

UK CLINICAL GUIDELINE · TEACHING DECK

# Anaemia in Pregnancy

A structured pathway for obstetric, midwifery and haematology teams

Aligned with BSH · NICE · RCOG · MHRA · SPS · NHS SCT

v1.0 · 19 April 2026

# Why does anaemia in pregnancy matter?

Mother · baby · system — the case for a structured pathway

## Mother

- Fatigue, breathlessness, dizziness
- Higher transfusion risk at delivery
- Impacts recovery and breastfeeding

## Baby

- Low birth weight and preterm birth
- Reduced neonatal iron stores
- No consistent cognition signal

## System

- MBRRACE-UK flags avoidable harm
- Transfusion and IV iron carry cost
- Structured pathway cuts variation

# What are the thresholds?

Trimester Hb · ferritin confirms iron deficiency · BSH 2020 · NICE NG201

**< 110 g/L**

First trimester (Hb)

**< 105 g/L**

Second / third trimester (Hb)

**< 100 g/L**

Postpartum first 48 h (Hb)

**< 30 µg/L**

Ferritin confirms iron deficiency

## Interpretation cautions

- Mid-T2 dilutional trough — do not over-treat
- Ferritin is acute-phase; add TSAT + CRP
- MCV rises  $\approx 6$  fL physiologically
- Hepcidin and sTfR — NOT routine in UK

# Who gets screened, and with what?

FBC for all · ferritin for those who need it

## Routine FBC — established

- FBC at booking
- FBC at 28 weeks
- Earlier if symptoms or risk factors

## Ferritin — targeted only

- If anaemic — confirm deficiency
- HMB · prior IDA · vegan / vegetarian
- Bariatric · malabsorption · multiples
- NOT routine unselected screening

## Emerging — HOW Collaborative 2025 (not UK standard)

Proposes routine ferritin at booking and 24–28 weeks. Adopt only as audited local policy.

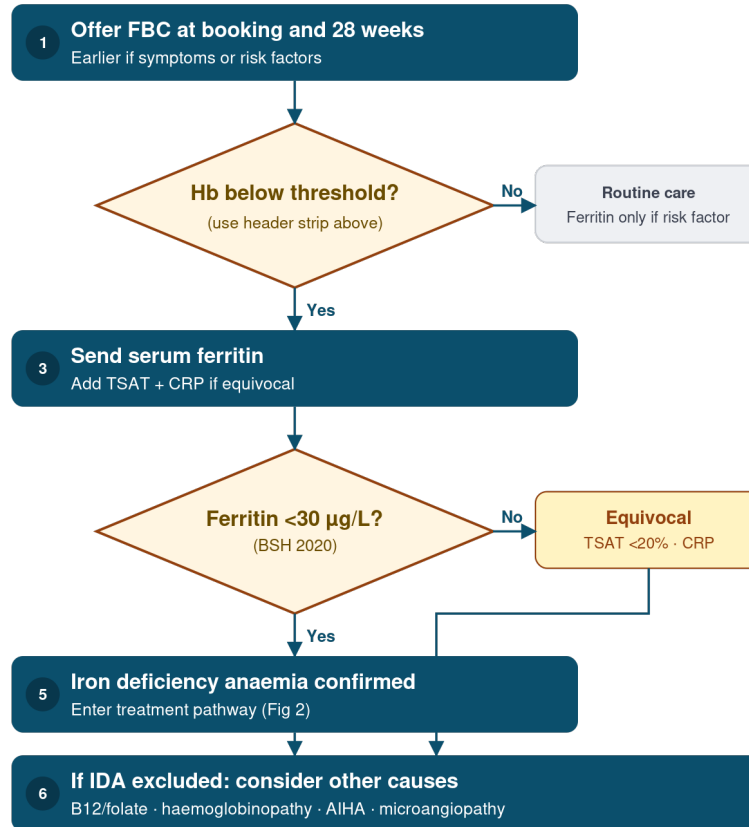
# How do I reach the diagnosis?

FBC → threshold → ferritin → equivocal work-up → alternatives

## Diagnostic pathway — anaemia in pregnancy

BSH 2020 · NICE NG201 · established UK standard

Hb anaemia thresholds (BSH 2020): T1 <110 · T2/T3 <105 · PP 48h <100 g/L



Legend (applies to all figures)

■ Action ■ Decision ■ Caution/Amber  
■ Red — transfusion / TTP / DIC

### Notes

#### Ferritin is acute-phase

Normal ferritin with TSAT <20% or raised CRP → deficiency still possible.

#### Trial of oral iron (diagnostic)

Acceptable if mild IDA suspected.  
Hb rise ≈10 g/L at 2 wk supports it.

#### Haemoglobinopathy caution

No empirical iron until status known.

#### Emerging — not UK standard

HOW Collaborative 2025: routine ferritin at booking + 24–28 weeks.  
Adopt only as local audited policy.

#### Do NOT use routinely

Hepcidin · soluble transferrin receptor.

