

Avoidable Repeat Rate for February 2023 for Newborn Blood Spot Screening - Manchester Laboratory

The avoidable repeat rate for samples received during February 2023 is displayed by Trust in Figure 1. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number of babies tested (i.e. first samples).

Acceptable: Avoidable repeat rate is $\leq 2.0\%$

Achievable: Avoidable repeat rate is $\leq 1.0\%$

A list of trust codes is provided in Table 1.

Table 1

Code	Trust Name
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST
RMC	BOLTON NHS FOUNDATION TRUST
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST
RW3	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – ST. MARY'S & RMCH
RM2	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – WYTHENSHAW
NM-R0A	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – NORTH MANCHESTER
OL-RW6	NORTHERN CARE ALLIANCE
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST
RWJ	STOCKPORT NHS FOUNDATION TRUST
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST

Figure 1 - Avoidable repeats by Trust

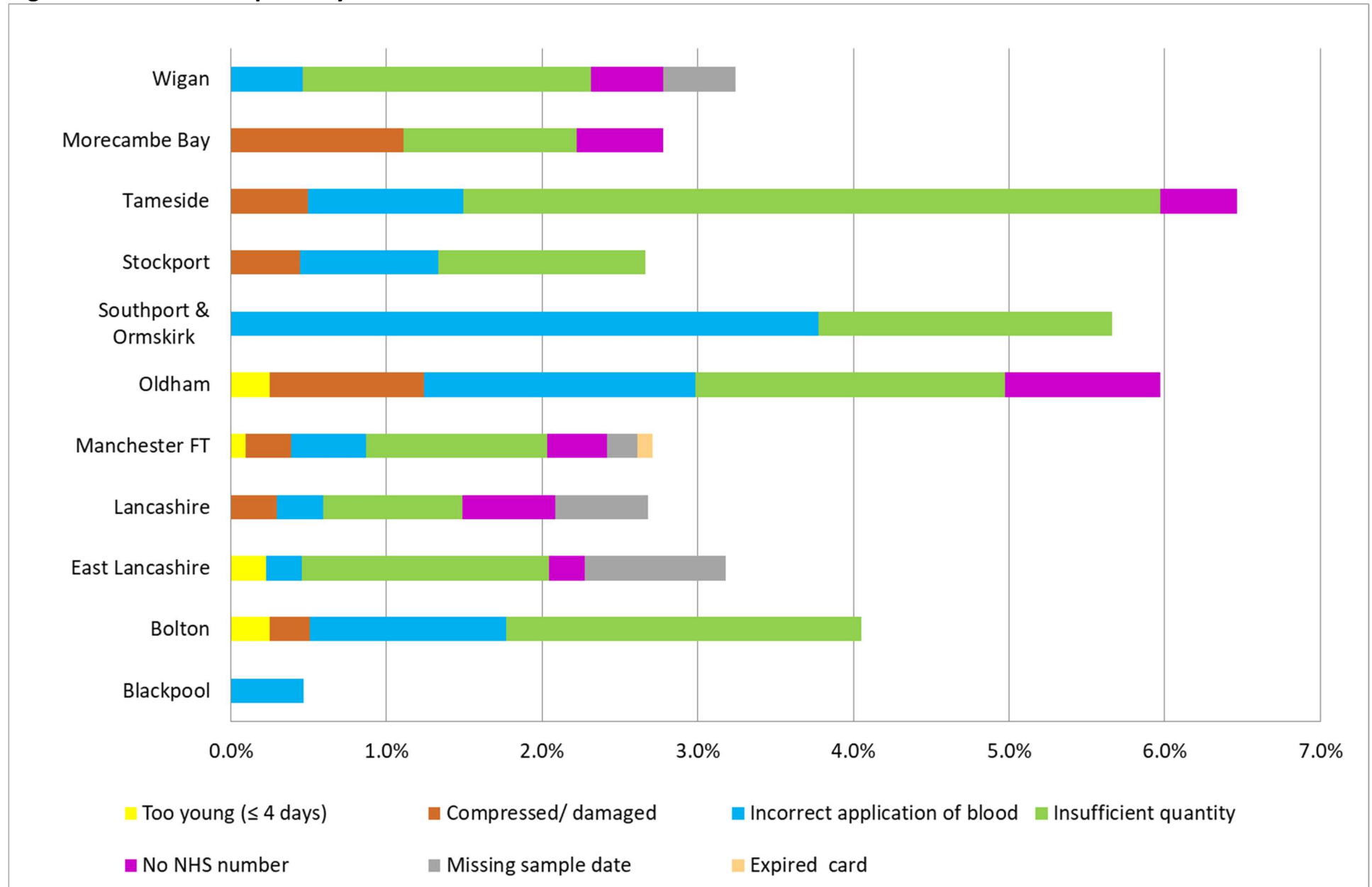


Table 2 – Avoidable repeats by Trust for February 2023

Maternity Unit	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young for reliable screening (≤ 4 days)	Blood spot damaged in transit	Bloodspot compressed/ damaged	Expired bloodspot card	Incorrect application of blood on card	Insufficient quantity	>14 days in transit	No NHS number	Contaminated (discrepant IRT)	Missing sample date	DOB missing	Number of Avoidable Repeat Requests	Avoidable Repeat Requests Rate
Blackpool Teaching Hospitals NHS FT	214	0	0	0	0	0	1	0	0	0	0	0	0	1	0.5%
Bolton NHS FT	395	0	1	0	1	0	5	9	0	0	0	0	0	16	4.1%
East Lancashire Hospitals NHS Trust	440	1	1	0	0	0	1	7	0	1	0	4	0	14	3.2%
Health Visitor	84	0	0	0	2	1	3	2	0	0	0	0	0	8	9.5%
Lancashire Teaching Hospitals NHS FT	336	0	0	0	1	0	1	3	0	2	0	2	0	9	2.7%
Manchester University NHS FT - SMH, RMCH, WH, NMGH	1034	0	1	0	3	1	5	12	0	4	0	2	0	28	2.7%
Not stated	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Oldham (NCA)	402	0	1	0	4	0	7	8	0	4	0	0	0	24	6.0%
Southport & Ormskirk Hospital NHS Trust	53	0	0	0	0	0	2	1	0	0	0	0	0	3	5.7%
Stockport NHS FT	225	1	0	0	1	0	2	3	0	0	0	0	0	6	2.7%
Tameside And Glossop Integrated Care NHS FT	201	0	0	0	1	0	2	9	0	1	0	0	0	13	6.5%
University Hospitals of Morecambe Bay NHS FT	180	0	0	0	2	0	0	2	0	1	0	0	0	5	2.8%
Wrightington, Wigan and Leigh NHS FT	216	0	0	0	0	0	1	4	0	1	0	1	0	7	3.2%
Grand Total	3787	2	4	0	15	2	30	60	0	14	0	9	0	134	3.5%

*Not included in calculation of avoidable repeats

Table 3 – Avoidable repeats by current hospital (in-patients) for February 2023

