

Avoidable Repeat Rate for December 2022 for Newborn Blood Spot Screening - Manchester Laboratory

The avoidable repeat rate for samples received during December 2022 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).

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	OLDHAM (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

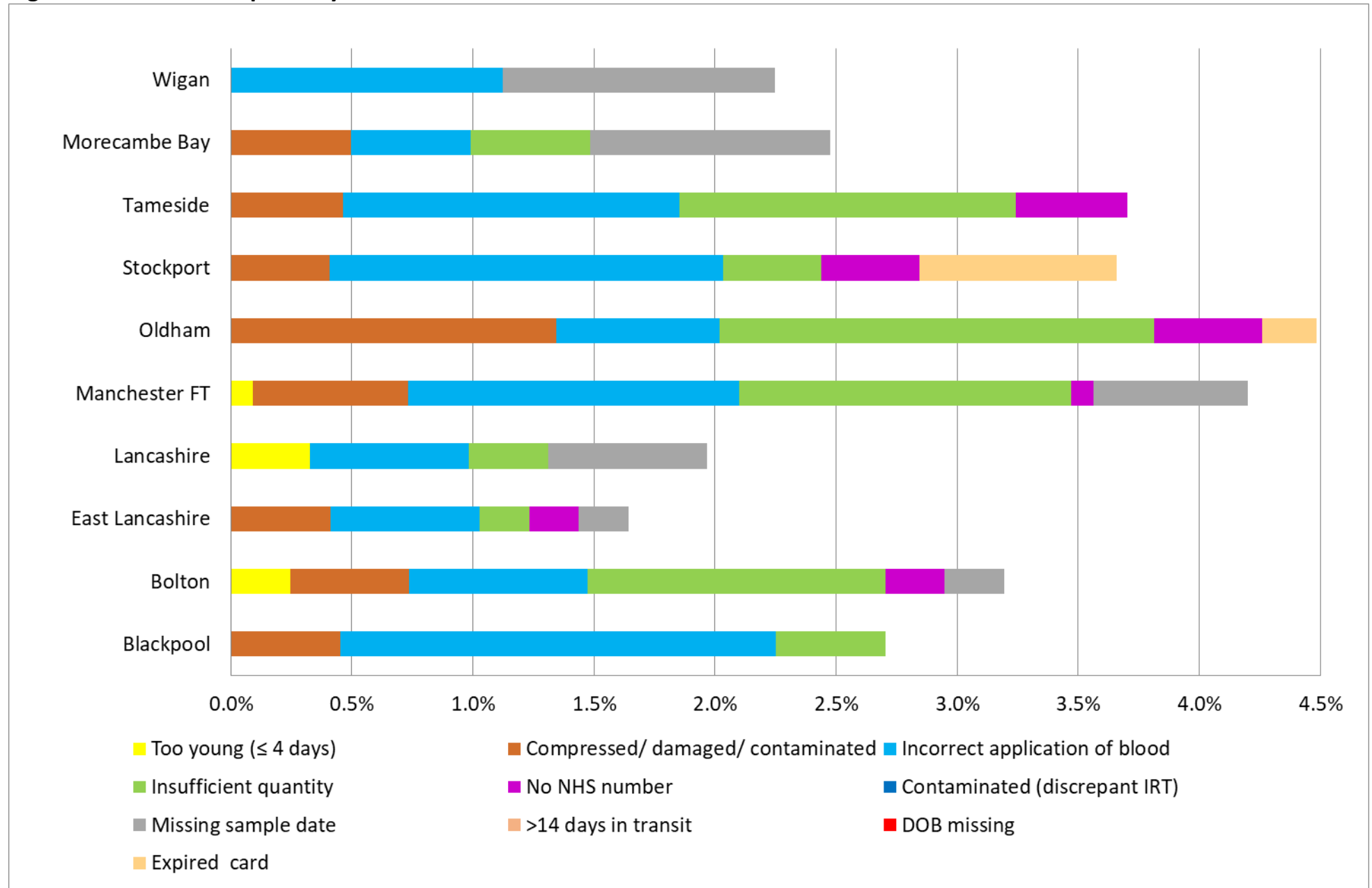


Table 2 – Avoidable repeats by Trust for December 2022

*Not included in calculation of avoidable repeats

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	Blood spot compressed/ damaged/ contaminated	Expired blood spot 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	222	0	0	0	1	0	4	1	0	0	0	0	0	6	2.7%
Bolton NHS FT	407	2	1	0	2	0	3	5	0	1	0	1	0	13	3.2%
East Lancashire Hospitals NHS Trust	487	3	0	0	2	0	3	1	0	1	0	1	0	8	1.6%
Health Visitor	74	0	0	0	3	0	4	2	2	2	0	0	1	14	18.9%
Lancashire Teaching Hospitals NHS FT	305	1	1	0	0	0	2	1	0	0	0	2	0	6	2.0%
Manchester University NHS FT	1095	1	1	0	7	0	15	15	0	1	0	7	0	46	4.2%
Not stated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Oldham (NCA)	446	0	0	0	6	1	3	8	0	2	0	0	0	20	4.5%
Southport & Ormskirk Hospital NHS Trust	85	0	1	0	1	0	5	0	8	0	0	0	0	15	17.6%
Stockport NHS FT	246	0	0	0	1	2	4	1	0	1	0	0	0	9	3.7%
Tameside And Glossop Integrated Care NHS FT	216	0	0	0	1	0	3	3	0	1	0	0	0	8	3.7%
University Hospitals of Morecambe Bay NHS FT	202	0	0	0	1	0	1	1	0	0	0	2	0	5	2.5%
Wrightington, Wigan and Leigh NHS FT	267	0	0	0	0	0	3	0	0	0	0	3	0	6	2.2%
Grand Total	4052	7	4	0	25	3	50	38	10	9	0	16	0	155	3.8%

Table 3 – Avoidable repeats by current hospital (in-patients) for December 2022

