

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

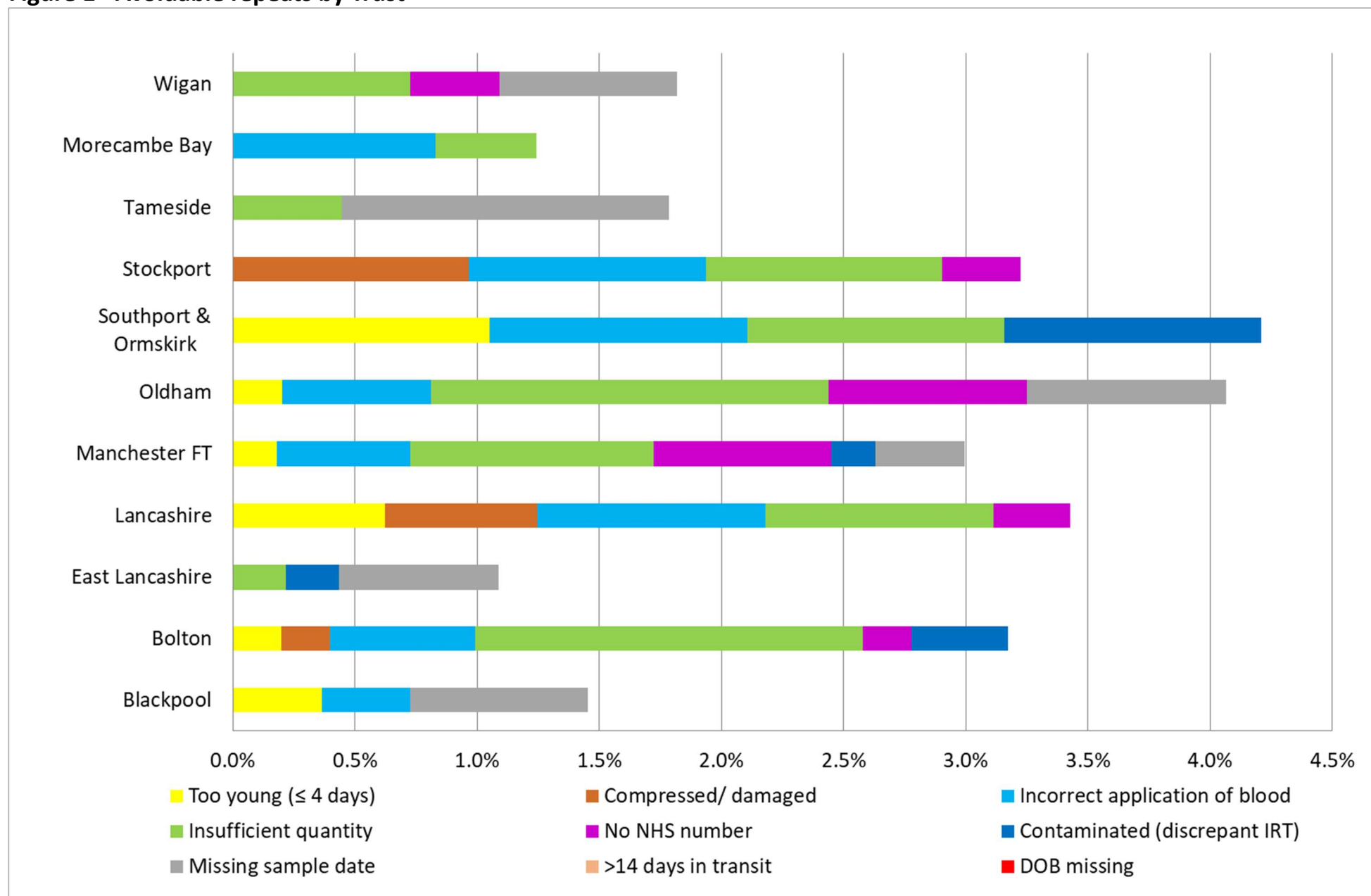
The avoidable repeat rate for samples received during October 2022 is displayed by Trust in Figure 1 and by current hospital (for in-patients) in Figure 2. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number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

A list of trust codes is provided in Table 1.

