

# At-Home Phe Monitoring

## What is at-home phe monitoring?

This is an at-home lab testing option provided by the state of Texas to monitor phenylalanine and tyrosine levels.

## Supplies provided by the State of Texas

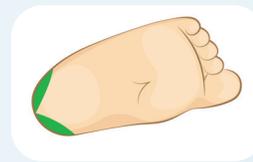
- Lancet
- Filter paper card
- Mailing envelope
- G1-B form

## Supplies to be purchased

- Alcohol swab or plain rubbing alcohol and cotton balls
- Gauze or tissue
- Bandage (small round or regular size)
- Stamps for mailing
- Sharps container for used lancets

## Choosing a testing site: heel or finger?

- **Choose the heel for infants under 6 months old or under 25 pounds.**
  - Stick the sides of the heel rather than the bottom of the heel.



- **Choose a finger for older children and adults.**
  - Avoid the thumb, index finger and little finger. The thumb and index finger are more sensitive and may have calluses or scars. The little finger doesn't have enough tissue depth to prevent a bone injury.



## Before you begin

- Check the expiration date on the filter paper card - DO NOT use an expired card.
- Label the filter paper card with the patient's name, date of birth, date of blood collection.
- Warm the finger or heel for 2-3 minutes with a warm washcloth.
- During colder months, keep a baby's foot covered with a sock to keep it warm.

## How to collect the sample

- Wash your hands
- Clean the fingertip or heel with alcohol
- Let dry for 10 seconds
- Prick fingertip or heel using lancet
- Wipe away the first drop of blood with gauze or tissue
- Drip blood onto the filter paper card in 1 circle at a time
  - Place the blood drop in the CENTER of the circle to allow the sample to spread

### Try to fill all 4 circles.

- Send the sample even if only 1 circle is filled
- The sample should be soaked through to the other side of the filter paper
- *Never go back to add blood once it has dried*

## Tips and tricks for success

**GRAVITY** – Is your friend! Make sure the heel of the foot or the finger is below the level of the heart when collecting the sample.

**"MILK"** – The heel of the foot or fingertip to increase blood flow. Make sure to not hold pressure the whole time. You should apply pressure then release. Apply pressure then release. Repeat while collecting sample.

**BUDDY** – Have another person to assist with holding baby or small child if needed depending on your child's temperament. For infants: Try swaddling infant and keeping one foot out if performing by yourself.



## How to hold an infant's foot

- Hold the foot firmly but gently.
- Avoid bending the foot back toward the shin.
- Position the foot so that it's lower than the heart. This can help with blood flow.
- Wrap your forefinger or index finger around the arch of the foot and place your thumb near the puncture site.
- Encircle the ankle with 2 fingers to maintain control.
- Be sure to rotate sites depending on frequency of collection to prevent scarring or injury.

## How to send the sample

- After collecting the sample, keep filter card drying in the open air (room temperature) for at least 4 hours. Avoid leaving the sample in areas where it could be damaged by water or excessive heat (i.e., kitchen sink, in the car, etc.).
- **DO NOT** use heating devices, like a hair dryer, to dry the sample.
- When using the blank G1B form provided by the state, make sure all required sections are complete. Patient's name, date of birth, and date of collection **MUST** match the filter paper card. If you have any questions about how to complete the G1B form, please contact the Metabolic team.
- What to place in envelope: filter card and completed G1B form.
- Place a stamp on provided state envelope.
- Drop samples indoors at post office and avoid outdoor collection boxes as excessive heat can damage sample.

## About results

- Goal: Phe levels should fall within 0-6 mg/dL.
- Results will be uploaded into MyChart once received.

## Factors that can affect results

- Medication and/or diet treatment plans. Make sure to follow instructions prescribed by the Metabolic Genetics team as these can significantly impact phe levels.
- Other factors that can affect phe levels:
  - The patient is sick. Notify our team so we can be aware of a significant change in phe level.
  - Certain medications/ingredients
  - Products/medications containing aspartame (an artificial sweetener)

Metabolic Genetics Clinic **832-822-2100 (Option #3)**