

PATIENT INSTRUCTIONS

The Test and Results

There are two different types of mercury, which come from different sources, commonly found in the human body: 1) inorganic mercury and 2) methylmercury. Directly testing both forms of mercury is called *mercury speciation testing*. Quicksilver Scientific is the *ONLY* commercial lab in the world currently performing mercury speciation testing on clinical samples. This analysis uses three matrices: 1) blood, 2) urine and 3) hair. To help you and your practitioner understand your results, your results will be compared to data collected by U.S. Centers for Disease Control and data collected by Quicksilver Scientific.

The Matrices

- 1) **The Blood Results** will give an indication of how much of each form of mercury is in your body.
- 2) **The Urine Results** will give an indication of your body's ability to get rid of inorganic mercury (HgII).
- 3) **The Hair Results** will give an indication of your body's ability to get rid of methylmercury (MeHg).

Materials Checklist

Your healthcare practitioner works with Quicksilver Scientific to provide you with all of the information and supplies you need to get your mercury tested. Before you begin, make sure your healthcare practitioner has given you each of the following:

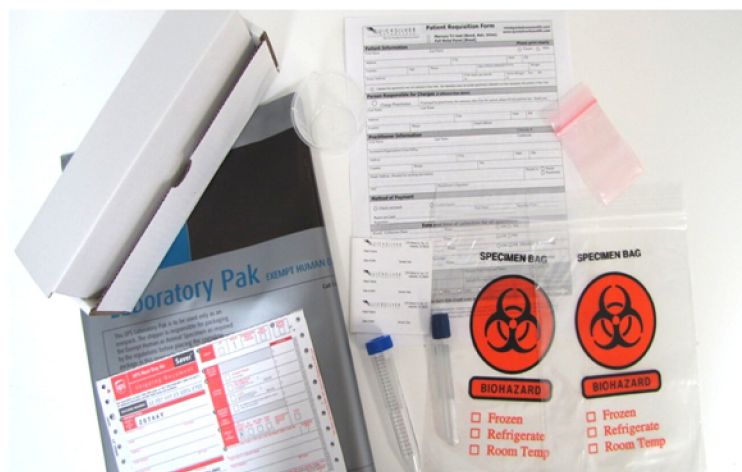
- **Patient Requisition Form (PRF) — Provided in your mercury test kit.**

This form will contain your contact information, email address for delivery of results and notify the Quicksilver Scientific laboratory of which samples you intend to provide for mercury analysis. Please be sure to complete everything on the PRF, including method of payment and make sure to return the PRF in the box with your samples - this is very important. Your samples can not be analyzed without this.

- **Sampling Kit**

The Quicksilver Scientific Mercury Tri-test Kit contains supplies for preparing and shipping samples. It includes:

- 3 Sample Labels
- 2 Absorbent Cloths
- 2 Biohazard Zip-Top Bags
- 1 Urine Collection Beaker
- 1 Urine Sample Test Tube – conical screw top vial (has numbers and hash marks on side)
- 1 Blood Collection Tube - EDTA preserved Vacutainer tube with round bottom and blue cap
- 1 Hair Collection Bag
- 1 cardboard box for shipping
- Patient Instructions
- Patient Requisition Form (MUST be filled out and sent with samples to the lab).
- 1 UPS Laboratory Pak bag
- 1 pre-addressed UPS shipping label



Taking Samples, Shipping Samples

For the best results, Quicksilver Scientific needs the correct amount of sample to arrive safely to the laboratory. These patient instructions will help you to correctly take, package and send your samples to the laboratory. All of the labeling and packaging materials are contained in the sampling kit, which was provided to you by your healthcare practitioner. **For best results, urine and blood samples should be taken within 24 hrs. of each other and no later than 48 hrs. of each other.**

Urine Collection

What you'll need:

- Sample label
- Urine collection beaker
- Urine sample test tube – **conical tube with screw top**
- Absorbent cloth
- Biohazard “lab-loc” zip top bag



Procedure

1. Take your urine sample during your first morning emission. Use the plastic collection beaker to take a midstream sample (not the beginning or end of the flow.)
2. Transfer a small amount of your sample into the urine sample test tube. The sample should come between lines marked 9 and 11. **DO NOT** fill the sample test tube to the very top. Tightly cap the sample test tube, making sure the cap is not crooked (mis-threaded) or leaking.
3. Write your name, date of birth and sampling date and time of the sample label provided. Affix the label on the test tube.
4. Wrap the test tube in the absorbent cloth, and place the wrapped vial into the biohazard zip-top bag.

Hair Collection

* You may want to ask a friend or family member to help you take your hair sample.

What you'll need:

- Scissors or shears
- Sample label
- Hair collection bag



Sufficient hair sample

Procedure

1. Write your name, date of birth, and sample date on the sample label provided, and affix it to the hair sampling bag.
2. Pinch a section of hair at the base of the back of your head. The amount of hair should be about as thick as a pencil lead, between 100 and 200 strands of hair.
3. Using scissors, cut the hair as close to the scalp as possible. You may want to ask a friend or family member to help you with this step.
4. Trim away the distal end by placing the hair you just cut onto a table. From the edge you just cut, measure one inch, and make another cut. Keep the scalp side section.
5. Place the small section of hair (one closest to scalp) into the hair sample bag, and seal.



Insufficient hair sample

NOTE: DO NOT send a hair sample that has been treated with a perm; all other hair treatments are acceptable.

If you do not have enough scalp hair or you have a perm, you can substitute pubic hair, in which case you should indicate that pubic hair is being submitted on the Patient Requisition Form.

Blood Collection – Phlebotomy Instructions

* **DO NOT** eat seafood or fish products for 72 hrs., *preferably* one week, prior to collecting your blood sample. **Fish oils are OK.**

What you'll need:

- EDTA preserved vacutainer blood vial – has rounded bottom and dark blue cap
- Sample label
- Absorbent cloth
- Biohazard 'lab-loc' zip top bag
- Patient Requisition Form

Procedure

1. Take your Patient Requisition Form to the laboratory or hospital recommended by your healthcare practitioner to get your blood drawn. The blood should be drawn in an EDTA preserved vacutainer blood tube.
2. Fill tube at least half way (minimum 2cc)
3. Wrap the tube in the absorbent cloth provided and place the wrapped tube into the biohazard "lab-loc" zip-top bag.

Note: **DO NOT** spin blood down or freeze blood. **No** ice packs are needed for shipping.

Packaging and Shipping Your Samples

Once you have all of your samples you are ready to ship them to the laboratory. **Keep tracking information for reference.**

What you'll need:

- Patient Requisition Form with payment information
- Biohazard zip top bag containing blood sample
- Biohazard zip top bag containing urine sample
- Hair sample – in small sample bag
- Cardboard box
- UPS Laboratory Pak bag
- UPS Pre-addressed shipping label



Procedure

1. Complete the Patient Requisition Form. Fold it and place it in the sample box along with your samples.
2. Place packaged blood, urine and hair samples in the provided cardboard box.
3. Place cardboard box containing samples in the UPS Laboratory Pak bag and seal.
4. Affix the UPS shipping label to the outside of the UPS Laboratory Pak bag.
5. Affix the UPS label to the blue shipping bag. Telephone UPS to arrange a collection or drop off at the nearest drop off point. Please visit www.ups.com for local details..