

● PSYCH / MENTAL HEALTH NURSING · SUBSTANCE USE DISORDERS

NCLEX 2026 · HIGH-YIELD CLINICAL BRIEF · VOL. 01

# Alcohol Intoxication & Withdrawal

*A clinical-judgment brief for the next-gen NCLEX — pathophys, priorities, pharm, & traps.*

PATHOPHYS

PHARM

RED FLAGS

TEST TRAPS

Chronic alcohol use rewires inhibitory and excitatory balance in the CNS. Abrupt cessation unmasks unopposed excitation — the pathway from tremor → seizure → delirium tremens. Recognize the timeline. Treat early. Save the airway.

DT MORTALITY (UNTREATED)

15%

*"A medical emergency — not a behavior problem."*

01

DEFINITION · OVERVIEW

## What it is & why it matters



**Alcohol** is a CNS depressant. **Alcohol Use Disorder (AUD)** is a chronic, relapsing brain disorder — compulsive drinking, loss of control, and physiologic dependence.

**Intoxication** = acute CNS depression after recent heavy intake. **Withdrawal** = CNS hyperexcitability after abrupt cessation in a dependent drinker.

*Why it matters:* untreated severe withdrawal (DT) carries up to 15% mortality. Early identification and benzodiazepine therapy are lifesaving.

DSM-5-TR CATEGORY

CIWA-AR ASSESSMENT

LIFE-THREATENING IF UNTREATED

# 02

PATHOPHYSIOLOGY · SIMPLIFIED

## From chronic use to delirium tremens

*Alcohol is a **GABA agonist** and **NMDA antagonist**. The brain adapts. When alcohol is removed, the adaptation becomes a storm.*

|                                                                                                      |                                                                                                    |                                                                                                             |                                                                                                          |                                                                                                              |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>STEP 1</b><br><b>Chronic Alcohol Use</b><br>↑ GABA inhibitory tone<br>↓ NMDA/glutamate excitation | <b>STEP 2</b><br><b>CNS Adapts</b><br>Down-regulates GABA receptors<br>Up-regulates NMDA receptors | <b>STEP 3</b><br><b>Tolerance</b><br>More alcohol needed for the same effect; physical dependence develops. | <b>STEP 4</b><br><b>Abrupt Cessation</b><br>GABA brake is removed. Excess NMDA receptors fire unopposed. | <b>STEP 5</b><br><b>Hyperexcitability</b><br>Tremor → autonomic surge<br>→ seizure → <b>Delirium Tremens</b> |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|

**Key insight:** Thiamine stores are depleted in chronic alcoholism because alcohol blocks GI absorption and replaces caloric intake. Giving IV dextrose before thiamine can precipitate **Wernicke encephalopathy** — confusion, ophthalmoplegia, ataxia.

# 03

SIGNS & SYMPTOMS

## Intoxication vs. Withdrawal



### Intoxication

CNS DEPRESSION

BAC 0.05–0.15

**Mild:** euphoria, disinhibition, slurred speech, mild ataxia, ↓reaction time, impaired judgment.

BAC 0.15–0.30

**Moderate:** nystagmus, marked ataxia, emotional lability, slowed cognition, N/V.

BAC > 0.30

**Severe:** stupor → coma, **respiratory depression**, **AIRWAY**, aspiration risk, hypothermia, hypoglycemia.

BAC > 0.40

**Potentially fatal** — apnea, cardiovascular collapse **DEATH RISK**.



### Withdrawal

CNS HYPERACTIVITY

6–12 hr

**Minor:** tremors, anxiety, insomnia, N/V, sweating, ↑HR, ↑BP, headache.

12–24 hr

**Alcoholic hallucinosis:** visual/tactile hallucinations — *sensorium & orientation intact*.

24–48 hr

**Withdrawal seizures:** generalized tonic-clonic, often single **SEIZURE**.

48–96 hr

**Delirium Tremens:** severe confusion, disorientation, hallucinations, fever, tachycardia, HTN, diaphoresis **EMERGENCY**.

