



## Media release

### Care needed when handling products containing hydrofluoric acid, researchers warn

Exposure to the skin or eyes from hydrofluoric acid, which is commonly used in industry and is an ingredient in widely available household products, can result in pain, burns, and even death.

Hydrofluoric acid is used in the manufacture of glass, electronics, pesticides and high-octane fuels, and it is used in electroplating.

It is also the active ingredient in some household products such as rust removers, wheel cleaners, and aluminium brighteners.

A study of hydrofluoric acid poisoning published as an Early View article in *Emergency Medicine Australasia*, the journal of the Australasian College for Emergency Medicine, has prompted warning calls for special care when handling common products containing it.

Toxicology and Emergency Registrar Anselm Wong, Emergency Physician, Clinical Toxicologist and Medical Director Shaun Greene, and Pharmacist Jeff Robinson, all from the Victorian Poisons Information Centre based at Melbourne's Austin Hospital, retrospectively studied calls to the Victorian Poisons Information Centre from June 2005 to February 2011.

During that period there were 75 separate hydrofluoric acid exposures, approximately 12 per year.

Most (91%) calls related to men who were poisoned.

Almost the same number (92%) related to adults, with six (8%) being children under 12 years.

Over half (53%) of the exposures occurred at the workplace.

Almost three-quarters (72%) were exposures to the skin, with eyes the next most common (15%).

More than half the exposures involved hydrofluoric acid concentrations of 10% or less.

Although poisoning severity was generally mild in this study, the researchers warned that delayed pain may delay patient presentation, hence resulting in a worse outcome.

Also, small exposures with higher concentrated hydrofluoric acid can be fatal.

Wheel cleaners were the most common products in exposure (27%), followed by pickling pastes (20%).

Other products such as tile etchers and aluminium cleaners accounted for 22% of exposures.

Products used in industry accounted for 31%.

"Even small dermal exposures to hydrofluoric acid can cause severe pain resistant to opioid analgesia.

“Larger dermal exposures or ingestions can cause a variety of problems, including arrhythmias and death.

“We urge the community to check the product information, warnings and wear protective clothing such as gloves when using these products.”

FURTHER INFORMATION:

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