

Maternal and Birthing Parent Antenatal Screening Tests Guideline

Summary statement: How does the document support patient care?	The purpose of this guideline is to provide evidence based guidance for staff on antenatal screening tests
Staff/stakeholders involved in development:	Antenatal Screening Coordinator, Obstetric Consultants, Senior Midwifery Staff, Joint Obstetric Guidelines Group
Division:	Women and Children's
/Department:	Maternity
Responsible Person:	Chief of Service
Author:	Antenatal Screening Coordinator
For use by:	Staff involved in maternal and birthing parent Antenatal Screening Tests
Purpose:	To provide evidence-based guidance on Maternal and birthing parent Antenatal Screening Tests
This document supports:	Screening tests for you and your baby (STFYAYB) GOV.UK August 2022
Key related documents:	UH Sussex (SRH & WH) Maternity Guidelines: Referral when a Fetal Abnormality is Detected, Antenatal Care and Patient Information, Antenatal Screening for Down's syndrome, Management of HIV, Hepatitis B and Syphilis during Pregnancy, and sickle cell and thalassaemia
Approved by:	Joint Obstetric Guideline Group
Approval date:	20th September 2023 Date uploaded: 20th September 2023
Ratified by Board of Directors/ Committee of the Board of Directors	Not Applicable – Divisional Ratification only required
Ratification Date:	Not Applicable – Divisional Ratification only required
Expiry Date:	September 2026
Review date:	March 2026
If you require this document in another format such as Braille, large print, audio or another language please contact the Trusts Communications Team	
Reference Number:	CG1105

Version	Date	Author	Status	Comment
1.0	January 2011	Antenatal Screening Coordinator	Archived	New Trustwide guideline
2.0	February 2011	CNST Midwife	Archived	Administrative update
3.0	August 2012	Antenatal Screening Coordinator	Archived	Sexually Transmitted Diseases and Rash Illnesses removed and made into stand alone guidelines
3.1	April 23 rd 2014	Antenatal Screening Coordinator	Archived	Minor update
3.2	July 2014	Consultant microbiologist and Consultant obstetrician	Archived	Clarification of action to be taken following GBS in booking MSU
3.3	May 2015	Antenatal Screening Coordinator	Archived	Minor updates re. failsafes and timescales
4.0	June 2016	Antenatal Screening Coordinator	Archived	Minor update – removal of Rubella within the guidance
5.0	November 2017	Antenatal Screening Coordinator	Archived	Addition of FOQ failsafe
5.1	February 2019	Antenatal Screening Coordinator	Archived	Addition of Quality Monitoring Standards
5.2	October 2019	Antenatal Screening Coordinator	Archived	Addition of process for known booking results
5.3	September 2020	Antenatal Screening Coordinator (H. Boiling)	Archived	Amendment made to infectious diseases failsafe
6.0	September 2023	Karen Lundie, Antenatal Screening Coordinator	LIVE	3-year review

Contents

1.0	Aim	4
2.0	Scope	4
3.0	Responsibilities.....	4
4.0	Abbreviations used within this guideline	4
5.0	Maternal and birthing parent Antenatal Screening Tests.....	5
5.1	Timescales	5
5.2	Results	6
5.2.1	Normal Blood / Urine Screening Results.....	6
5.2.2	Screen Positive Results.....	6
5.2.3	Positive Syphilis, Hepatitis B and HIV Results:	6
5.3	Subsequent Miscarriages	6
6.0	Infectious Diseases and Sickle cell and Thalassemia Testing (Screening Pathway)	7
7.0	Screening for:	8
7.1	Anomaly Scan	8
7.2	Failsafe.....	8
7.3	Normal scan result.....	8
7.4	Incomplete Scan.....	8
7.5	Abnormal scan.....	8
8.0	Screening for SCT and other Haemoglobin Variants	9
8.1	Antenatal screening using Family Origin Questionnaire (FOQ).....	9
8.2	Screening Accepted	9
8.3	Screening Declined	9
8.4	Positive carrier results	9
8.5	Baby's biological father available for testing	10
8.6	Baby's biological father identified as carrier or is unavailable.....	10
9.0	Screening for HIV, Hepatitis B, Hepatitis C and Syphilis in Pregnancy	10
9.1	Screening	10
9.2	Declined	10
9.3	Accepted	11
9.4	Rejected samples	11
10.0	Screening Failsafes	11
11.0	Training	11
12.0	Quality Monitoring Standards.....	12
	References	13
	Appendix 1: Haemoglobinopathy & Infectious Diseases Failsafe	14

Maternal and Birthing Parent Antenatal Screening Tests Guideline

1.0 Aim

To provide an evidence-based guideline for staff involved in offering, undertaking and reporting on maternal and birthing parent antenatal screening tests. To ensure antenatal screening tests are undertaken within the time scale set by the National Screening Committee (NSC) whenever possible.

