

## HOUSEHOLD IRRITANTS

Eczema is a very individual condition and no two people with eczema are the same. Eczema can be irritated by many things in the environment and often people with eczema have similar and different triggers. Often it's a question of working out what your personal triggers are (it's very unusual for a person with eczema to have just one). This factsheet provides information and advice about avoiding, or reducing exposure to, the most common household irritants.

### House dust mites

House dust mites are tiny relatives of spiders and ticks and live unseen in all our homes. It is not the mites themselves but the protein in their droppings which can cause problems for people who are atopic. House dust mite droppings are unlikely to be the main cause of eczema, but eczema can sometimes be made worse by allergy to them.

If someone is sensitive to these droppings, cutting down on dust in the home is important as dust contains dust mite droppings. Reducing humidity in your home can also help as house dust mites thrive in humid conditions. House dust mites are found in the largest numbers in mattresses and other bedding, which contains a good supply of their main food source – flakes of skin that we all shed. House dust mites are also found in clothes, carpets, curtains, soft furnishings and soft toys.

It is absolutely impossible to completely rid your home of dust mites but you can reduce contact with them by doing some simple things.

- Vacuum carpets regularly, preferably several times a week. Vacuum soft furnishings once a week, paying special attention to the seams, where there are high levels of house dust mite.
- Wash/dry-clean curtains and cushion covers on a regular basis.
- Consider having soft furnishings that can be wiped down, such as vinyl and leather. You might also think about replacing curtains with roller blinds to reduce dust carriage. If you or your child has severe eczema, you may wish to replace carpets with flotek or marmoleum (carpet equivalent), linoleum, wood, vinyl or laminated flooring, which can easily be cleaned by mopping.
- If your child plays on a carpet, place a protective cotton sheet over the play area. (A cotton 'sitter' for the carpet at nursery or primary school is also a good idea.)
- Wipe hard surfaces – daily if possible – with a damp duster or mop. (See also 'Cleaning' below.)
- Air the bedroom and living room daily to reduce humidity, thereby making them less attractive places for the mites to live. If your home is very humid, you may wish to invest in a dehumidifier (see 'Central heating and humidity' below).
- It may help to keep ornaments and items such as books in enclosed display cupboards rather than on open shelves which attract dust. Likewise, store toys in a toy box or cupboard and, ideally, avoid keeping soft toys in a child's cot or bed.

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- Soft toys should be washed regularly according to the instructions on the label (but please note, the temperature needs to be at least 60°C to destroy the mites). A good way to destroy house dust mites in a non-washable cuddly toy is to place it in the freezer (in a plastic bag) for at least 24 hours. Freezing kills house dust mites but you will still need to brush the toy afterwards (at a distance from the child) to remove the droppings.
- Replace old mattresses and pillows, and buy washable pillows with synthetic fillings – but make sure the cover is cotton.
- Wash bed linen at least twice a week, and pillows and duvets every 4–6 weeks at 60°C (see ‘Laundry’ below.) Tumble drying on a hot setting will also help to destroy house dust mite.
- Fit the mattress, pillows and duvets with anti-dust mite covers if the eczema is severe – please note, however, that these can be costly. (See ‘Choice of bedding’ below.)
- Anti-house dust mite sprays should be used with caution as they may cause skin irritation (they are also expensive and unnecessary). After use, the room still needs to be vacuumed to remove house dust mite droppings. (Please note, the NES does not necessarily recommend this approach, as its efficacy is far from proven.)

### Pets

Animal dander (shed skin cells), saliva and fur can all be irritants. Aside from avoiding too much physical contact with animals and washing hands after stroking them, the following tips can help:

- Vacuum and damp dust regularly (see ‘Cleaning’ below).
- Train your cat or dog to use its own pet bed/basket rather than your sofa.
- Ban pets from bedrooms and do not allow them to lie directly on soft furniture. For example, place a pet blanket, which can be removed, shaken and washed regularly, on the pet’s favourite armchair and avoid sitting in that particular chair yourself.
- Brush pets regularly to remove loose fur, including allergens such as grass pollen (see ‘Pollens and moulds’ below) which can become attached to their coats.

### Pollens and moulds

These allergens are often airborne and can easily find their way into the home. Grass, weed and tree pollen can be especially problematic in the spring and summer. In the autumn, moulds release tiny seeds called spores into the air which can trigger eczema symptoms. Mould spores are found in any damp place – from piles of autumn leaves and woody areas to steamy bathrooms, kitchens and even piles of damp clothes. Although moulds are dormant outdoors in the winter, indoors they may not be if the air is too warm and humid.

