

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

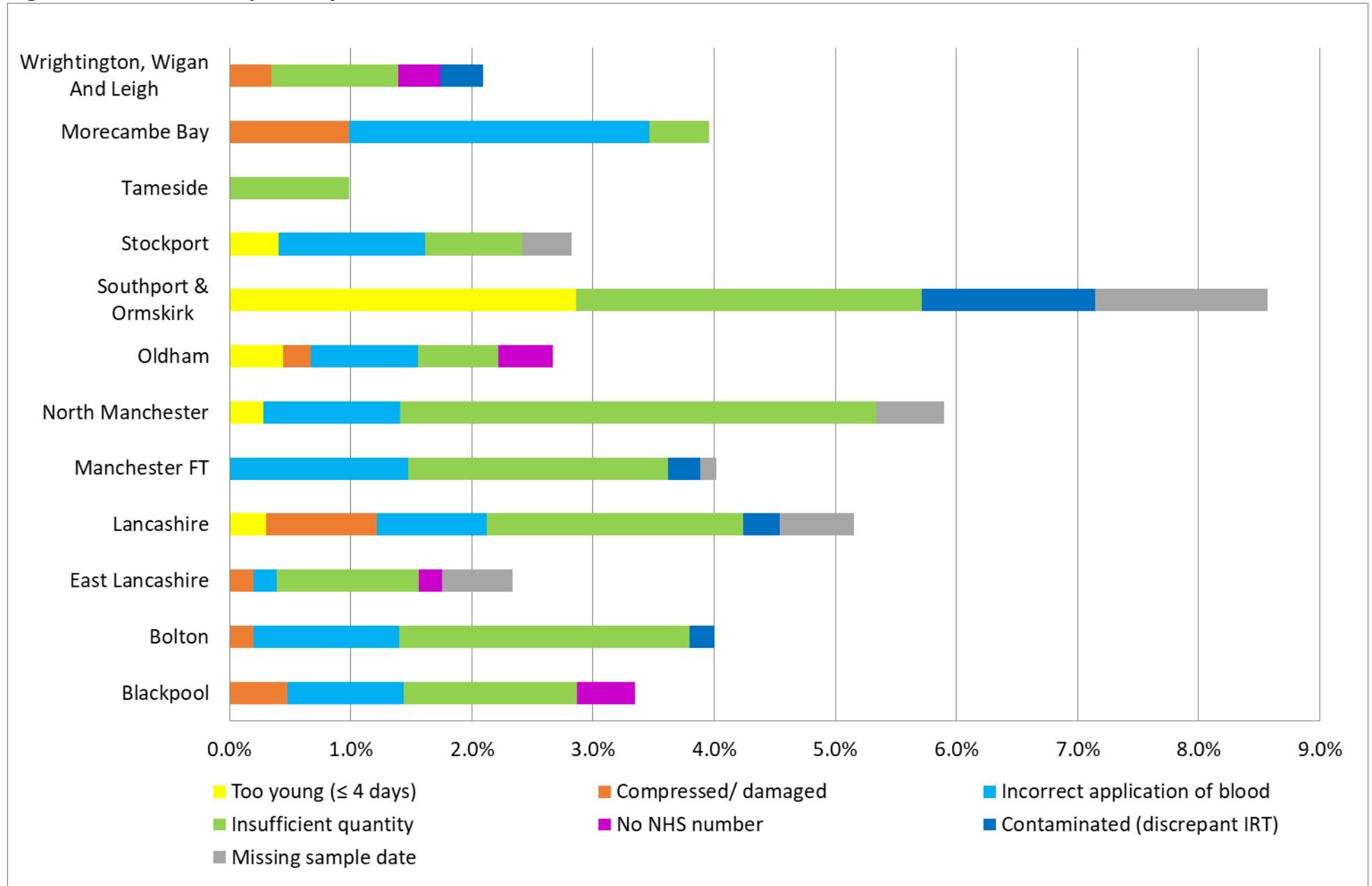
The avoidable repeat rate for samples received during April 2021 is displayed by Trust in Figure 1 and by current hospital (for in-patients) in Figure 2. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number of babies tested (i.e. first samples).

