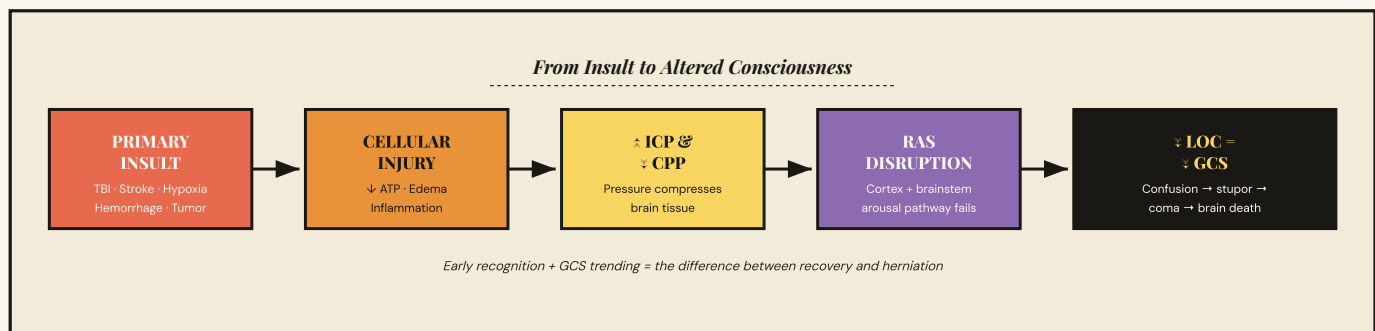


Lowest possible score is **3** — never zero. Every patient gets at least 1 point per category.

2 Pathophysiology — Why LOC Changes

THE PATHWAY FROM INSULT TO COMA

Consciousness depends on an intact **reticular activating system (RAS)** in the brainstem and functioning cerebral cortex. Any disruption to perfusion, oxygenation, structure, or chemistry along this pathway depresses LOC.



3

The Three Components — How to Score

ALWAYS DOCUMENT AS E + V + M (E.G., E3V4M5 = 12)

Score the **BEST response** in each category. Use a stepwise stimulus: **voice → touch → pain**. Always document the components separately, not just the total.

E Eye Opening SCORE 1–4	V Verbal Response SCORE 1–5	M Motor Response SCORE 1–6
4 Spontaneous — eyes open without stimulus	5 Oriented × 4 — person, place, time, situation	6 Obeys commands — "squeeze my fingers"
3 To sound / voice command	4 Confused conversation — answers but disoriented	5 Localizes to pain — reaches toward stimulus
2 To pain / pressure (trapezius pinch, nail bed)	3 Inappropriate words — random, no conversation	4 Withdraws from pain — pulls away
1 No response to any stimulus	2 Incomprehensible sounds — moans, groans	3 Abnormal flexion — decorticate posturing
	1 No verbal response · (T = intubated)	2 Abnormal extension — decerebrate posturing
		1 No motor response — flaccid

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Score Interpretation

FROM MILD TO SEVERE — CLINICAL MEANING

SCORE	SEVERITY	CLINICAL MEANING
15	Normal	Fully alert & oriented
13–14	Mild	Mild impairment · monitor closely
9–12	Moderate	Moderate impairment · stupor
≤ 8	Severe	 Coma — intubate to protect airway
3	Deep Coma	Lowest possible · grim prognosis

⚠️ A drop of **2 or more points** from baseline is a critical change — notify the provider **immediately**.

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Signs & Symptoms

POSTURING = LATE, OMINOUS FINDING

DecorTICATE

Motor = 3



Arms flexed to **core** — toward the heart. Damage to cerebral cortex / hemispheres.
Better prognosis than decerebrate.

DecerEBRATE

Motor = 2



Arms **extended & rotated outward**. Damage to brainstem. 
Worse prognosis — herniation pending.



RED FLAG

Progression from decorticate → decerebrate → flaccid = neurologic deterioration. Notify provider **immediately** — herniation is imminent.

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Priority Nursing Interventions

ABC FRAMEWORK · ACTION VERBS · NCLEX PRIORITY ORDER

A

AIRWAY

GCS $\leq 8 \rightarrow$ **intubate**. Position head midline, neutral. Suction PRN.

