

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

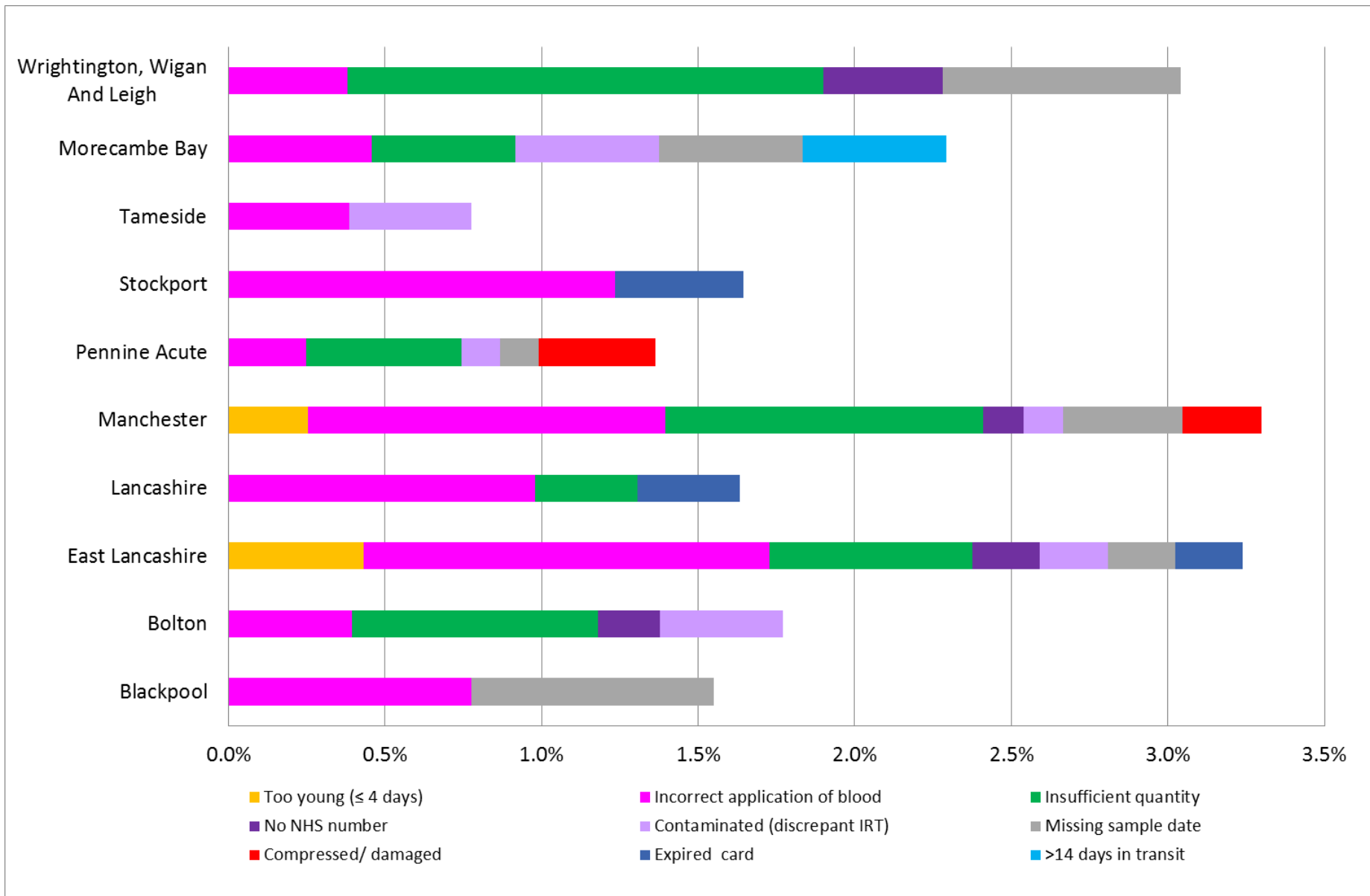
The avoidable repeat rate for samples received during September 2019 is displayed by Trust in Figure 1 and by current hospital (for in-patients) in Figure 2. The raw data is provided in Tables 2 and 3. The avoidable repeat rate is calculated by dividing the total number of avoidable repeats by the number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

