

Pediatric *Neuro* Disorders

A high-yield, rapid-review map of the pediatric neurologic conditions most tested on the Next Generation NCLEX – with signs, priorities, and the red flags you cannot miss.

★ HIGH YIELD

CLINICAL JUDGMENT

PRIORITY SETTING

SAFETY



01 Increased ICP — Age Matters

Signs of *Increased Intracranial Pressure*

Always compare the child's baseline. In pediatrics, the younger the child, the more subtle — and more dangerous — the presentation.

👶 Infant < 18 MO

- **Bulging anterior fontanel** (hallmark sign)
- Widened cranial sutures, ↑ head circumference
- High-pitched, shrill cry
- Poor feeding, irritability, lethargy
- Setting-sun eyes (late)
- Scalp veins distended

👦 Child > 18 MO

- Headache (often AM, worse w/ cough/straining)
- Nausea & projectile vomiting
- Diplopia, blurred vision
- ↓ LOC, irritability, personality change
- Seizures
- Papilledema

⚠️ LATE & LETHAL — Cushing's Triad

↑ Systolic BP (widened pulse pressure) · ↓ Irregular HR (bradycardia) · Irregular respirations. This is brainstem herniation — **notify provider STAT**.

HOB 30° · MIDLINE · NEUTRAL · NO CLUSTERING CARE

02 Top 6 High-Yield Disorders



Bacterial Meningitis

★ MEDICAL EMERGENCY

— CLASSIC SIGNS

- Fever, severe HA, nuchal rigidity, photophobia
- **Kernig's** — pain w/ knee extension (leg flexed at hip)
- **Brudzinski's** — neck flexion → hip/knee flexion
- Opisthotonos, petechial rash (meningococcal)
- Infants: bulging fontanel, poor feeding, shrill cry

— NURSING PRIORITIES

- **DROPLET precautions × 24 h after abx**
- Assist with LP → expect ↑ protein, ↓ glucose, cloudy CSF
- Quiet, dim room · HOB 30° · seizure precautions

NCLEX PRIORITY →

Isolate **FIRST**, then give antibiotics within 30 min of order.



Seizures & Febrile Sz

⚡ SAFETY FIRST

— KEY POINTS

- Febrile Sz: 6 mo–5 yr, rapid temp ↑, usually benign < 15 min
- Status epilepticus = > 5 min OR back-to-back w/o return of consciousness
- Absence: brief staring spells, often mistaken for daydreaming

— DURING THE SEIZURE

- Side-lying, loosen clothing, protect head
- Time it · **Do NOT restrain** · NOTHING in mouth
- Suction & O₂ ready · note aura, pattern, duration

NCLEX PRIORITY →

Airway & safety. Status epilepticus → IV lorazepam/diazepam, then load phenytoin/fosphenytoin.



Hydrocephalus & VP Shunt

💧 ICP WATCH

— ASSESSMENT

- ↑ Head circumference, bulging fontanel, setting-sun eyes
- Shunt malfunction = ICP signs returning
- Shunt infection = fever + ICP signs + redness along tract

— POST-OP VP SHUNT

- Position **flat or on UNoperated side** to prevent rapid CSF drainage
- Measure head circumference daily · strict I&O
- Monitor for abd distention (peritoneal absorption issue)

NCLEX PRIORITY →

Vomiting + headache + irritability = shunt malfunction until proven otherwise.



Spina Bifida (Myelomeningocele)

🚫 LATEX-FREE ONLY

— PRE-OP CARE OF THE SAC

- **Prone position**, sterile moist saline dressing over sac
- NO diapers over sac · assess for leakage, rupture, infection
- Measure head circumference — **hydrocephalus risk**

— LONG-TERM

- Neurogenic bladder/bowel → clean intermittent cath
- Folic acid 400 mcg for all women of childbearing age (prevention)

NCLEX PRIORITY →

LATEX PRECAUTIONS for life — high cross-reactivity w/ banana, kiwi, avocado.



Reye's Syndrome

🚫 NO ASA IN KIDS

— TRIGGERS & PRESENTATION

- Follows viral illness (flu, varicella) + **aspirin use**
- Acute encephalopathy + fatty liver
- Vomiting → lethargy → confusion → seizures → coma
- ↑ AST/ALT, ↑ ammonia, hypoglycemia, ↑ ICP

— NURSING

- Quiet environment · ICP precautions · strict I&O
- Monitor for bleeding (coagulopathy from liver failure)

NCLEX PRIORITY →

TEACH: NEVER give aspirin (salicylates) to a child/teen — use acetaminophen or ibuprofen.