B

BREATHING

Monitor RR, SpO₂, ABGs. Goal PaO₂ > 60 , PaCO₂ 35–45 to prevent $\uparrow$ ICP.

C

CIRCULATION

Maintain MAP ≥ 70 for cerebral perfusion. Avoid hypotension.

- **Assess GCS** at minimum every 2 hours (more often if unstable or post-op) — and **trend** the score, don't just record it.
- **Document each component separately** (E_V_M_). A total of "8" tells you very little; "E2V2M4" tells you everything.
- **Use stepwise stimulus**: start with voice $\rightarrow$ light touch $\rightarrow$ painful stimulus (trapezius squeeze, supraorbital pressure, nail bed pressure). **Never use sternal rub** per current AANN guidelines — can bruise and isn't reliable.
- **Elevate HOB to 30°**, keep head/neck midline to promote venous drainage and reduce ICP.
- **Assess pupils** (PERRLA), motor strength, and brainstem reflexes *alongside* GCS — GCS does not assess pupils or brainstem function.
- **Notify provider** for any drop ≥ 2 points, new posturing, pupillary change, Cushing's triad ($\uparrow$ BP with widened pulse pressure, $\downarrow$ HR, irregular respirations), or GCS ≤ 8 .
- **Protect from injury**: side rails up, bed low, seizure precautions, prevent aspiration (NPO if GCS < 8 or unable to protect airway).
- **Document hindrances**: intubation (T), facial trauma, eye swelling (C — closed), aphasia, sedation, paralytics — these affect scoring and must be noted.

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Pharmacology — Drugs That Alter GCS

WATCH FOR FALSELY DEPRESSED SCORES

Many medications artificially lower GCS by depressing CNS function. Always document medications given before assessing — and consider their effects when interpreting the score.

DRUG / CLASS	MECHANISM (SIMPLE)	KEY SIDE EFFECTS	NURSING CONSIDERATIONS
Opioids (morphine, fentanyl)	Bind μ -receptors → CNS depression, analgesia	↓ LOC, ↓ RR, miosis (pinpoint pupils), hypotension	Have naloxone at bedside; monitor RR before/after dose
Benzodiazepines (midazolam, lorazepam)	Potentiate GABA → sedation	↓ LOC, respiratory depression, amnesia	Antidote: flumazenil ; titrate to LOC (per your Titration notes)
Propofol	GABA agonist → rapid sedation	Hypotension, ↑ triglycerides, PRIS	Monitor any -ase enzymes & triglycerides (per your notes)
Mannitol (osmotic diuretic)	Pulls fluid from brain → ↓ ICP	Diuresis, electrolyte shifts, rebound ICP	Use filter needle ; monitor serum osmolality & I&O hourly
Hypertonic Saline (3%)	↑ Serum osmolality → pulls fluid from brain	Hypernatremia, fluid overload, phlebitis	Central line preferred; check Na+ q6h
Phenytoin (Dilantin)	Stabilizes neuronal membranes → seizure prevention	Gingival hyperplasia, nystagmus, ataxia, ↓ LOC if toxic	Therapeutic level 10–20 mcg/mL; IV only with NS, slow push
Paralytics (vecuronium, rocuronium)	Block NMJ → flaccid paralysis	Patient can't move — GCS motor invalid	Always pair with sedation; document "P" for paralyzed

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NCLEX Test Traps ⚠️

WRONG VS RIGHT — WHAT STUDENTS CONFUSE

❌ **TRAP** Reporting only the total GCS — "Score is 10."



✅ **CORRECT** Document **E_V_M_** separately. E3V3M4 ≠ E1V4M5. The component pattern shows what's failing.

❌ **TRAP** Using **sternal rub** to elicit a pain response.



✅ **CORRECT** Use **trapezius pinch, nail bed pressure, or supraorbital pressure**. Sternal rub causes bruising and is no longer recommended.

❌ **TRAP** Confusing **decorticate (flexion)** with **decerebrate (extension)**.



✅ **CORRECT** "Corticate = arms to the **core** (heart) = better." "Decerebrate = E for Extension = worse."

❌ **TRAP** Calling GCS 8 "borderline" and waiting to see.



✅ **CORRECT** "**GCS of 8, intubate.**" Score ≤ 8 = unable to protect airway. Anticipate intubation immediately.

