

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

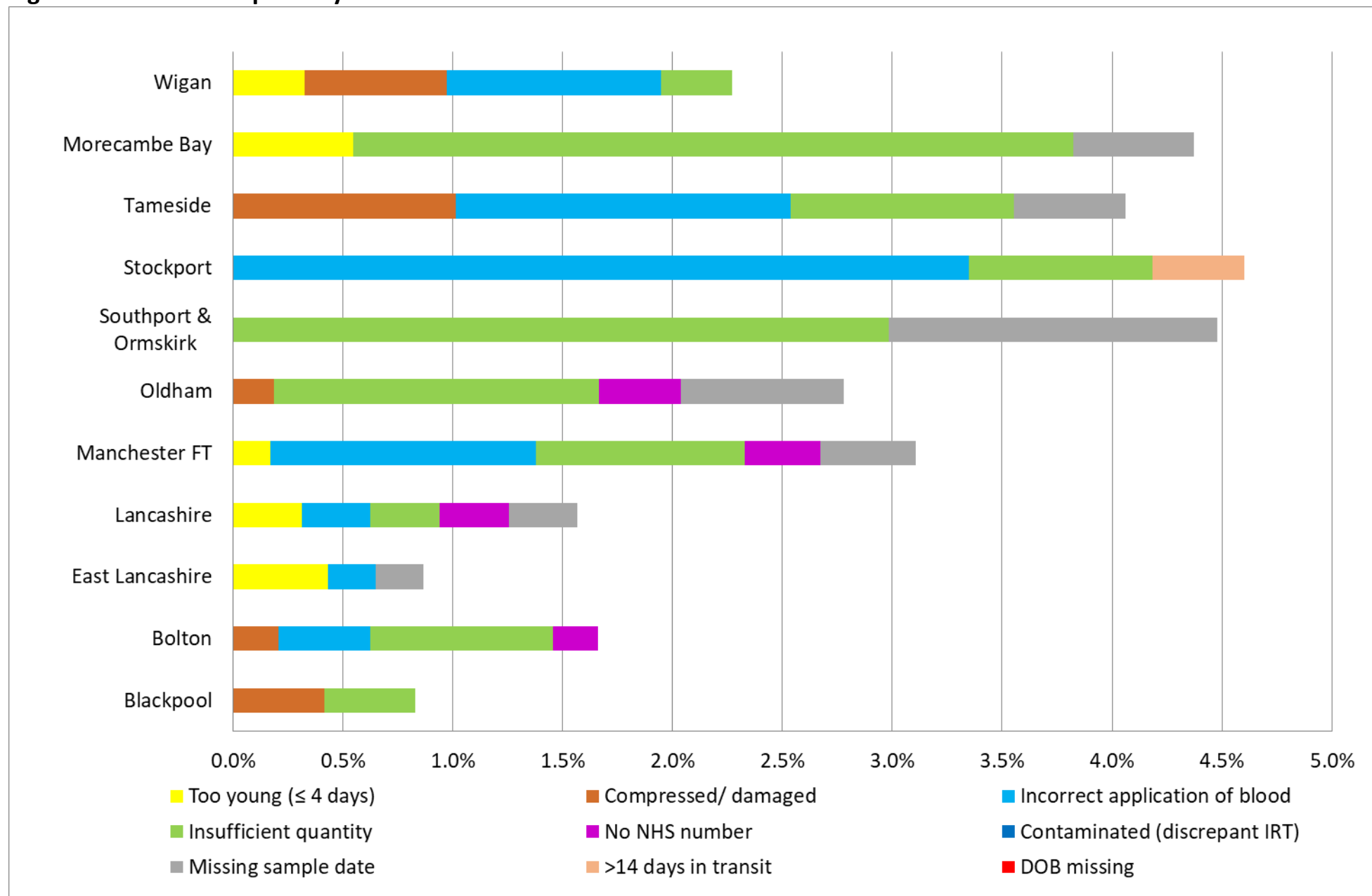
The avoidable repeat rate for samples received during November 2022 is displayed by Trust in Figure 1 and by current hospital (for in-patients) in Figure 2. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number of babies tested (i.e. first samples).