### ⌚ WITHDRAWAL TIMELINE — LAST DRINK →

6–12 HR

#### Tremors

Anxiety, sweating, ↑VS

12–24 HR

#### Hallucinations

Visual/tactile, oriented

24–48 HR

#### Seizures

Generalized tonic-clonic

48–96 HR

#### Delirium Tremens

Confusion + autonomic storm

# 04

## PRIORITY NURSING INTERVENTIONS

# ABCs, safety & clinical judgment

### ✦ Acute Intoxication

- ★ **Airway first:** position side-lying (lateral recumbent) to prevent aspiration.
- ★ **Monitor** RR, SpO<sub>2</sub>, LOC continuously — watch for **respiratory depression**.
- ☐ **Check** blood glucose & core temperature (hypoglycemia & hypothermia are common).
- ☐ **Assess** for trauma / head injury — intoxication masks signs.
- ☐ **Never** leave an intoxicated patient unattended. Raise side rails.
- ☐ **Administer** IV fluids & thiamine as ordered — *thiamine before dextrose*.

### ⚡ Alcohol Withdrawal

- ★ **Assess** with **CIWA-Ar** scale q1–4h; score > 8 triggers medication per protocol.
- ★ **Seizure precautions:** padded side rails, suction & O<sub>2</sub> at bedside, low bed.
- ☐ **Administer** benzodiazepines on schedule or symptom-triggered (per CIWA-Ar).
- ☐ **Environment:** quiet, well-lit, minimal stimuli — reduces illusions & anxiety.
- ☐ **Reorient** frequently. Calm, simple speech. Same caregiver when possible.
- ☐ **Monitor** I&O, electrolytes (Mg<sup>2+</sup>, K<sup>+</sup>, PO<sub>4</sub><sup>3-</sup>), VS q2–4h.
- ☐ **Fall precautions.** Restraints are last resort — may worsen agitation.

**A**

**B**

**C**

*Always prioritize Airway · Breathing · Circulation — then Safety → Assessment → Medication → Psychosocial support.*

