

Neurological observations in adults: Indications and required frequency

Schedule A	Guidance notes	When and how to escalate
<p><i>Perform neuro obs</i></p> <ul style="list-style-type: none"> Half-hourly until GCS 15 Half-hourly for next 2h One-hourly for next 4h Two-hourly thereafter Go back to the top if GCS deteriorates at any time 	<ul style="list-style-type: none"> The standard screening tool for disorders of consciousness (DOC) is the ACVPU scale that forms part of NEWS Regular, more detailed neurological observations (AKA 'neuro obs') are required in patients with head injury, other suspected structural brain problems or raised ICP and those with no appropriate response to verbal stimuli The frequency at which neuro obs should be repeated depends on particular clinical scenario, whether or not a CT-head is needed, and (if applicable) acute CT findings There are three different neuro obs 'schedules' (shown on the left). Use the table below to decide which one to use. In ALL patients who are not fully alert on first assessment, discuss the appropriate schedule with a senior ED clinician Intubated patients do not require neuro obs If CFS 7-9 or end-of-life, agree individualised approach that respects the patient's wishes with a senior ED clinician DO NOT discharge patients with a recorded <i>new</i> GCS of less than 15 without a further documented GCS of 15 Alcohol intoxication often leads to significant underestimation of the GCS, but with appropriate stimulation (e.g. firm, sustained 'trapezius squeeze') patients are often rousable or verbalise and are able to localise pressure 	<p>If you observe any of the below, get another nurse to check your findings immediately</p> <ul style="list-style-type: none"> A drop of 1 point in GCS score (especially if in the motor score) that lasts at least 30min Any drop of 2 or more points in the motor score Any drop of 3 or more points in the eye opening or verbal score Agitation or abnormal behaviour Severe or increasing headache Persistent vomiting New or increasing pupil inequality New or increasing asymmetry of limb or facial movement <p>If your colleague confirms your findings (or if no other nurse is available), please notify your area's medical lead, an ED consultant or the EPIC at once</p>
<p>Schedule B</p> <p><i>Perform neuro obs</i></p> <ul style="list-style-type: none"> One-hourly if GCS 13-15 Repeat after 30min if latest GCS lower than previous one Half-hourly if GCS 12 or less 		
<p>Schedule C</p> <p><i>Perform ACVPU if appropriate response to verbal stimuli</i></p> <p>Change to full neuro obs half-hourly if there is no appropriate response to verbal stimuli</p>		

Neuro obs requirements

		Imaging needs and (if applicable) findings			
		If no CT head required	If CT head indicated or decision awaited	After CT head (if applicable)	
		(OR presenting more than 48h after symptom onset AND GCS 15)	(AND presenting within 48h of symptom onset OR GCS <15)	New abnormality reported	No new abnormality reported
<i>Please note that a complete set of neuro obs includes ALL of the below:</i>					
<ul style="list-style-type: none"> Glasgow Coma Scale (GCS) Pupil size & response to light Limb movement assessment A current NEWS score 					
Suspected structural brain problem or raised intracranial pressure (ICP)	Suspected stroke	Initial GCS, then four-hourly and before leaving in ED			
	Seizures	Half-hourly until GCS 15	Schedule A	Schedule B	Schedule C
	Headache	GCS initially only	Schedule A	Schedule B	Schedule C
	Confusion on anticoagulant				
	Known or suspected brain tumour or metastases				
	Suspected CNS infection				
	Suspected blocked VP shunt	GCS initially only	Schedule A	Schedule A	Schedule A (but stop if GCS 15 once CT reported)
	Raised ICP of other causes				
Non-structural brain problem likely	OD with CNS depressant	Schedule B UNLESS patient is fully alert			
	Alcohol intoxication	Schedule C BUT if any suspicion of head injury, follow Schedule A instead			
	Any other presumed non-structural causes of a reduced level of consciousness (e.g. sepsis or hypoglycaemia)	Schedule C			