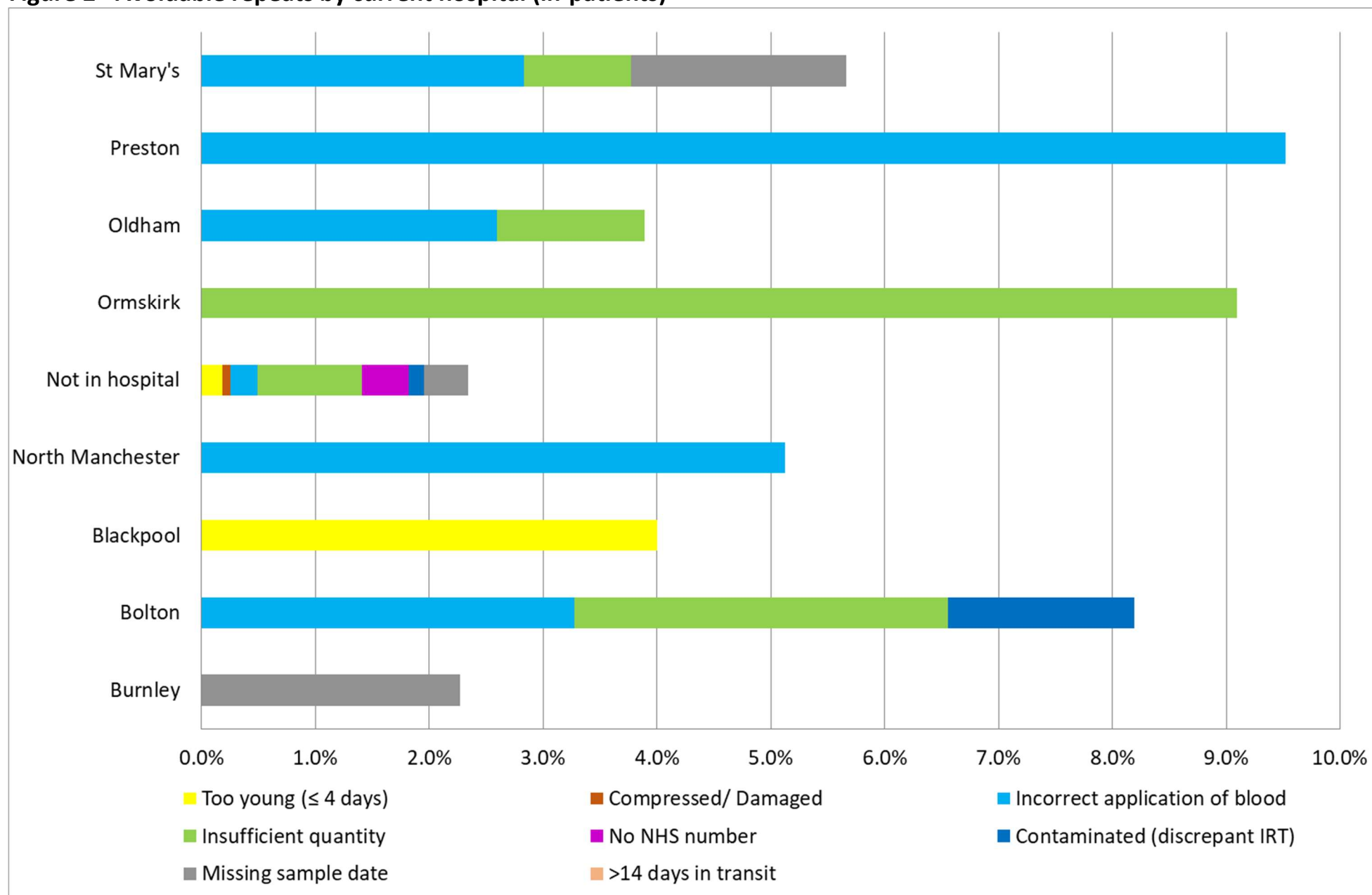
**Table 1**

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	NORTHERN CARE ALLIANCE NHS FOUNDATION TRUST – OLDHAM
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)**



There were no avoidable repeats for RAEI, Blackburn, RLI, RMCH, TGH and WH. Furness had an avoidable repeat rate of 25% (1 out of 4 samples), Stepping Hill had an avoidable repeat rate of 15%.

