Home Safety Checklist

AIR
The quality of the air in our homes has rarely been the subject of air pollution anxiety, yet pollutants like mould spores, formaldehyde and carbon monoxide can build up to concentrations quite unacceptable in other environments. These are usually breathed in more continuously, in the home than anywhere else. One air change per hour is the generally accepted air flow rate to dilute pollutants and exhaust them. Stuffy, sneezing, red eyes and bad or musty smells are some indications of a flow rate below this level. Fixed or fan-forced vents and open windows (locked partly open to prevent burglary), can achieve help that airflow.

ALLERGENS AND ASThma
Allergens commonly trigger asthma attacks and also cause hayfever. Dust mites, pollens, moulds and cats are common sources of allergens in the home. Temperature variations, humidity and irritant particles can also trigger asthma attacks. Reducing your exposure to these things reduces the risk of developing allergies and asthma. Your doctor can arrange tests to discover which allergens you react to, so you can minimise the effect of these first. First level preventative steps involve more frequent vacuuming, dusting, washing and airing of bedding and attention to the garden.

BATHROOM
(See Design Issues, Electrical Hazards, Hot Water Systems, Showers and Baths)

BEDROOM
Items for consideration in bedrooms include:
- finger jam protectors for hinges
- beds & other bedroom furniture located away from windows
- dust mite covers to mattresses
- soft surfaces to floor coverings
- safety glass beneath midrails of windows
- 100mm max. opening to sashes
**BLINDS**
Blind cords have strangled children. Devices are available from most hardware stores that can restrain cords away from children. Toxic gases are given off when venetian blinds are burned. Venetians are also notorious for collecting dust. Consider alternatives.

**BUILDING MATERIALS**
Some building materials like asbestos are dangerous. Asbestos is most commonly found in asbestos cement sheeting and is considered safe unless severely deteriorated or broken up during removal or alterations. Some chemicals like glues containing formaldehyde in timber are unhealthy in concentrated form, so ventilation is important. An Archicentre Australia Inspection Report will comment on ventilation.

**CARPETS**
Carpets harbour dust and dust mites. If you choose to have carpets, vacuum them regularly, preferably with ducted vacuuming which exhausts dust outside. If your family is sensitive to dust mite allergens, seriously consider non-carpet alternatives.

**CHEMICALS**
Poisonous, corrosive or flammable chemicals should be removed from easy access or from where they could ignite in or near buildings especially the house. A lockable shed away from the house is a good place to store them. Buy a childproof cabinet to hold corrosive household cleaners and detergents and be sure to use it.

**CLOTHES DRYING**
Tumble dryers are probably the worst generators of water vapour in the home. They generally need fan forced ducted ventilation to the outside of the house. (See Condensation)

**CONCRETE SLABS**
If ducted central heating is installed under concrete slabs, ducts may corrode and admit water, forcing humid air into the house. (See Condensation.) Water penetration through concrete slabs can be expensive to repair. Ground drainage may help alleviate the dampness, however, serious cases will require an Archicentre Australia investigation.

**CONDENSATION**
Water vapour generated by heating, bathing, clothes washing, cooking and clothes drying needs to be vented outside to prevent high levels of humidity and condensation. Condensation may cause mould growth and generate conditions conducive to termite, borer, cockroach, silverfish, dust mite and other infestations, all of which may cause diseases or structural damage. Better ventilation can be achieved by partly opening windows and increasing passive vents in rooms, by cutting back shrubs encroaching on the house, ventilating thoroughly under the house and draining the ground where very wet. Serious condensation problems may necessitate an Archicentre Australia Inspection Report, to recommend possible remedies.

**COOKING**
Cooking with gas releases water vapour, irritant and allergy sensitizing gases. Ensure range hoods force combustion gases and steam outside. Consider electric if gases cannot be adequately expelled.

**CUPBOARDS**
You need at least one childproof cabinet to keep poisons and drugs away from children. Try to avoid doors opening at head and eye level or within 600mm over stoves for combustion reasons. Build cupboards up to the ceiling to avoid dust collection and maximise storage space.

**DAMP**
Rising damp will cause similar moisture and vermin problems to condensation. It can be costly to repair, so if you are about to purchase a home, have Archicentre Australia check for damp first.

**DESIGN ISSUES**
- Consider minimising horizontal surfaces that accumulate dust, especially high, hard to reach surfaces.
- Orient living areas north for maximum solar heating.
- Design to maximise flow-through ventilation with few still air pockets, which accumulate condensation.
- Orient kitchens and living rooms to overlook indoor and outdoor playing areas for supervision of children.
- The design of the kitchen should minimise the size of the "hazard triangle" between stove, sink and refrigerator.
- Shower taps should not be placed directly below shower roses.
- Select non-slip bath and shower bases or add rubber grips. Clean these surfaces regularly to reduce slipping.
• Select non-slip floor surfaces.
• Light switches should be accessible to children.
• Try to eliminate blind spots when locating driveways, and install a childproof gate to prevent access to the driveway from the backyard.
• Be aware that gas heaters which exhaust combustion gases and moisture into the house can lead to allergies, asthma and mould.
• All heaters should have guards around them to prevent burns or clothes igniting.
• Consider passive radiant heating such as panel radiators or floor coil heating. Ducted systems circulate airborne allergens and dust particles.
• Use grab rails instead of towel rails.

