

COLLECTING BLOOD SAMPLES

Newborn Screening Ontario (NSO) offers monitoring tests for children and adults with metabolic diseases. NSO performs this testing on dried blood samples. Dried blood samples for monitoring are collected on filter paper at home and mailed directly to NSO.

This guide shows you how to fill out the requisition (form), collect a blood sample, and mail the sample to NSO.

Supplies required:

Warm cloth
Sterile gauze
Alcohol wipes
Lancet

Requisition (form)
Band-aid
Courier envelope
Blood spot card

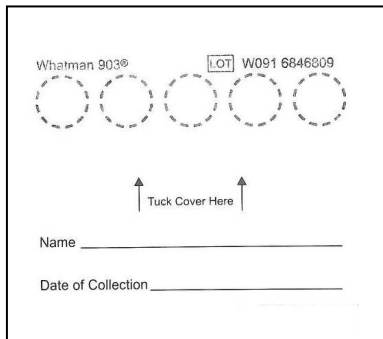
Step 1: The filter paper card

This is an example of a card. **Only one circle needs to be filled with blood.** Fill a second circle if you think there is a problem with the first one.

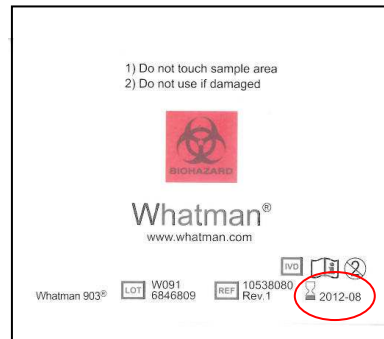
Check the expiry date on the card before you collect the sample. If the card has expired, DO NOT USE IT. Ask your/your child's health care provider for more cards.

Filter Paper Card

Front



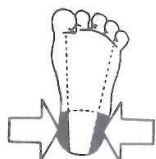
Back



Step 2: Collect a sample

i) Collecting the sample

- a) Birth to about 6 months (weight of 3-10kg or 7-22lbs): blood is usually collected from the baby's heel. Collect the blood from the black areas.



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b) Children older than 6 months of age (weight above 10 kg or 22lbs) and adults: blood is typically collected from the ring or middle finger perpendicular to the lines of the fingerprint.

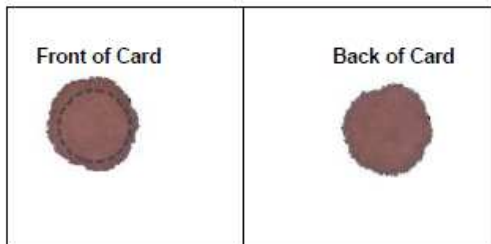
ii) Warm the area (heel or finger) where the blood is to be collected. This increases the blood flow, making it easier to collect the sample.

iii) Clean the heel or finger with alcohol and allow to air dry.

iv) After drying, poke the heel or finger with a 2 mm disposable sterile lancet. Wipe away the first drop of blood with sterile gauze and allow another large drop of blood to form.

v) Lightly touch the filter paper to the blood and allow the blood to soak into the paper. The blood should soak through. Check that it has soaked through by looking at the back of the card. A minimum of **one** circle needs to be filled. Only apply blood to the front side of the card and allow it to soak completely through to the back of the card. This picture shows a satisfactory sample.

Satisfactory Sample



Unsatisfactory Sample



The picture above shows an unsatisfactory sample (a sample that NSO cannot test). The back of the card shows areas of white, indicating the blood has not soaked through.

Too little or too much blood can lead to an inaccurate result. Please make sure that you collect the correct amount of blood (see the first picture). If the sample is unsatisfactory, NSO will call your health care provider.

vi) Allow the blood to dry for a minimum of **3 hours**. Lay the card flat to dry away from sunlight or heat.

vii) Fill in your/your child's full **name and date of collection** on the filter paper card AND the requisition.

Step 3: Fill in the requisition (form)

The requisition is on the NSO website: www.newbornscreening.on.ca. Please fill in all areas of the requisition.

If you do not know the medical record number, leave this field blank. Write in your/your child's full name, date of birth, and health card number.

Make sure you write down the date you collected the blood. If the sample arrives at NSO more than two weeks after it was collected, it is unsatisfactory and you may need to collect a new sample.

The health care provider (doctor, dietician, or nurse) on the requisition should be the metabolic specialist managing your/your child's metabolic disease. NSO faxes results to that health care provider. If you want results sent to additional health care providers, include their name(s) and fax number(s).

If you do not know the diagnosis and analysis requested, ask the health care provider who requested the test. NSO will call your health care provider for any missing information.

Step 4: Mail the requisition and blood sample

Once the sample is dry, mail the requisition and sample to NSO as soon as possible. Shipping the same day as sample collection is preferable. The sample and requisition can be shipped through **Express Post** or **courier** to:

Newborn Screening Ontario
415 Smyth Road
Ottawa, Ontario
K1H 8M8

Shipping with Express Post or a courier lets you track the shipment. Shipping samples by regular mail may result in delayed analysis and results.

If you have any additional questions you can visit our website at www.newbornscreening.on.ca or talk to your child's health care provider.