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	Blood spot compressed/ damaged/ contaminated	Expired blood spot 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 Victoria Hospital	21	0	0	0	0	0	1	0	0	0	0	0	0	1	4.8%
Burnley General Hospital	41	3	0	0	1	0	3	0	0	1	0	0	0	5	12.2%
Furness General Hospital	3	0	0	0	0	0	1	0	0	0	0	0	0	1	33.3%
North Manchester General Hospital	28	0	0	0	0	0	1	1	0	0	0	0	0	2	7.1%
Not in hospital	3614	0	4	0	22	3	34	28	10	8	0	14	0	123	3.4%
Ormskirk & District General	3	0	0	0	1	0	0	0	0	0	0	0	0	1	33.3%
Royal Albert Edward Infirmary	27	0	0	0	0	0	2	0	0	0	0	1	0	3	11.1%
Royal Blackburn Hospital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Bolton Hospital	47	2	0	0	0	0	0	1	0	0	0	0	0	1	2.1%
Royal Lancaster Infirmary	9	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	63	0	0	0	0	0	2	5	0	0	0	0	0	7	11.1%
Royal Preston Hospital	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
St Mary's Hospital, Manchester	98	1	0	0	0	0	5	1	0	0	0	1	0	7	7.1%
Stepping Hill Hospital	18	0	0	0	1	0	1	1	0	0	0	0	0	3	16.7%
Tameside General Hospital	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Wythenshawe Hospital	40	0	0	0	0	0	0	1	0	0	0	0	0	1	2.5%
Grand Total	4052	7	4	0	25	3	50	38	10	9	0	16	0	155	3.8%

*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 3.8% which is higher than November (2.7%). The most common reason for rejection of samples was incorrect application of blood (multi-spotting), followed by insufficient blood. Compressed/ damaged/ contaminated samples also made a significant contribution to the rejection rate this month, along with samples delayed in transit. Two Maternity Units met the standard.