2.0 Scope

This guideline applies to midwives, obstetricians, student midwives and clerical staff involved in the process of maternal and birthing parent and birthing parent antenatal screening.

3.0 Responsibilities

Midwives, Clerical staff and Obstetricians are expected:

- To access, read, understand and follow this guidance
- To use their professional judgement in the application of this guideline

Management are expected:

- To ensure the guideline is reviewed as required in line with Trust and National Recommendations.
- To ensure the guideline is accessible to all relevant staff.

4.0 Abbreviations used within this guideline

ANST - Antenatal screening team	HIV - Human immunodeficiency virus
ASC - Antenatal screening coordinator	NHSE - National Health Service England
SCT - Sickle cell and thalassaemia	STFYB - Screening tests for you and your baby
IDPS - Infectious diseases of pregnancy screening	NSC - National Screening Committee
HA - Health advisor	FOQ - Family origin questionnaire
MIS – Maternity Information System eg Badgernet	MIA - Maternity information systems
CMW - Community Midwife	SG - Safeguarding Team
PDF - Portable Document Format	FASP - Fetal Anomaly Screening Programme
ICE - Integrated clinical Environment	GP – General Practitioner

5.0 Maternal and birthing parent Antenatal Screening Tests

The designated lead for antenatal screening within the maternity service is the Trust Antenatal Screening Coordinator. This position is cross site, between Worthing and St Richards, and involves coordinating the antenatal screening programme for both hospitals and managing screen positive results.

Within this guideline are descriptions of the processes to be followed for the following screening tests:

- Screening for:
 - i. Down's, Edward's and Patau's syndrome (see separate guideline)
 - ii. Fetal anomalies (see separate guideline)
- Infectious disease in pregnancy
 - i. Hepatitis B
 - ii. Human immunodeficiency virus (HIV)
 - iii. Syphilis
- Sickle Cell and Thalassaemia Screening
 - i. Sickle Cell and Thalassaemia

[Screening tests for you and your baby \(STFYAYB\) GOV.UK August 2022](#)

5.1 Timescales

The information – '[Screening tests for you and your baby](#)' should be made available to the woman and person as early as possible. This is available as a GOV.UK digital download or leaflet. This information includes details of all the routine screening offered during pregnancy and for the newborn baby. The information is available in alternative languages via the digital download and on the [UK.GOV website](#).

All screening tests will be offered at the booking appointment, which ideally should be between 8-10 weeks to ensure detection of positive results and appropriate referral at the earliest opportunity.

For women and people who book late or transfer from another trust, all screening blood tests will be offered at booking, regardless of gestation.

Unbooked women and people who present to the maternity unit in labour should be offered all screening blood tests, with the HIV, Hep B and syphilis tests being fast tracked.

Women and people who decline any booking bloods will be contacted by letter to and inform them that this will be re-offered by 20 weeks.

5.2 Results

SCT results are to be reported by the labs by 3 working days after receipt of sample. IDPS bloods results should be reported by 9 working days after receipt of sample.

These results should be acknowledged on MIS (Maternity Information System) and actioned accordingly by the booking midwife within 10 days of taking the sample.

5.2.1 Normal Blood / Urine Screening Results

Normal booking blood should be relayed to the woman and person at the next routine antenatal appointment with the community midwife, and documented on MIS.

5.2.2 Screen Positive Results

Blood screen positive results will be reported directly from the laboratory to the ANST via the generic email address Uhsussex.screening@nhs.net. The ANST will notify and liaise with the relevant specialist at the earliest opportunity. Details of this result and subsequent care plan will be documented in the woman and person's MIS once the woman and person has been counselled and the IDPS data base will be updated.

5.2.3 Positive Syphilis, Hepatitis B and HIV Results:

The ANST will liaise with the HA and an appointment will be made to discuss the result within 3 working days of ANST being notified. The result can be given in person at this appointment or over the phone. Following this, subsequent care will be arranged.

The HA will inform the GP and arrange an appointment with the Genito-urinary Consultant and/or gastroenterologist.

