

Nursing Clinical Cheat Sheets

Six one-page

Six quick-reference sheets: normal labs, ABG interpretation, electrolytes & imbalances, IV fluids, common meds by class, and ECG rhythm basics. One design system, one glance, six less-deep breath moments per shift.

Built by a 13-year ER night-shift nurse.

Print at 100% / actual size on US Letter (8.5 × 11 in) — do not fit to page.
Personal use only. Not a substitute for your facility's policies or professional judgment.

Normal Lab Values

Standard adult
assay.

Test	Normal adult range	Notes
WBC	4.5–11.0 K/ μ L	rises with infection, stress, steroids
RBC	M 4.7–6.1 / F 4.2–5.4 M/ μ L	anemia vs polycythemia
Hemoglobin	M 13.5–17.5 / F 12.0–15.5 g/dL	transfusion threshold varies by patient
Hematocrit	M 41–50% / F 36–44%	roughly 3 $\times$ Hgb
Platelets	150–400 K/ μ L	< 50K = bleeding risk discussion
Sodium	135–145 mEq/L	moves water; change slowly
Potassium	3.5–5.0 mEq/L	cardiac first; never IV push
Chloride	98–106 mEq/L	tracks Na and fluids
CO ₂ (bicarbonate)	22–29 mEq/L	metabolic buffer
BUN	7–20 mg/dL	hydration + renal
Creatinine	0.6–1.3 mg/dL	best single renal screen
Glucose (fasting)	70–100 mg/dL	capillary vs serum correlate
Calcium	8.5–10.5 mg/dL	correct for albumin
Magnesium	1.7–2.2 mg/dL	pairs with potassium
Phosphorus	2.5–4.5 mg/dL	refeeding risk if low
Albumin	3.5–5.0 g/dL	nutrition + oncotic pressure
AST / ALT	10–40 / 7–56 U/L	liver injury pattern
Alk phos	44–147 U/L	biliary / bone
Total bilirubin	0.3–1.2 mg/dL	liver + hemolysis
INR / PT / aPTT	0.8–1.2 / 9.5–13.5 s / 25–35 s	coagulation cascade
Troponin	assay-dependent	interpret per your lab; trend matters
Lactate	< 2.0 mmol/L	tissue perfusion
HbA1c	< 5.7%	3-month glucose picture

Memorize the handful that change management: K⁺, Na⁺, glucose, creatinine, troponin, lactate — let the page carry the rest.

ABG Interpretation

Read every b

Value	Normal
pH	7.35-7.45
PaCO ₂	35-45 mmHg (respiratory)
PaO ₂	80-100 mmHg
HCO ₃	22-26 mEq/L (metabolic)
Base excess	±2 mEq/L
SaO ₂	95-100%

- Step 1 — Is the pH acidemic (< 7.35) or alkalemic (> 7.45)?
- Step 2 — Which side matches? ROME: Respiratory Opposite (pH ↓ / PaCO₂ ↑), Metabolic Equal (pH ↓ / HCO₃ ↓).
- Step 3 — Is the other side compensating? (kidneys move HCO₃; lungs move PaCO₂)
- Step 4 — Check the anion gap: Na⁺ – (Cl⁻ + HCO₃⁻) — normal 8-12.

Pattern quick-table

Disorder	pH	PaCO ₂	HCO ₃
Respiratory acidosis	↓	↑	normal (early)
Respiratory alkalosis	↑	↓	normal (early)
Metabolic acidosis	↓	normal (early)	↓
Metabolic alkalosis	↑	normal (early)	↑

Suspicion + trend beats memorization: one gas is a snapshot, two gases are a story.

Electrolytes & Common Imbalances

Signs below

Ion (normal)	Too low — think	Too high — think	Nursing focus
Na ⁺ 135–145	confusion, weakness, seizures · losses, SIADH, dilution	thirst, agitation, seizures · dehydration, hypertonic fluids	slow correction; neuro checks
K ⁺ 3.5–5.0	U waves, weakness, ileus · diuretics, GI losses	peaked T, wide QRS · renal failure, cell breakdown, K-sparing drugs	cardiac monitor; never IV push K
Ca ²⁺ 8.5–10.5	tetany, Chvostek/Trousseau, tingling · hypoparathyroid, pancreatitis	stones, bones, groans, psychic moans · malignancy, hyperPTH	cardiac + neuromuscular checks
Mg ²⁺ 1.7–2.2	tremor, arrhythmia · losses, malnutrition	hyporeflexia, hypotension, bradypnea · renal failure	K ⁺ won't hold until Mg ²⁺ is fixed
PO ₄ ³⁻ 2.5–4.5	weakness, rhabdo risk · refeeding, alcohol	ectopic calcification · renal failure, tumor lysis	refeeding syndrome watch

Cardiac rhythm is the tiebreaker for K⁺, Ca²⁺, Mg²⁺ — when in doubt, put them on the monitor.

