

Carbon Monoxide Poisoning

Merlin reporting code = 98600
 Case report form (CRF): [Carbon Monoxide Poisoning Reporting Form](#)
PAPER CRF REQUIRED

Clinical description

There is no consistent constellation of signs and symptoms resulting from acute carbon monoxide (CO) poisoning, nor are there any pathognomonic clinical signs or symptoms which would unequivocally indicate a case of acute CO poisoning. The clinical presentation of acute CO poisoning varies depending on the duration and magnitude of exposure and between individuals with the same degree of exposure or the same venous carboxyhemoglobin (COHb) level.

The most common signs and symptoms include headache, nausea, lethargy (or fatigue), weakness, abdominal discomfort/pain, confusion, and dizziness. Other signs and symptoms may include visual disturbances including blurred vision, numbness and tingling, ataxia, irritability, agitation, chest pain, dyspnea (shortness of breath), palpitations, seizures, and loss of consciousness.

Laboratory criteria for case classification

Biologic evidence:

Elevated COHb concentration found in blood specimen determined by laboratory tests from a blood specimen or pulse CO-oximetry. Elevated levels of COHb should be interpreted in light of endogenous production, patient smoking status, and exposures to second hand smoke.

Environmental evidence:

Detection of CO from environmental monitoring data as provided by first responders (e.g., fire department, hazmat), environmental consultants, or other sources if deemed reliable.

Case classification

Only CO poisoning cases resulting from **unintentional** exposures are reportable.

Confirmed:

- A person with clinically compatible signs or symptoms and COHb level $\geq 9\%$,
- OR
- A person with clinically compatible signs or symptoms and environmental evidence,
- OR
- A person with COHb level $\geq 12\%$.

Probable:

- A person with clinically compatible signs or symptoms and the same environmental exposure as that of a confirmed case,
- OR
- A person with clinically compatible signs or symptoms and smoke inhalation secondary to conflagration (explosive fire),
- OR
- A person with $9\% \leq \text{COHb} \leq 12\%$.

Suspect:

A person with clinically compatible signs or symptoms and a history of recent exposure to CO.

Comments

Reliable CO environmental monitoring data

The acceptance of this data is at the discretion of the public health investigator/official. The quality of environmental monitoring data is dependent on the capabilities and limitations of the monitoring equipment and the equipment users. False positive environmental monitoring data is possible (e.g., some CO sensor technologies are known to be cross-sensitive when exposed to other chemicals such as hydrogen sulfide). Please contact the Department of Health, Radon and Indoor Air Program Office at (850) 245-4288 or (800) 543-8279 for assistance with the interpretation of CO environmental monitoring data.

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