Slide One – introductory slide

Slide TIM – danger sign

Is your house killing you? Might be slightly hysterical overstatement but when you have met someone who has been affected by issues in their home it can affect a great many aspects of their lives.

Slide SHANI - air quality

The average Australian spends 80 to 90% of their time indoors – which can be very unhealthy if the air quality indoors is poor.

Indoor air is far dirtier than outdoor air – up to 10 times dirtier, this is a concern to many of us. Most contaminants from outside come inside and stay there due to our modern homes being more snug and airtight. Many homes don’t get “aired out” regularly. Many indoor items will also be releasing toxins into the air eg carpets.

Slide Tim VOC’s –

Aldehydes, ketones, benzene, toluene

One of the issues with modern buildings in the level of emissions from building products and furnishings. Can lead to something called sick building syndrome.

One of the main issues is VOCs - A class of carbon based chemicals, which evaporate easily at room temperatures, giving off vapours, which can be inhaled. This process is called off gassing, and small amounts of the VOC’s are emitted as vapour. Particularly bad during construction or installation and reduces over time. Usually associated with a smel, but not necessarily eg formaldehyde is odourless at room temperature.

Australia produces 60,000 tonnes annually

Two main sources – refinement and storage of fuels and buildings and furnishings. Also in glues, cleaning agents, fabrics, cosmetics and air fresheners.

Indoor air quality can have 5- 10 times more concentration of VOCs

If eg stripping paint can be up to 1000 times

Impact health and environment. One ingredient in smog, mix with nitrogen to make ozone, acid rain.

Health effects eye nose throat irritations, asthma, headaches, loss of coordination, nausea. Over time damage to kidneys, liver and nervous system. Some are known to cause cancer

Slide 12 SHANI Paints.

A common source of CFLs responsible for 16% of VOC’s

Normal paint contains 30 – 80 g litre water based, 350 – 450 oil based

Low odour less than 5 g litre untinted (less than 20 tinted tints have VOCs)

Low VOC less than 1 g per litre including tins (Wattyl, dulux)

No VOC – Rockote ecostyle, ecocolour (Aust made using old engine oil, carbon neutral)

Lime based – Bauwerk

Clay based Volvox – highly regarded breathable one coaat

Slide TIM MDF

Used a lot in cabinetry and kitchens Used for most modern kitchens and shelves. Particularly bad in commercial and office buildings

EO MDF emits half the formaldehydes of EI which is the current standard level

There is NAF MDF made without formaldehyde but not currently available Made in Dardanup and includes scrap timber which would otherwise end up as landfill

Slide SHANI Carpets

Even if wool can contain lots of VOC emmiters in backing material, underlay adhesives, stain proofing etc

Can contain BFRs which is a nero toxin

Kids come in close contact with carpets if they play on the floor

Wear unevenly so need to replace the whole thing

Slide TIM Floor Finishes

Some sealants (eg 5008) are now banned in Australia. Ask a floor sander if you can understand them.

Slide TIM– CCA treated pine

chromated copper arsenate

Slide SHANI– chemicals in the shed

It’s a good idea to do a chemical audit of your home - it may surprise you how many chemicals you have, how many of these overlap in function and how many you don’t need!

You might be surprised what chemicals are in those tins!

Slide SHANI – and the bathroom cupboard

There are potentially a lot of chemicals in the products we put on our body all in the name of beauty!

It is possible to look good, reduce your exposure to chemicals and be friendly to the environment.

Unfortunately there is no black and white answer to choosing “green” cosmetics.

But you can ask yourself the following questions:

What is in the product?

Where did it come from and how was it made?

Is it tested on animals?

How is it packaged?

ACTIVITY CARD CLUSTER – four common products in shed and bathroom

Slide TIM- Unflued gas heaters

Slide SHANI dust

On a normal day we breathe in one teaspoon of microscopic dust particles

Dust contributes to respiratory infection and disease – many of the microscopic particles can be absorbed into our lungs.

Causes headaches, nausea and asthma

What Constitutes Dust?

Skin cells (animal and human)

House dust mites

Mould and fungal spores

Dead and living bacteria

Insect parts

Fibrous material

Left over food particles

Inorganic particles

Chemicals

Pesticides from gardens

Heavy metals from exhausts

Pet faeces

etc

Slide SHANI – mould

MOULD Dust mites are microscopic organisms that feed on dried human skin

Both love moist areas- and dust mites need mould to survive.

Exposure to mould spores is serious especially for children. Mould can cause serious health consequences – any mould in a house is too much!

Both can cause asthma, chronic bronchitis, rhinitis, nasal congestion, coughs, wheezing and sore throats

Dust mites are common trigger for asthma

Slide SHANI what can we do to make our homes healthier?

Use objects and photos, each group talk about items and come up with an answer

Microfibre cloths

Vinegar

Salt and lemon

Bicarb soda

Ecaluptus oil

Borax

Soap flakes

HEPA filter vacuum (high efficiency particulate airs)

In the 1940's HEPA (High Efficiency Particulate Air) filters were invented to filter out radioactive dust particulate contaminants in bomb shelters during the atomic bomb tests. These filters were designed to capture particles down to 0.3 microns in size at efficiency ratings of 99.97%. This standard is still used to this day for HEPA vacuum cleaners and HEPA air cleaners for asbestos and lead abatement. However HEPA vacuum cleaners are now used everyday in homes and businesses to clean and remove household dust and allergens to improve the indoor air quality you breathe

Picture of open windows

Picture of the sun

Face mask

Protective clothing

Slide WEBSITES

SLIDE TOOTHPASTE

Why I started making my own – packaging and health

Sodium Fluoride: One of the main ingredients in rat poison and toothpaste

FD&C Blue Dye # 1 & 2: Are you eating crude oil for breakfast?

Sodium Lauryl Sulfate (SLS): Used clinically to irritate skin

Triclosan: A pesticide found in many types of toothpaste