



Tips from Training



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Cyanide in Smoke



[Report on Cyanide](#)

Smoke inhalation is a common cause of cyanide poisoning during fires, resulting in injury and even death. In many cases of smoke inhalation, cyanide has increasingly been recognized as a significant toxicant. Cyanide exists in several forms, including hydrogen cyanide (HCN). **HCN from fire smoke is probably the most common cause of acute cyanide poisoning.**

- Treatment for cyanide poisoning includes administration of high-flow 100% oxygen and an antidote for cyanide toxicity.
- On signal 10-75 a regular conditions car will be assigned, they carry 1 Cyanokit (antidote).
- **At fires with multiple 10-45's or when multiple firefighters are experiencing smoke inhalation it is imperative to request a HazTac officer as they carry 5 Cyanokits.**
- In contrast to carbon monoxide poisoning, there is no rapid detection method for HCN in blood and it takes time to obtain analytical confirmation. **Lab analysis will confirm the diagnosis, but treatment should start without waiting for the lab results.**
- Early manifestations of cyanide toxicity:
 - Neurologic and respiratory stimulation, giddiness, confusion, headache, vertigo, dizziness, nausea and vomiting; palpitations; and hyperventilation or shortness of breath.
- Later symptoms of acute cyanide poisoning:
 - Neurological, respiratory and cardiovascular depression arising from the inability to compensate for tissue hypoxia. Eventually, seizures, bradycardia, hypotension, coma, respiratory and cardiac arrest will ensue.

Prevent dangerous toxins from entering your lungs. Use your SCBA through overhaul.