



The Training Brief

Quick Reference mini-training Topics Use of Personal Wipes

The purpose of this training topic is to describe the use of personal wipes to reduce exposure risk.

Discussion

Fact: Firefighters are exposed to many chemical compounds during fire assignments that due to chronic exposures can cause a higher risk of developing cancer than the general population. Using personal wipes to wipe away contamination can reduce contaminants on your skin until you can take a shower (hopefully within the hour after contamination.)

The use of cleansing wipes is outlined in NFPA 1500 (14.5.3.1) (2018 version.)

Key Points: Using wet wipes to expose all exposed skin areas reduce your exposure to PAH's by 54%.

Action: Perform preliminary exposure reduction after being exposed to products of combustion. Once done with PER ensure you wipe down all areas of exposed skin with personal wipes.

Using wipes is not a substitute for preliminary exposure reduction practices.

Shower within the hour as wipes are not a substitute for a shower.

Make the necessary changes

The use of personal cleansing wipes on the fire incident scene is necessary first steps in reducing exposure to the product of combustion.

Published in the Journal of Occupational and Environmental Hygiene NIOSH "**Contamination of firefighter personal protective equipment and skin and the effectiveness of decontamination procedures**" states that "cleansing wipes were able to reduce Polycyclic Aromatic Hydrocarbons (PAH) contamination on the neck skin by a median of **54%**"

What kind of wipes should be used: Most cleansing wipes are manufactured similarly with some variations noted.

- Avoid purchasing cleansing wipes with ingredients that promote absorption like lanolin or aloe.
- Some wipes are designed to removed heavy metal particles off the exposed skin areas as heavy metal particles are often suspended in structure fire smoke.

Have the cleansing wipes located in the contamination reduction or warm zone). Use the cleansing wipes to decontaminate before heading into the cold zone where rehab would occur.

Carefully remove your structure fire gloves trying to avoid hand contact with the exterior of the gloves.

Use multiple wipes for a preliminary exposure reduction:

- Wipe hands, under fingernails, and don nitrile gloves.
- Wipe your neck and throat.
- Wipe your forehead and face eyelids and hair.
- Use the last wipe to clean any other area of exposed skin or that is susceptible to a high degree of absorption (arm pits or groin.)
- Use wipe to clean nostrils and blow nose into wipe.

Please use the link below on the proper use of wipes after a fire incident and the link for the NIOSH study:

FDNY use of wipes Video:
<https://www.fdnipro.org/field-wipes/>

NIOSH Study:
<https://www.tandfonline.com/doi/full/10.1080/15459624.2017.1334904>