

FACT SHEET:

household products – chemicals



At least three children under three are admitted to hospital in Queensland each week due to non-medicinal poisoning.

In Australia, at least one child under five is admitted for this reason every day.^{1,2,3}

A quarter of non-medicinal poisonings treated in hospital emergency departments are from household cleaners such as soap, detergent, dishwasher detergent, bleach and other caustic substances.¹ Other chemicals often involved in poisoning include petrol, paint/paint thinner, essential/fragrant oil, vaporiser liquid, moth repellent, pesticide/insecticide/herbicide, rat poison, glue/adhesive and paints/dyes.^{1,2}

How are children exposed to household chemicals?²

Children mainly come into contact with household chemicals through swallowing, breathing or touching. There are higher concentrations of chemicals near the floor that can stick to carpets, sofas and plush toys. Children have a higher risk of exposure to household chemicals because they crawl, play close to the floor, put objects in their mouth, touch everything, and put their hands in their mouth.

Harmful chemicals²

Harmful chemicals are found in aerosol sprays, cleansers, disinfectants, moth repellents, air fresheners, aerosol insecticides, mosquito coils, hobby products, bleaches, cleaners, detergents, solvents, and paraffin.

Pesticide can also be harmful to children of all ages but especially in early childhood (ages 0-3yrs), and to pregnant mothers. Pesticides include insect sprays, rodent sprays and bait.

Other common household products that are dangerous to children when ingested are: essential oils, petrol or petrol related products and some plants or mushrooms.

Health effects from chemicals

Low-level exposure to household chemicals can affect the skin, eyes, nerves, heart, lungs, stomach, liver, kidneys and the bloodstream. Chemicals have been linked to an increased risk of certain types of cancers (for example, acute lymphoblastic leukemia).³

Exposure to pesticides can affect physical and mental development.³

Household products often contain:

Lead, which can cause hyperactivity, learning disabilities, stomach pain, seizures and brain damage.⁴

Mercury, which can cause tremors or muscle weakness and increased sensitivity to light.⁵

Formaldehyde (found in household cleaners), which can irritate eyes, nose and airways.²

Alternatives to harmful chemicals:

Baking soda – cleans and deodorises.

Borax – cleans, deodorises and is a disinfectant.

Biodegradable soap – is non-toxic and easily dissolves in hot water without chemical scent.

Washing soda (sodium carbonate) – cuts grease, removes stains and disinfects.

White vinegar or lemon juice – cuts grease, kills moulds and germs (disinfects) as well as freshens.

Prevention – reduce exposure¹

Ensure that household products and chemicals are securely stored and remain in their original containers.

Dispose of unwanted household chemicals and medications appropriately.

Iron tablets and other 'natural' products like vitamins or mineral supplements etc can be highly dangerous – store them as you would medicines.

Carers, visitors and elderly relatives may have dangerous substances accessible to children, for example, tablets in handbags or on bedside tables. Ensure the environment is safe and supervise your child when visiting.

Contact the Poisons Information Centre in case of poisoning or suspected poisoning on 131 126.

Sources

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4. Sly PD, Flack F. Susceptibility of Children to Environmental Pollutants. Annals of the New York Academy of Sciences 2008; 1140:163-83.
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