❌ **TRAP** Recording the score as zero when patient is unresponsive.



✅ **CORRECT** **Minimum score is 3**, never 0. Even a dead patient on paper would score 3 (1+1+1).

❌ **TRAP** Scoring eye opening when both eyes are swollen shut.



✅ **CORRECT** Document "**C**" (closed) — not 1. Likewise: "**T**" for intubated verbal response, "**P**" for paralyzed motor.

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Patient & Family Education

SETTING EXPECTATIONS · SUPPORTING RECOVERY



For the Family

- **Speak normally** to the patient — hearing is the last sense to go, even in coma.
- **Avoid arguing** or contradicting a confused patient (V=4). Reorient calmly to person, place, and time.
- Explain that **frequent neuro checks** (every 1–2 hours, even at night) are essential — not a sign of worsening.
- A **single score is not the whole picture** — trends over time matter most.
- Encourage **quiet, calm environment**; cluster care to allow rest.



For the Patient (if able)

- Report **headache, blurred vision, nausea**, or worsening confusion.
- **Don't bear down** (Valsalva) — straining at stool, coughing increases ICP. Stool softeners as prescribed.
- Take **seizure medications** exactly as ordered; never stop abruptly.
- Follow up for **cognitive rehab** if needed; recovery is gradual.
- No driving or alcohol until cleared.

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Memory Mnemonics

PATTERN RECOGNITION · QUICK RECALL

"EVM 4-5-6"

E 4 **V** 5
M 6

Maximum points in alphabetical order. **Eye** = 4 **Verbal** = 5 **Motor** = 6. Total = 15.

"GCS 8 — Intubate"

≤ 8 → **E**
T

The most-tested rule. Eight or below = patient cannot protect the airway. **Anticipate intubation.**

"Core vs Extend"

D **C** **vs** **D**
E

De-COR-ticate = arms to **core** (better). **De-cerEBRATE** = **E**xtended (worse). Both are bad — extension is worse.

"Spell SAVED"

S **A** **V** **E**
D

Spontaneous · **A**ddressed (voice) · **V**olent stimulus (pain) · **E**mpy (none) · **D**ocument it. The stepwise eye-opening cue.

★ NEXT GENERATION NCLEX · CLINICAL JUDGMENT MEASUREMENT MODEL

NCJMM Scenario: *Falling GCS After a Fall*

Case: A 62-year-old client is admitted to the medical-surgical unit following a ground-level fall with a brief loss of consciousness. Initial GCS on arrival: **E4 V5 M6 = 15**. Two hours later, the nurse reassesses and finds the client difficult to arouse. New assessment: eyes open only to painful stimulus, speaks incomprehensible sounds, and withdraws from pain. BP 168/72, HR 54, RR 10 and irregular, pupils unequal (L 5mm, R 3mm).

1

Recognize Cues

Current GCS = **E2 V2 M4 = 8** (drop of 7 points). Cushing's triad: **↑ BP w/ widened pulse pressure, ↓ HR, irregular RR**. Anisocoria (unequal pupils). All point to **↑ ICP and impending herniation**.

2

Analyze Cues

The 7-point GCS drop, Cushing's triad, and pupillary asymmetry indicate **rapidly evolving intracranial hemorrhage** (likely epidural or subdural hematoma post-fall). Patient can no longer protect airway at GCS 8.

3

Prioritize Hypotheses

#1 priority: ↑ ICP with impending herniation. Differentials (less likely): metabolic encephalopathy, seizure, hypoglycemia. Airway is the immediate threat — **GCS ≤ 8 = intubate**.

4

Generate Solutions

Notify provider **STAT**. Anticipate: emergent intubation, head CT, mannitol or 3% saline, HOB 30° midline, seizure precautions, neurosurgery consult, ICP monitor placement.

5

Take Action

Call Rapid Response. **Protect airway** — position, suction, prepare intubation supplies. Elevate HOB 30°, keep head midline. Establish 2nd IV. Draw labs (CBC, BMP, coags, type & cross). Stay at bedside.

6

Evaluate Outcomes

Reassess GCS, pupils, and vital signs every 15 min. **Target outcomes:** airway secured, MAP ≥ 70, ICP < 20, GCS stabilized or improving post-intervention, pupils equal and reactive, no further deterioration.