SEDATION & DELIRIUM

Analgesia-first · Light sedation · ABCDEF bundle

PAIN *first*

RASS

Richmond Agitation-Sedation Scale · target 0 to -2

Score	Term	Description
+4	Combative	Violent; danger to staff
+3	Very agitated	Pulls / removes tubes; aggressive
+2	Agitated	Non-purposeful movement; fights vent
+1	Restless	Anxious, not aggressive
0	Alert & calm	-
-1	Drowsy	Awakens > 10 s to voice
-2	Light sedation	Awakens < 10 s to voice
-3	Moderate	Moves to voice, no eye contact
-4	Deep	Responds to physical stimulus only
-5	Unarousable	No response to voice or physical

CAM-ICU

Confusion Assessment Method - ICU

Assess only if RASS ≥ -3

Delirium = (1 AND 2) + (3 OR 4)

1 Acute onset
or fluctuating course of mental status

2 Inattention
errors on the letter squeeze test

3 Altered consciousness
any RASS other than 0

4 Disorganised thinking
fails logic questions / command

Pain tools: BPS = Behavioural Pain Scale · CPOT = Critical-Care Pain Observation Tool · SAT = Spontaneous Awakening Trial · SBT = Spontaneous Breathing Trial

THE ABCDEF BUNDLE

higher compliance → lower mortality

- **A** Assess & manage Pain
- **B** Both SAT + SBT
- **C** Choice of sedation (light, non-benzo)
- **D** Delirium: assess & manage
- **E** Early mobility & exercise
- **F** Family engagement

SEDATION STRATEGY

- **Pain first -** score with BPS or CPOT; treat pain before adding a sedative
- **Target light -** RASS 0 to -2; daily SAT paired with the SBT
- **Non-benzo -** propofol or dexmedetomidine over benzodiazepines
- **2025 update -** dexmedetomidine over propofol when delirium is the priority

DELIRIUM: DO THIS

- **Screen -** every shift with CAM-ICU or ICDSC
- **Treat causes -** pain, hypoxia, sepsis, Na / glucose, withdrawal, drugs
- **Stop -** benzodiazepines and anticholinergics
- **Non-pharmacological FIRST -** reorient, mobilise, sleep, family, remove lines
- **Antipsychotics -** NOT routine; reserve for dangerous agitation

DRUG DOSES

adult; titrate to effect

Agent	Dose	Notes
Propofol	5-50 mcg/kg/min	Fast off; PRIS, ↓BP, hypertriglyceridaemia
Dexmedetomidine	0.2-1.4 mcg/kg/h	Light sedation; bradycardia, ↓BP; no respiratory depression
Fentanyl	25-100 mcg/h	Analgesia-first; bolus 25-50 mcg
Morphine	1-5 mg/h (bolus 2-4)	Avoid in renal failure (active metabolite)
Ketamine	0.1-0.5 mg/kg/h	Opioid-sparing analgesic adjunct; bronchodilator
Midazolam	0.02-0.1 mg/kg/h	Reserve: withdrawal, status; accumulates
Haloperidol	2-5 mg IV PRN	Agitation only, not prophylaxis; watch QTc

MULTIMODAL ANALGESIA (opioid-sparing): scheduled paracetamol, ketamine, regional / neuraxial blocks, dexmedetomidine, gabapentinoids for neuropathic pain; reserve opioids for boluses. Less opioid = less delirium, ileus and ventilator time.

PEARLS & PITFALLS

- Pain first: agitation is often untreated pain, not inadequate sedation.
- Do not run CAM-ICU on a deeply sedated patient (RASS -4/-5) - lighten first, then assess.
- Deeper is not safer - over-sedation prolongs ventilation, delirium and ICU stay.
- Antipsychotics do not prevent or shorten delirium; benzodiazepines are the most modifiable risk.

References: PADIS 2018 + 2025 Update · SCCM ICU Liberation (ABCDEF) · RASS 2002 · CAM-ICU 2001.

Educational aid; verify doses against local protocol and patient factors.