

THE W's of POSTPARTUM FEVER



Focus: WIND • WATER • WOUND

1 DEFINITION & WHY IT MATTERS

100.4°F

= 38.0 °C (fever threshold)

*on any 2 of the first 10 days postpartum
(excluding the first 24 hours)*

- A postpartum fever = a sign of possible infection, one of the leading causes of maternal morbidity.
- The "W's" is a mnemonic that helps locate the source of the fever by organ system.
- This review focuses on the top 3: Wind (lungs), Water (urinary), Wound (incision / perineum).

2 PATHOPHYSIOLOGY — HOW FEVER DEVELOPS

LABOR & BIRTH

Tissue trauma
Perineum • Uterus
Incision

INVASIVE DEVICES

IV lines, Foley
catheter, epidural,
vaginal exams

ANESTHESIA / IMMOBILITY

Shallow breathing
↓ lung expansion
bed rest

IMMUNE SHIFTS

Physiologic
immunosuppression
of pregnancy



**MULTIPLE PORTALS → BACTERIAL ENTRY
→ LOCALIZED / SYSTEMIC INFECTION → FEVER**

The fever's DAY and LOCATION help you pinpoint which "W" is the source.

THE 7 W's AT-A-GLANCE

Focus of this review: W1 Wind • W2 Water • W3 Wound



NGN CLINICAL JUDGMENT MODEL

Recognize → Analyze cues → Prioritize hypotheses → Generate solutions → Take action → Evaluate.

SECTION 3 • SIGNS & SYMPTOMS

Grouped by timeline — Early vs Late (red-bordered boxes = RED FLAGS)

W1 **WIND**
Pulmonary

Typical onset: Day 1-2



RISK FACTORS
General anesthesia, C-section, pain ↓ deep breaths, immobility

EARLY (Mild)

- Shallow breathing
- Mild ↓ SpO₂ (94-96%)
- Atelectasis on auscultation
- Low-grade fever, fatigue

⚠ LATE / RED FLAG

- ▶ Productive cough
- ▶ Crackles / wheezes
- ▶ Tachypnea (RR > 24)
- ▶ Hypoxia (SpO₂ < 92%)
- ▶ Pneumonia, chest pain

W2 **WATER**
Urinary Tract

Typical onset: Day 3-5



RISK FACTORS
Foley catheter, repeated vaginal exams, epidural, bladder trauma, urinary stasis

EARLY (Mild)

- Urgency, frequency
- Dysuria (burning)
- Suprapubic discomfort
- Cloudy / foul urine

⚠ LATE / RED FLAG

- ▶ CVA / flank tenderness
- ▶ High fever + chills
- ▶ Nausea / vomiting
- ▶ Pyelonephritis
- ▶ Risk of urosepsis

W3 **WOUND**
Incision / Perineum

Typical onset: Day 5-7



RISK FACTORS
C-section, episiotomy, perineal laceration, prolonged ROM, chorioamnionitis

EARLY (Mild)

- Redness around incision
- Edema, tenderness
- Mild warmth
- Serous drainage

⚠ LATE / RED FLAG

- ▶ Purulent drainage
- ▶ Foul odor
- ▶ Wound dehiscence
- ▶ Induration / abscess
- ▶ Sharp ↑ in pain

ONSET TIMELINE — use the DAY to choose where to assess first

D1
Wind

D3
Water

D5
Wound

D7
monitor

SECTION 4 • PRIORITY NURSING INTERVENTIONS

Use ABC → Safety → NCLEX prioritization



PRIORITY RULE

Airway → Breathing → Circulation → Safety. Fever + ↓ SpO₂ or crackles = address WIND first.



WIND

WIND — Airway & Breathing FIRST

AUSCULTATE lung sounds every 4 hrs; document adventitious sounds.

ELEVATE HOB ≥ 30°; incentive spirometer 10 breaths every hr awake.

ENCOURAGE early ambulation, cough & deep-breathe q1-2h.

MONITOR SpO₂; administer O₂ to keep SpO₂ ≥ 95% as ordered.

PAIN CONTROL so patient can breathe deeply — under-treated pain → atelectasis.



WATER

WATER — Urinary / Hydration

ASSESS void pattern; palpate bladder for distention; check for retention.

ENCOURAGE ≥ 3,000 mL fluids/24 h unless contraindicated.

COLLECT clean-catch UA + C&S BEFORE starting antibiotics.