Known IDPS and SCT carriers:

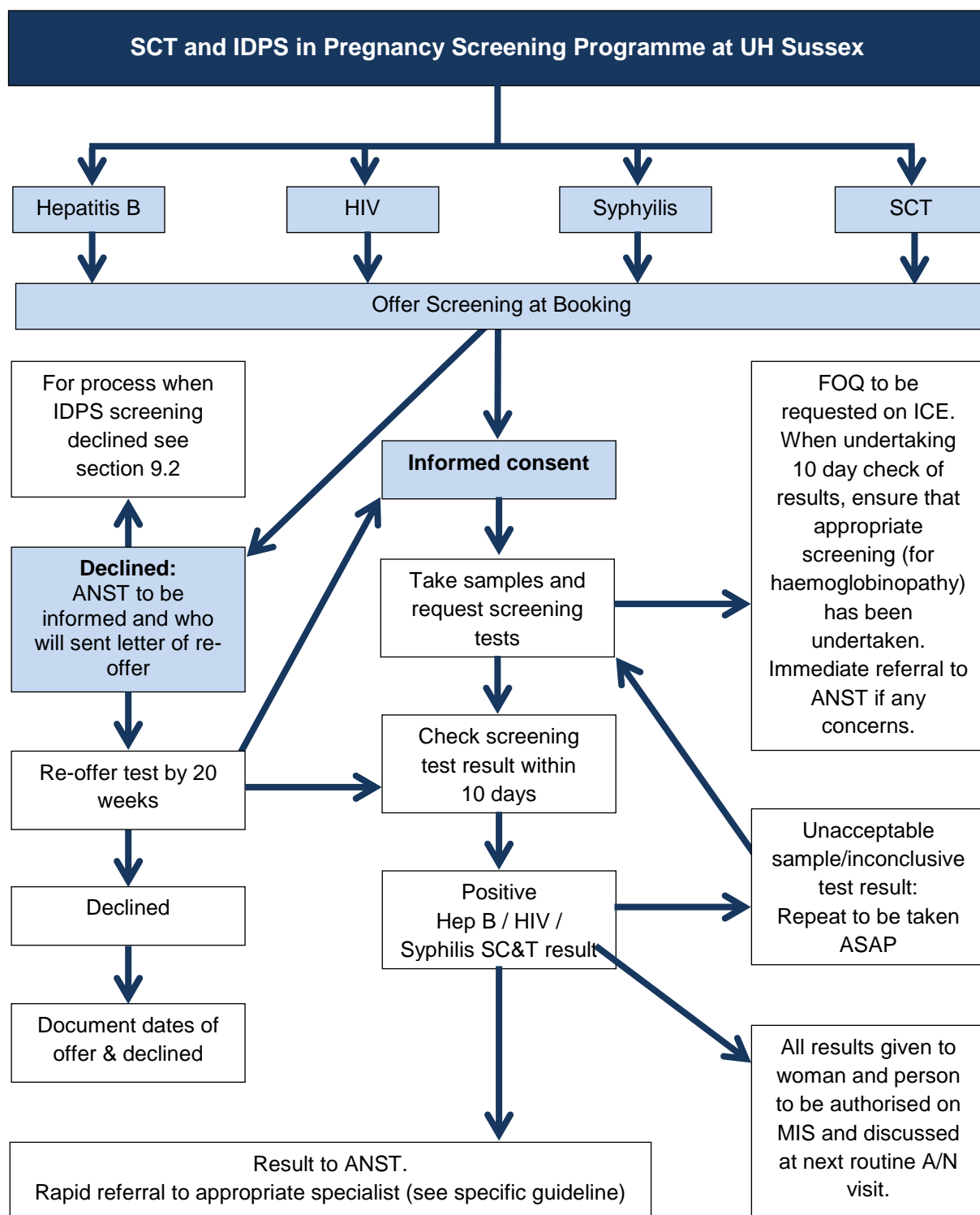
Following the booking appointment, known (disclosed) IDPS and SCT results should be notified by emailing the ANST generic email address Uhsussex.screening@nhs.net in order for timely referrals to be made.

5.3 Subsequent Miscarriages

Women and people, who miscarry, with normal screening results, should be sent a letter by their community midwife informing them of their results.

Women and people, who miscarry following a positive blood screening result, must be referred for specialist care by the ANST.

6.0 Infectious Diseases and Sickle cell and Thalassaemia Testing (Screening Pathway)



7.0 Screening for:

1. Down's, Edward's and Patau's syndrome - [See separate guideline](#)
2. Fetal Anomalies

7.1 Anomaly Scan

All pregnant women and people will be offered fetal anomaly ultrasound screening at booking, which will ideally be performed between 18 and 20 weeks and 6 days. Information about the anomaly scan is contained within the national patient information leaflet STFYAB.

