Rh_0(D) Immune Globulin

RhoGAM • WinRho • HyperRHO • Rhophylac — NCLEX High-Yield Review

MATERNAL • PHARM

1 DEFINITION / OVERVIEW

- Purified human **IgG with anti-Rh(D) antibodies** — a blood product providing **passive immunity**.
- Given to **Rh-NEGATIVE** mothers to **prevent Rh sensitization** during/after exposure to Rh-positive blood.
- Prevents **hemolytic disease of the newborn (HDN / erythroblastosis fetalis)** in **future pregnancies**.

300 mcg	≤ 72 hr	50 mcg
Standard IM dose (28 wks & postpartum)	Critical window post-exposure	Microdose (<13 wks loss)

2 PATHOPHYSIOLOGY (SIMPLIFIED)

1. **Rh- mom** + **Rh+ fetus** → fetal blood crosses placenta (delivery, trauma, miscarriage, procedures)
2. Mom's immune system sees **Rh+ RBCs as foreign** → begins forming **anti-Rh antibodies**
3. In **NEXT** pregnancy with Rh+ fetus → antibodies cross placenta → **destroy fetal RBCs**
4. Result: **HDN / Erythroblastosis fetalis** — fetal anemia, hydrops, kernicterus

★ **RhoGAM RESCUE:** coats fetal Rh+ cells BEFORE mom's immune system reacts → **no antibodies made** → no future HDN

3 SIGNS & SYMPTOMS — WHEN IT'S INDICATED

✅ GIVE RhoGAM (Rh- mom events)

- **28 weeks** gestation (routine antepartum)
- Within **72 hours** of delivery if baby is **Rh+**
- After **miscarriage, abortion, ectopic** pregnancy
- After **amniocentesis, CVS, external version**
- After **abdominal trauma** (MVA, fall)
- After **Rh+ blood transfusion** mismatch
- Antepartum **bleeding** (placenta previa, abruption)

🚨 RED FLAGS — Sensitization Signs

- **Positive indirect Coombs** = mom **already sensitized** (RhoGAM will NOT help)
- Positive **direct Coombs** in newborn
- Fetal **hydrops** on ultrasound
- Newborn **jaundice within 24 hr**
- Severe fetal/neonatal **anemia**
- ↑ **Bilirubin** in newborn

4 PRIORITY NURSING INTERVENTIONS (ABCS • SAFETY)

VERIFY — Mother is **Rh-NEGATIVE** & baby is **Rh-POSITIVE** (postpartum dose).

CHECK — **Indirect Coombs NEGATIVE** before giving (confirms not sensitized).

OBTAIN — **Informed consent** — it is a **human blood product**.

ADMINISTER — **IM in deltoid** (or ventrogluteal); WinRho/Rhophylac can be IV.

GIVE — Within **72 hours** of delivery/exposure — time-critical!

MONITOR — Injection site, vitals, for allergic / anaphylactic reaction.

DOCUMENT — Lot #, dose, site, time — provide patient ID card.

EDUCATE — Needed with **every at-risk pregnancy/event** (not one-and-done).

🚨 **SAFETY ALERT:** Never give to an **Rh-POSITIVE** patient or a mother with a **positive indirect Coombs** (already sensitized). Never give to the newborn.

5 PHARMACOLOGY

💉 Rh_0(D) Immune Globulin (RhoGAM, WinRho, HyperRHO, Rhophylac)

CLASS
Immune globulin / Immunosuppressant (blood product)

MECHANISM
Passive immunization — pre-formed anti-Rh(D) antibodies bind & clear Rh+ fetal RBCs before maternal B-cells can recognize them, preventing active maternal antibody formation.

ROUTE
IM (RhoGAM, HyperRHO) — deltoid. IV option: WinRho, Rhophylac.

DOSE
300 mcg (1500 IU) standard at 28 wks & within 72 hr postpartum. 50 mcg microdose for loss < 13 wks.

