

DETOX YOUR HOME

EASY STEPS YOU CAN
TAKE FOR A SAFER
AND HEALTHIER HOME



A HEALTHY HOME
IS A PLACE THAT IS
SAFE FOR EVERYONE,
ESPECIALLY CHILDREN,
AND DOESN'T
HURT THE LOCAL
ENVIRONMENT

Australians now spend more than 90% of their time indoors: at home, at school, at work and as we travel in cars and public transport. It makes sense then to make our indoor spaces as healthy and safe as we can for our families.

Many everyday items found around our homes such as household cleaners, personal care products, pesticides, carpets and furniture can emit chemicals that when combined together can reduce the quality of the air inside our home and may have impacts on our health.

Modern day illnesses, such as asthma, allergies, chemical sensitivity, hyperactivity in children and chronic fatigue syndrome are increasingly being linked to chemicals that we are exposed to in our homes. It is now widely recognized that babies and young children are at greater risk from chemical exposures, which could impact on their health and ability to learn.

WHAT MAKES A HOME SICK?

▶▶ CEILING/ ATTIC

Lead contaminated dust which can contribute to lead poisoning can accumulate in walls, ceilings and under floors.

▶▶ LIVING ROOM

Carpets, furnishings and coverings and chemical cleaning products can give off volatile organic compounds (VOCs).

▶▶ SUBFLOORS

Pest treatments applied under floors can give off fumes that may enter inside and contaminate the soil outside.

▶▶ BEDROOM

Dry cleaned clothes, new mattresses and particleboard furniture can give off chemical fumes.

▶▶ GARDEN/ GARAGE/ POOL

Some garden chemicals and pesticides used indoors or outdoors are powerful poisons.

Car batteries, pool chemicals and motor fuels contain chemicals that can burn skin or eyes.

▶▶ KITCHEN

Unflued gas appliances are major emitters of indoor air pollutants (including carbon monoxide, nitrogen dioxide, air toxics and particulates). Some drain cleaners and oven cleaners contain corrosive chemicals that can burn skin and mucous membranes.

▶▶ BATHROOM

Air fresheners, disinfectants, window cleaners and anti-mould preparations often contain chemicals such as solvents, bleach, ammonia and chlorine.

Personal care products such as deodorants, perfumes, aftershave and hairspray can also contribute to the chemicals indoors.

SIX STEPS TO A HEALTHIER HOME

- ▶▶ Open windows and doors and air rooms well
- ▶▶ Shift to natural cleaning
- ▶▶ Replace fume emitting furnishings and coverings
- ▶▶ Renovate with natural and low-toxic materials
- ▶▶ Banish chemical pesticides from the home and go organic in the garden
- ▶▶ Use natural personal care products

Read on for more healthy living tips.

KEEP CHILDREN SAFE

Children may be more vulnerable to chemical exposures and at greater risk than adults because their bodily systems and brains are still developing; they eat more, drink more and breathe more in proportion to their body size; and their behaviour (such as crawling or the hand-to-mouth activities of babies and toddlers) provides greater exposure to chemicals in and around the home.

Child-safe your home

Common cleaners and chemicals around the home are responsible for 95% of all childhood poisoning incidents (Kidsafe NSW).

Bleach, laundry detergents, disinfectants, oven cleaners, furniture polishes, floor cleaners and medicines can hold a near fatal attraction to children. These often contain colourful liquids – perfect for curious toddlers.

▶▶ Try these child safe TIPS:

- ▶ Buy products which are non toxic and with childproof seals.
- ▶ Keep cleaners, solvents and other chemicals in their original container. Make sure the label is intact.
- ▶ Store in a cool, dry place out of the reach of children.
- ▶ Keep lids tightly closed to avoid leaks, spills and fumes.

For more on reducing chemicals in your home, school or childcare centre, read: *The Toxic Playground* by Jo Immig. You can download an order form from www.safersolutions.org.au or contact Total Environment Centre on 02 9261 3437.



