

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

The avoidable repeat rate for samples received during September 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	PENNINE ACUTE HOSPITALS NHS 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

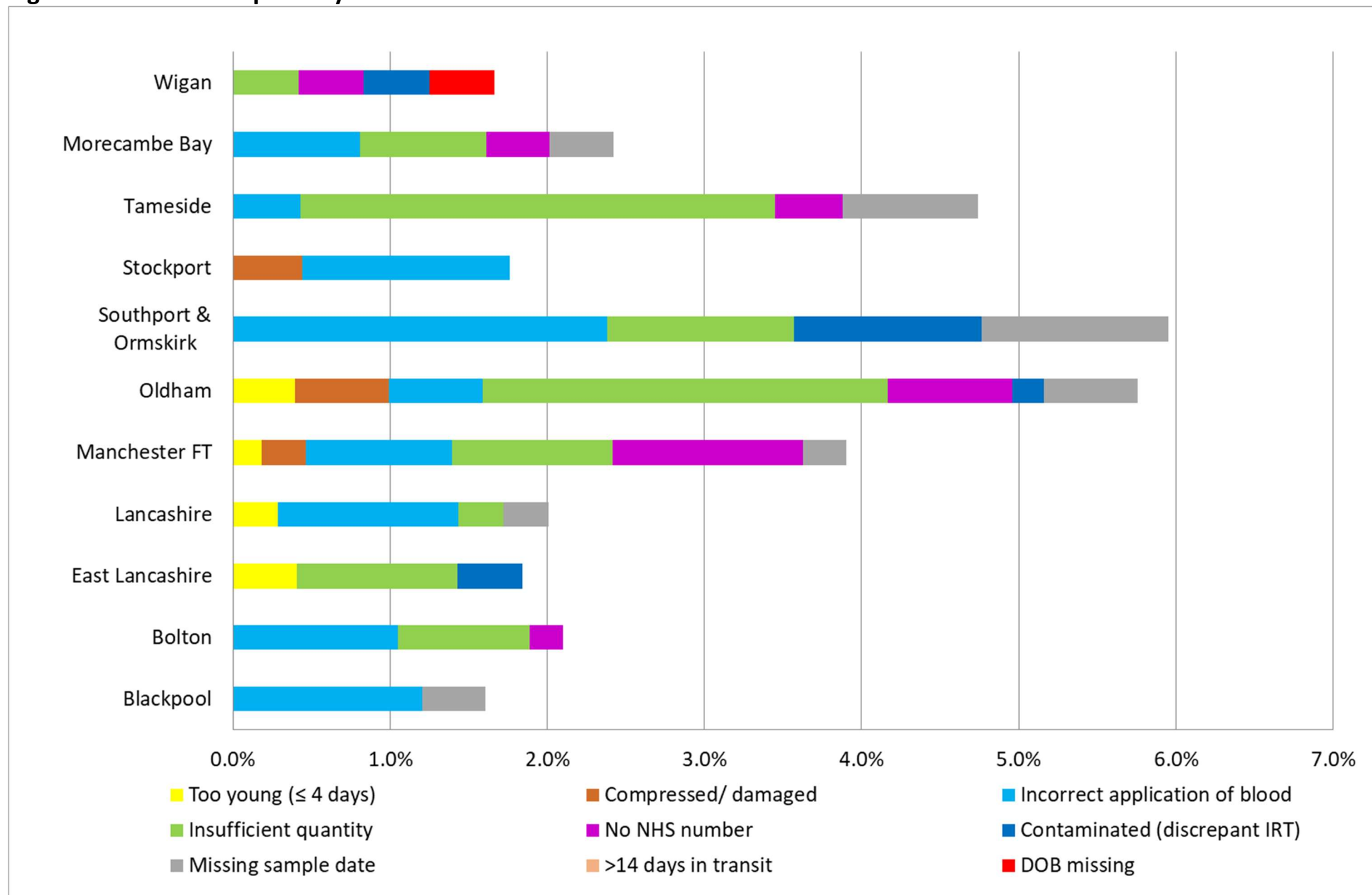
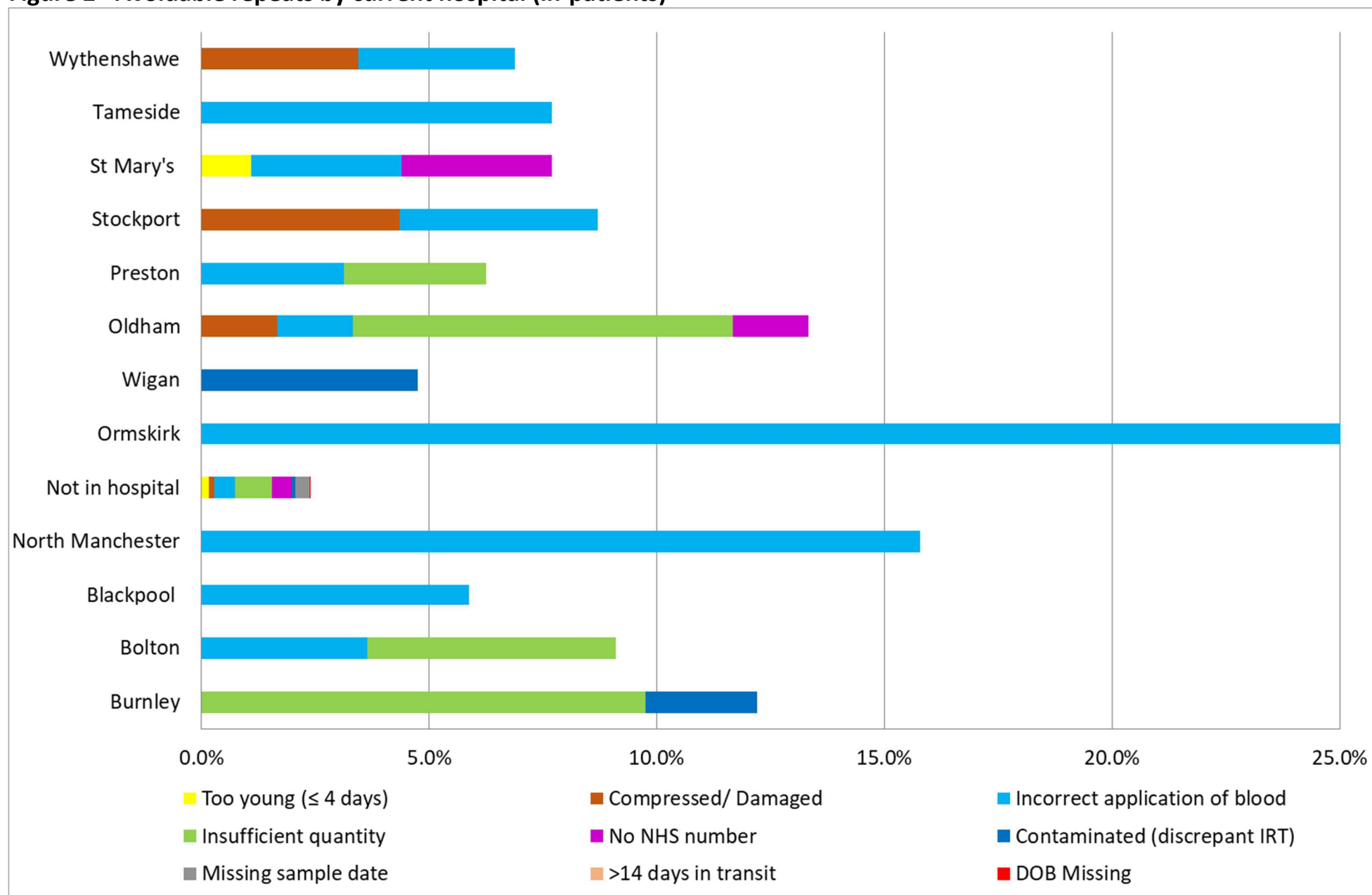


