

Allergies explained

Children can experience allergic reactions when they come into contact with something in the environment that they are allergic to – this thing is called **an allergen**. This can cause symptoms such as a runny nose, sneezing, itchy eyes, postnasal drip and nasal congestion. These symptoms can get in the way of your child's ability to sleep well, play and function in school. To help, here's more information on different respiratory allergens to look out for, and **how to help reduce or remove them from your home**.

What is allergic rhinitis?



1 in 8 children worldwide suffer from allergic rhinitis¹ – **it is the most common childhood ailment caused by allergies**²

DESCRIPTION

An inflammatory condition affecting the upper airways and the membranes of the nose and eyes, caused by an allergic reaction to an allergen³

SYMPTOMS

Blocked or running nose, sneezing, itching and watering eyes and inflamed eyelids¹

TYPE

1 Seasonal: symptoms of seasonal allergic rhinitis can occur in spring, summer and early fall. They are usually caused by allergic sensitivity to outdoor pollen and seasonal mold spores from grass, trees and weeds – commonly known as hay fever

2 Perennial: children with this type of allergic rhinitis experience symptoms year-round. It is generally caused by dust mites, pet hair or dander, or indoor mold spores

How does the body defend itself against allergens?



An allergy happens when **the immune system overreacts to an allergen**, treating it as an invader that it needs to fight off⁴

IN AN ATTEMPT TO PROTECT THE BODY, THE IMMUNE SYSTEM WILL:

1

Make antibodies called immunoglobulin E (IgE)

2

As a defense, these antibodies cause certain cells to **release chemicals such as histamine** into the bloodstream

3

It is the release of these chemicals **that causes allergic reactions**

Common allergens for children

These common allergens **can trigger allergic rhinitis in children**:

HOUSE DUST MITES

WHAT ARE THEY?

Microscopic organisms that **feed off of house dust and the moisture in the air**. They live and multiply easily in warm, humid places and are often found in pillows, mattresses, carpeting and upholstered furniture⁵

SEASONALITY?

They are one of the most common indoor allergens, and symptoms **can be present year round**

HOW TO FIGHT BACK:

- **Vacuum and dust your home** (especially your child's bedroom) regularly
- **Avoid feather or down pillows;** choose bedding made with synthetic materials instead
- **Keep mattresses well ventilated** and make them up with special bedding that does not allow mite allergens to penetrate
- **Bedding should be laundered every one to two weeks at 60°C.** Pillows and blankets should be washed at the same temperature every three months
- Keep your child's collection of soft toys to a minimum and **wash them regularly in hot water** – alternatively put toys that can't be washed in the freezer overnight

POLLEN

WHAT IS IT?

Pollen are the **cells of flowering plants**, including trees, grasses, and weeds, and are easily blown by the wind. It is the most common cause of seasonal allergic rhinitis, sometimes known as hay fever

SEASONALITY?

Each plant has a pollen season, but they **usually start in the spring** and last until November. Spring allergies are typically caused by tree pollen, while weeds and grasses are the common culprits of summer allergies. Ragweed and fungus spores often trigger fall allergies⁶

HOW TO FIGHT BACK:

- Before playing outdoors, **check the pollen level on the Air Matters app** – which now includes a three day pollen forecast. If it's going to be high you can plan alternative activities, or use medication to help alleviate symptoms whilst your child is outdoors (speak to your healthcare professional)
- **Ensure children are taking medication recommended by a health professional** to relieve symptoms
- **Do not hang your child's bedding or clothing** outside to dry
- Ensure **your child showers and washes their hair** in the evening
- **Use an air purifier** to remove pollen from indoor air. Philips air purifiers all feature VitaShield IPS technology, which is proven to be effective against fine particles and contaminants

PET DANDER

WHAT IS IT?

Pet dander is composed of **tiny, even microscopic, flakes of skin and hair shed by cats, dogs, rodents, birds and other animals with fur or feathers**. They easily stick to furniture, bedding, fabrics and many items carried into and out of the home⁷

SEASONALITY?

Symptoms can be **present year round**.

HOW TO FIGHT BACK⁸:

- **Keep pets out of your child's bedroom** and playroom
- **Avoid having rugs and wall-to-wall carpeting** in your child's bedroom
- Have someone other than your child **wash or brush your pet every week** to help reduce the amount of dander it spreads in the home

MOLD SPORES

WHAT ARE THEY?

Mold is **a fungus that comes in thousands of varieties**. In order to thrive, it needs two things, water and warmth. Inhaling spores – the invisible airborne seeds of mold – can cause allergy symptoms⁹

SEASONALITY?

Mold can be present **indoors during the entire year**

HOW TO FIGHT BACK:

- **Repair any leaks quickly.** If you notice a moldy odor in a room, look for hidden leaks
- In bathrooms, **use washable throw rugs** instead of carpet
- **Keep the humidity in your home between 40% – 60%.** Philips humidifiers and dehumidifiers are highly efficient, and help to maintain a comfortable humidity levels

Philips believes there is always a way to make life better. Whilst parents of allergy sufferers are powerless to control the quality of outdoor air, they can improve their indoor air at home and monitor outdoor allergen levels so **their child can enjoy a happy, normal life.**

1. Polz DH et al. Interrelationships between Atopic Disorders in Children: A Meta-Analysis Based on ISAAC Questionnaires. 2015 Jul 2;10(7)
2. <http://acaal.org/allergies/who-has-allergies/children-allergies>
3. <http://www.theipcri.org/download/attachments/689587/EFABookonRespiratoryAllergiesFINAL.pdf?version=1%26modificationDate=1332965739000>
4. <http://kidshealth.org/en/parents/allergy.html#>
5. <http://acaal.org/allergies/types/dust-allergy>
6. <http://fortworthnet.net/types-of-allergies/>
7. <http://www.lung.org/our-initiatives/healthy-air/indoor/indoor-air-pollutants/pet-dander.html?referrer=https://www.google.co.uk/>
8. <http://kidshealth.org/en/parents/asthma-pet.html>
9. <https://www.parents.com/health/allergies/seasonal/mold-allergy/>