

Overview

Hydrofluoric acid (HF) causes corrosive chemical burns and is a serious systemic poison by all routes of exposure.

Car and truck wash cleaning products, rust removers, and aluminum brighteners often contain HF because it is inexpensive and highly effective in breaking down roadway matter. Workers are at risk of exposure to HF from skin contact, ingestion, and inhalation.

In 2012, a truck wash worker died from ingestion exposure to HF. Following the death, Washington State workers' compensation data was used to characterize all injuries sustained from HF exposure during car and truck washing from 2001-2013.

Acid Burns in Car & Truck Wash

Occupational Hydrofluoric Acid Injury from Car and Truck Washing – Washington, 2001-2013

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Key Findings

One death and 48 chemical burns from exposure to hydrofluoric acid-based products used during car and truck washing, including auto detailing, were reported:

- Seven of the 48 workers had burns that resulted in hospitalization.
- Eight workers had between 2 and 40 lost work days and two workers received permanent partial disability awards.

HF concentration may have a greater effect on burn severity than the total body surface area burned:

- Workers were exposed to both 'diluted use' concentrations of <1% as well as concentrated formulations containing up to 20% HF. Both concentrations are highly hazardous.

Gloves and boots do not ensure protection against skin contact; solution drips inside boots and gloves, gloves also tear.

Impact

Hydrofluoric Acid exposure can result in severe burn, disability, and death. Efforts are needed to identify less hazardous alternatives to HF-based wash products.

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Research for Safe Work

The SHARP Program at the Washington State Department of Labor & Industries partners with business and labor to develop sensible, effective solutions to identify and eliminate industry-wide hazards. Learn more at www.lni.wa.gov/Safety/Research/

Find the article here:

[http:// www.cdc.gov/mmwr/preview/mmwrhtml/mm6432a4.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6432a4.htm)

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