

Rhinitis Basics



Rhinitis, including hay fever, is the most common of all the allergic diseases. The typical symptoms such as blocked nose, watery eyes, & running nose may persist all year round (perennial rhinitis) or may be seasonal. Even though it's often undiagnosed and its symptoms often thought of as harmless, the impact perennial rhinitis can have on a person's overall quality of life can be significant.

What is rhinitis?

Rhinitis is inflammation of the nose. It may, or may not, be caused by an allergy.

Allergic rhinitis:

- seasonal allergic rhinitis (hay fever)

Hay fever, the most common of the allergic diseases, is also known as 'seasonal allergic rhinitis'. People with hay fever generally have symptoms throughout the pollen season (spring, summer, autumn). The exact period will depend on the type of pollen (tree, grass or weed) that triggers their symptoms.

- perennial allergic rhinitis

Where symptoms are present all year-round rhinitis is known as 'perennial allergic rhinitis'. In this case the allergen is often something other than pollen, like house dust mite, pet dander or traffic pollution. However, some people have rhinitis all year round, but find their symptoms are worse during the pollen season.

In some countries the pollen season is very long, so you may hear the term persistent rhinitis used to describe hay fever in such cases.

Allergic rhinitis is common, for example affecting around 20% of the UK population.

Non-allergic rhinitis:

- triad

The name triad comes from the presence of three distinct symptoms: asthma, nasal polyps, and perennial rhinitis. Triad is strongly associated with a sensitivity to aspirin and related drugs.

- NARES

NARES is an acronym for Non-Allergic Rhinitis with Eosinophilia and is marked by the presence of immune cells called eosinophils in the nose, where they cause severe inflammation.

- vasomotor rhinitis

Vasomotor rhinitis is a condition that causes chronic sneezing, congestion, or runny nose. While these symptoms are like those of allergic rhinitis (hay fever), nonallergic rhinitis is different because, unlike an allergy, it doesn't involve the immune system.

Rhinitis symptoms

Common symptoms:

- frequent sneezing
- runny or blocked nose
- itchy, red or watery eyes (also known as allergic conjunctivitis)
- an itchy throat, mouth, nose and ears

Less commonly, you may experience:

- the loss of your sense of smell
- facial pain (caused by blocked sinuses)
- sweats

Another symptom of perennial allergic rhinitis is post-nasal drip, where mucous runs down the back of the nose and then into the throat and the airways, producing a persistent phlegm cough.

Causes of allergic rhinitis

Allergic rhinitis is caused by exposure to an airborne allergen. Common allergens include:

- house dust mite excretions
- particles from insects such as midges, mosquitoes, cockroaches, carpet beetles, house flies

- mould spores, indoors and outdoors
- pet dander, especially from dogs, cats and horses
- workplace allergens, such as flour, wood dust and chemicals
- sometimes a food allergen can cause rhinitis -yeast is probably the most common food allergen to produce nasal symptoms

What happens when the allergen is breathed in

The nose is a remarkable organ acting as both heat exchanger and filter.

Cold air entering the nose flows past the turbinates, which are small bony projections on the breathing passages covered by mucous membrane. Particles and bacteria are trapped by the membranes, while the air is warmed by being drawn across the network of blood vessels that lie beneath the membranes.



In allergic rhinitis, blood flow is increased, the mucous membranes swell and there is increased mucous production, all occurring in response to histamine production on exposure to the allergen. The result is nasal congestion, nasal blockage, and/or a runny nose.

Allergic rhinitis diagnosis

A simple description of your symptoms and their seasonality may be all that is required to diagnose rhinitis.

If confirmation and/or identification of an allergic cause is needed, then a skin prick test can be used. A tiny drop of allergen extract is placed on the skin at either the arm or the back. If you are allergic to the substance, a small red weal will appear within a short period.

Prevention

Allergic rhinitis can be reduced by avoiding exposure to allergic triggers, for example:

House dust mite:

- minimise allergen 'reservoirs' like carpets, sofas and curtains by using different materials and changing to hard flooring where possible
- de-clutter your home and damp dust regularly
- keep your home dry, reducing mould as well as house dust mites

Pet dander:

- confine your pet to one room in the house or keep it outside
- wash your pet regularly with special allergy shampoo and always wash your own hands after touching it
- pet dander gets airborne but also settles on carpets and soft furnishings so keep the house ventilated and vacuum regularly to suck up the allergen, using a vacuum with a HEPA filter to trap the particles

Mould spores:

- keep your home dry by dealing with any cracks, leaks, or rising damp, and remove any visible patches of mould.
- when you are cooking or bathing close the door and where possible open a window afterwards to allow steam to escape, preventing a build-up of mould spores
- avoid having carpet in the bathroom
- dry all clothes outside whenever possible

Medical treatments for allergic rhinitis

If your symptoms are mild, you can use a long-acting non-sedating antihistamine such as Claritin (loratadine), NeoClaritin (desloratadine), Zyrtec (cetirizine), Xyzal (levocetirizine) or Allegra (fexofenadine).

These are available without a prescription, but you should always consult your pharmacist before use.

The older antihistamines like chlorpheniramine (Piriton) and hydroxyzine (Atarax) have a significant sedating effect and should not be used if you are driving, operating machinery, or studying. These older drugs also interact with alcohol so having even a small amount to drink may significantly affect performance.

If rhinitis mainly affects your eyes, antihistamine eye drops, such as Otrivine (antazoline) may help.

In addition to an antihistamine, a nasal decongestant (drops or a spray) may also be helpful in clearing a blocked nose. Some of these decongestants are corticosteroids, which act by reducing inflammation including Beconase (beclomethasone) and Flixonase (fluticasone). Non-corticosteroid nasal decongestants include Otrivine/Sudafed (xylometazoline). All of these can be bought without a prescription. However, only use a decongestant for as short a time as possible, as the nose tends to stop responding to these medications over time.

In general, antihistamines and topical nasal steroids are most effective against seasonal allergic rhinitis/hay fever but may still help with perennial allergic rhinitis.

Can an air cleaner help?

While numerous manufacturers of 'air cleaners' / 'air filters' claim to be able to clear those allergens leading to rhinitis from the air, they can only reduce, not eliminate, the problem, because:

- they can only clean the air that passes through them, and stratification, eddies and more means that some air in the room never passes through the filter
- they don't clean surfaces at all and it only takes a small disturbance to put settled allergens back into the air

The only technology we know of that can neutralise allergens throughout the air in the room and on surfaces is Airora's 'Hydroxyl Cascade' technology.

You can learn more about why traditional air cleaners don't work well [here](#) and why Airora's unique technology does work [here](#).

