

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

The avoidable repeat rate for samples received during December 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%**

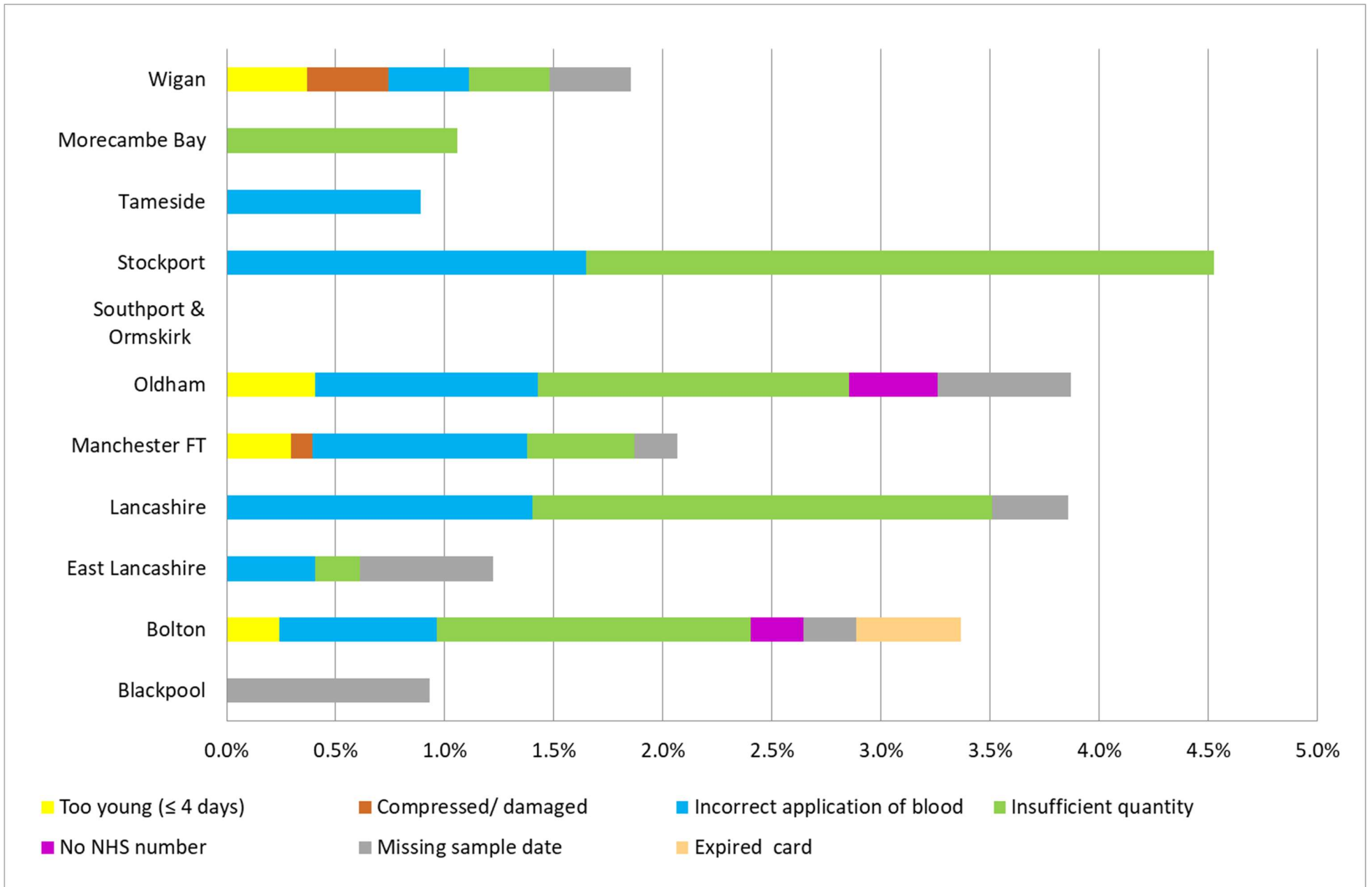
**Achievable: Avoidable repeat rate is  $\leq$  1.0%**

A list of trust codes is provided in Table 1.

**Table 1**

<b>Code</b>	<b>Trust Name</b>
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-ROA	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 – December 2023**



**Table 2 – Avoidable repeats by Trust for December 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	215	0	0	0	0	0	0	0	0	0	0	2	0	2	0.9%
Bolton NHS FT	416	1	1	0	0	2	3	6	0	1	0	1	0	14	3.4%
East Lancashire Hospitals NHS Trust	491	4	0	0	0	0	2	1	0	0	0	3	0	6	1.2%
Health Visitor	78	0	0	0	0	0	1	10	0	2	0	0	0	13	16.7%
Lancashire Teaching Hospitals NHS FT	285	0	0	0	0	0	4	6	0	0	0	1	0	11	3.9%
Manchester University NHS FT - SMH, RMCH, WH, NMGH	1016	2	3	0	1	0	10	5	0	0	0	2	0	21	2.1%
Not stated	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Oldham (NCA)	491	1	2	0	0	0	5	7	0	2	0	3	0	19	3.9%
Southport & Ormskirk Hospital NHS Trust	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Stockport NHS FT	243	0	0	0	0	0	4	7	0	0	0	0	0	11	4.5%
Tameside And Glossop Integrated Care NHS FT	225	0	0	0	0	0	2	0	0	0	0	0	0	2	0.9%
University Hospitals of Morecambe Bay NHS FT	189	0	0	0	0	0	0	2	0	0	0	0	0	2	1.1%
Wrightington, Wigan and Leigh NHS FT	270	0	1	0	1	0	1	1	0	0	0	1	0	5	1.9%
<b>Grand Total</b>	<b>3985</b>	<b>8</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>32</b>	<b>45</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>106</b>	<b>2.7%</b>

\*Not included in calculation of avoidable repeats

**Table 3 – Avoidable repeats by current hospital (in-patients) for December 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	4	0	0	0	0	2	0	0	0	0	1	0	3	5.8%
Royal Bolton Hospital	49	1	0	0	0	1	3	2	0	0	0	1	0	7	14.3%
Blackpool Victoria Hospital	26	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	0	1	0	0	0	0	0	0	1	4.0%
Not in hospital	3551	0	3	0	1	1	12	40	0	5	0	11	0	73	2.1%
Ormskirk & District General	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Albert Edward Infirmary	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Blackburn Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Lancaster Infirmary	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Manchester Childrens Hospital	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Oldham Hospital	57	1	1	0	0	0	2	0	0	0	0	0	0	3	5.3%
Royal Preston Hospital	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Stepping Hill Hospital	19	0	0	0	0	0	2	0	0	0	0	0	0	2	10.5%
St Mary's Hospital, Manchester	105	2	3	0	1	0	6	3	0	0	0	0	0	13	12.4%
Tameside General Hospital	16	0	0	0	0	0	2	0	0	0	0	0	0	2	12.5%
Wythenshawe Hospital	20	0	0	0	0	0	2	0	0	0	0	0	0	2	10.0%
<b>Grand Total</b>	<b>3985</b>	<b>8</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>32</b>	<b>45</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>106</b>	<b>2.7%</b>

\*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 December was 2.7% which is higher than November (2.6%). The most common reason for rejection of samples was insufficient blood, followed by incorrect application. Three Maternity Units met the acceptable standard, and three met the achievable standard.