## Avoidable Repeat Rate for November 2019 for Newborn Blood Spot Screening - Manchester Laboratory

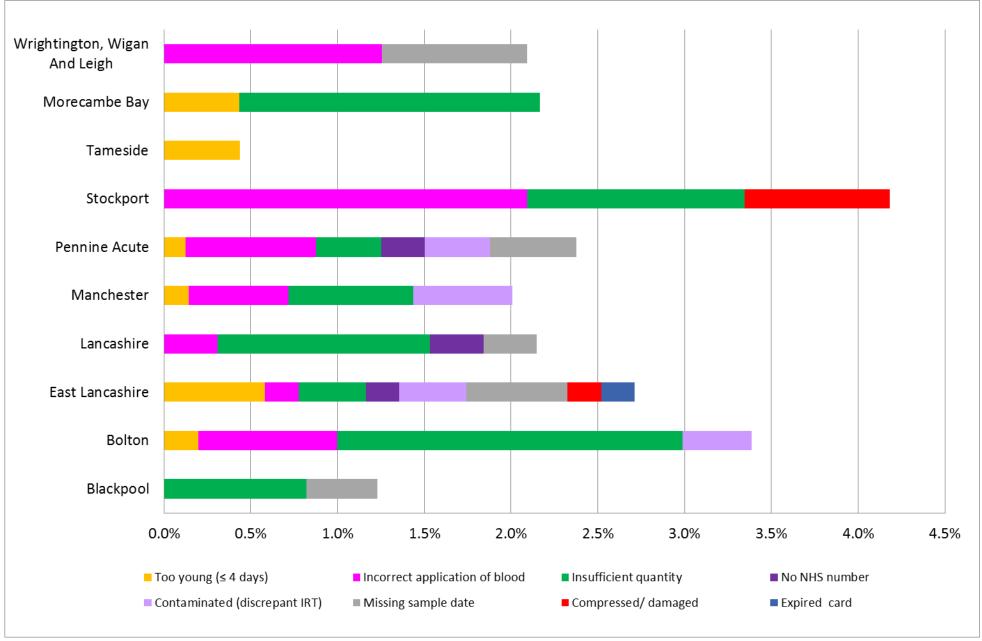
The avoidable repeat rate for samples received during November 2019 is displayed by Trust in Figure 1 and by current hospital (for in-patients) in Figure 2. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number of babies tested (i.e. first samples).

Please note that the 'Trust of the sample taker' data is incomplete as 31 samples (first samples and repeats) received in November had no Trust code (1%). Please write the Trust code for your maternity unit/ neonatal unit in the PCT field on the blood spot 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, so that we can provide data specific to health visitors.

Table 1

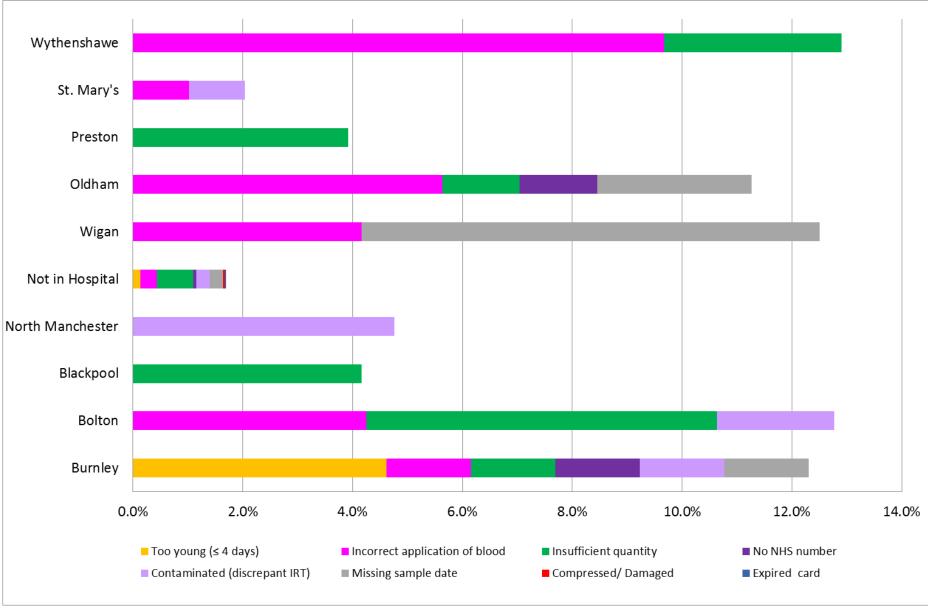
Code	Trust Name
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST
RMC	BOLTON NHS FOUNDATION TRUST
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST
RW3/R0A	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – ST. MARY'S & RMCH
RM2/R0A	MANCHESTER UNIVERSITY NHS FOUNDATION TRUST - WYTHENSHAWE
RW6	PENNINE ACUTE HOSPITALS NHS TRUST
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



Southport and Ormskirk were excluded from the graph as there was a high avoidable repeat rate of 12.7% due to there being 9 AR's our of 71 samples.