IV Fluids Quick Reference

Tonicity deci

Fluid	Tonicity	Key uses	Watch for
D5W	isotonic in bag; hypotonic once dextrose is metabolized	maintenance, drug mixing	glucose load; not for volume expansion
0.45% NaCl ($\frac{1}{2}$ NS)	hypotonic	maintenance, hyponatremia correction	rapid shifts → cerebral edema risk
0.9% NaCl (NS)	isotonic	volume expansion, blood administration, resuscitation	fluid overload, hyperchloremia
Lactated Ringer's (LR)	isotonic	surgery/trauma resuscitation	contains K^+ ; caution in hepatic failure
D5 $\frac{1}{2}$ NS	hypertonic in bag, ~isotonic once metabolized	maintenance with dextrose	glucose + free water
3% NaCl	hypertonic	severe symptomatic hyponatremia (ICU)	rate limits, central access, osmotic demyelination risk

Nobody gets “all the fluids” memorized — know tonicity, electrolytes, and when to slow down.

Common Meds by Class

Generic name

Class	Example generics	Key uses	Watch for
Beta-blockers	metoprolol, carvedilol, labetalol	HTN, rate control, HF	bradycardia, bronchospasm; don't stop abruptly
ACE inhibitors	lisinopril, enalapril	HTN, heart failure	cough, angioedema, K ⁺ /Cr bump
ARBs	losartan, valsartan	HTN, heart failure	similar to ACE, less cough
CCBs	amlodipine, diltiazem, verapamil	HTN, rate control	edema, bradycardia (non-DHP)
Loop diuretics	furosemide	fluid overload, HF	K ⁺ /volume loss, ototoxicity
Thiazides	hydrochlorothiazide	HTN	K ⁺ , Na ⁺ , glucose
Opioids	morphine, hydromorphone	pain	respiratory depression, hypotension
Benzodiazepines	lorazepam, midazolam	anxiety, seizures, sedation	sedation, respiratory depression
Anticoagulants	heparin, enoxaparin, warfarin, apixaban	clot prevention/treatment	bleeding; know the reversal agents
Antiplatelets	aspirin, clopidogrel	ACS, stroke prevention	bleeding
Antibiotics (examples)	ceftriaxone, vancomycin, pip-tazo, azithromycin	bacterial infection	allergy, renal dosing, infusion reactions
Bronchodilators	albuterol, ipratropium	bronchospasm	tachycardia, tremor
Corticosteroids	dexamethasone, prednisone	inflammation, airway	hyperglycemia, immunosuppression
Antiemetics	ondansetron, metoclopramide	nausea/vomiting	QT (ondansetron), EPS (metoclopramide)
Insulin	lispro, regular, NPH	glucose control	hypoglycemia
Acid suppressors	pantoprazole, famotidine	acid suppression	interactions, renal dose

ECG Rhythm Basics

Anchor number

Rhythm	Key ECG features	Think
Normal sinus	P before every QRS, 60–100 bpm	normal
Sinus brady	NSR pattern, < 60 bpm	vagal, meds, athletes — treat if symptomatic
Sinus tachy	> 100 bpm, P waves present	fever, pain, hypovolemia, anxiety
Atrial fibrillation	no P waves; irregularly irregular	rate control; anticoag; stroke risk
Atrial flutter	“sawtooth” flutter waves	rate control
SVT	regular narrow complex, ~150–250	vagal maneuvers, adenosine
1st-degree AV block	PR > 0.20 s, all beats conduct	usually benign
2nd-degree type I (Wenckebach)	PR lengthens until a QRS drops	often transient
2nd-degree type II	dropped beats, PR unchanged	may progress — watch closely
3rd-degree (complete)	atria and ventricles dissociated	unstable until paced
PVC	wide, premature QRS	frequency, ischemia, electrolyte check
V-tach	wide, regular, fast	pulse? → follow ACLS
V-fib	chaotic, no organized QRS	shock — follow ACLS
Asystole	flatline	confirm leads — follow ACLS

This is a memory anchor, not a protocol. Always follow your facility's ACLS algorithms and code policies.