

Quality Improvement

Associated NEMSIS Protocol(s) (eProtocol.01) (for additional information, go to www.nemsis.org)

- 9914167—Exposure - Carbon Monoxide
- 9914173—Exposure - Smoke Inhalation

Key Documentation Elements

- If using an environmental carbon monoxide detector, record the level detected
- Evidence of soot or burns around the face, nares, or pharynx
- Early and repeat assessment of patient's mental status and motor function are extremely useful in determining response to therapy and the need for hyperbaric therapy
- Accurate exposure history
 - Time of ingestion/exposure
 - Route of exposure
 - Quantity of medication or toxin taken (safely collect all possible medications or agents)
 - Alcohol or other intoxicant taken
- Signs and symptoms of other patients encountered at same location if present

Performance Measures

- Early airway management in the rapidly deteriorating patient
- Accurate exposure history
 - Time of ingestion/exposure
 - Route of exposure
 - Quantity of medication or toxin taken (safely collect all possible medications or agents)
 - Alcohol or other intoxicant taken
- Appropriate protocol selection and management
- Multiple frequent documented reassessments

References

1. Buckley NA, Juurlink DN, Isbister G, Bennett MH, Lavonas EJ. Hyperbaric oxygen for carbon monoxide poisoning. *Cochrane Database Syst Rev*. 2011 Apr 13;(4): CD002041
2. *Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department with Acute Carbon Monoxide Poisoning*. ACEP Clinical Policies Subcommittee (Writing Committees) on Carbon Monoxide Poisoning, American College of Emergency Physicians; *Ann Emerg Med*. 2017;69:98–107
3. Hampson N. Practice Recommendations: the diagnosis, management, and prevention of carbon monoxide poisoning. *Am J Respir Crit Care Med*. 2012;186(11):1095–101
4. High Flow Nasal Cannula is superior than CPAP in carbon monoxide poisoning
5. Hoffman RS, Howland MA, Lewin NA, Nelson LS, Goldfrank LR. *Goldfrank's Toxicologic Emergencies, 10th Edition*. China: McGraw-Hill Education; 2015
6. Hampson NB. Pulse oximetry in severe carbon monoxide poisoning. *Chest*. 1998;114(4):1036–41
7. Jones A. Recent advances in the management of poisoning. *Ther Drug Monit*. 2002;24(1):150–5
8. Karaman K, Golcuk Y, Yıldırım B, Acar E. Am J Emerg Med. 2020 Oct 2: S0735-6757(20)30879-2. doi: 10.1016/j.ajem.2020.09.084. Bahadır Caglar¹, Suha Serin², Gokhan Yilmaz³, Alper