

Operating Guideline # 232

Hygiene and Post Incident Decontamination

November 26, 2023



PURPOSE:

The purpose of this Operating Guideline (OG) is to protect the health of firefighters who work in contaminated (smoky) environments and reduce the risk of exposure to contaminants by promoting improved personal hygiene practices and routine PPC decontamination procedures to be followed in a post-exposure environment.

ISSUE/RATIONALE:

The risk of work related illness for firefighters is generally poorly understood despite recent advancements in our understanding of how smoke and heat affect us physiologically. The prevalence of cancers in firefighters alone is stark evidence of the effect that our working environment can have on some firefighters despite our best attempts to provide protective clothing that is specifically designed for this environment.

What is clear is that our personal protective clothing can be contaminated at a fire incident or during training through exposure to products of combustion and smoke.

GUIDELINE:

General

1. Due to the potential health risks posed by air-borne contaminants contained in smoke, all staff who are exposed to moderate or heavy smoke conditions while working at a structure or vehicle fire or during training exercises are responsible to ensure they follow the provisions of this guideline.
2. All firefighters that may be exposed are expected to inform themselves by taking the ["Comprehensive Risk Reduction Strategies for the Fire Service"](#) free online training course and providing a copy of their certificate of completion to the MLFD training coordinator. This course synthesizes current research on fire service contamination control in the context of the NIOSH Hierarchy of Controls, a framework that supports decision-making based on implementing feasible and effective control solutions in occupational settings.
2. Following an exposure to smoke or contaminants from combustion at the conclusion of operations, staff are to:
 - a) Undergo a thorough gross decon at a suitable location at the incident or training site (all obvious debris shall be brushed or rinsed/washed off of all PPE - boots, bunker gear, gloves, balaclava, helmet and SCBA).
 - b) PPE (including SCBA) that cannot be adequately decontaminated at the scene as described in sentence 2a) shall be doffed and quarantined by placement in a plastic garbage bags for transport back to the station. (NOTE: PPE that is quarantined in this manner shall not be transported back in the crew compartment of a vehicle.)
 - c) Personnel shall utilize a sanitation "wipe" as soon as possible to clean skin areas to attempt to further remove any invisible contaminants. Pay special attention to the face and neck, hands and forearms and armpits and crotch area if possible. Dispose of soiled wipes by placing them in a separate plastic bag for disposal at the station and transport these in the same manner as quarantined PPE.
 - d) Upon arrival at the station, contaminated gear shall be laundered (washed and dried) as soon as possible utilizing the equipment provided at Station 6 and Station 3

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for this purpose. When handling soiled equipment, staff should ensure that nitrile gloves and eye protection are worn as a minimum (N95 masks may additionally be necessary if the gear is heavily soiled). Where this cannot be done immediately, arrangements shall be made to obtain a spare set of gear. Personnel are responsible for regular/routine cleaning of their own gear. Where gear is heavily soiled, contaminated with bodily fluids or is in need of repair, arrangements shall be made for the gear to be sent to the appropriate cleaning/maintenance contractor for advanced cleaning and advanced inspection.

e) As soon as is practical, personnel should doff and wash their personal clothing and take a shower. Some stations have showers to support this, soap, towels and spare clothing may be provided.

3. Bunker gear is NOT to be worn in any area of the station facility apart from the bunker gear/locker rooms, apparatus floor and area's dedicated to practical training evolutions.
4. Equipment used at a scene shall be rinsed/cleaned at the incident site to remove debris before return to the station.
5. Where the inside seating area of any apparatus becomes soiled, it shall be cleaned as soon as is practical following return to the station.
6. Inside surface areas and seats in all apparatus shall be cleaned and disinfected regularly as part of station/apparatus maintenance routines.
7. Incident Commanders should always consider risk avoidance as part of their Incident Action Plan and avoid placing firefighters in contaminated atmospheres wherever possible. Consideration should also be given to minimizing exposure time as a risk reduction strategy – avoid having crews stay in contaminated areas for prolonged periods.
8. Firefighters should understand the importance of hydration to physical wellbeing and take steps to hydrate themselves prior to emergency responses and training activities. In addition, firefighters should make it a priority to re-hydrate themselves during periods of exertion and as soon as possible following.
9. Soiled gear shall not be worn at any public education event where the public (especially children) may come into contact with it.
10. The Joint Health and Safety Committee has the additional responsibility to take a proactive approach to monitor emerging informed practices with respect to decontamination and to bring these practices forward for possible implementation.

RESPONSIBILITY

It is the responsibility of all members of the Muskoka Lakes Fire Department to adhere to the provisions of this Operational Guideline.

DEFINITIONS:

“PPC” means Personal Protective Clothing.

“PPE” means Personal Protective Equipment.

REFERENCES:

- Occupational Health & Safety Act, RSO (and Regulations)

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- S. 21 Committee Guidance Note 6-40, Hygiene and Decontamination
- NIOSH Hierarchy of Controls
- Fire Safety Research Institute Training Division, training.fsri.org
- MLFD. O.G. 105 – PPC Care and Maintenance
- MLFD O.G. 106 – PPC Maintenance Team
- MLFD O.G. 203 – Breathing Apparatus
- MLFD O.G. 1411 – Haz-Mat Incidents – Decontamination