8 samples (first samples and repeats) received in April had no Trust code (0.2%). 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.

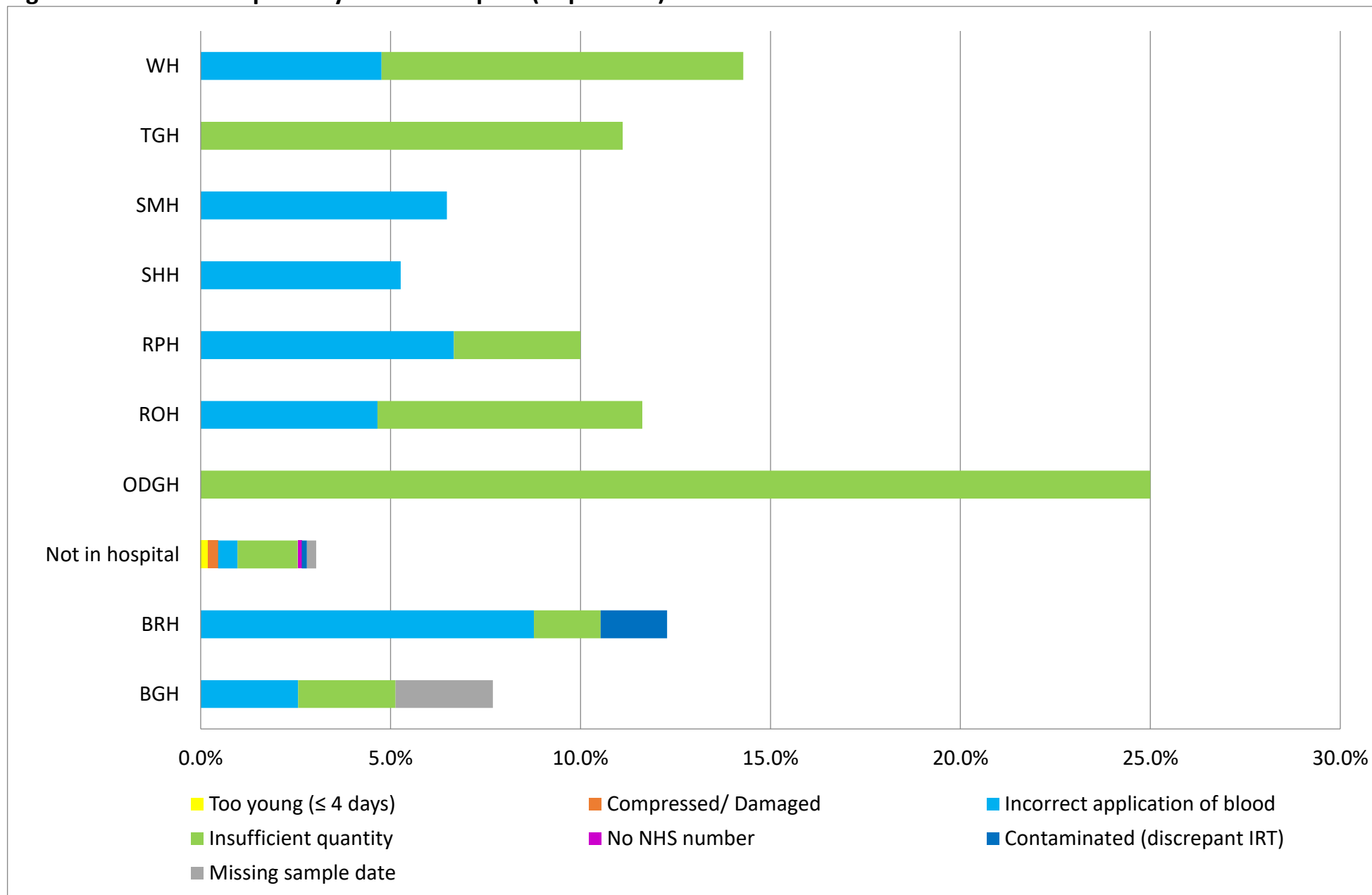
**Table 1**

<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-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 Blackpool, Furness, North Manchester, RAEI and Lancaster. Royal Blackburn and RMCH: Each had 1 avoidable repeat from 2 samples collected (AR Rate 50%), therefore too high to plot on the graph.