7.2 Failsafe

The eligible population (i.e. anomaly screening requested by woman and person) will be identified using the MIS. The ANST will undertake a weekly check to identify women and people within this eligible group who appear not to have had an anomaly scan. These cases will be checked in depth and women and people who have not been scanned will be offered an urgent anomaly scan. If the ANST are unable to contact a woman and person after they have missed a scan appointment, they will arrange and send a repeat appointment to the woman and person either by email, post, call or text. CMW and SG teams will be notified accordingly.

This will be used to provide denominator and numerator data for the quarterly and annual KPI data reports.

7.3 Normal scan result

This will be reported to the woman and person at time of scan and documented on a report. A copy of the report will be given to the woman and person. A PDF of the report will be interfaced to MIS.

7.4 Incomplete Scan

If the first anomaly scan is incomplete due to increased BMI or persistent fetal lie, one more scan will be offered by 23 weeks gestation. If this second attempt is also unsuccessful but a problem hasn't been detected, no further scans will be offered in line with the FASP standards. These women and people should be referred to the ANST who will discuss and upload further supporting information outlining the standard.

7.5 Abnormal scan

Women and people must be informed of an abnormal scan before they leave the ultrasound room (11 physical conditions (20-week scan) Gov.UK 2022).

The Sonographer will inform the ANST. At this point, findings should be discussed and explained to woman and person and their partner.

Outcomes and statistics should not be discussed at this point or information outside of expertise given to parents.

Note: For further management see UH Sussex Maternity guideline: [‘Referral when a Fetal Abnormality is Detected’](#)

8.0 Screening for SCT and other Haemoglobin Variants

8.1 Antenatal screening using Family Origin Questionnaire (FOQ)

- Booking appointment should be between 8-10 weeks gestation
- Midwife should refer to baby’s biological father during interview not partner
- FOQ is completed by midwife completing all sections on ICE.
- Pregnant women and people should be asked about their own family origins and the family origins of the baby’s biological father – asking about **two** generations.
- Always ask about actual family origin (ancestry) rather than making assumptions based on people’s appearance, presentation or perceived ethnicity.

8.2 Screening Accepted

- Full blood count taken (purple top bottle)
- When undertaking screening bloods tests, results are to be checked by the midwife within 10 days. If there are any concerns, the ANST should be notified as soon as possible and follow this up with the laboratory urgently
- Sample sent to laboratory
- **NB** The baby’s biological father screening should **not** be offered until mother and birthing parent’s status confirmed.

8.3 Screening Declined

- Select FOQ Screening accepted screening box ‘no’.
- Routine FBC taken and sent to laboratory.
- If still declined this should be recorded in hospital notes and link Health Visitor ANST informed

8.4 Positive carrier results

- Positive carrier results and unknown result (i.e. donor egg or both egg/sperm donor pregnancy) are emailed to the generic ANST uhsussex.screening@nhs.net. These details are also added to the paternal screening database by the laboratory. This can also be accessed by the ANST to update progress.
- The woman and person is informed over the phone or face to face. [Information for fathers invited for a screening test for sickle cell disease and thalassaemia major - GOV.UK \(www.gov.uk\)](#) information is provided either in person, by email or uploading

copy to MIS. The partner is offered HBO screening and invited for the test at the earliest opportunity.

- Full explanation of result given to woman and person and the baby's biological father if present with written material where available by a qualified genetic risk counsellor.
- If the woman and person is identified as a carrier of Beta Thalassaemia at the booking appointment, blood should be taken for ferritin, vitamin B12 and folate levels prior to appointment with Consultant Obstetrician. ANST will notify GP of positive result.
- It is recommended that women and people identified as having Beta thalassaemia trait should take 5 milligrams Folic Acid for the duration of their pregnancy.
- Results to be entered on MIS with a linked neonatal alert.

8.5 Baby's biological father available for testing

- FBC (purple top) taken and sent to laboratory
- Result emailed to ANST within 3 working days.
- Permission should be sought from both parents to upload biological father's results on to the woman and person's MIS.

8.6 Baby's biological father identified as carrier or is unavailable

- Woman and person or couple offered appointment with ANST or genetic counselor to discuss diagnostic testing.
- If diagnostic testing declined or unborn baby diagnosed as affected by HBO Consultant Pediatrician informed. Alert to be entered on woman and person's MIS.
- Newborn Bloodspot Screening Test performed routinely at 5 days, with relevant information on card.