- Try to keep doors and windows closed on days when the pollen count is high (or if you can hear the sound of lawnmowers).

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- Consider whether any houseplants or their compost are triggering your eczema.
- Vacuum and damp dust regularly (see 'Cleaning' below).
- Avoid mould forming by ensuring your home is well ventilated (see 'Central heating and humidity' below).
- Treat any areas of damp and mould at the first opportunity.
- Avoid hanging clothes and bed linen outside to dry if they will be exposed to airborne pollen and mould.

### Food preparation

Certain foods can cause irritant dermatitis. Common culprits include citrus fruits, raw onions, garlic, tomatoes, peppers and chillies.

- Try to avoid handling irritant foods, or wear protective gloves (use cotton liners with rubber gloves).
- Avoid soap when washing hands before and after food preparation. Wash your hands with a soap substitute and re-apply your leave-on emollient.

### Central heating and humidity

Central heating reduces humidity and dries the skin, making it itchy. On the other hand, high levels of humidity can encourage dust mites and the growth of mould, which can both be triggers for eczema. Many people overheat their homes in the winter months and being too hot is a common trigger for itching. Moving indoors from the cold outside and vice versa may also be a trigger.

The following tips may help:

- People with eczema generally find radiators preferable to convection heaters.
- Keep your home as cool as is comfortable, especially the bedrooms. (Turn off the radiator in the bedroom at night or set an individual thermostat to 18°C.)
- Dress in thin layers which you can remove if you get too hot.
- Keep the home well ventilated in the winter.
- Ideally, maintain humidity levels between 50% and 60% – consider using electric humidifiers or place bowls of water under radiators.

### Cleaning

As previously mentioned, regular cleaning can help to remove dust and other allergen particles which can make eczema worse. The choice and use of cleaning equipment and products can make a difference.

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- It is important to use a high-efficiency vacuum cleaner with excellent filtration and suction power – possibly labelled as suitable for allergy (i.e. with special filters for tiny allergen particles); or, if you have pets, labelled as suitable for animal (i.e. manufactured to effectively remove pet hair).
- Standard vacuum cleaners tend to beat into the carpet and stir up dust; so you need a vacuum cleaner which keeps dust within the machine (i.e. one that has a low-dust exhaust).
- Some people find that a vacuum cleaner which uses disposable dust bags is preferable to a cylinder vacuum cleaner which you have to empty, thereby exposing you to dust. Perhaps you could ask someone without eczema to empty the cylinder into a bag outside the house and put it straight into the dustbin.
- Remember to clean/change the vacuum cleaner filters regularly.
- Keep the person with eczema out of the room when you are vacuuming.
- Damp dusting (using plain water on the duster) is preferable to dry dusting as it prevents dust from being transferred from one place to another.
- Household cleaners, detergents and sprays, whether in liquid form or as airborne particles, can irritate the skin of people with eczema. In particular they can cause a type of eczema called irritant contact dermatitis (ICD). People with a history of atopic eczema are more likely to have sensitive skin and are therefore more vulnerable to ICD. If you are sensitive to regular cleaning products, try using ‘old-fashioned’ agents – white vinegar (as an alternative to a proprietary glass cleaner), bicarbonate of soda (as an alternative to bleach) and soda crystals (as an alternative to bathroom/kitchen cleaners) – as they do not contain added chemicals and preservatives.
- Steam-cleaning is especially good for cleaning wooden or tiled floors and hard surfaces as it avoids the need for chemicals which can irritate the skin.
- If your housework routine involves regularly putting your hands in water or in a combination of water and detergent, this is likely to irritate your eczema and cause ICD, especially if you do not dry your hands properly and apply your leave-on emollient after drying. It is advisable to wear protective household gloves (ideally plastic gloves with a cotton liner, or plastic gloves with cotton gloves worn underneath). Gloves are important not only to protect the hands but to prevent chemicals collecting on the fingers under rings.
- For very messy jobs, wear protective clothes, with cotton liners for rubber gloves.

### Choice of bedding

The choice of bedding is important on two counts: maintaining a comfortable temperature and reducing exposure to house dust mites.

