ICR-PREV-032

Quality & safety

Updated 21 Jun 2026

CRITICAL CARE PREVENTION BUNDLES

Prevention Protocols

Standard prevention bundles for every ICU patient. The discipline is the same across all nine: assess the indication daily, apply the bundle, and de-escalate the moment the indication ends. Run the Daily Prevention Checklist on rounds. Adapt every threshold to your institutional policy.

FOR ALL Apply to every ICU admission unless specifically contraindicated. For each domain — **assess** the indication / risk daily, **document** it on rounds, and **de-escalate promptly** — stop prophylaxis and remove devices when the indication ends.

01 Stress ulcer prophylaxis (SUP)

INDICATIONS — START SUP IF ANY PRESENT

- [ ] Mechanical ventilation expected ≥ 48 h
- [ ] Coagulopathy — platelets < 50,000/µL, INR > 1.5 (not on warfarin), or aPTT > 2× normal
- [ ] History of recent GI bleed, or active GI bleed
- [ ] Severe shock, major trauma, TBI, spinal cord injury, major burns, or high-dose steroids (per local policy)

ORDERS — IF INDICATED AND NO CONTRAINDICATION

- [ ] **PPI** — pantoprazole `40 mg IV/PO daily`
- [ ] **OR H_2 blocker** — famotidine `20 mg IV/PO q12h` (renal adjust)

AVOID SUP if low bleeding risk, or high C. diff risk without a clear indication.

STOP Once extubated / hemodynamically stable and no ongoing major bleeding risk.

02 Venous thromboembolism (DVT/PE) prophylaxis

ASSUME RISK Assume ICU patients are **high VTE risk** unless clearly ambulatory and low-risk.

PHARMACOLOGIC — DEFAULT

- [ ] **Enoxaparin 40 mg SC daily** (adjust for CrCl and BMI per protocol)
- [ ] **OR UFH 5,000 units SC q8–12h** — preferred if `CrCl < 30` or when rapid reversal may be needed

HOLD / MODIFY FOR

- [ ] Significant thrombocytopenia (e.g., platelets `< 50,000/µL`), active bleeding, or high-risk procedures

MECHANICAL

- [ ] **SCDs** for all nonambulatory patients; alone if pharmacologic prophylaxis is contraindicated — verify in place & functioning `≥ once per shift`
- [ ] **Daily** — reassess bleed vs VTE risk; restart pharmacologic prophylaxis as soon as safe

03 Hospital-acquired pressure injury (HAPI)

ASSESSMENT

- [ ] Full skin exam within `4 h` of ICU admission, then **Braden** (or equivalent) `once per shift`
- [ ] Focus on sacrum, heels, occiput, scapulae, trochanters, elbows, and under devices

PREVENTION BUNDLE

- [ ] **Reposition ≥ q2h**; offload heels

- [ ] Pressure-redistributing mattress for all ICU beds; specialty surfaces for very high risk
- [ ] Moisture — prompt incontinence care + barrier creams; avoid friction / shear, use lift sheets
- [ ] **Device-related** — foam under masks, tubing, collars, restraints; daily "device-off" skin check when feasible
- [ ] Nutrition — dietitian consult for high risk; adequate calories / protein, enteral feeds or supplements

ESCALATE Wound-care consult for any suspected **stage ≥ 2** or deep-tissue injury; document skin checks and repositioning each shift.

04 CLABSI prevention

Insertion bundle

- [ ] Verify & document indication; hand hygiene before the procedure
- [ ] **Maximal sterile barrier** — cap, mask, gown, gloves, full-body drape
- [ ] **2% chlorhexidine in alcohol** skin prep; allow to dry
- [ ] Prefer **subclavian / IJ over femoral** when feasible and safe; ultrasound guidance when appropriate; standardized line kit / cart

Maintenance bundle

- [ ] Daily — confirm indication for each line; remove when no longer needed
- [ ] Transparent dressing + CHG disk; change **q7 days** or if soiled / loose (gauze **q2 days**)
- [ ] **Scrub the hub** with alcohol / CHG ≥ **15 s** before each access; change caps per protocol
- [ ] Strict aseptic technique; bundle blood draws to minimize entries

LINE ROUNDS Daily: "Does the patient still need this line?" · "Is the dressing clean, dry, intact?" · "Using minimal necessary lumens?"

05 CAUTI prevention

APPROPRIATE FOLEY INDICATIONS

- [ ] Acute urinary retention / obstruction
- [ ] Selected perioperative situations
- [ ] Precise hourly I/Os in unstable / vasopressor patients
- [ ] Severe perineal wounds / advanced pressure injuries needing moisture control

AVOID Use for incontinence, convenience, or workload alone.

INSERTION & MAINTENANCE

- [ ] Document indication; hand hygiene & sterile technique with catheter kit; smallest appropriate size; secure to prevent traction
- [ ] **Closed drainage system**, bag below bladder & off floor; daily perineal hygiene; no routine irrigation; verify necessity once per shift

REMOVAL — NURSE-DRIVEN WHEN ALLOWED

- [ ] Remove when no strict I/O or GU indication and patient stable
- [ ] Post-removal — bladder scan / intermittent straight cath protocol rather than reinsertion when possible

06 Ventilator-associated pneumonia (VAP)

APPLY TO All **intubated and trached** patients.