A list of trust codes is provided in Table 1.

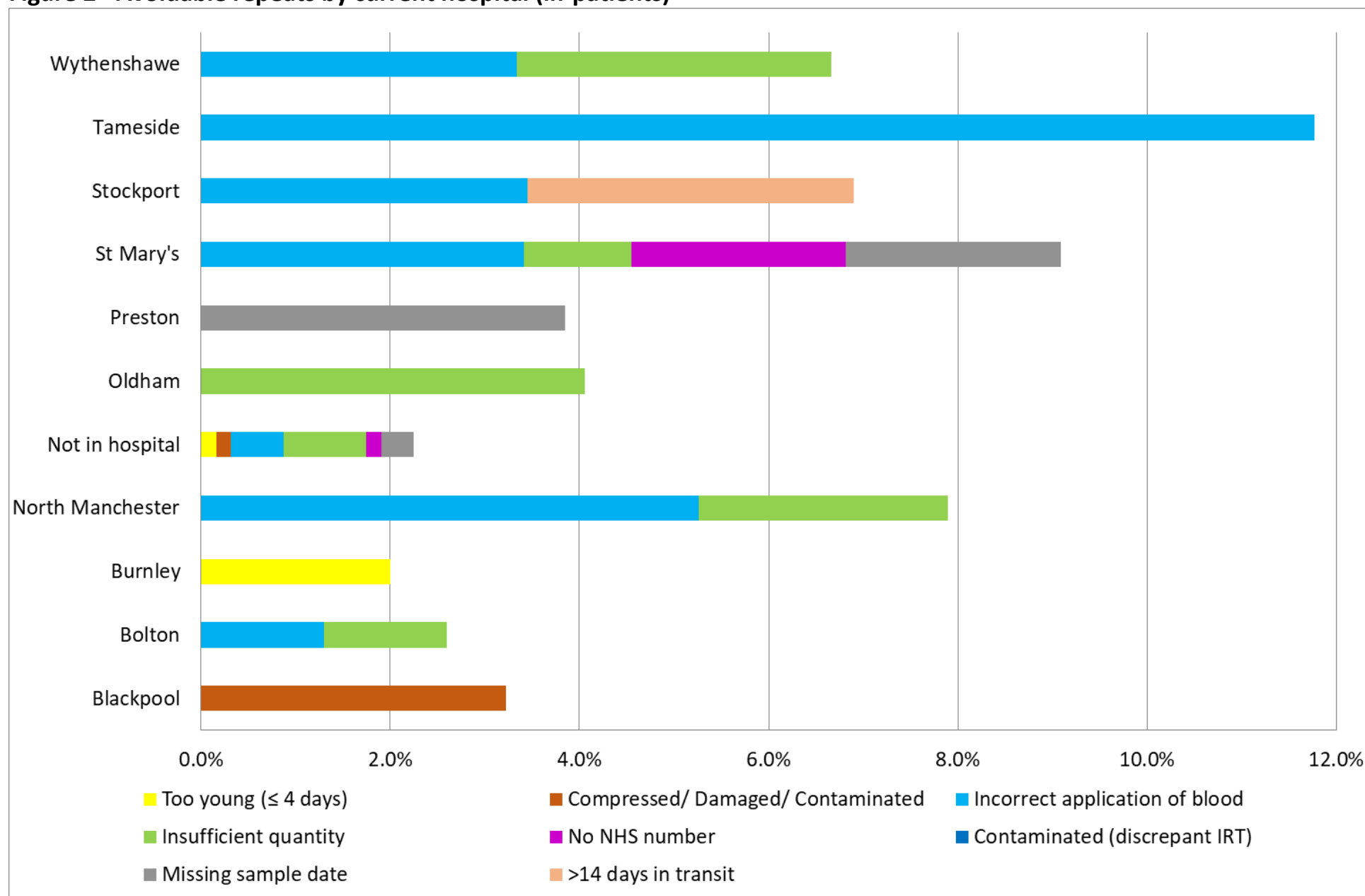
**Table 1**

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-ROA	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**



**Figure 2 - Avoidable repeats by current hospital (in-patients)**



Hospitals with no in-patient avoidable repeats are excluded from the chart (see table 3 for details). Royal Albert Edward Infirmary not shown on the chart (avoidable repeat rate of 20%, 4/20 samples).