Current Hospital	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young for reliable screening (≤ 4 days)	Blood spot damaged in transit	Bloodspot compressed/ damaged	Expired bloodspot card	Incorrect application of blood on card	Insufficient quantity	>14 days in transit	No NHS number	Contaminated (discrepant IRT)	Missing sample date	DOB missing	Number of Avoidable Repeat Requests	Avoidable Repeat Requests Rate
Burnley General Hospital	52	1	0	0	0	0	0	4	0	0	0	2	0	6	11.5%
Royal Bolton Hospital	60	0	1	0	1	0	4	3	0	0	0	0	0	9	15.0%
Blackpool Victoria Hospital	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Furness General Hospital	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
North Manchester General Hospital	25	0	0	0	0	1	1	1	0	0	0	0	0	3	12.0%
Not in hospital	3360	0	3	0	12	1	17	45	0	13	0	7	0	98	2.9%
Ormskirk & District General	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Albert Edward Infirmary	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Blackburn Hospital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Lancaster Infirmary	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Manchester Childrens Hospital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Oldham Hospital	57	0	0	0	0	0	5	1	0	0	0	0	0	6	10.5%
Royal Preston Hospital	37	0	0	0	0	0	0	3	0	0	0	0	0	3	8.1%
Stepping Hill Hospital	19	1	0	0	1	0	0	1	0	0	0	0	0	2	10.5%
St Mary's Hospital, Manchester	86	0	0	0	0	0	3	1	0	1	0	0	0	5	5.8%
Tameside General Hospital	18	0	0	0	1	0	0	0	0	0	0	0	0	1	5.6%
Wythenshawe Hospital	21	0	0	0	0	0	0	1	0	0	0	0	0	1	4.8%
Grand Total	3787	2	4	0	15	2	30	60	0	14	0	9	0	134	3.5%

*Not included in calculation of avoidable repeats

Tips to help avoid rejection of samples:

- Collect sample on day 5 (date of birth is day 0)
- Check the expiry date on the card
- Wash the baby's heel with water to reduce the risk of a contaminated IRT result
- Ensure that blood spots are the size of the guide circles on the card
- Allow the blood to drop onto the card rather than touching the filter paper to the baby's heel
- Some brands of lancet device are more effective than others
- Extra blood spots, in addition to the 4 indicated by the guide circles, can be collected elsewhere on the card
- Repeat the test at the same visit if the spots are too small or have not soaked through to the back of the card
- Make sure there is a valid NHS number on the card

Conclusion

The avoidable repeat rate for February was 3.5% which is higher than January (3.4%). The most common reason for rejection of samples was insufficient blood, followed by incorrect application of blood (multi-spotting). Only one Maternity Unit met the standard, and the achievable threshold.