



Routes of Carcinogen Exposure



Firefighters have greater cancer rates compared to the general population. The following are routes of carcinogen exposure and the steps you can take to reduce your contact with **deadly contaminants**.

- **Inhalation Exposures (most common):**
 - Chemicals in smoke do not disappear when the fire is extinguished.
 - Carcinogens are often inhaled during the overhaul phase.
 - Exposure also occurs from off-gassing of contaminated equipment/PPE.
 - **Wear SCBA through overhaul. Bag contaminated gear for decon.**
- **Dermal Exposures:**
 - Occurs when contaminants are absorbed through the skin.
 - Soot contains carcinogens.
 - Elevated temperatures increase dermal absorption.
 - **Wipe soot from skin (on-scene). Shower and change into a clean uniform at quarters and wear clean bunker gear.**
- **Ingestion Exposures:**
 - Soot from unwashed hands can be ingested when a firefighter eats.
 - 2020 research study identified gloves are widely contaminated: greater than bunker gear.
 - **Practice on scene decon of PPE/equipment, hand washing and shower as soon as possible upon returning to the firehouse.**