Please note that the 'Trust of the sample taker' data is incomplete as 61 samples (first samples and repeats) received in September 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

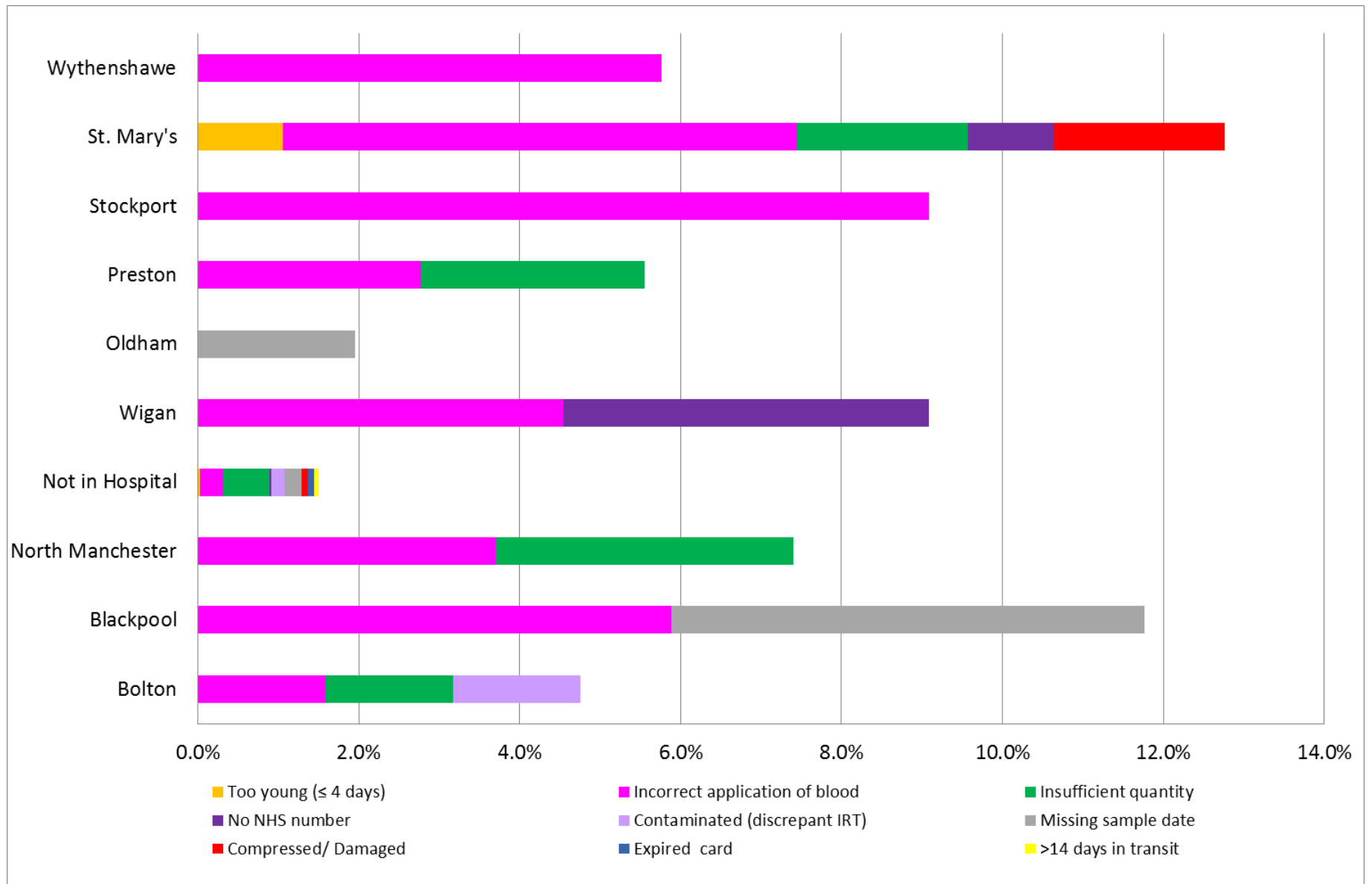
| Code | Trust Name |
|-------------|--|
| RXL | BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST |
| RMC | BOLTON NHS FOUNDATION TRUST |
| RXR | EAST LANCASHIRE HOSPITALS NHS TRUST |
| RXN | LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST |
| RW3/ROA | MANCHESTER UNIVERSITY NHS FOUNDATION TRUST – ST. MARY'S & RMCH |
| RM2/ROA | MANCHESTER UNIVERSITY NHS FOUNDATION TRUST - WYTHENSHAW |
| 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 & Ormskirk was excluded from the graph due to a high avoidable repeat rate (9/84 samples, 11%).

