

## HOTLINE: Effective November 15, 2021

## 2011304 Heavy Metals Panel 3, Random Urine with Reflex to Arsenic Fractionated

HYMETU RND

## **Interpretive Data:**

Quantification of urine excretion rates before or after chelation therapy has been used as an indicator of lead exposure. Urinary excretion on >125 mg of lead per 24 hours is usually associated with related evidence of lead toxicity.

Urinary mercury levels predominantly reflect acute or chronic elemental or inorganic mercury exposure. Urine concentrations in unexposed individuals are typically less than  $10 \ \mu g/L$ . 24 hour urine concentrations of 30 to  $100 \ \mu g/L$  may be associated with subclinical neuropsychiatric symptoms and tremors. Concentrations greater than  $100 \ \mu g/L$  can be associated with overt neuropsychiatric disturbances and tremors. Urine mercury levels may be useful in monitoring chelation therapy.

The ACGIH Biological Exposure Index (BEI) for arsenic in urine is 35 µg/L. The ACGIH BEI is based on the sum of inorganic and methylated species. For specimens with elevated total arsenic results, fractionation is automatically performed to determine the proportions of inorganic, methylated and organic species.

**Note:** If total arsenic concentration is found to be elevated based on reference intervals, then Arsenic, Fractionated, will be added to determine the proportion of organic, inorganic, and methylated forms. Additional charges apply.