

ESO: Recent Study Uncovers Discrepancies in Firefighter Decontamination Practices, Raising Concerns About Elevated Cancer Risk

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ESO's research looks at documented fire decontamination practices, discovers almost one in five firefighters with no decontamination procedures documented following a working fire.

AUSTIN, Texas--(BUSINESS WIRE)-- **ESO**, the leading data and software company serving fire departments, emergency medical services (EMS), hospitals, state and federal agencies, has released findings focusing on on-scene decontamination procedures following firefighting related exposures. The analysis uses data from one of the largest fire records management databases in the country. These findings are based on more than 2,509 firefighters involved in an incident with exposure to smoke or combustion byproducts between January 1, 2021 and December 31, 2021.

"At ESO, we are deeply concerned by the alarming number of firefighter fatalities attributed to fire exposures. It is disheartening to witness firefighters commit their lives to selfless service, only to reach retirement and, within a mere four months, receive the devastating diagnosis of cancer," said Bill Gardner, ESO Senior Director of Fire Programs. "That's why we have placed an emphasis on understanding the gravity of the situation."

"Our results suggest that far too few firefighters are documenting and/or performing decontamination on-scene following exposure to fire products, with almost one in five exposed firefighters having no decontamination procedures documented," continued Bill Gardner.

Key Findings include:

- Documented Fire Exposures: Among the 31,281 firefighters included in the study, 8% documented fire-related exposures. 82% of firefighters with exposures documented at least one on-scene decontamination procedure.
- Low Compliance with Best Practices : However, only 4% of those with exposures documented all on-scene decontamination procedures defined as best practice.
- Rural Disparity: The odds of documenting any decontamination procedure were significantly lower for firefighters responding to rural area fires compared to those working in urban areas.
- Common Decontamination Procedures: The most common type of decontamination procedure reported was cleaning the neck, face, arms, and exposed areas with wet wipes, accounting for 65% of incidents.
- Gear Handling Following Exposure: 10% of firefighters in this study documented placing their bagged gear in the cab following exposure during a fire incident, a practice that was specifically identified as one to be avoided by the Lavender Report update.
- Limitations: It is possible that incomplete documentation practices may have masked the actual performance of decontamination procedures, yet signals an area that warrants further attention for firefighter health and safety.

“In presenting this data, we aim to inform leadership on the need to complete accurate documentation of exposure and decontamination procedures. We know that best practices such as wet brushing gear with soap, cleaning neck, face, arms, and exposed areas using wet wipes, as well as having gear bagged and placed outside of the cab can greatly reduce firefighters' risk of cancer,” said Dr. Antonio Fernandez, Principal Research Scientist at ESO. “In addition, documenting exposure and decontamination measures can greatly increase firefighters' access to necessary resources in the event of a cancer diagnosis due to exposure.”

About the Research:

The research is based on a comprehensive analysis of 655 participating fire agencies and 15,538 unique working fire incidents between January 1, 2021, and December 31, 2021.

To request the research, you can head to <https://www.eso.com/data-and-research/> and request the publication reprint.

About ESO:

ESO (ESO Solutions, Inc.) is dedicated to improving community health and safety through the power of data. Since its founding in 2004, the company continues to pioneer innovative, user-friendly software to meet the changing needs of today's EMS agencies, fire departments, hospitals, state and federal offices. ESO currently serves thousands of customers throughout North America with a broad software portfolio, including the industry-leading

ESO Electronic Health Record (EHR), the next generation ePCR; **ESO Health Data Exchange (HDE)**, the first-of-its-kind healthcare interoperability platform; **ESO Fire RMS**, the modern fire Record Management System; **ESO Patient Registry** (trauma, burn and stroke registry software); and **ESO State Repository**. ESO is headquartered in Austin, Texas. For more information, visit www.eso.com.

Media Contact:

Kaitlyn Karmout

Kaitlyn.karmout@eso.com

832-952-6008

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