DOORS
To minimise finger injuries to children, add closers to make doors slow closing in windy locations. Finger-jam protectors are available. Always keep keys in deadlocks when in the house so you can escape from fire. Consider half-glass doors looking onto children's play areas. Doors should not open onto those play areas or into driveways.

DRAINAGE
Site and sub-floor drainage may be needed to reduce dampness and condensation, both of which can cause disease and asthma. Dampness also promotes timber rot leading to structural problems. An Archicentre Australia Inspection Report will comment on these problems.

DUST MITES
Dust mites are one of the prime agents of allergies and asthma. They are frequently found in carpets and bedding where they live on skin scales. Dust mites love a warm moist environment. (See Condensation) You can kill them by drying them out or with heat over 55 degrees C. Air your bedding often, tumble dry it or turn on the electric blanket. Wash bedding frequently to remove dust mite droppings, which is an important allergen. If you make the washing water 55 degrees C or hotter it will kill the mites as well.

ELECTRICAL HAZARDS
• Archicentre Australia’s statistics show that in some suburbs half of all houses inspected had electrical faults.
• A registered electrical contractor will be required to replace old perished wiring.
• Keep all electrical appliances away from water, especially hairdryers. Keep movable electric heaters out of the bathroom. Don't install power points near water.
• Install safety switches: either at the main switchboard; or use plug-in devices.
• Put plug-in covers over power points if you have children.
• Unplug appliances when not in use, especially toasters.

EMERGENCY NUMBERS
Critical phone numbers for ambulance, fire, doctors, electricians, etc., should be known and be accessible by all. The Nation-Wide Poisons Information Centre number is 131126. The critical telephone number for ambulance, police and fire brigade is 000.

FLOOR SURFACES
Soft surfaces are recommended for children, however, carpets harbour dust mites. A soft rubber surface is one compromise; another is a removable washable rug laid over wood, tile or vinyl surfaces with rug grips to avoid slipping. Use non-slip surfaces in all wet areas.

FIRE HAZARDS
(See Smoke Detectors and Chemicals)

FIREPLACES
Fireplaces should have screens to protect hot surfaces and prevent sparking. Burning timber will release irritants, so fireplaces are an asthma and allergy risk. Good ventilation will reduce the risk. Fireplaces should have an adjustable damper to minimise heat loss from the room when not in use in winter and aid ventilation in summer.

FIRST AID KIT
All homes should have a basic First Aid Kit. Parents should also learn First Aid and CPR (Cardio-Pulmonary Resuscitation).

FURNITURE
Furniture should have rounded edges or sharp-edge protection where small children are present. Timber chairs, vinyl and leather couches are best for discouraging dust mites.
GLASS
To prevent severe or fatal injury, laminated safety glass is recommended where falling through is possible, especially in the living room and children's bedrooms. Visible stickers should be applied to glass doors and large windows at eye level.

GARDEN
Excessively dry gardens will cause soil to shrink, foundations to drop and walls to crack resulting in potential structural problems and vermin entry. Excessively wet conditions will cause damp and condensation problems. Your garden should be evenly moist all year round: refer to Archicentre Australia's helpful technical information sheets, go to www.archicentreaustralia.com.au.

- Install drip watering systems rather than spray watering which ruptures pollen grains causing asthma and allergies as well as wasting water.
- Remove rye grasses. The best plants to choose are Camellias, Rhododendrons, Azaleas, Proteas and other plants and ground covers, which are bee-pollinated and release little airborne pollen.
- Cut back dense bushes around the house since they encourage condensation and dampness.
- Consider removing poisonous Oleanders and Rhus trees which can cause rashes.
- Prune branches that are eye hazards and remove decaying tree limbs

HEATING
Heating produced by combustion appliances inside the house carries an asthma and allergy risk. Electric or hydronic panel radiators are considered safest, (protected from children's reach) or slab heating, however, running costs should be considered. Avoid electric radiators in the presence of small children. All heaters should have safety guards.

HOT WATER SYSTEMS
A thermostatic hot/cold-mixing valve will enable you to reduce your hot water temperature to 50 degrees C in the bathroom, where young children may be at risk from scalding. Contact a licensed plumber or your Kidsafe State Office for more information.

INSECTS
Cockroaches, silverfish, termites and ants. (See Condensation.)

