Introduction

Antenatal and newborn screening is an important element in supporting mothers during and after pregnancy. The screening process uses a number of tests to ensure the baby is doing well and no adverse issues are affecting the child. Good development of both the mother and the unborn child are important in promoting good health and wellbeing in the womb and once born. Screening helps detect a number of conditions that could be potentially harmful.

What do we know?

Most pregnant women put on 10-12.5kg of weight, partly due to the baby growing but also due to taking extra food. At this stage it is important to eat a healthy diet as well as taking some regular exercise, such as walking.

As part of the screening taking a urine test can highlight any issues of concern, for example if the protein is too high in the urine and can lead to pre-eclampsia (pregnancy induced hypertension) that can cause fits. In this respect checking blood pressure is important to ensure this is not the case and provide the required remedial action. It affects 5% of pregnancies and can cause complications for the mother.

Blood tests are also taken routinely at visits to antenatal clinics and can help determine blood group, anaemia, diabetes and other conditions. Infections such as rubella, that can seriously harm a baby, hepatitis B and C, Syphilis, HIV and other infections that can be passed on to the child, can be detected at this stage.

Once the child is born they will also be tested to ensure they do not carry the infection. The screening process is a preventative measure and helps identify any areas of concern that can be resolved and supported by health professionals.

What is the data telling us?

Antenatal and newborn screening data is available at an NHS Trust and Care Commissioning Group (CCG) level depending on the indicator. Information for Royal Berkshire NHS Foundation Trust (RBFT) is shown for West Berkshire as the majority of West Berkshire births were at this Trust.

CCG level data is shown for Newbury & District CCG (NDCCG) and North & West Reading CCG (NWRCCG) since 3 practices in NWRCCG are located in West Berkshire.
Newborn blood spot screening coverage was above the acceptable level of 95% for both NDCCG and NWRCCG throughout 2014/15. The quarterly data available for 2015/16 showed that this remained the case for NWR however the Q4 figure for NDCCG was below acceptable at 93.5%. (Achievable level is 99.9%).

The proportion of repeat tests required is reported as a Royal Berkshire Hospital figure and although the 2014/15 figures was below the acceptable level of 2%, the 2015/16 figures remain slightly higher than the 2% in all 4 quarters. This is still lower than the England averages which are above 3% in all quarters.

Screening for infectious diseases (hepatitis B, HIV, syphilis, rubella) was at a consistently high level of over 99% in all 4 quarters of 2015/16 for RBFT.

Screening for Down's, Edwards' and Patau's syndrome showed that in 2015/16. For the RBFT, in the last 2 quarters of 15/16, over 97% of Down's Syndrome screening laboratory request forms were submitted to the laboratory within the recommended timeframes of 10 and 20 weeks gestation. This was above the acceptable level of 97%.
Screening for inherited conditions (such as sickle cell, thalassaemia and other haemoglobin disorders). The coverage for this test for RBFT was well above the 95% coverage deemed acceptable throughout all of 2015/16. Similarly the timeliness of the test – women receiving the result within 10 weeks - was above the acceptable level of 50% in all 4 quarters of 2015/16. More than 94% of pregnant women completed the Family Origin Questionnaire in all 4 quarters of 15/16, above the acceptable level of 90%. This does remain below the achievable level of 95% however.

In the last 2 quarters of 2015/16 the coverage of the Newborn hearing screening was above 98% for RBFT, above the acceptable level of 95% but lower than the national average.

Newborn and infant physical examination (to detect any problems with eyes, heart, hips and, in boys, testicles) coverage remains over 97% in RBFT which is higher than the acceptable level of 95% but lower than the achievable level of 99%

**Recommendations for consideration**

- There needs to be continued awareness raised about the value of the service, particularly to vulnerable women and those with widening inequalities (housing, income, socio-economic).
- Work needs to continue with both CCGs and Royal Berkshire NHS Foundation Trust to aim to reach achievable levels of antenatal and newborn screening, not only acceptable levels.

**Other services and partner organisations**

- Royal Berkshire NHS Trust Maternity Services, Antenatal General Practitioners (GPs)

**National and local strategies**
UK National Screening Committee

Other chapters you might be interested in

Breastfeeding
Access to the antenatal pathway

If you have any questions about this chapter, please contact Public Health and Wellbeing Team on publichealthandwellbeing@westberks.gov.uk or 01635 503437