

## Avoidable Repeat Rate for January 2021 for Newborn Blood Spot Screening - Manchester Laboratory

The avoidable repeat rate for samples received during January 2021 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).

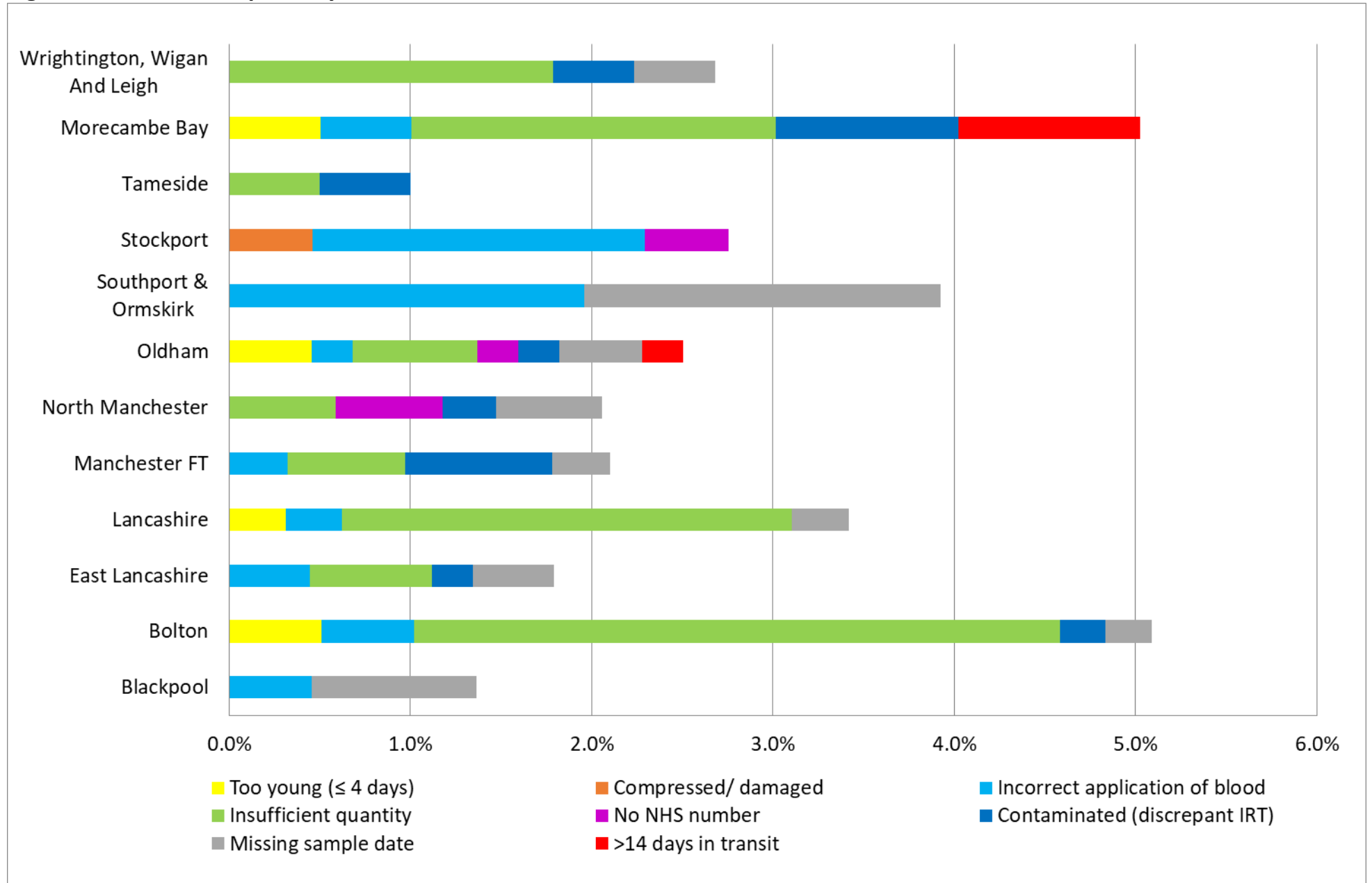
5 samples (first samples and repeats) received in January had no Trust code (0.1%). Please write the Trust code for your maternity unit/ neonatal unit in the PCT field (old style card) or the 'Trust of sample taker' field (new style card) to improve the accuracy of the figures. A list of trust codes is provided in Table 1. Alternatively maternity units could stamp cards with the code prior to issuing to midwives/neonatal units, depending on local arrangements. It would also be helpful if health visitors could write 'HV' in the PCT field (old style card) or 'Trust of sample taker' field (new style card) so that we can provide data specific to health visitors.