INSULATION
Fibrous roof insulation has the potential for harbouring dust mites and mould growth. Since there is also risk of generating airborne particles from insulation materials, the safest insulation varieties are foil and polyester, but ensure that you use a licensed installer. Ceiling insulation will help keep the house warm and reduce condensation problems.

ILLEGAL BUILDING
Some illegal building is structurally hazardous. Archicentre Australia's Property Assessment Report statistics show that in some areas, one in five houses has illegal building work. If buying a house, you can often spot suspicious signs of illegal building, but it is wise to have the house checked by an Archicentre Australia expert. Never undertake renovations or structural alterations without the appropriate approvals. Your architect can advise you when a permit is needed.
KITCHEN
(See Design Issues, Stoves and Furniture.)
Other items for consideration Include;
- hot & cold water taps clearly marked
- good supervision of play areas
- adequate power points – best located at corners above benches
- limiting travel between sink and fridge
- externally vented Rangehood
- easily pulled down fire blanket in a pocket
- non-slip floor coverings
- fire extinguisher easily accessible
- limited thoroughfare through food preparation area.

MOULD
(See Condensation)

PETS
Pets with fur (especially long hair) or feathers can cause asthma problems. Restricting these pets’ access especially into bedrooms will help.

Children under five years of age are particularly susceptible to dog bites. These injuries often occur around the head region due to the size of young children. Never leave children unsupervised with animals.

POOLS AND SPAS
Install isolation fencing with a childproof self-locking gate to prevent the high incidence of children drowning. Appropriate locks on adjacent doors and windows should be fitted. Contact your local Council for advice on Australian Standards for Pool Fencing or your Kidsafe State Office.

PLUMBING LEAKS
Particularly those causing sub floor dampness should be remedied immediately. (See Sub Floor)

PLAY EQUIPMENT
Check play equipment for any faults. Equipment should have soft landing material around it such as Pine bark or sand. Edges and splinters are further considerations when selecting building materials and play equipment. All vertical bars on cots, play pens, stairs and verandahs should be between 50-85mm apart.

ROOF SPACE
Possums and rats carry germs and fleas and can cause structural and electrical damage. Ensure possible points of entry are sealed. Your roof space should be insulated, well ventilated and secure. If you are unsure, have Archicentre check it for you. Also check that exhaust fans are not venting into the roof space, but are ducted outside to avoid the build-up of moisture.
SCALDS
Always keep kettles, jugs and hot drinks away from children. Cordless jugs are safest or use a curly cord. Always turn pot handles away from the edge of the stove. Fit safety guards around your hot plates.

Most homes in Australia will deliver hot water temperature in their bathrooms well in excess of 50 degrees C. At these temperatures a young child can be severely scalded within one second.

SHEDS
Store all dangerous substances in sheds away from the house and keep them locked. Sheds are often illegally built and could be structural or electrical deathtraps. Repair sheds or demolish the hopeless cases.

SHOWERS AND BATHS
Showers, baths and other water vapour producers need fan forced ventilation to the outside of the house or apartment. (See Condensation)

Leaking shower bases will cause timber rot and sub floor damp problems. Non-slip shower and bath bases are available.

SMOKE DETECTORS
Install smoke detectors in hallways and bedrooms to warn against fire. Practice fire drills especially where children are involved. Keep a torch near the bed. Residential-size fire extinguishers are a good idea. Buy a fire blanket for the kitchen where most fires start. Check the batteries of your smoke detectors regularly.

STAIRCASES
Stairs should be well lit but not glary. When designing, avoid spirals and have short flights between landings or turns. There are regulations covering stair dimensions. If children are around, stairs should have childproof barriers to prevent falls and moveable gate barriers to prevent access.

STOVES
Buy a stove guard if you have children and consider installing a gate barrier to keep them out of the kitchen. Make sure there is a fire blanket nearby.

STRANGER-DANGER AND THEFT
Install good lighting such as movement sensor lights to the front door, and consider peepholes or security screens to doors. Keep your view to the front gate clear by eliminating dense planting. Install deadlocks to doors and windows and take precautions such as mail collection, timer activated lights and washing on the line when on holidays.

SUB FLOOR
The sub floor may harbour many disease-causing pests like rats, cockroaches and ants, and destructive things like termites and mould-spoore-producing dry rot. The drier and more ventilated the sub floor, the healthier it is. Vents need to be cleaned and sometimes more added. Debris, particularly timber, needs clearing away and dampness needs attention. A house with a clean dry floor is a much healthier house. If in doubt, have an Archicentre Australia Inspection Report.

VERMIN
Cockroaches, silverfish, termites, ants and house dust mites all thrive in sheltered moist humid conditions. Keep your house clean; remove papers, soiled clothing and food scraps. (See Condensation)

Kidsafe Child Accident Prevention
Foundation of Australia
www.kidsafe.com.au