Newborn Screening in Manitoba
Helping your baby get a healthy start

Getting the best start
As a new or expecting parent, you place great importance on your baby’s health. To ensure that your baby gets the best start in life and stays healthy, your newborn – and every other newborn in Manitoba – will be screened for 40 or more rare disorders.

Although most babies with these disorders look healthy at birth, they may be at risk of having serious health problems – including developmental disabilities, recurrent sickness and even death – if their disorder is not detected and treated. Early identification is the key to effective treatment.

Early detection leads to early treatment
Individually, these disorders are very rare. As a group, they affect less than 1 in 1000 babies born each year in Manitoba. By testing newborns within the first five days of their lives, many disorders can be treated early, reducing the chance of serious health problems later in life.

A small test, producing big benefits
In order to perform the screening tests, a small sample of blood is taken from your baby by pricking the heel. The blood is collected on a special paper card and then sent to the Cadham Provincial Laboratory for testing. Blood samples can be taken any time between one day (24 hours) and 5 days after your baby is born. If your baby is tested before one day (24 hours) of age, the laboratory will take measures to have the test repeated within five days.

 Disorders screened
There are two types of disorders included in the screening: metabolic and endocrine.

When the body is not able to break down (metabolize) certain substances in food like fats, proteins or sugars, they can accumulate in the body and cause serious health problems. These are:
- Organic Acid Disorders
- Amino Acid Disorders
- Other disorders like Botulinum deficiency and Galactosemia

When the body’s hormone systems do not function properly, endocrine disorders can result. The two endocrine disorders that can be detected by this method and treated in time are:
- Congenital Hypothyroidism
- Congenital Adrenal Hypo- or Hyperplasia

Cystic fibrosis, the most common genetic disease affecting Canadian children, can also be detected and treated early.

Screening results: high risk and low risk
A screening test only shows where there is a high or low risk that your baby has a disorder. It is important to understand that the screening test identifies babies who need further testing, it does not make a diagnosis.

Once the Cadham Provincial Laboratory has received and analyzed your baby’s blood sample, one of the following will occur:

Your baby screens negative for all the disorders
The Cadham Provincial Laboratory will send a report to your hospital and/or your health care provider. It will be filed in your baby’s medical records.

More than 99 per cent of babies screened will receive a ‘screen negative’ or normal result. This means there is a very low risk that your baby has one of these rare disorders. On very rare occasions, the newborn screening test may miss a baby with one of these disorders.

The Cadham Provincial Laboratory may need another blood sample
It may be that the first sample was not taken properly, there was not enough blood to complete the testing, or there was some other problem with the sample. In this case, your baby’s health care provider will contact you and arrange for another blood sample to be taken as soon as possible.

Your baby screens positive for one of the conditions
A screening positive does not necessarily mean that your baby has a disorder, but only that further testing is needed. Your baby’s health care provider will contact you right away to make arrangements for follow-up at his/her office, or if needed, at the Winnipeg Children’s Hospital. Specialists will help arrange further testing to determine whether your baby has one of these disorders. If a diagnosis of a specific disorder is made, the specialist at the Winnipeg Children’s Hospital will provide your baby with a care plan and provide your family with information and counselling about the condition.

The Cadham Provincial Laboratory also issues a report to your hospital and/or health care provider, which will be filed in your baby’s medical records. It is important to remember that less than one per cent of babies tested will receive a ‘screen positive’ result and that it does not necessarily mean that there is a problem.

What happens to my baby’s newborn screen card?
Your baby’s newborn screen card containing the blood sample will be stored securely by Cadham Provincial Laboratory after the screening tests are completed. It may be used for follow-up tests if necessary or to ensure high quality testing at Cadham Lab on an ongoing basis. Sometimes newborn screen cards are also used for future research purposes, but only after full approval from the Research Ethics Board at the University of Manitoba is obtained and after your baby’s name and personal information is removed. The blood spots are destroyed once a legally set number of years passes.

Want to learn more?
For more information about newborn screening in Manitoba, speak to your health care provider or call the Cadham Provincial Laboratory at 204-945-7458, or visit www.gov.mb.ca/health/publichealth/cpl.