

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

The avoidable repeat rate for samples received during July 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  $\leq 2.0\%$**

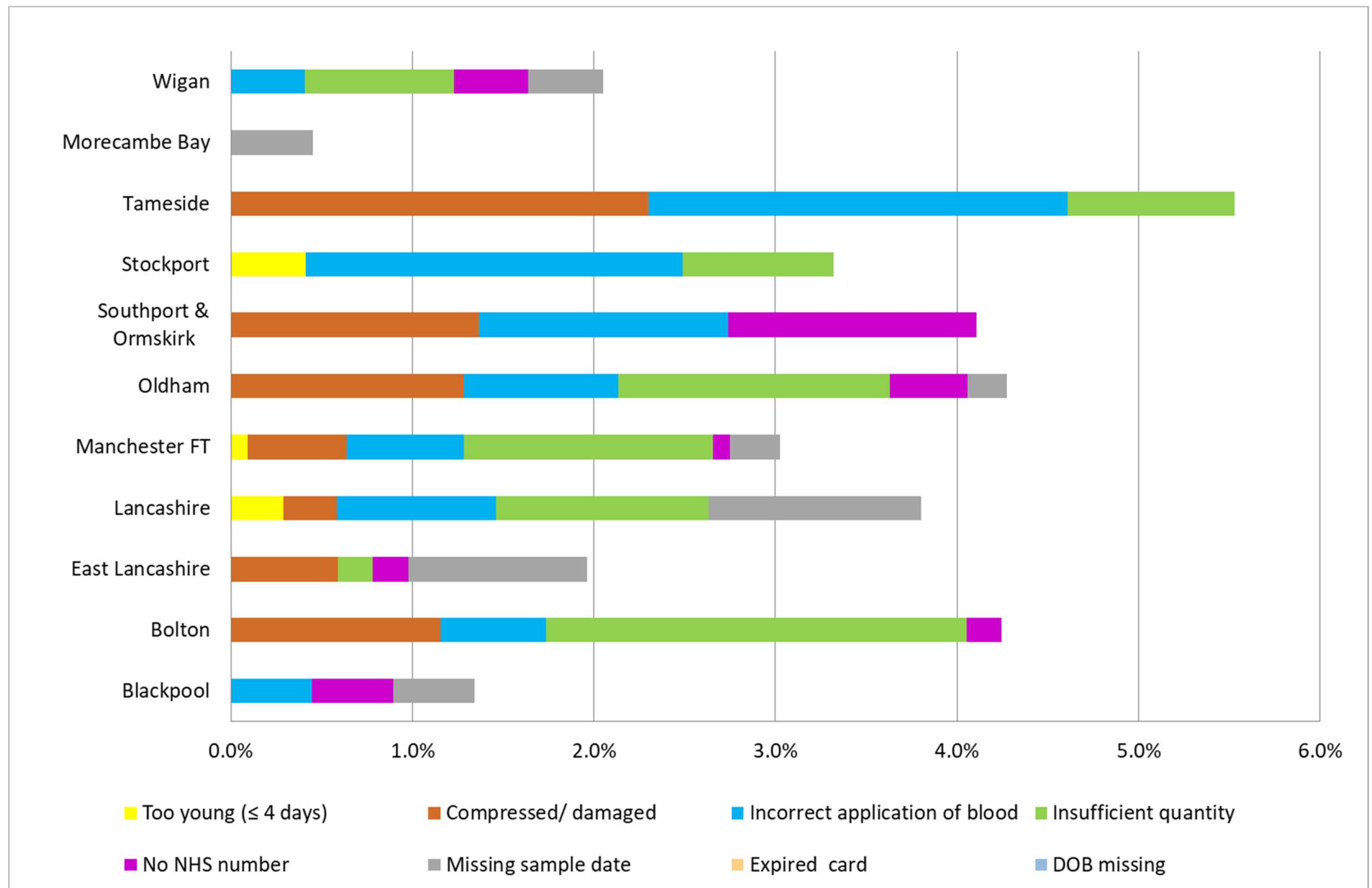
**Achievable: Avoidable repeat rate is  $\leq 1.0\%$**