**Table 2 – Avoidable repeats by Trust for November 2022**

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	241	0	0	0	1	0	0	1	0	0	0	0	0	2	0.8%
Bolton NHS FT	481	1	0	0	1	0	2	4	0	1	0	0	0	8	1.7%
East Lancashire Hospitals NHS Trust	461	1	2	0	0	0	1	0	0	0	0	1	0	4	0.9%
Health Visitor	83	0	0	0	1	0	2	2	0	0	0	2	1	8	9.6%
Lancashire Teaching Hospitals NHS FT	319	0	1	0	0	0	1	1	0	1	0	1	0	5	1.6%
Manchester University NHS FT	1159	4	2	0	0	0	14	11	0	4	0	5	0	36	3.1%
Not stated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Oldham (NCA)	540	2	0	0	1	0	0	8	0	2	0	4	0	15	2.8%
Southport & Ormskirk Hospital NHS Trust	67	0	0	0	0	0	0	2	0	0	0	1	0	3	4.5%
Stockport NHS FT	239	0	0	0	0	0	8	2	1	0	0	0	0	11	4.6%
Tameside And Glossop Integrated Care NHS FT	197	0	0	0	2	0	3	2	0	0	0	1	0	8	4.1%
University Hospitals of Morecambe Bay NHS FT	183	0	1	0	0	0	0	6	0	0	0	1	0	8	4.4%
Wrightington, Wigan and Leigh NHS FT	308	0	1	0	2	0	3	1	0	0	0	0	0	7	2.3%
Grand Total	4278	8	7	0	8	0	34	40	1	8	0	16	0	114	2.7%

\*Not included in calculation of avoidable repeats

**Table 3 – Avoidable repeats by current hospital (in-patients) for November 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	31	0	0	0	1	0	0	0	0	0	0	0	0	1	3.2%
Burnley General Hospital	50	1	1	0	0	0	0	0	0	0	0	0	0	1	2.0%
Furness General Hospital	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
North Manchester General Hospital	38	0	0	0	0	0	2	1	0	0	0	0	0	3	7.9%
Not in hospital	3780	0	6	0	6	0	21	33	0	6	0	13	0	85	2.2%
Ormskirk & District General	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Albert Edward Infirmary	20	0	0	0	1	0	3	0	0	0	0	0	0	4	20.0%
Royal Blackburn Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Royal Bolton Hospital	77	1	0	0	0	0	1	1	0	0	0	0	0	2	2.6%
Royal Lancaster Infirmary	12	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	74	2	0	0	0	0	0	3	0	0	0	0	0	3	4.1%
Royal Preston Hospital	26	0	0	0	0	0	0	0	0	0	0	1	0	1	3.8%
St Mary's Hospital, Manchester	88	4	0	0	0	0	3	1	0	2	0	2	0	8	9.1%
Stepping Hill Hospital	29	0	0	0	0	0	1	0	1	0	0	0	0	2	6.9%
Tameside General Hospital	17	0	0	0	0	0	2	0	0	0	0	0	0	2	11.8%
Wythenshawe Hospital	30	0	0	0	0	0	1	1	0	0	0	0	0	2	6.7%
Grand Total	4278	8	7	0	8	0	34	40	1	8	0	16	0	114	2.7%

\*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 November was 2.7% which is the same as October. The most common reason for rejection of samples was insufficient blood, followed by incorrect application of blood (multi-spotting). Four Maternity Units met the standard, including two below the achievable threshold of  $\leq 1\%$ .