ONSET / DURATION
Peak ~5–10 days; protective ~12 wks → must be repeated for each pregnancy.

SIDE EFFECTS
Injection site pain/redness, low-grade fever, myalgia, HA; rare allergic reaction / anaphylaxis; rare hemolysis (IV form).

CONTRAINDICATIONS
Rh-positive patient; already sensitized (positive indirect Coombs); IgA deficiency with antibodies; prior severe reaction.

NURSING CARE
Verify Rh-, indirect Coombs negative, baby Rh+ (postpartum); consent for blood product; give within 72 hr; document lot #; monitor 20 min post-dose.

6 NCLEX TEST TRAPS ⚠

Trap 1: Thinking it's given to Rh-POSITIVE moms. → **Only Rh-NEGATIVE** mothers receive RhoGAM.

Trap 2: Forgetting the postpartum dose requires the baby to be **Rh-POSITIVE**. If baby is Rh-negative, no postpartum dose needed.

Trap 3: Giving it to an **already sensitized** mom (positive indirect Coombs). → RhoGAM will NOT reverse sensitization; it only prevents it.

Trap 4: Confusing **indirect Coombs (mother)** with **direct Coombs (newborn)**. Remember: "iD" → **I**ndirect = momma's **I**mmune status; **D**irect = **D**aby (baby).

Trap 5: Calling it a vaccine. → It is **passive immunity** (pre-made antibodies), NOT a vaccine. Protection is short-lived.

Trap 6: Thinking one dose is lifelong. → Must be **repeated with every at-risk pregnancy/event**.

Trap 7: Missing the **72-hour window**. Still give if late — partial protection > none — but earlier is better.

Trap 8: Giving it **to the newborn**. → RhoGAM is for the **MOTHER ONLY**.

7 PATIENT EDUCATION

✓ Because you are **Rh-negative**, you need RhoGAM with **every pregnancy** — routine shot at **28 weeks**.

✓ You'll need another dose **within 72 hours after delivery** if your baby is Rh-positive.

✓ Also required after: **miscarriage, abortion, ectopic, amniocentesis,** or **abdominal trauma**.

✓ It is a **blood product** from screened human plasma — extremely safe; consent required.

✓ It is **NOT a vaccine** — protection is temporary; dose must be repeated for each event.

✓ Expect **mild soreness, redness, or low fever** at the injection site — normal.

✓ 🧯 **Call provider immediately** for rash, shortness of breath, swelling, or chest tightness.

✓ Keep your **RhoGAM card/record** — show it at every prenatal visit & ER visit.

8 MEMORY BOOSTERS 🧠

🔑 **MASTER MNEMONIC**

"Rh-NEGATIVE MOMS NEED RhoGAM"

Only **Rh-NEG** mothers get RhoGAM. **Rh-POS** moms never need it.

🔑 **"28 & 72" RULE**

28 weeks gestation • 72 hours postpartum

Two landmark times to remember — classic NCLEX select-all-that-apply answer combo.

🔑 **COOMBS MEMORY TRICK — "ID"**

Indirect = **I**mmune mom • **D**irect = **D**aby (baby)

Indirect Coombs tests **mom** for antibodies; Direct Coombs tests **baby's** RBCs for attached antibodies.

🔑 **"RHOGAM RESCUES" — THE 7 TRIGGERS**

R.E.S.C.U.E.S.

Rh-negative mom • **E**xposure event (trauma/bleed) • **S**ensitization prevention • **C**oombs (indirect) negative • **U**nder 72 hours • **E**very pregnancy • **S**hot in deltoid (IM)

🔑 **PATTERN RECOGNITION**

If you see **"Rh-negative mother"** + **ANY mixing of blood** (delivery, bleed, trauma, miscarriage, procedure) → **think RhoGAM**. If the question says **"already has antibodies"** or **"positive indirect Coombs"** → **too late, RhoGAM won't help**.