**Table 1**

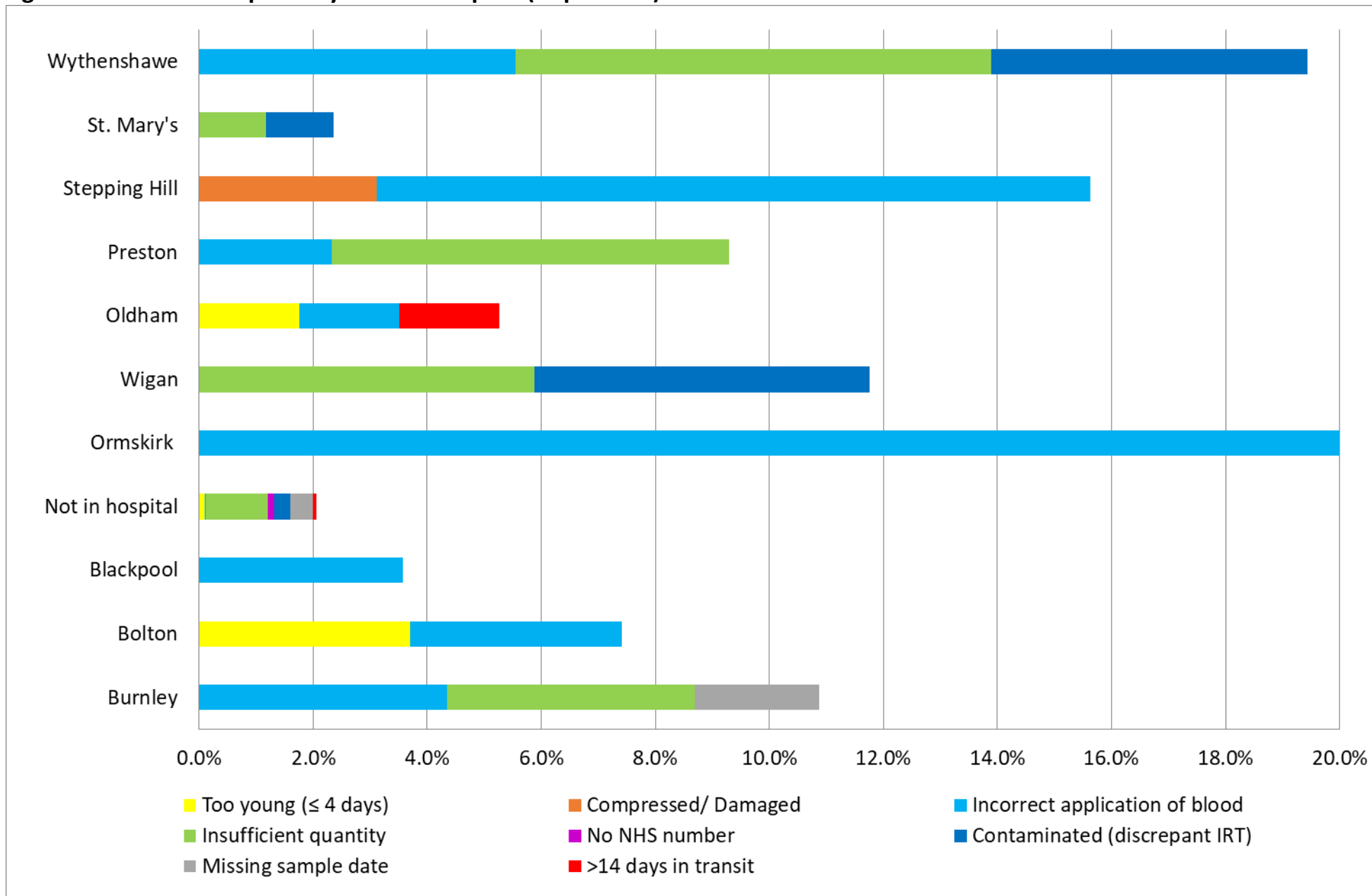
<b>Code</b>	<b>Trust Name</b>
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST
RMC	BOLTON NHS FOUNDATION TRUST
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST
RW3	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – ST. MARY’S & RMCH
RM2	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST - WYTHENSHAW
NM-RW6	PENNINE ACUTE HOSPITALS NHS 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

In this document North Manchester and Oldham will be referred to as separate maternity units, although they are currently part of the same Trust.