▶▶ Toddlers are especially susceptible to the ill effects of household dust



▶▶ Childproof locking devices are widely available

- ▶ Keep cockroach baits and other pesticides well away from children. Better still, don't use them!
- ▶ Keep any potentially hazardous items such as medicines in a secured (locked) cupboard and return any unused medicines (www.returnedmed.com.au) to your Chemist.
- ▶ If you can't use or give away leftover chemicals and cleaners make sure that you dispose of them responsibly. Contact your local council, the Environment Line on 131555 or www.cleanout.com.au for information on safe and free disposal.

Keep dust down

House dust often contains lead, toxic chemicals, allergens, moulds and fibres which irritate the lungs.

Reducing dust in your home through regular non-toxic cleaning and airing is one of the best ways to protect young children.

HOME HEALTH AND PREGNANCY

▶▶ Some chemicals can cause harm to unborn children. It is particularly important to avoid exposure to hazardous compounds during pregnancy. Solvents, pesticides (including insecticides, herbicides and fungicides), dry cleaning fluids and anti-mould preparations are some of the chemicals that are best to avoid. Lead and other harmful chemicals can accumulate in the body and be passed to babies through pregnancy and breastfeeding and may cause low birth weight or miscarriage.

LIVING AREAS

► Try these steps to healthier air inside your home

Ventilate!

The cheapest and easiest way to improve the air inside is to let more of the outside air in. Air circulation dilutes pollutants and helps to keep mould at bay. Ensure there is good air flow through windows, doors, wall vents and ducts at all times.

Choose natural floorings and furnishings

Avoid treated materials used in carpets, furniture covers and cushions. Where possible, choose natural and untreated materials such as wool carpets, felt underlays, hemp, cotton, linen, wool or hessian fabrics and latex or natural fibre cushions.

Floor coverings and furnishings should be aired and cleaned regularly.

Freshen air naturally

Instead of masking odours with artificial fragrances or air fresheners use your sense of smell to act on problem areas. Unpleasant odours, plastic smells and dusty smells

► Low maintenance, easy to clean floorings can help prevent the build up of dust and chemicals



are giving you an important message about the air quality within your home. Reduce undesirable odours by ventilating and removing the causes of the problem.

Plants are nature's air cleaners and having them inside can help to keep pollutants down. Native Kentia Palm and Dwarf Queensland Umbrella Tree along with Peace Lily and Devil's Ivy are some of the plants suitable for indoors that can reduce indoor air pollution.

► For more on indoor air quality:

- www.safersolutions.org.au;
- *Healthy Homes – A guide to indoor air quality in the home for buyers, builders and renovators* (www.nphp.gov.au)

► Fresh flowers and herbs are ways to naturally scent your home. Adding peppermint or rose oil to bicarbonate of soda makes a great, fragrant, low-toxic cleaner

WHAT'S THAT 'PLASTIC' SMELL?

Some of the worst culprits in sick building syndrome are chemicals called Volatile Organic Compounds or VOCs. These are gases which are given off by many household items. They are invisible, but can often be smelt – the fresh plastic smell of a new car is one example.

VOCs are found in some carpets and furnishings, cleaning products, polishes and waxes, paints, plastics, air fresheners, pesticides and aerosol sprays.

VOCs can irritate skin, eyes, nose and throat. They can cause dizziness, nausea and headaches.

Some VOCs, such as formaldehyde are known or suspected to cause cancer. Other toxic VOCs are released when, for example, household bleach mixes with ammonia-based cleaners.



KITCHENS AND BATHROOMS

Switch to natural cleaning

Many cleaning products contain dangerous chemicals. Disinfectants, oven cleaners, drain cleaners, floor polishes, anti-mould preparations and window cleaners can contain a potent mix including solvents, bleach, ammonia and chlorine.

Replace chemical cleaners with natural alternatives. A cheap and environmentally friendly green cleaning kit can make your home a safe place for you and your children.