Figure 2 - Avoidable repeats by current hospital (in-patients)



There were no avoidable repeats for RLI. RMCH had an avoidable repeat rate of 100%, Furness had an avoidable repeat rate of 50%.

Table 2 – Avoidable repeats by Trust for September 2022

Maternity Unit	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young for reliable screening (≤ 4 days)	Bloodspot card 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	249	0	0	0	0	0	3	0	0	0	0	1	0	4	1.6%
Bolton NHS FT	476	1	0	0	0	0	5	4	0	1	0	0	0	10	2.1%
East Lancashire Hospitals NHS Trust	489	0	2	0	0	0	0	5	0	0	2	0	0	9	1.8%
Lancashire Teaching Hospitals NHS FT	348	0	1	0	0	0	4	1	0	0	0	1	0	7	2.0%
Manchester University NHS FT - SMH, RMCH, WH, NMGH	1076	2	2	0	3	0	10	11	0	13	0	3	0	42	3.9%
Health Visitor	43	0	0	0	1	0	0	0	0	0	0	0	0	1	2.3%
Oldham (NCA)	504	0	2	0	3	0	3	13	0	4	1	3	0	29	5.8%
Southport & Ormskirk Hospital NHS Trust	84	0	0	0	0	0	2	1	0	0	1	1	0	5	6.0%
Stockport NHS FT	227	0	0	0	1	0	3	0	0	0	0	0	0	4	1.8%
Tameside And Glossop Integrated Care NHS FT	232	0	0	0	0	0	1	7	0	1	0	2	0	11	4.7%
University Hospitals of Morecambe Bay NHS FT	248	0	0	0	0	0	2	2	0	1	0	1	0	6	2.4%
Wrightington, Wigan and Leigh NHS FT	240	0	0	0	0	0	0	1	0	1	1	0	1	4	1.7%
Grand Total	4216	3	7	0	8	0	33	45	0	21	5	12	1	132	3.1%

*Not included in calculation of avoidable repeats

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

Current Hospital	Number of first samples received/ babies tested	Too soon after transfusion (<72 hours)*	Too young (≤ 4 days)	Damaged in transit	Compressed/ Damaged	Expired card	Incorrect application of blood	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	41	0	0	0	0	0	0	4	0	0	1	0	0	5	12.2%
Royal Bolton Hospital	55	1	0	0	0	0	2	3	0	0	0	0	0	5	9.1%
Blackpool Victoria Hospital	17	0	0	0	0	0	1	0	0	0	0	0	0	1	5.9%
Furness General Hospital	2	0	0	0	0	0	0	0	0	1	0	0	0	1	50.0%
North Manchester General Hospital	19	0	0	0	0	0	3	0	0	0	0	0	0	3	15.8%
Not in hospital	3795	0	6	0	5	0	17	31	0	16	3	12	1	91	2.4%
Ormskirk & District General	8	0	0	0	0	0	2	0	0	0	0	0	0	2	25.0%
Royal Albert Edward Infirmary	21	0	0	0	0	0	0	0	0	0	1	0	0	1	4.8%
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	1	0	0	0	0	0	1	100.0%
Royal Oldham Hospital	60	0	0	0	1	0	1	5	0	1	0	0	0	8	13.3%
Royal Preston Hospital	32	0	0	0	0	0	1	1	0	0	0	0	0	2	6.3%
Stepping Hill Hospital	23	0	0	0	1	0	1	0	0	0	0	0	0	2	8.7%
St Mary's Hospital, Manchester	91	2	1	0	0	0	3	0	0	3	0	0	0	7	7.7%
Tameside General Hospital	13	0	0	0	0	0	1	0	0	0	0	0	0	1	7.7%
Wythenshawe Hospital	29	0	0	0	1	0	1	0	0	0	0	0	0	2	6.9%
Grand Total	4216	3	7	0	8	0	33	45	0	21	5	12	1	132	3.1%

*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 September was 3.1% which is higher than August (2.7%). The most common reason for rejection of samples was insufficient blood, followed by incorrect application of blood (multi-spotting). We have also seen an increase in No NHS Number which has contributed to the rate increase (up from 13 samples in August to 21 samples in September). Four Maternity Units met the standard, and none met the achievable threshold.