- Try to avoid synthetic sheets, pillow slips and duvet covers. Bedding which is 100% cotton is more comfortable for people with eczema as it is breathable, is less likely to cause overheating, and absorbs sweat.

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- Use low-tog duvets and/or cotton cellular blankets – even in the winter months – to prevent night-time overheating. Several light layers which you can put on/take off the bed can help you maintain an even temperature and therefore itch less.
- Pillows and duvets made from synthetic materials are easier to wash and dry than those containing feathers. They are also less likely to provide a breeding ground for house dust mites.

A number of companies produce ‘anti-allergenic’ bedding covers. However, these can be expensive, so you may wish to consider them only if the eczema is severe. The idea behind these systems is to prevent skin scales from entering the mattress and providing food for the house dust mites, while also preventing the person from coming into contact with the potentially allergenic droppings of the mite. In order to be truly effective, these measures need to be combined with the use of a high-powered vacuum cleaner, damp dusting and adequate ventilation. Choose a cover which totally encases a mattress/pillow. It should have a British standard mark, indicating water permeability and breathability, with an index greater than 75%. Ask the following questions when considering purchasing bedding covers:

- Have trials/tests been carried out?
- How long do the covers offer protection from house dust mite?
- What quality control standards (e.g. strong seams, fire resistant) do the covers adhere to?
- Are covers washable, and will they withstand high temperature washes?

The NES does not endorse any one product as what suits one person with eczema may not suit another. A selection of suppliers of barrier covers for mattresses, pillows and duvets is listed below:

Alprotec Tel: 0161 998 1999. [www.allergy.uk.com](http://www.allergy.uk.com)

Greenfibres Tel: 01803 868001. [www.greenfibres.com](http://www.greenfibres.com)

Healthy House Ltd Tel: 01453 752216. [www.healthy-house.co.uk](http://www.healthy-house.co.uk)

The Sounder Sleep Company Tel: 01274 565699. [www.allergybestbuys.com](http://www.allergybestbuys.com)

Silent Mites Tel: 0800 458 6794. [www.silentmites.co.uk](http://www.silentmites.co.uk)

John Lewis [www.johnlewis.com](http://www.johnlewis.com)

### Laundry

There is an assumption that non-biological washing powders and liquids are the safest thing for people with eczema to use and that fabric conditioners can irritate eczema.

In truth, there is no scientific evidence that the enzymes in biological washing powders and liquids make eczema worse. Nevertheless, many people feel that their skin does react to them and for this reason prefer to use non-biological products.

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Fabric conditioners leave a residue in the items that have been washed and rinsed. They make material feel softer but softness is not essential for many people so using a fabric conditioner with potentially irritant ingredients (fragrance and other chemicals) can be seen as unnecessary and even harmful to the skin. Some people with eczema do find that they can tolerate the newer, unperfumed fabric conditioners.

The following suggestions can help:

- An alternative method of doing the laundry is to use Ecoballs. Instead of detergent they use cleaning pellets to 'lift' out the dirt during the wash cycle. However, white clothes can be left looking 'greyish'.
- Avoid overloading your machine as this stops the clothes getting washed and rinsed properly.
- Fabric conditioner used on towels reduces their absorbency. However, if you use just a little fabric conditioner for every other wash, your towels will feel soft but remain absorbent.
- Do not use more powder or liquid than necessary, and follow the manufacturer's instructions.
- Use a double rinse cycle (called a 'baby cycle' on some machines) to make sure that no traces of detergent are left on your clothes.
- It is best to wash items before they get too dirty, to avoid clogging up your machine with emollient. A build-up of emollients from clothes and bedding may damage the rubber seal of your washing machine over time, so once a month do an empty wash at 90°C, ideally using a biological washing powder as this will help to digest grease.
- If you wash clothes by hand, make sure the detergent is properly dissolved in the water, and take care of your hands by using protective gloves. Better still, invest in a machine with a hand washing programme.
- When trying a new washing powder, wash only a few articles at first to ensure that you or your child does not react to it.
- Wash bedding at a temperature setting of 60°C and tumble dry on a high heat to destroy house dust mites.

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- ◇ We are dedicated to improving the quality of life for people with eczema and their carers.
- ◇ Eczema affects FIVE MILLION children and adults in the UK every year.
- ◇ ALL our information is clinically evidence based and written by or verified by dermatology experts.
- ◇ The National Eczema Society receives no Government or Health Service funding, relying entirely on voluntary income from the general public, Companies and Trusts.

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