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



Furness, Lancaster, RMCH, and Tameside were excluded from the graph as they had no in-patient avoidable repeats. ODGH was excluded due to having a high avoidable repeat rate (28.6%; 4/14). SHH was also excluded due to having a high avoidable repeat rate (29.4%; 5/17).

Table 2 – Avoidable repeats by Trust for November 2019

Trust	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
Blackpool Teaching Hospitals NHS FT	244	0	0	0	0	0	0	2	0	0	0	1	0	3	1.2%
Bolton NHS FT	502	1	1	0	0	0	4	10	0	0	2	0	0	17	3.4%
East Lancashire Hospitals NHS Trust	516	2	3	0	1	1	1	2	0	1	2	3	0	14	2.7%
Lancashire Teaching Hospitals NHS FT	326	0	0	0	0	0	1	4	0	1	0	1	0	7	2.1%
Manchester University NHS FT - SMH & RMCH	697	2	1	0	0	0	4	5	0	0	4	0	0	14	2.0%
Not Stated	30	0	0	0	0	0	1	0	0	0	0	1	0	2	6.7%
Health Visitor	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Pennine Acute Hospitals NHS Trust	799	0	1	0	0	0	6	3	0	2	3	4	0	19	2.4%
Southport & Ormskirk Hospital NHS Trust	71	0	0	0	0	0	4	0	0	0	3	2	0	9	12.7%
Stockport NHS FT	239	0	0	0	2	0	5	3	0	0	0	0	0	10	4.2%
Tameside And Glossop Integrated Care NHS FT	229	0	1	0	0	0	0	0	0	0	0	0	0	1	0.4%
University Hospitals of Morecambe Bay NHS FT	231	0	1	0	0	0	0	4	0	0	0	0	0	5	2.2%
Wrightington, Wigan and Leigh NHS FT	239	1	0	0	0	0	3	0	0	0	0	2	0	5	2.1%
Grand Total	4161	6	8	0	3	1	29	33	0	4	14	14	0	106	2.5%

<sup>\*</sup>Not included in calculation of avoidable repeats

## Table 3 – Avoidable repeats by current hospital (in-patients) for November 2019

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	65	2	3	0	0	0	1	1	0	1	1	1	0	8	12.3%
Royal Bolton Hospital	47	1	0	0	0	0	2	3	0	0	1	0	0	6	12.8%
Blackpool Victoria Hospital	24	0	0	0	0	0	0	1	0	0	0	0	0	1	4.2%
Furness General Hospital	8	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	1	0	0	1	4.8%
Not in hospital	3653	0	5	0	1	1	11	24	0	2	9	9	0	62	1.7%
Ormskirk & District General	14	0	0	0	0	0	3	0	0	0	1	0	0	4	28.6%
Royal Albert Edward Infirmary	24	1	0	0	0	0	1	0	0	0	0	2	0	3	12.5%
Royal Lancaster Infirmary	19	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	71	0	0	0	0	0	4	1	0	1	0	2	0	8	11.3%
Royal Preston Hospital	51	0	0	0	0	0	0	2	0	0	0	0	0	2	3.9%
Stepping Hill Hospital	17	0	0	0	2	0	3	0	0	0	0	0	0	5	29.4%
St Mary's Hospital, Manchester	98	2	0	0	0	0	1	0	0	0	1	0	0	2	2.0%
Tameside General Hospital	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Wythenshawe Hospital	31	0	0	0	0	0	3	1	0	0	0	0	0	4	12.9%
Grand Total	4161	6	8	0	3	1	29	33	0	4	14	14	0	106	2.5%

<sup>\*</sup>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 2.5% which is lower than last month's rate (October was 2.7%). Insufficient and multi-spotted samples remain the most common reason for sample rejection. There has been a significant decrease in multi-spotted samples since last month. Three maternity units met Standard 6: Blackpool, Manchester and Tameside. Only Tameside met the achievable threshold of ≤1%.