YOUR GREEN CLEANING KIT

▶▶ BAKING SODA

A cheap environmentally friendly all purpose cleaner and stain remover. Mix a small amount to make a cleaning paste and wash off with water

▶▶ VINEGAR

Use white vinegar in a spray bottle to clean and cut grease. It's a great window cleaner and glasses sparkle after a vinegar rinse. Also good for drains and septic systems

▶▶ SOAP AND WATER

Cleaning thoroughly with natural soap and water is effective against bacteria

▶▶ OLD COTTON CLOTHING

OR TOWELS make great cleaning rags and dusting cloths (using natural cloth means that they can be composted when they can no longer be used)

▶▶ Try microfibre cloths that clean with just water

For more green cleaning tips: www.safersolutions.org.au and www.livingthing.net.au

Practice common sense cleaning

Most people just aren't aware how harmful common household cleaners can be.

Here are a few safety tips to remember:

▶▶ Don't place them in the garbage

- ▶ Visit www.cleanout.com.au or call 131555 for your nearest Household Chemical Collection or check with your local council.

▶▶ Buy fewer cleaning products and try natural cleaning instead

- ▶ Purchase only what you need and buy concentrates or refills wherever possible. Many commercial cleaning products contain chemicals that can cause harm to you, your family and the environment.



▶▶ Be informed

- ▶ If you must buy commercial chemical cleaners, read the labels carefully and follow all safety instructions. If you or your family are sensitive to chemicals or suffer from asthma or allergies, take extra care. To find out more about the chemical ingredients in cleaning products request a Material Safety Data Sheet from the manufacturer.

Check your stoves and heaters

Gas, kerosene and wood heaters and stoves produce gases and small particles that can cause breathing problems (especially for asthmatics), headaches, dizziness and nausea.

Get gas appliances serviced regularly and checked for leaks. Make sure all combustion cooking and heating equipment is flued to the outside (ie the toxic fumes and particles are taken outside). Good ventilation will go a long way in reducing these hazards.

RENOVATING

Choose bio and water-based paints and finishes

The best choice of all is plant-based bio paints, oils and finishes. Always choose low fume paints over oil-based paints which have high levels of VOCs which evaporate as they dry. Lighter coloured paints have less VOCs.



Avoid petroleum-based paint strippers and solvents

Petroleum-based paint strippers and thinners contain solvents that dissolve or thin oil-based paint. Benzene, toluene and xylene are examples of the highly hazardous solvents found in strippers.

Choose less toxic alternatives such as citrus-based paint strippers and solvents. Remember water is the universal solvent if you are working with water-based products.

Use natural materials

Avoid using composite wood products which give off formaldehyde vapours from the glues they contain such as some chipboard, MDF (medium density fibreboard) or particle board products. Look for low VOC/ formaldehyde materials where available.



► It's vital to be lead safe. Kids' health depends on it



Use natural building materials as much as possible such as recycled timber, solid sustainably-grown timber, bamboo, stone, gypsum plasterboard, cork flooring, natural fibre insulation materials, underfelts and natural floor coverings.

Be lead safe

Lead exposure is a major health risk, especially to young children. Just a small amount ingested can slow children's learning and development.

Most houses built before 1970 contain lead paint. Renovating can release large amounts of lead-contaminated paint dust.

►► For lead safety around the home:

- Call the Environment Line on 131555 or the Global Lead Advice and Support Service on 1800 626 086 for advice and free publications such as *Lead Safe: A guide to keeping your family safe from lead* and *Lead Safe: A renovators guide to the dangers of lead*.
- Look up: www.environment.nsw.gov.au and www.lead.org.au for more lead safety tips.

UNSAFE HOME RENOVATION AND MAINTENANCE ARE THE LEADING CAUSE OF ACUTE LEAD POISONING IN CHILDREN

IN THE GARDEN

Use a common sense approach to pests

Chemicals used to treat common pests, such as cockroaches, ants, spiders, fleas and termites can be powerful poisons, not only for pests but also for people and pets.