REMOVE Foley catheter ASAP once no longer indicated.

TEACH wipe front-to-back, void every 2-3 hrs, empty bladder completely.



WOUND

WOUND — Incision & Perineum

REEDA assessment every shift (Redness, Edema, Ecchymosis, Discharge, Approximation).

ICE PACK × 24 hrs to perineum, then warm sitz baths 3-4×/day.

CHANGE perineal pad at least every 4 hrs front-to-back; don't touch inner surface.

STERILE dressing change for C-section; notify HCP of dehiscence or purulent drainage.

CULTURE wound drainage BEFORE antibiotics.

5

PHARMACOLOGY



Cefazolin (Ancef)

1st-gen cephalosporin

MOA

Inhibits bacterial cell wall synthesis

SIDE EFFECTS

Diarrhea, rash, hypersensitivity (cross-react w/ PCN ~5%)

NURSING

Ask about PCN allergy; infuse over 30 min; safe in breastfeeding.



Clindamycin + Gentamicin

Combo for severe infection / endometritis

MOA

Clinda: ↓ protein synthesis. Gent: aminoglycoside, concentration-dependent kill

SIDE EFFECTS

Clinda → C. difficile. Gent → nephro- & oto-toxicity

NURSING

Monitor BUN/Cr, peaks & troughs, hearing/tinnitus; report watery diarrhea.



Acetaminophen

Antipyretic / analgesic

MOA

↓ central prostaglandin synthesis

SIDE EFFECTS

Hepatotoxicity if > 4 g / 24 hrs

NURSING

Safe while breastfeeding; space doses q4-6h; avoid with alcohol.

TRAPS • TEACHING • MEMORY

Sections 6–8 • Think like the NCLEX writers

6 NCLEX TEST TRAPS ⚠️

- ⚠️ **Normal temp spike ≠ infection**
A one-time temp $\geq 100.4^{\circ}\text{F}$ in the first 24 hrs is usually dehydration from labor. HYDRATE + reassess — do NOT jump to antibiotics.
- ⚠️ **Cultures BEFORE antibiotics**
Always obtain blood / urine / wound cultures FIRST (unless septic shock). Giving antibiotics first contaminates results.
- ⚠️ **Lochia odor**
Normal lochia = fleshy / musky. FOUL odor + fever + tender uterus = endometritis (Womb).
- ⚠️ **Engorgement ≠ mastitis**
Engorgement: bilateral, no fever. Mastitis: unilateral, red wedge-shape, fever + flu-like symptoms.
- ⚠️ **REEDA "A" is Approximation**
The "A" in REEDA is whether the wound edges are approximated (together). Not a redness finding.
- ⚠️ **Prioritize WIND**
Two febrile patients? Pick the one with $\downarrow$ SpO₂ or crackles — airway/breathing beats urinary and wound.

7 PATIENT EDUCATION — "CALL THE PROVIDER IF..."

CALL PROVIDER IF:

- * Fever $> 100.4^{\circ}\text{F}$ or chills
- * Foul-smelling lochia / heavy bleeding (> 1 pad/hr)
- * Red streaks or drainage from incision
- * Painful / burning urination
- * Leg pain, redness, swelling (DVT)

SELF-CARE AT HOME:

- ✓ Wipe front-to-back; change pad q2–4 hrs
- ✓ Drink 8–10 glasses water/day; void q2–3 hrs
- ✓ Use incentive spirometer; deep breathe, ambulate early
- ✓ Keep incision clean & dry; NO tub baths until cleared
- ✓ Hand hygiene before breastfeeding and after toilet

8 MEMORY BOOSTERS — THE 7 W's + REEDA

THE 7 W's — by typical day of onset

- | | |
|------------------------|---------------------------|
| W1 Wind | — atelectasis / pneumonia |
| W2 Water | — urinary tract infection |
| W3 Wound | — incision / perineum |
| W4 Walk | — DVT / thrombophlebitis |
| W5 Womb | — endometritis |
| W6 Weaning | — mastitis / engorgement |
| W7 Wonder drugs | — drug / anesthesia fever |



Day 1

Day 3

Day 5

Day 5–7

Day 2–3

Day 7–21

Any day

REEDA (wound)

R = Redness

E = Edema

E = Ecchymosis

D = Discharge

A = Approximation

Pattern tip: Fever DAY → tells you WHERE to assess first.