



To Hell and Back: Cyanide Poisoning

Instructor Training Outline

- I. **Smoke: Perceptions, Myths & Misunderstandings**
 - a. **Reading smoke vs. breathing smoke**
 - b. **Combustion Process**
 - c. **Dangers of Fire Smoke**
 - d. **Toxic Twins of Smoke Inhalation**
 - i. **Cyanide – Mechanism of Action**
 - 1. **Cyanide Kills Organs**
 - ii. **Carbon Monoxide – Mechanism of Action**
 - 1. **CO Kills the Blood**
 - e. **Short and Long Term Effects of Smoke Inhalation**
- II. **Prevention Practices for Line of Duty Smoke Inhalation**
 - a. **Air Management**
 - i. **RIT – Phoenix Study**
 - ii. **Synchronizing Bottle Pressure**
 - iii. **Reilly Emergency Breathing Technique (R-EBT)**
 - 1. **Synchronize Bottle Pressures**
 - 2. **4-Day Breathing Technique Test and Results**
 - b. **Mayday Air Management**
 - i. **Practical Application & Tactics**
 - ii. **When to use R-EBT**
 - c. **NFPA 1404**
- III. **Overhaul & Rehab**
 - a. **Metering**
 - b. **SCBA usage**
 - c. **NFPA 1584**
 - d. **What happens at Rehab?**
 - e. **Liability without SOG's**
- IV. **Signs & Symptoms of Cyanide Toxicity**
- V. **Treatment and Antidotes**
 - a. **ALS**
 - b. **BLS**

***Training Resources:**

Cyanide & Modern Day Fires

SMOKE: Perceptions, Myths & Misunderstandings

SMOKE: Cyanide and Carbon Monoxide – the Toxic Twins of Smoke Inhalation

SMOKE: Cyanide and Carbon Monoxide – An Advanced Perspective

*All publications are found at www.FireSmoke.org.