Often by using pesticides around the home and garden we kill the good bugs along with the bad.

There is a safer way to get rid of pests around your home - apply common sense rather than toxic chemicals and aim for an integrated approach to managing unwanted house guests.

Simple and environmentally friendly ways to manage pests

There are three steps:

▶▶ Step 1 – Physical controls

- ▶ Make your home and garden a less attractive place for pests.
- ▶ Keep it clean! – clean up food scraps that attract insects and remove dark, moist hiding places.
- ▶ Keep them out! – block up holes and cracks, use barriers against garden pests (a ring of crushed eggshell or garden lime around seedlings discourages snails and slugs).
- ▶ Use simple traps and hand remove caterpillars and snails.

▶▶ Forget about expensive artificial fertilizers. Make compost at home from food and garden wastes. It's cheap and it works



AUSTRALIANS ARE AMONG THE HIGHEST PESTICIDE USERS IN THE WORLD

▶▶ Step 2 – Biological controls

- ▶ Encourage the good insects rather than the bad – ladybirds and lacewings love to eat aphids.
- ▶ Plant flowers and herbs such as basil, marigolds, rosemary, garlic and lavender around your vegetables. These discourage insect pests.

▶▶ Step 3 – Chemical controls – your last resort

- ▶ Try organic controls first – for example, a simple homemade spray can be made from garlic.
- ▶ Use natural pyrethrum pesticides.
- ▶ If you must reach for a chemical pesticide, make sure you read and follow the label directions, only use it against the target pest, wear protective clothing and apply only as much as you need.

IN THE GARAGE

In terms of sources of indoor air pollution, the garage can be a major culprit. Ensure that your garage is not contributing dangerous emissions into your home. Ideally it should be separated from the house. If connected by a door ensure the door is kept closed and the garage well ventilated to release toxic vehicle emissions.

Store chemicals safely

- ▶ Store chemical items safely and take precautions when handling them
 - ▶ Never store hazardous items in old food or drink containers.
 - ▶ Never throw hazardous wastes down drains, the toilet, into the soil or into the garbage bin.
 - ▶ Always keep chemicals in their original labeled containers.
 - ▶ Always store hazardous materials in a safe, secure place well away from children and pets.

NEVER PUT DANGEROUS SUBSTANCES INTO THE GARBAGE – THERE ARE SPECIAL COLLECTIONS FOR THESE



Protect yourself

- ▶ If you do choose to use potentially dangerous chemicals ensure you follow all label instructions and wear protective clothing such as:
 - ▶ Gloves
 - ▶ Long-sleeved shirt, trousers and boots
 - ▶ Safety glasses or face shield
 - ▶ Appropriate mask
- ▶ And remember, prevention is always better than a cure!

Practice safe disposal

The garage is a common place to store hazardous materials – old paints, thinners, adhesives, car oil, solvents such as kerosene and methylated spirits, pool chlorine and old batteries. Make sure your garage doesn't become a health hazard!

Waste motor oil and batteries can be recycled. Contact your local council or www.oilrecycling.com.au to find your nearest recycling depot.

Unwanted chemicals can be disposed through Household Chemical Waste collections. Call 131555 or your local council to find out your next collection day.

For information about the hazards of particular chemicals:
www.safersolutions.org.au

TIPS ON REDUCING LEFTOVER PAINT

- ▶ Seal paint tins well after use and store upside down. This will keep the paint fresh for the next use
- ▶ Buy just enough for the job at hand. 4 litres of acrylic (water based) paint will coat an area of about 60 square metres
- ▶ Use leftover paint on other home improvement projects – give the dog kennel or letter box a lick of paint
- ▶ Give it away to a neighbour or community group
- ▶ Once all the paint is used up, let the can dry and place it out for recycling



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Safer Solutions
Keeping your home **healthy** and **green**



TOTAL ENVIRONMENT CENTRE