Mercury Poisoning

Clinical criteria for case classification
The clinical presentation of mercury poisoning varies depending upon the form of mercury (elemental, organic or inorganic) as well as the route of exposure and the dose if ingested. Any organ system may be affected.

The signs and symptoms of acute exposure to mercury may vary depending on the form of mercury (elemental or inorganic). For elemental mercury, acute toxicity might result in fever, fatigue, and clinical signs of pneumonitis. For inorganic mercury, symptoms might include profuse vomiting and diarrhea that is often bloody, followed by hypovolemic shock, oliguric (decreased urine production) renal failure, and possibly death. Delayed toxicity symptoms (>1 month) are typical of organic mercury poisoning and usually involve the central nervous system. These symptoms might include paresthesias, headaches, ataxia, dysarthria (motor speech disorder), visual field constriction, blindness, and hearing impairment.

Laboratory criteria for case classification
One or more of the following:
- >10 micrograms per liter (μg/L) of urine, or
- >10 micrograms per liter (μg/L) of whole blood, or
- >5 micrograms per gram (μg/g) of hair.

No definitive correlation exists between either blood or urine mercury levels or mercury toxicity. Urine mercury levels are not useful in evaluating organic mercury poisonings.

Epidemiological criteria for case classification
Either of the following:
- A person with a high index of suspicion (patient’s exposure history regarding location and time) or
- A person who is epidemiologically linked to a confirmed mercury poisoning case.

Case classification
Confirmed:
A clinically compatible illness in a person with laboratory evidence.

Probable:
A clinically compatible illness in a person with epidemiological criteria.

Criteria to distinguish a new case from previous reports
Not applicable