**Figure 1 - Avoidable repeats by Trust**



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



There were no avoidable repeats for Furness, NMGH, Lancaster, RMCH and Tameside.

**Table 2 – Avoidable repeats by Trust for January 2021**

Trust	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	220	0	0	0	0	0	1	0	0	0	0	2	0	3	1.4%
Bolton NHS FT	393	1	2	0	0	0	2	14	0	0	1	1	0	20	5.1%
East Lancashire Hospitals NHS Trust	447	1	0	0	0	0	2	3	0	0	1	2	0	8	1.8%
Lancashire Teaching Hospitals NHS FT	322	0	1	0	0	0	1	8	0	0	0	1	0	11	3.4%
Manchester University NHS FT	618	2	0	0	0	0	2	4	0	0	5	2	0	13	2.1%
North Manchester (Pennine Acute Hospitals NHS Trust)	340	0	0	0	0	0	0	2	0	2	1	2	0	7	2.1%
Not Stated	5	0	0	0	0	0	0	1	0	0	0	0	0	1	20.0%
Health Visitor	28	0	0	0	0	0	0	1	0	0	0	0	0	1	3.6%
Oldham (Pennine Acute Hospitals NHS Trust)	439	1	2	0	0	0	1	3	1	1	1	2	0	11	2.5%
Southport & Ormskirk Hospital NHS Trust	51	0	0	0	0	0	1	0	0	0	0	1	0	2	3.9%
Stockport NHS FT	218	0	0	0	1	0	4	0	0	1	0	0	0	6	2.8%
Tameside And Glossop Integrated Care NHS FT	200	0	0	0	0	0	0	1	0	0	1	0	0	2	1.0%
University Hospitals of Morecambe Bay NHS FT	199	0	1	0	0	0	1	4	2	0	2	0	0	10	5.0%
Wrightington, Wigan and Leigh NHS FT	224	0	0	0	0	0	0	4	0	0	1	1	0	6	2.7%
Grand Total	3704	5	6	0	1	0	15	45	3	4	13	14	0	101	2.7%

\*Not included in calculation of avoidable repeats

**Table 3 – Avoidable repeats by current hospital (in-patients) for January 2021**

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	46	1	0	0	0	0	2	2	0	0	0	1	0	5	10.9%
Royal Bolton Hospital	54	1	2	0	0	0	2	0	0	0	0	0	0	4	7.4%
Blackpool Victoria Hospital	28	0	0	0	0	0	1	0	0	0	0	0	0	1	3.6%
Furness General Hospital	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
North Manchester General Hospital	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Not in hospital	3250	0	3	0	0	0	1	35	2	4	9	13	0	67	2.1%
Ormskirk & District General	5	0	0	0	0	0	1	0	0	0	0	0	0	1	20.0%
Royal Albert Edward Infirmary	17	0	0	0	0	0	0	1	0	0	1	0	0	2	11.8%
Royal Lancaster Infirmary	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Manchester Childrens Hospital	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Oldham Hospital	57	1	1	0	0	0	1	0	1	0	0	0	0	3	5.3%
Royal Preston Hospital	43	0	0	0	0	0	1	3	0	0	0	0	0	4	9.3%
Stepping Hill Hospital	32	0	0	0	1	0	4	0	0	0	0	0	0	5	15.6%
St Mary's Hospital, Manchester	85	2	0	0	0	0	0	1	0	0	1	0	0	2	2.4%
Tameside General Hospital	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Wythenshawe Hospital	36	0	0	0	0	0	2	3	0	0	2	0	0	7	19.4%
<b>Grand Total</b>	<b>3704</b>	<b>5</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>45</b>	<b>3</b>	<b>4</b>	<b>13</b>	<b>14</b>	<b>0</b>	<b>101</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 January was 2.7% which is an improvement on December's rate (2.9%). The most common reason for rejection was insufficient blood, followed by blood incorrect application of blood (multi-spotting) and missing sample date. This month there was a significant decrease in the number of samples where blood had been incorrectly applied. Blackpool and East Lancs met the acceptable threshold for standard 6 and Tameside met the achievable threshold.