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

Row Labels	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	209	0	0	0	1	0	2	3	0	1	0	0	0	7	3.3%
Bolton NHS FT	500	0	0	0	1	0	6	12	0	0	1	0	0	20	4.0%
East Lancashire Hospitals NHS Trust	513	2	0	0	1	0	1	6	0	1	0	3	0	12	2.3%
Lancashire Teaching Hospitals NHS FT	330	0	1	0	3	0	3	7	0	0	1	2	0	17	5.2%
Manchester University NHS FT	746	0	0	0	0	0	11	16	0	0	2	1	0	30	4.0%
North Manchester (MFT)	356	0	1	0	0	0	4	14	0	0	0	2	0	21	5.9%
Not Stated	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Health Visitor	29	0	0	0	0	0	0	1	0	0	0	0	0	1	3.4%
Oldham (Pennine Acute Hospitals NHS Trust)	450	2	2	0	1	0	4	3	0	2	0	0	0	12	2.7%
Southport & Ormskirk Hospital NHS Trust	70	0	2	0	0	0	0	2	0	0	1	1	0	6	8.6%
Stockport NHS FT	248	0	1	0	0	0	3	2	0	0	0	1	0	7	2.8%
Tameside And Glossop Integrated Care NHS FT	203	0	0	0	0	0	0	2	0	0	0	0	0	2	1.0%
University Hospitals of Morecambe Bay NHS FT	202	0	0	0	2	0	5	1	0	0	0	0	0	8	4.0%
Wrightington, Wigan and Leigh NHS FT	287	0	0	0	1	0	0	3	0	1	1	0	0	6	2.1%
<b>Grand Total</b>	<b>4151</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>39</b>	<b>72</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>10</b>	<b>0</b>	<b>149</b>	<b>3.6%</b>

\*Not included in calculation of avoidable repeats

**Table 3 – Avoidable repeats by current hospital (in-patients) for April 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	39	2	0	0	0	0	1	1	0	0	0	1	0	3	7.7%
Royal Bolton Hospital	57	0	0	0	0	0	5	1	0	0	1	0	0	7	12.3%
Blackpool Victoria Hospital	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Furness General Hospital	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
North Manchester General Hospital	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Not in hospital	3719	0	7	0	10	0	19	59	0	4	5	9	0	113	3.0%
Ormskirk & District General	4	0	0	0	0	0	0	1	0	0	0	0	0	1	25.0%
Royal Albert Edward Infirmary	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Royal Blackburn Hospital	2	0	0	0	0	0	0	0	0	1	0	0	0	1	50.0%
Royal Lancaster Infirmary	12	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	1	0	0	0	0	0	1	50.0%
Royal Oldham Hospital	43	2	0	0	0	0	2	3	0	0	0	0	0	5	11.6%
Royal Preston Hospital	30	0	0	0	0	0	2	1	0	0	0	0	0	3	10.0%
Stepping Hill Hospital	19	0	0	0	0	0	1	0	0	0	0	0	0	1	5.3%
St Mary's Hospital, Manchester	108	0	0	0	0	0	7	0	0	0	0	0	0	7	6.5%
Tameside General Hospital	9	0	0	0	0	0	0	1	0	0	0	0	0	1	11.1%
Wythenshawe Hospital	42	0	0	0	0	0	2	4	0	0	0	0	0	6	14.3%
<b>Grand Total</b>	<b>4151</b>	<b>4</b>	<b>7</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>39</b>	<b>72</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>10</b>	<b>0</b>	<b>149</b>	<b>3.6%</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 April was 3.6% which lower than March's rate of 4.6%. The most common reason for rejection was insufficient blood, followed by incorrect application of blood (multi-spotting). Tameside met the achievable threshold.