



Kidsafe and Archicentre 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. They 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. Stiffness, 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 that airflow.

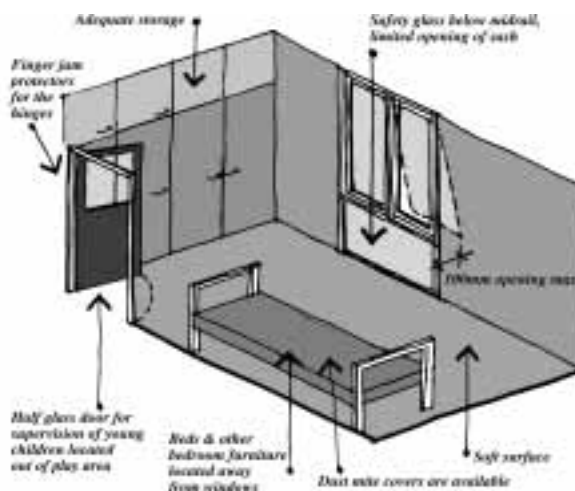
Allergens and Asthma

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 these first. First level preventative steps involve more frequent vacuuming, dusting, washing and airing of bedding and attention to the garden. See specific sections below, and contact your local **Asthma Foundation** for more information.

Bathroom

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

Bedroom



Blinds

Blind cords have strangled children. Devices are available from most hardware stores that can restrain cords. 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. Some chemicals like formaldehyde glues in timber are unhealthy in concentrated form, so ventilation is important. An **Archicentre 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 the house. A lockable shed 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. They 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** investigation.

Condensation

Water vapour generated by heating, bathing, clothes washing, cooking and clothes drying needs to be vented outside to prevent saturation-level humidity and condensation. Condensation will 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 Inspection Report**, to recommend possible remedies.

Cooking

Cooking with gas releases water vapour, irritant and allergy sensitising gases. Ensure range hoods force combustion gases and steam outside. Consider electric.

Cupboards

You need at least one childproof medicine 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** 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 child proof 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 Inspection Report** will comment on sub-floor 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°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°C or hotter it will kill the mites as well. The **Asthma Foundation** has more information.

Electrical Hazards

- **Archicentre's** statistics show that in some suburbs half of all houses inspected for prospective buyers had electrical faults.
- A registered electrical contractor must 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, especially toasters, when not in use.

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.

First Aid Kit

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

Flammable Liquids

(See Chemicals.)

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. Your local **Asthma Foundation** can provide advice on fillings for couches which will not harbour dust mites.

Glass

To prevent severe or fatal injury, laminated safety glass is recommended where falling through is likely, 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, footings to drop and walls to crack resulting in 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's Treatment of Dampness Technical Sheet**.
- Install drip watering systems rather than spray watering which ruptures pollen grains causing asthma and allergies.
- 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 are higher. 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°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

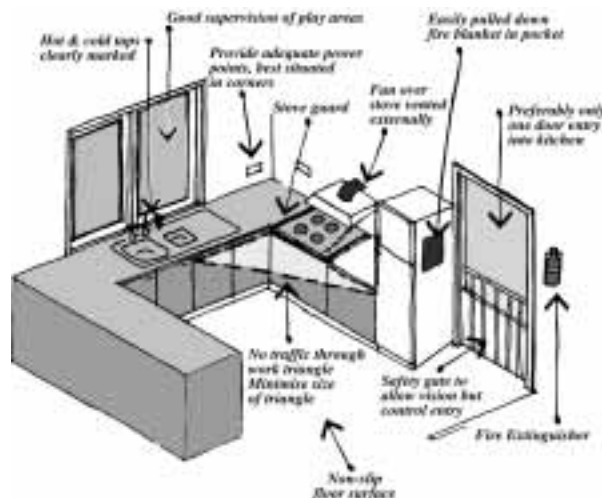
Fibrous roof insulation has potential for harbouring dust mites and mould growth. Since there is also risk of generating airborne particles from insulation materials, the safest insulation varieties are foil and polyester. Ceiling insulation will help keep the house warm and reduce condensation problems.

Illegal Building

Some illegal building is structurally hazardous. **Archicentre's Pre-Purchase Inspection 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. Never undertake renovations or structural alterations without building approval. Your architect can advise you when a permit is needed.

Kitchen

(See Design Issues, Stoves and Furniture.)



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. Your local **Asthma Foundation** may be able to help provide more details. 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.

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 pinebark 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 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°C. At this temperature a young child can be severely scalded within one second.

Sheds

Store all dangerous substances in sheds 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. If children are around, stairs should have child proof 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 harbours many disease-causing pests like rats, cockroaches and ants, and destructive things like termites and mould-spore-producing dry rot. The drier and more ventilated the sub floor, the healthier it is. Vents need to be cleaned and sometimes 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 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

National Division

Level 1 Suite B
222 Church Street
Richmond Victoria 3121
Tel: (03) 9427 1008

ACT Division

Building 2
Pearce Centre
Collett Place
Pearce ACT 2607
PO Box 351 Mawson ACT 2607
Tel: (02) 6290 2243

New South Wales Division

Kidsafe House
C/- The New Children's Hospital
Hawkesbury Road
Westmead NSW 2145
PO Box 3515 Parramatta NSW 2124
Tel: (02) 9845 0890

Cnr Library Lane & Smart Street
Charlestown NSW 2290
PO Box 580 Charlestown NSW 2290
Tel: (02) 4942 4488

Northern Territory Division

Shop 20
Rapid Creek Shopping Centre
Trower Road
Rapid Creek NT 0810
PO Box 40596 Casuarina NT 0811
Tel: (08) 8985 1085

Queensland Division

Kidsafe House
50 Bramston Terrace
Herston QLD 4029
Tel: (07) 3854 1829

South Australia Division

Kidsafe Centre
Women's and Children's Hospital
72 King William Road
North Adelaide SA 5006
Tel: (08) 8204 6318

Tasmania Division

C/- Tasmania Fire Service
83-85 Argyle Street
Hobart TAS 7000
GPO Box 1526R Hobart TAS 7001
Tel: (03) 6230 8644

Victoria Division

Level 1 Suite B
222 Church Street
Richmond Victoria 3121
Tel: (03) 9427 1008

Western Australian Division

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C/- Princess Margaret Hospital
Thomas Street
Subiaco WA 6008
Tel: (08) 9340 8509

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