Cerebral Palsy

👉 NON-PROGRESSIVE

— KNOW THE TYPES

- **Spastic (most common)** — hypertonia, scissor gait, persistent primitive reflexes
- Dyskinetic — slow, writhing, involuntary movements
- Ataxic — wide-based, unsteady gait, poor coordination

— NURSING FOCUS

- Aspiration risk → thickened liquids, upright feeding
- Baclofen for spasticity · PT/OT · adaptive equipment
- Safety (helmet PRN) · seizure precautions · skin care

NCLEX PRIORITY →

It is non-progressive but permanent. Maximize function, prevent contractures, support family.

The NCLEX loves to distinguish *helpful* actions from *harmful* ones.

✓ ALWAYS DO

- ✓ Turn the child side-lying (recovery position)
- ✓ Time the seizure from the moment it starts
- ✓ Loosen any restrictive clothing at the neck
- ✓ Protect the head with padding; clear the area
- ✓ Stay with the child — observe pattern, eye deviation, LOC
- ✓ Pad crib/bed rails · suction & O₂ at bedside
- ✓ Post-ictal: assess airway, orient, allow to sleep

✗ NEVER DO

- ✗ Do NOT put anything in the mouth (no tongue blade)
- ✗ Do NOT restrain the child's movements
- ✗ Do NOT move the child unless they are in danger
- ✗ Do NOT give PO anything until fully awake & alert
- ✗ Do NOT leave the child alone
- ✗ Do NOT use rectal temps in active sz precautions

04 High-Yield Pediatric Neuro Meds

Quick Med Reference

★ TESTED OFTEN

MEDICATION	USED FOR	TEACH / MONITOR
Phenytoin (Dilantin)	Tonic-clonic, focal seizures, status	Narrow range 10–20 mcg/mL · gingival hyperplasia → oral care · ataxia, nystagmus, rash (SJS) · never mix in D5W
Valproic Acid (Depakote)	Most seizure types, absence	Hepatotoxicity → monitor LFTs · pancreatitis · thrombocytopenia · weight gain
Lorazepam / Diazepam	Status epilepticus (first-line)	Resp depression · bradycardia · HYPOtension · have airway & O ₂ ready
Levetiracetam (Keppra)	Broad-spectrum sz control	Mood/behavior changes — agitation, irritability · drowsiness
Ceftriaxone + Vancomycin	Empiric bacterial meningitis	Give within 30 min · monitor renal fx, red-man syndrome · not in neonates (ceftriaxone)
Dexamethasone	Meningitis (↓ hearing loss), ↑ ICP	Hyperglycemia · GI bleed · immune suppression · give before or with first abx dose
Acetaminophen / Ibuprofen	Fever, pain	Use INSTEAD of aspirin in children (Reye's) · weight-based dosing · check for combo products

◆ TEST-DAY INTEL

5 NGN *Clinical Judgment* Moves

The NGN asks you to *recognize cues*, *prioritize hypotheses*, and *take action*. These five patterns show up across pediatric neuro items.

01

Trend > Snapshot

Compare the child's vitals & neuro assessment to *their* baseline, not adult norms. A "normal" adult BP may be critically high — or low — for a toddler.

03

Airway & Safety Win

In seizure, increased ICP, or post-op shunt — airway, positioning, and safety always come before teaching or labs in "first action" items.

05

Fontanel = Free Data

Bulging = ↑ ICP · sunken = dehydration. Always palpate with the infant upright and calm; measure head circumference daily if concern exists.

02

The "Quiet" Child Is Worst

Irritability progressing to lethargy & poor feeding is an ICP red flag in infants. A previously-crying child who "finally settled" may be decompensating.

04

Droplet, Then Drugs

Suspected bacterial meningitis → **isolate first**, then start antibiotics within 30 min of order. Both happen — but order matters on the NGN.

06

Teach the Caregiver

NGN items reward family-focused teaching: *no aspirin* (Reye's), *folic acid* (NTD prevention), *helmet use*, *car seats*, *seizure action plans*.