VENTILATOR BUNDLE

- [ ] **Head of bed 30–45°** unless contraindicated (spinal instability, severe shock)
- [ ] Daily sedation interruption + readiness-to-extubate — explicit sedation target (e.g., **RASS `0 to −1`**); perform daily **SAT / SBT** per protocol
- [ ] Oral care — antiseptic (chlorhexidine per institutional practice, often **q12h**); frequent oral suction; subglottic suction with appropriate tubes
- [ ] **ETT cuff pressure** within target range to prevent aspiration / mucosal injury; check at set intervals (e.g., **q8–12h**)
- [ ] Keep circuit closed; avoid routine circuit changes; drain condensate away from patient aseptically
- [ ] Early enteral nutrition when appropriate; avoid unnecessary high-volume gastric residual checks; manage aspiration risk per protocol

MOBILITY & WEANING

- [ ] Early mobilization — out-of-bed to chair / ambulation when feasible, even while intubated, with adequate staffing (overlaps with delirium)
- [ ] Daily structured SBT & extubation-readiness (oxygenation, hemodynamics, mental status, airway protection) — minimize ventilator days

07 Clostridioides difficile prevention

ANTIMICROBIAL STEWARDSHIP

- [ ] Daily antibiotic review — indication, spectrum, duration; de-escalate / narrow or discontinue when possible
- [ ] Avoid unnecessary double Gram-negative coverage and prolonged broad-spectrum therapy

ACID-SUPPRESSION STEWARDSHIP

- [ ] Discontinue SUP when no longer indicated (see Section 01)

INFECTION CONTROL

- [ ] Test only patients with clinically significant new diarrhea (not solely laxative effect)
- [ ] **Contact precautions** — gown & gloves for room entry; **soap-and-water** hand hygiene on exit (alcohol insufficient for spores)
- [ ] Bleach / sporicidal agents for environmental cleaning; dedicated or thoroughly disinfected equipment

08 Fall prevention

RISK ASSESSMENT

- [ ] On admission and daily — delirium, sedation level, weakness, hypotension, agitation, history of falls

BUNDLE

- [ ] **Environment** — bed low, brakes on; side rails as appropriate; call light & items within reach for alert patients; lines / tubes organized and secured
- [ ] **Monitoring** — bed / chair alarms in high-risk patients when feasible; close supervision during mobilization, toileting, transfers

- [ ] **Mobility** — PT/OT consult for early progressive mobilization; non-slip footwear, gait belt, staff assist for all out-of-bed activity

POST-FALL Immediate evaluation, imaging as indicated, provider notification, documentation, and brief root-cause analysis.

09 Delirium prevention & management

SCREENING

- [ ] **CAM-ICU** (or equivalent) at least once per shift; **RASS** or similar **q2–4h**

SEDATION / ANALGESIA STRATEGY

- [ ] Target **light sedation** (e.g., RASS 0 to −1) unless deeper sedation required; **analgesia-first** — adequate pain control before escalating sedatives
- [ ] Prefer **propofol or dexmedetomidine** over continuous benzodiazepines; minimize anticholinergics, high-dose steroids when possible

NONPHARMACOLOGIC PREVENTION BUNDLE

- [ ] **Orientation** — frequent reorientation, clocks / calendars, daylight; encourage family presence per policy
- [ ] **Sleep** — cluster nighttime care, reduce noise / light, avoid unnecessary nocturnal vitals / labs in stable patients; earplugs / eye masks when appropriate
- [ ] **Early mobility** — daily PT/OT & nursing protocol (bed exercises → dangle → stand → walk); ensure **glasses / hearing aids** in use

Pharmacologic treatment — dangerous hyperactive delirium only

- [ ] Low-dose antipsychotics per protocol (after QTc / drug-interaction review)
- [ ] Consider dexmedetomidine in ventilated patients with refractory agitation when appropriate — always combine with nonpharmacologic measures

FOR ROUNDS — ONCE DAILY

Daily ICU prevention checklist

Document once daily for each patient; many items are reassessed each shift.

01 SUP

- [ ] Indication present? On PPI/H_2 if indicated? Can stop today?

02 DVT prophylaxis

- [ ] Pharmacologic ordered/given? If not, reason? SCDs in place?

03 HAPI

- [ ] Braden done? Repositioning q2h? Device pressure points protected?

04 Central lines

- [ ] Indication for each line? Dressing clean/dry/intact? Remove any today?

05 Foley

- [ ] Present? Clear indication? System intact / bag positioned? Remove today?

06 VAP (if ventilated)

- [ ] HOB 30–45°? SAT/SBT done or planned? Oral care done? Cuff pressure in target? Mobility plan?

07 C. diff / stewardship

- [ ] New diarrhea? Testing appropriate? Antibiotics reviewed/narrowed? SUP without indication?

08 Falls

- [ ] Fall risk documented? Bed low/brakes/alarms? Mobility plan & assistance level?

09 Delirium

- [ ] CAM-ICU documented? RASS within target? Nonbenzo, analgesia-first strategy? Orientation, sleep hygiene, mobility, and aids (glasses/hearing) in place?

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Improving outcomes