9.0 Screening for HIV, Hepatitis B, Hepatitis C and Syphilis in Pregnancy

9.1 Screening

- Offer HIV, Hepatitis B and syphilis screening at the booking appointment in each pregnancy and on transfer of care from another provider as recommended in national standards on screening (Gov.UK Feb 2023)
- If known positive please notify ANST to ensure early referral to specialist services.
- All test can be declined individually on ICE if the women and person chooses not to be screened for individual infections.
- If the woman and person discloses she has a history of intravenous drug use or is Hepatitis C positive, screening for Hepatitis C should be requested with full clinical details (not routinely screened). Please notify ANST of any known Hepatitis C positive.

9.2 Declined

- Documented in notes and on the MIS as 'declined' and create alert. Tests should be re-offered by 20 weeks and ANST informed.

- The woman and person will be sent a letter by the ANST outlining the reasons for infectious diseases screening, and an appointment is offered with the ANST to discuss.
- Patient details added to 'declines' database by ANST to enable monitoring and reporting of data to NHSE.

9.3 Accepted

- Blood taken and sent to laboratory.

9.4 Rejected samples

- If any antenatal sample is rejected in the laboratory (incorrect labeling, clotted etc.), the ANST will be informed immediately and will organise a repeat sample

10.0 Screening Failsafes

The ANST carry out failsafe checking for SCT, IDPS, and FASP. These are changing due MIS implementation and will be updated once failsafe officer in place.

11.0 Training

Training for staff working within the maternity service will be delivered in line with the Maternity Training Needs Analysis document.

12.0 Quality Monitoring Standards

1. Antenatal Screening-normal results

Sample Size	Audit 20 sets of MIS antenatal records on each site
Frequency of Audit	Annual
Method for data collection	Approved notes quality review tool
Standards	GOV.UK 2018
Monitoring of compliance by	Antenatal & newborn steering and immunisations steering group
Reports to	Maternity safety and quality group

1. The number with documented consent for combined/quad/dating
2. The number with a documented combined/quad result?
3. The number where combined /quad result was given at the subsequent appointment following booking
4. The number with the screening result on Medway
5. The number sent their screening result within 10 days of the test
6. The number with date of booking bloods documented
7. The number with booking blood results documented
8. The number where booking blood results given at appointment subsequent to booking
9. a) The number with any booking bloods declined
b) If any declined, the number with documented re-offer by 20 weeks

2. Abnormal Haemoglobinopathy (HBO) result

Sample Size	5 cases on each site with abnormal haemoglobinopathy result
Frequency of Audit	Annual
Method for data collection	Approved notes quality review tool and /or paternal screening database
Standards	GOV.UK 2018
Monitoring of compliance by	Antenatal & newborn steering and immunisations steering group
Reports to	Maternity safety and quality group

1. The number where the result was available by 10 weeks
2. The number where partner testing was offered
3. The number where 'tests for dads' leaflet was given or offered
4. The number with an abnormal partner HBO result
5. The number where woman and partner had an abnormal HBO result who had prenatal diagnosis test by 12+6

References

[Screening tests for you and your baby \(STFYAYB\) - GOV.UK \(www.gov.uk 2022\)](#)

[Screening tests in pregnancy - NHS \(www.nhs.uk 2021\)](#)

[Population screening programmes: NHS sickle cell and thalassaemia \(SCT\) screening programme - detailed information - GOV.UK \(www.gov.uk 2023\)](#)

[Sickle cell and thalassaemia \(SCT\) screening: programme overview - GOV.UK \(www.gov.uk 2023\)](#)

[Screening for sickle cell and thalassaemia - NHS \(www.nhs.uk 2022\)](#)

[SCT screening: handbook for antenatal laboratories - GOV.UK \(www.gov.uk 2022\)](#)

[Population screening programmes: NHS infectious diseases in pregnancy screening \(IDPS\) programme - detailed information - GOV.UK \(www.gov.uk 2021\)](#)

[Infectious diseases in pregnancy screening: standards - GOV.UK \(www.gov.uk 2023\)](#)

[Screening for hepatitis B, HIV and syphilis - NHS \(www.nhs.uk 2021\)](#)

[Infectious diseases in pregnancy screening programme: laboratory handbook - GOV.UK \(www.gov.uk 2022\)](#)

[NHS Fetal Anomaly Screening Programme \(FASP\): programme overview - GOV.UK \(www.gov.uk 2021\)](#)

[Fetal anomaly screening programme handbook - GOV.UK \(www.gov.uk 2023\)](#)

[Fetal anomaly screening programme: standards - GOV.UK \(www.gov.uk 2021\)](#)

[Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome - NHS \(www.nhs.uk 2021\)](#)

Appendix 1: Haemoglobinopathy & Infectious Diseases Failsafe