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 July 2023**

Maternity Unit	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young for reliable screening (≤ 4 days)	Too old for screening (>1 year)	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	223	1	0	0	0	0	0	1	0	0	1	0	1	0	3	1.3%
Bolton NHS FT	518	3	0	0	0	6	0	3	12	0	1	0	0	0	22	4.2%
East Lancashire Hospitals NHS Trust	510	2	0	0	0	3	0	0	1	0	1	0	5	0	10	2.0%
Health Visitor	115	0	0	1	0	1	0	1	2	0	1	0	0	0	6	5.2%
Lancashire Teaching Hospitals NHS FT	342	1	1	0	0	1	0	3	4	0	0	0	4	0	13	3.8%
Manchester University NHS FT - SMH, RMCH, WH, NMGH	1091	3	1	0	0	6	0	7	15	0	1	0	3	0	33	3.0%
Not stated	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	100.0%
Oldham (NCA)	468	3	0	0	0	6	0	4	7	0	2	0	1	0	20	4.3%
Southport & Ormskirk Hospital NHS Trust	73	0	0	0	0	1	0	1	0	0	1	0	0	0	3	4.1%
Stockport NHS FT	241	0	1	0	0	0	0	5	2	0	0	0	0	0	8	3.3%
Tameside And Glossop Integrated Care NHS FT	217	0	0	0	0	5	0	5	2	0	0	0	0	0	12	5.5%
University Hospitals of Morecambe Bay NHS FT	222	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0.5%
Wrightington, Wigan and Leigh NHS FT	244	0	0	0	0	0	0	1	2	0	1	0	1	0	5	2.0%
Grand Total	4265	14	3	1	0	29	0	31	48	0	9	0	16	0	137	3.2%

\*Not included in calculation of avoidable repeats

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

Current Hospital	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young for reliable screening (≤ 4 days)	Too old for screening (>1 year)	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	54	2	0	0	0	0	0	0	0	0	1	0	4	0	5	9.3%
Royal Bolton Hospital	51	3	0	0	0	1	0	1	2	0	0	0	0	0	4	7.8%
Blackpool Victoria Hospital	19	1	0	0	0	0	0	0	0	0	1	0	0	0	1	5.3%
Furness General Hospital	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
North Manchester General Hospital	30	0	0	0	0	0	0	1	1	0	0	0	0	0	2	6.7%
Not in hospital	3809	0	2	1	0	25	0	16	39	0	6	0	12	0	101	2.7%
Not stated	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	100.0%
Ormskirk & District General	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Albert Edward Infirmary	12	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8.3%
Royal Blackburn Hospital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Lancaster Infirmary	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Manchester Childrens Hospital	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Oldham Hospital	50	3	0	0	0	1	0	4	0	0	0	0	0	0	5	10.0%
Royal Preston Hospital	35	1	0	0	0	0	0	0	1	0	0	0	0	0	1	2.9%
Stepping Hill Hospital	20	0	0	0	0	0	0	4	0	0	0	0	0	0	4	20.0%
St Mary's Hospital, Manchester	110	3	1	0	0	0	0	3	1	0	1	0	0	0	6	5.5%
Tameside General Hospital	11	0	0	0	0	1	0	1	1	0	0	0	0	0	3	27.3%
Wythenshawe Hospital	33	0	0	0	0	1	0	1	1	0	0	0	0	0	3	9.1%
Grand Total	4265	14	3	1	0	29	0	31	48	0	9	0	16	0	137	3.2%

\*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 July was 3.2% which is higher than June (2.3%). The most common reason for rejection of samples was insufficient blood, followed by incorrect application. Three Maternity Units met the acceptable standard, and one met the achievable standard.