Anaemia in Pregnancy · Figure 1 of 4 · v1.0 · 19 Apr 2026

# How do I give oral iron well?

First-line: elemental iron 100–200 mg daily · review at 2 weeks

- Elemental iron 100–200 mg daily
- Empty stomach; vitamin C helps
- Avoid tea, coffee, calcium, antacids
- Review Hb at 2 weeks — expect  $\approx 10$  g/L
- Continue 3 months after Hb normalises

## Regimens (any one)

- Ferrous sulfate 200 mg
- Ferrous fumarate 210 mg
- Ferrous gluconate 300 mg
- Each 2–3× daily

**Intolerance: change formulation · dose reduce · alternate-day — keep 2-week review target**

# When do I escalate to IV iron?

FCM · FDI · confine to T2/T3 unless clearly necessary

- Oral intolerance despite change
- True non-response after 2 weeks
- Malabsorption (coeliac, bariatric, IBD)
- Severe anaemia Hb <90 from T2
- Late presentation  $\geq 34$  weeks

## Safety essentials

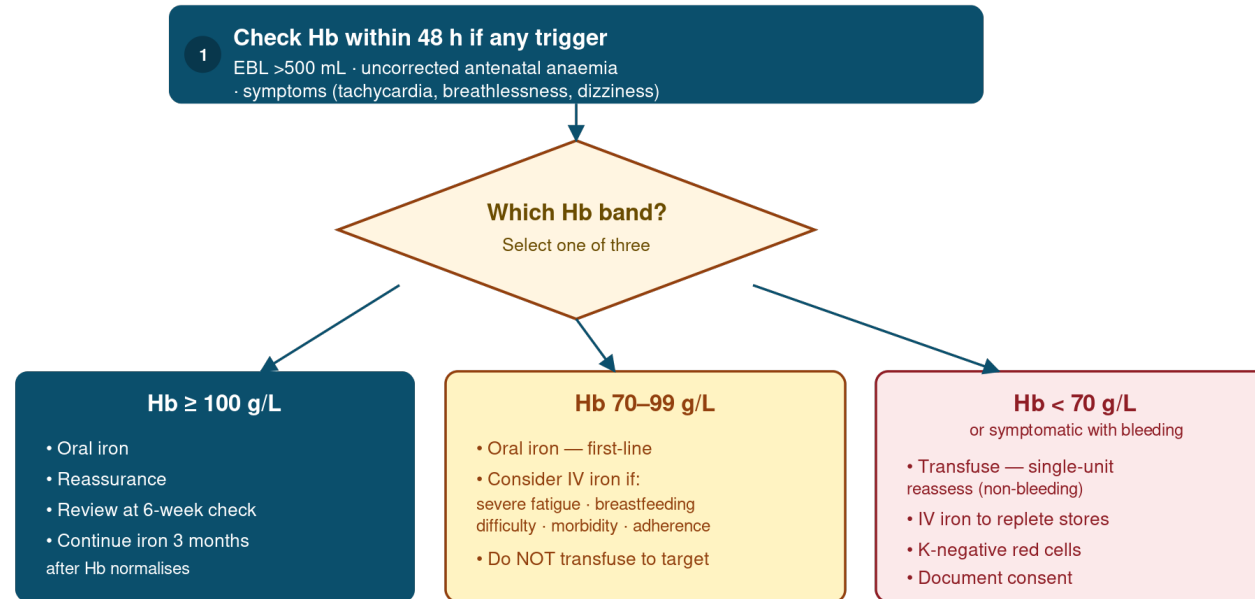
- Dose per current SPC
- Observe  $\geq 30$  min every dose
- Reassess Hb  $\geq 4$  weeks
- Phosphate after FCM if at risk
- Consent covers hypersensitivity

# How do I treat postpartum anaemia?

Check when triggered · stratify by Hb band

## Postpartum anaemia pathway

BSH 2020 · UK PBM principles · legend on Fig 1



### Notes

**Trigger** Caesarean alone is NOT an automatic BSH trigger; record locally if Trust routinely checks.

**Transfusion** Restrictive (Hb <70 or symptomatic/bleeding) · single-unit reassess · avoid target-Hb strategy.

**Escalate urgently** Platelets <50 + haemolysis · Hb fall >20 g/L/24h · suspected TTP (ADAMTS13/PEX) · DIC.

**Follow-up** Continue iron 3 months after Hb normalises. 6-week postnatal review.

**Caution** IV iron does NOT prevent postpartum depression — do not offer for that purpose.

**Product** K-negative for women of childbearing age; CMV-negative must not delay urgent transfusion.

# When do I transfuse — and which blood?

Restrictive threshold · single-unit reassess · correct product

- Restrictive threshold Hb <70 g/L
- Single-unit reassess in non-bleeding women
- K-negative for women of childbearing age
- CMV-negative for elective pregnancy transfusion
- Do NOT delay urgent transfusion for CMV-negative

# When do I escalate urgently?

Microangiopathy · TTP · DIC — do not miss these

- Platelets  $<50$  with haemolytic indices
- Hb fall  $>20$  g/L in 24 h — no overt bleed
- Suspected TTP → ADAMTS13 + plasma exchange
- Deranged DIC screen → major haemorrhage pathway
- Consider HELLP, aHUS, AIHA, AFLP

# Common mistakes in practice

Avoidable errors identified from audit and incident review

- Empirical iron before excluding haemoglobinopathy
- Ferritin interpreted alone during inflammation
- Reassessing Hb before 4 weeks after IV iron
- Skipping 30-minute post-IV-iron observation
- Transfusing to a target Hb when IV iron feasible

# Five take-home messages

What to remember at the bedside

1

## Know the thresholds

T1 <110 · T2/T3 <105 · PP 48 h <100 · ferritin <30

2

## Start oral iron well

100–200 mg daily · review Hb at 2 weeks

3

## Use IV iron with care

Dose per SPC · observe ≥30 min · Hb ≥4 weeks

4

## Stratify postpartum by Hb

≥100 oral · 70–99 consider IV · <70 transfuse

5

## Escalate red flags early

Platelets <50 + haemolysis · Hb fall >20 g/L / 24 h