◆ NCLEX 2026 · CLINICAL JUDGMENT MEASUREMENT MODEL

Substance Use & Smoking in Pregnancy

● System: Maternal / Newborn Health ● High-Yield NGN Content ● Priority: Fetal Safety

01 ◆ OVERVIEW Definition & Why It Matters

- **Substance use in pregnancy** = maternal consumption of tobacco, alcohol, opioids, stimulants (cocaine, methamphetamine), or marijuana while pregnant.
- All substances cross the **placenta** — what the mother uses, the fetus uses. Effects are **teratogenic, hypoxic, or addictive**.
- Leading **preventable cause** of low birth weight, preterm birth, birth defects, and Neonatal Abstinence Syndrome (NAS).

02 ◆ MECHANISM Pathophysiology — Simplified

TOBACCO	Nicotine + CO → Vasoconstriction → ↓ O_2 & nutrients → IUGR / Preterm / Abruption
ALCOHOL	EtOH crosses placenta → Disrupts neuronal migration → Fetal Alcohol Spectrum Disorder (FASD)
OPIOIDS	Fetus exposed in utero → Develops physical dependence → Abrupt cut-off at birth → NAS
STIMULANTS	Cocaine / Meth → Severe vasoconstriction + ↑ BP → Placental abruption, stroke, preterm labor

03

◆ ASSESSMENT

Signs & Symptoms by Substance

Tobacco / Nicotine

- Low birth weight (LBW)
- Preterm birth
- **Placental abruption & previa**
- Ectopic pregnancy risk ↑
- ↑ SIDS risk in infant
- Respiratory issues in newborn

Alcohol (EtOH)

- **FAS facial features:** smooth philtrum, thin upper lip, short palpebral fissures
- Microcephaly · IUGR
- Intellectual disability
- **CNS dysfunction & seizures**
- Cardiac & skeletal defects

Opioids (NAS)

- High-pitched cry · irritability
- Tremors · hypertonia · hyperreflexia
- Poor feeding · uncoordinated suck
- Diarrhea · vomiting · diaphoresis
- **Seizures · respiratory distress**
- Onset: heroin 24–72 h · methadone 5–10 d

Cocaine / Meth

- **Placental abruption (hallmark)**
- Preterm labor · PROM
- IUGR · microcephaly
- Maternal HTN crisis, stroke, MI
- Irritable jittery newborn

Marijuana / Cannabis

- Low birth weight · stillbirth risk ↑
- Long-term neurodevelopmental & attention deficits
- Passes into breast milk — **breastfeeding contraindicated while using**

04 ◆ TAKE ACTION
Priority Nursing Interventions

A

Airway / Breathing — Mother & Newborn

`ASSESS` maternal respiratory rate (opioid OD → <12/min). `MONITOR` newborn for apnea & respiratory distress. `ADMINISTER` naloxone *only* for maternal overdose.

C

Circulation — Fetal Perfusion

`MONITOR` continuous FHR. `ASSESS` for vaginal bleeding & rigid, board-like uterus (abruption). `CHECK` maternal BP trends (stimulants → HTN crisis).

S

Safety — Screen, Score, Support

`SCREEN` every prenatal visit using **5 P's** (nonjudgmental). `OBTAIN` urine toxicology with consent. `USE` **Finnegan Neonatal Abstinence Scoring Tool** q3–4 h for exposed newborns. `IMPLEMENT` seizure precautions.

P

Priority Care — NAS Newborn Bundle

`SWADDLE` snugly & hold skin-to-skin. `DIM` lights, minimize stimulation, cluster care. `OFFER` small frequent feeds with high-calorie formula. `REFER` mother to **methadone/buprenorphine program** — *never stop opioids abruptly* (fetal death risk).

05 ◆ MEDS
Pharmacology

DRUG	MECHANISM	KEY SIDE EFFECTS	NURSING CONSIDERATIONS
Methadone OPIOID AGONIST	Long-acting full opioid agonist; prevents maternal withdrawal & fetal stress	Sedation · constipation · QT prolongation · NAS (delayed, prolonged)	**Gold standard** in pregnancy. Breastfeeding usually safe. Daily supervised dosing.
Buprenorphine PARTIAL OPIOID AGONIST	Partial μ-agonist → reduces cravings with ceiling effect	Milder NAS than methadone · headache · nausea	Preferred for milder NAS outcomes. Mono-product (Subutex) in pregnancy.
Naloxone (Narcan) OPIOID ANTAGONIST	Competitive μ-receptor blocker	Acute withdrawal · ↑ BP · fetal distress	⚠ **Only for overdose.** Can precipitate preterm labor & fetal death.
Morphine (oral) OPIOID — NAS TX	Treats severe neonatal withdrawal symptoms	Respiratory depression · constipation	Wean slowly. Continue Finnegan scoring. Monitor RR & O_2 sat.
Nicotine Replacement PARTIAL AGONIST	Delivers nicotine without combustion toxins	Skin irritation · palpitations · nausea	Case-by-case; behavioral counseling is **first line** in pregnancy.

06 ◆ DON'T FALL FOR IT
NCLEX Test Traps

⚠ ~~"Moderate wine is fine in the 3rd trimester."~~
✓ NO safe amount of alcohol exists at ANY point in pregnancy.

⚠ ~~"Detox the pregnant patient off opioids fast."~~
✓ Abrupt withdrawal → fetal distress & demise. Use methadone/buprenorphine maintenance.

⚠ ~~"Give naloxone to every opioid-exposed newborn."~~
✓ Only in overdose. In an exposed neonate it triggers severe withdrawal & seizures.

⚠ ~~"Mom on methadone shouldn't breastfeed."~~
✓ Breastfeeding is encouraged on methadone/buprenorphine (if no HIV / illicit use).

⚠ ~~"NAS always appears right at birth."~~
✓ Heroin: 24–72 h. Methadone: 5–10 days — discharge teaching is critical.

⚠ ~~"Priority is odor of alcohol on breath."~~
✓ Priority = fetal oxygenation & safety. Assess FHR, bleeding, BP first.

07 ◆ TEACH BACK
Patient Education

1. **Abstinence is safest.** No known safe level of tobacco, alcohol, or illicit drugs in pregnancy.
2. **Secondhand smoke harms too** — raises SIDS, LBW, & preterm risk. Keep home/car smoke-free.
3. **Attend all prenatal visits.** Early entry to care improves outcomes dramatically.
4. **Safe sleep for infants:** back to sleep, own crib, no co-sleeping — especially if mother smokes.
5. **Treatment, not shame.** Methadone or buprenorphine programs + AA/NA/SMART Recovery.
6. **Calm the NAS newborn:** swaddle, low lights, soft voices, small frequent feeds, skin-to-skin.

08 ◆ LOCK IT IN Memory Boosters

WITHDRAWAL — Neonatal Abstinence Syndrome

W	Wakefulness (poor sleep)	**I**	Irritability
T	Tremors / Temp instability	**H**	Hyperactivity / High-pitched cry
D	Diarrhea / Diaphoresis	**R**	Rhinorrhea / Respiratory distress
A	Apnea / Autonomic dysfunction	**W**	Weight loss / poor feeding
A	Alkalosis (respiratory)	**L**	Lacrimation (tearing)

`FAS Face: 3 S's — Smooth philtrum · Short fissures · Slim upper lip`

`5 P's Screen: Parents · Peers · Partner · Past · Pregnancy`

`Abruption triad: pain + bleeding + rigid uterus`

`Cocaine ≠ Calm — think HTN, stroke, abruption`

`Methadone = Maintenance, NOT detox`

`Naloxone = Never (unless OD)`