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



Barrow, Lancaster, RMCH, and Tameside were excluded from the graph as they had no in-patient avoidable repeats. Three hospitals were excluded from the chart due to very high avoidable repeat rates (Blackburn: 1 out of 2 samples, 50%; Burnley 11/43 samples, 26%, Ormskirk: 3/9 samples, 33%),

Table 2 – Avoidable repeats by Trust for September 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 | 258 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 1.6% |
| Bolton NHS FT | 508 | 2 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 1 | 2 | 0 | 0 | 9 | 1.8% |
| East Lancashire Hospitals NHS Trust | 463 | 2 | 2 | 0 | 0 | 1 | 6 | 3 | 0 | 1 | 1 | 1 | 0 | 15 | 3.2% |
| Lancashire Teaching Hospitals NHS FT | 306 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 1.6% |
| Manchester University NHS FT | 788 | 4 | 2 | 0 | 2 | 0 | 9 | 8 | 0 | 1 | 1 | 3 | 0 | 26 | 3.3% |
| Not Stated | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8% |
| Health Visitor | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 6.3% |
| Pennine Acute Hospitals NHS Trust | 807 | 1 | 0 | 0 | 3 | 0 | 2 | 4 | 0 | 0 | 1 | 1 | 0 | 11 | 1.4% |
| Southport & Ormskirk Hospital NHS Trust | 84 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 1 | 0 | 9 | 10.7% |
| Stockport NHS FT | 243 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1.6% |
| Tameside And Glossop Integrated Care NHS FT | 258 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0.8% |
| University Hospitals of Morecambe Bay NHS FT | 218 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 5 | 2.3% |
| Wrightington, Wigan and Leigh NHS FT | 263 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 1 | 0 | 2 | 0 | 8 | 3.0% |
| Grand Total | 4285 | 9 | 4 | 0 | 5 | 3 | 35 | 30 | 2 | 4 | 7 | 11 | 0 | 101 | 2.4% |

*Not included in calculation of avoidable repeats

Table 3 – Avoidable repeats by current hospital (in-patients) for September 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 | 43 | 2 | 2 | 0 | 0 | 0 | 4 | 3 | 0 | 1 | 0 | 1 | 0 | 11 | 25.6% |
| Royal Bolton Hospital | 63 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 4.8% |
| Blackpool Victoria Hospital | 17 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 11.8% |
| Furness General Hospital | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| North Manchester General Hospital | 27 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 7.4% |
| Not in hospital | 3809 | 0 | 1 | 0 | 3 | 3 | 11 | 22 | 2 | 1 | 6 | 8 | 0 | 57 | 1.5% |
| Ormskirk & District General | 9 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 33.3% |
| Royal Albert Edward Infirmary | 22 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 9.1% |
| Royal Blackburn Hospital | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 50.0% |
| Royal Lancaster Infirmary | 18 | 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 | 51 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2.0% |
| Royal Preston Hospital | 36 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 5.6% |
| Stepping Hill Hospital | 22 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9.1% |
| St Mary's Hospital, Manchester | 94 | 3 | 1 | 0 | 2 | 0 | 6 | 2 | 0 | 1 | 0 | 0 | 0 | 12 | 12.8% |
| Tameside General Hospital | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| Wythenshawe Hospital | 52 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5.8% |
| Grand Total | 4285 | 9 | 4 | 0 | 5 | 3 | 35 | 30 | 2 | 4 | 7 | 11 | 0 | 101 | 2.4% |

*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 2.4% which is similar to last month's rate (2.3%). Insufficient and multi-spotted samples remain the most common reason for sample rejection. There has been a decrease in samples with missing dates since last month. Six maternity units met Standard 6: Blackpool, Bolton, Lancashire Teaching, Pennine, Stockport and Tameside. Only Tameside met the achievable threshold of $\leq 1\%$.