Blood Group O Positive Mothers and Newborn Cord Blood Testing Policy

1. Purpose

When a mother with blood group O becomes pregnant with a fetus with a blood group of A, B, or AB this can lead to an increased risk of ABO incompatibility with haemolysis of the fetal red blood cells and significant jaundice. The purpose of this policy is to ensure early identification and management of those newborns at risk.

2. Policy

All newborns born to mothers who are blood group O positive are recommended to have cord blood tested at birth, and a flowchart is provided for instances where there was no cord blood collection at birth. This flowchart relates specifically to the following guidelines:

- CAHS Jaundice
- WNHS Blood group and antibody screening in pregnancy.

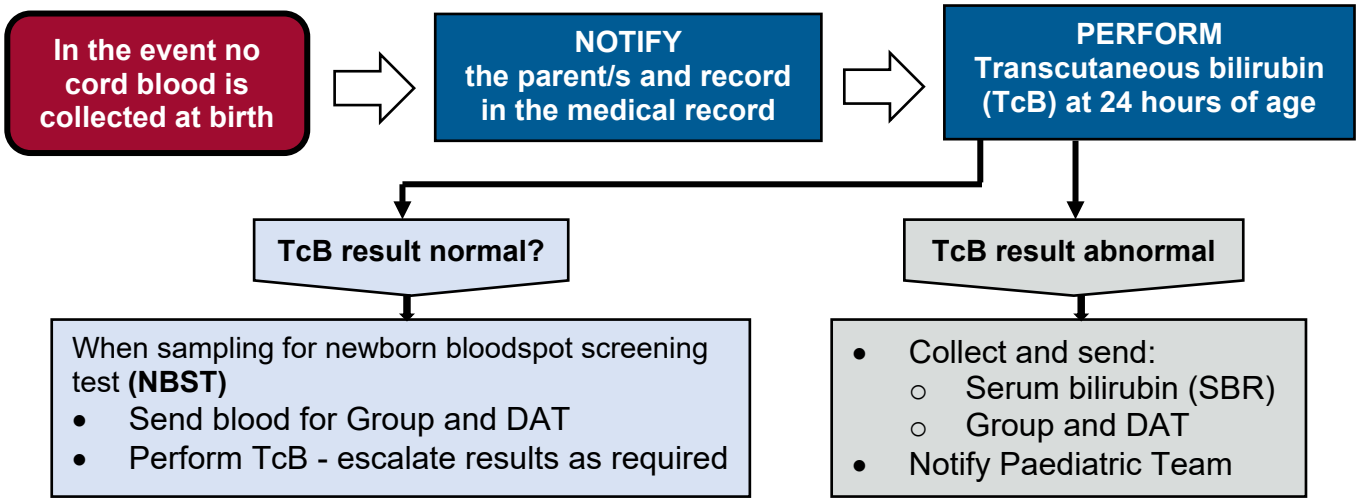
2.1 Cord Blood Collection at Birth

With informed parental consent, cord blood is to be collected and tested at birth on **all** newborns born to mothers who are blood group O positive. Testing is to include a:

- Blood group (Group)
- Direct antiglobulin test (DAT)

2.2 No Cord Blood Collection at Birth

The following management pathway applies when cord blood is not collected at birth.



ATTENTION

If there is clinically significant jaundice in this group of neonates at any point in time (particularly in the first 72 hours of life), a formal SBR is to be performed.

3. Roles and Responsibilities

District Directors are responsible for:

- ensuring that all health professionals involved in provision of maternity care have access to this policy
- ensuring compliance with this policy.

Medical and Midwifery staff are responsible for:

- having knowledge and understanding of this policy to ensure the best possible outcome for the newborn.
- actioning pathology, results and escalating clinical concerns where appropriate, including all documentation in the maternal and newborn medical record.

All staff are required to comply with the directions in WACHS policies and procedures as per their roles and responsibilities. Guidelines are the recommended course of action for WACHS, and staff are expected to use this information to guide practice. If staff are unsure which policies procedures and guidelines apply to their role or scope of practice, and/or are unsure of the application of directions they should consult their manager in the first instance.

4. Monitoring and Evaluation

Maternity managers will monitor compliance via reviewing:

- regular feedback received from health providers implementing blood testing on the newborn of blood group O positive mothers in the early postpartum setting
- audit outcomes of compliance, correct use of, and evaluation of the feedback and effectiveness of the introduction of blood testing on the newborn of blood group O positive mothers.

This policy will be evaluated by the Obstetric and Paediatric Leadership Groups and Midwifery Advisory Forum to determine the effectiveness, relevance and currency. The efficiency and overall usefulness of implementing blood testing in the newborn will occur through continuous evaluation and review of audit outcomes as per the monitoring activities above.

5. References

1. CAHS Jaundice. Accessed 22/04/2026.
2. WNHS Blood group and antibody screening in pregnancy. Accessed 22/04/2026.

6. Definitions

Term	Definition
Direct Antiglobulin Test (DAT)	A blood test that detects antibodies attached to the surface of red blood cells. Historically known as a direct Coombs test.
Haemolytic disease of the fetus and newborn (HDFN)	Characterised by a breakdown of red blood cells (RBC) by maternal antibodies. Antibodies to the RhD, Rhc and Kell antigen are the most common causes of severe HDFN in Australia.

Jaundice	Also known as hyperbilirubinaemia, is a condition where there is too much bilirubin in the blood. Affects about 60% of term and 80% of preterm babies in their first week of life. Early detection and assessment are crucial in managing neonatal jaundice, as they enable timely interventions that can reduce the risk of long-term neurological damage.

7. Document Summary

Coverage	WACHS
Audience	Clinical
Records Management	Clinical: Health Record Management Policy
Related Legislation	*Health Services Act 2016* (WA)
Related Mandatory Policies / Frameworks	• MP 0175/22 Consent to Treatment Policy • Clinical Governance, Safety and Quality Policy Framework
Related WACHS Policy Documents	• Consent to Treatment Policy • Recognition and Response to Acute Deterioration (RRAD) of the Newborn Policy
Other Related Documents	• CAHS Jaundice • WNHS Blood group and antibody screening in pregnancy
Related Forms	• MR140D Newborn Observation and response Chart (N-ORC) • MR75 Newborn Care Plan • MR8B WA Handheld Pregnancy Record
Related Training	Nil
Aboriginal Health Impact Statement Declaration (ISD)	ISD Record ID: 6020
National Safety and Quality Health Service (NSQHS) Standards	1.07, 1.08, 5.01, 5.07, 5.10, 5.12, 6.09, 7.01, 7.02, 7.05.
Aged Care Quality Standards	Nil
Chief Psychiatrist's Standards for Clinical Care	Nil
Other Standards (please specify and include link)	Nil

8. Document Control

Version	Published date	Current from	Summary of changes
1.00	6 August 2026	6 August 2026	New Policy

9. Approval

Policy Owner	Executive Director Nursing and Midwifery Services
Co-approver	Executive Director Clinical Excellence
Contact	WACHS Coordinator of Midwifery
Business Unit	Midwifery
EDRMS #	ED-WA-26-351567

This document can be made available in alternative formats on request.