# 05

## PHARMACOLOGY

# Detox, deficiency repletion & maintenance

### ♦ ACUTE DETOX / WITHDRAWAL



#### Lorazepam • Chlordiazepoxide • Diazepam

BENZODIAZEPINES — GOLD STANDARD

**MOA:** GABA-A agonist → suppresses CNS hyperexcitability.

**SE:** sedation, resp. depression, amnesia, ataxia.

**Nursing:** taper to prevent rebound; use **LOT** drugs in liver disease.

**AIRWAY MONITORING**



#### Thiamine (Vitamin B<sub>1</sub>)

VITAMIN REPLETION — IV/IM

**MOA:** cofactor for glucose metabolism in CNS neurons.

**Prevents:** Wernicke encephalopathy (confusion, ataxia, ophthalmoplegia) & irreversible Korsakoff psychosis.

**Nursing:** give **BEFORE dextrose**. Continue with folate & multivitamin.

**BEFORE GLUCOSE • ALWAYS**



#### Folate • Magnesium • Multivitamin

NUTRITIONAL SUPPORT

**Why:** chronic alcoholics are deficient — corrects anemia, tremor threshold, seizure risk.

**Nursing:** monitor Mg<sup>2+</sup>, K<sup>+</sup>, PO<sub>4</sub><sup>3-</sup> (refeeding syndrome risk).



#### Haloperidol (adjunct)

ANTIPSYCHOTIC — SEVERE AGITATION

**Use only** when benzodiazepines inadequate for severe hallucinations/agitation.

**Caution:** lowers seizure threshold, ↑QT, EPS.

**Nursing:** never as first-line for withdrawal.

**NOT FIRST-LINE**

### ♦ MAINTENANCE • RELAPSE PREVENTION



#### Disulfiram (Antabuse)

AVERSION THERAPY

**MOA:** inhibits aldehyde dehydrogenase → acetaldehyde accumulation.

**Reaction:** flushing, N/V, tachycardia, HA, hypotension.

**Teach:** avoid ALL alcohol — mouthwash, cough syrup, vanilla, aftershave, hand sanitizer.

**48 H BEFORE / 14 D AFTER**



#### Naltrexone

OPIOID RECEPTOR ANTAGONIST

**MOA:** blocks μ-opioid receptors → ↓reward & ↓cravings.

**SE:** nausea, headache, **hepatotoxicity**.

**Nursing:** check LFTs; hold opioid analgesics.



#### Acamprosate

GLUTAMATE MODULATOR

**MOA:** restores GABA/glutamate balance → ↓post-acute cravings.

**Safe** in liver disease.

**Nursing:** caution in renal impairment; monitor for diarrhea.

# 06

## NCLEX TEST TRAPS

# What students confuse — priority vs. non-priority

1

"Give D50 for confusion" — **dextrose first**.  
**Thiamine first, then glucose**. Glucose without thiamine can precipitate Wernicke encephalopathy.

2

Withdrawal ≠ intoxication care. Withdrawal needs **benzodiazepines**, **not antipsychotics** as first-line.

3

Hallucinations with **intact orientation** = **alcoholic hallucinosis**, not DT. DT requires **disorientation + autonomic instability**.

4

DT peaks **48–96 hr** after the last drink — not immediately. A "sober for 3 days" pt can still crash.

5

Disulfiram reaction can be triggered by **mouthwash, cough syrup, aftershave, hand sanitizer, vanilla extract** — educate early.

6

**Wernicke** encephalopathy is **reversible** with thiamine. **Korsakoff** psychosis (amnesia, confabulation) is **not**.

7

Priority in DT = **safety & seizure precautions** — not restraints. Restraints ↑ agitation & injury.

8

In liver failure use **LOT** benzos: **L**orazepam, **O**xazepam, **T**emazepam — no hepatic phase-I metabolism.

# 07

## PATIENT EDUCATION

# Recovery, safety & teaching points



**Never stop cold-turkey** without medical supervision if physically dependent — withdrawal can be fatal.



**Join AA / 12-step** or similar peer support. Sobriety is a *lifelong* commitment, not an event.



**On disulfiram**, avoid all alcohol-containing products: mouthwash, OTC cough syrups, aftershave, vanilla, hand sanitizer.



**Take daily** thiamine, folate, multivitamin. Eat thiamine-rich foods — pork, legumes, fortified grains.



**Identify triggers** (people, places, emotions). Build coping skills & relapse-prevention plan with a counselor.



**Include family** in recovery. Consider Al-Anon for loved ones. Rebuild trust gradually.



**Know warning signs:** tremor, anxiety, insomnia, hallucinations after cutting back → seek care *immediately*.



**Naltrexone** — take with food to ↓ nausea. Notify MD of yellowing skin / dark urine (hepatotoxicity).

# 08

## MEMORY BOOSTERS

# Mnemonics & pattern recognition

### ◇ “SWEATING” — DELIRIUM TREMENS

- S** Sweating & diaphoresis
- W** Wide-awake (insomnia)
- E** Elevated temp / HR / BP
- A** Agitation / anxiety
- T** Tremors — coarse, bilateral
- I** Illusions & hallucinations
- N** Nausea / vomiting
- G** Grand-mal seizure risk

### ◆ WERNICKE TRIAD — “COA”

**C**onfusion · **O**phthalmoplegia · **A**taxia. Reversible with IV thiamine.  
*Korsakoff = Can't remember* (amnesia + confabulation, **irreversible**).

### ◇ WITHDRAWAL TIMELINE — 6•12•24•48

- 6** hr: Shakes (tremors, anxiety, autonomic)
- 12** hr: Hallucinations (oriented)
- 24** hr: Seizures (tonic-clonic)
- 48** —96 hr: Delirium Tremens

### ◆ “LOT” — BENZOS SAFE IN LIVER DISEASE

**L**orazepam · **O**xazepam · **T**emazepam.  
 No hepatic phase-I metabolism — safer in cirrhosis / hepatic failure.

### ◆ GOLDEN RULE

**Thiamine BEFORE Glucose.** Always. Every single chronic alcoholic. Every single NCLEX question.