**Table 2 – Avoidable repeats by Trust for October 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	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	275	0	1	0	0	0	1	0	0	0	0	2	0	4	1.5%
Bolton NHS FT	504	2	1	0	1	0	3	8	0	1	2	0	0	16	3.2%
East Lancashire Hospitals NHS Trust	460	2	0	0	0	0	0	1	0	0	1	3	0	5	1.1%
Lancashire Teaching Hospitals NHS FT	321	1	2	0	2	0	3	3	0	1	0	0	0	11	3.4%
Manchester University NHS FT - SMH, RMCH, WH, NMGH	1102	2	2	0	0	0	6	11	0	8	2	4	0	33	3.0%
Health Visitor	67	0	0	0	0	0	0	0	0	0	2	0	1	3	4.5%
Not stated	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Oldham (NCA)	492	1	1	0	0	0	3	8	0	4	0	4	0	20	4.1%
Southport & Ormskirk Hospital NHS Trust	95	0	1	0	0	0	1	1	0	0	1	0	0	4	4.2%
Stockport NHS FT	310	0	0	0	3	0	3	3	0	1	0	0	0	10	3.2%
Tameside And Glossop Integrated Care NHS FT	224	0	0	0	0	0	0	1	0	0	0	3	0	4	1.8%
University Hospitals of Morecambe Bay NHS FT	241	0	0	0	0	0	2	1	0	0	0	0	0	3	1.2%
Wrightington, Wigan and Leigh NHS FT	275	0	0	0	0	0	0	2	0	1	0	2	0	5	1.8%
Grand Total	4367	8	8	0	6	0	22	39	0	16	6	18	0	118	2.7%

\*Not included in calculation of avoidable repeats

**Table 3 – Avoidable repeats by current hospital (in-patients) for October 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	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	44	2	0	0	0	0	0	0	0	0	0	1	0	1	2.3%
Royal Bolton Hospital	61	2	0	0	0	0	2	2	0	0	1	0	0	5	8.2%
Blackpool Victoria Hospital	25	0	1	0	0	0	0	0	0	0	0	0	0	1	4.0%
Furness General Hospital	4	0	0	0	0	0	1	0	0	0	0	0	0	1	25.0%
North Manchester General Hospital	39	0	0	0	0	0	2	0	0	0	0	0	0	2	5.1%
Not in hospital	3835	0	7	0	3	0	9	35	0	16	5	15	0	90	2.3%
Ormskirk & District General	11	0	0	0	0	0	0	1	0	0	0	0	0	1	9.1%
Royal Albert Edward Infirmary	27	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	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Manchester Childrens Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Oldham Hospital	77	1	0	0	0	0	2	1	0	0	0	0	0	3	3.9%
Royal Preston Hospital	21	1	0	0	0	0	2	0	0	0	0	0	0	2	9.5%
Stepping Hill Hospital	40	0	0	0	3	0	3	0	0	0	0	0	0	6	15.0%
St Mary's Hospital, Manchester	106	2	0	0	0	0	3	1	0	0	0	2	0	6	5.7%
Tameside General Hospital	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Wythenshawe Hospital	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Grand Total	4367	8	8	0	6	0	24	40	0	16	6	18	0	118	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 October was 2.7% which is lower than September (3.1%).

The most common reason for rejection of samples was insufficient blood, followed by incorrect application of blood (multi-spotting). Five Maternity Units met the standard, and none met the achievable threshold.