

# Hayfever

# What is Hayfever?

Hayfever is the common name given to cold-like symptoms caused by inhaling plant pollens at certain times of the year.

## The UK pollen season:

**Tree Pollens** March – April

**Grass Pollen** May - July (Peak in June and July)

Weed Pollen June – August

**Mould Spores** September – October

When people who are allergic to plant pollen breathe it in, it causes the lining inside the airway to swell, this is called inflammation. It commonly affects the nose (rhinitis), eyes (conjunctivitis) throat and ears and can affect the lungs. Inflammation of the lining inside the nose is called rhinitis. Hayfever is often referred to as **Seasonal Allergic Rhinitis**.

It occurs at particular times of the year when the various plants release their pollen. Pollen is one of many allergens which can cause allergic responses.

Hayfever affects one in four people in the UK and approximately nine out of ten hayfever sufferers are allergic to grass pollen. Some individuals are allergic to both tree and grass pollen and will have symptoms that last for several months of the year.

Hayfever often starts in childhood and regularly occurs at the same time each year. Sometimes the symptoms of hayfever are experienced all year round and this is referred to as perennial rhinitis. Both seasonal and perennial rhinitis can lead to asthma development. In known asthmatics, untreated hayfever increases the likelihood of having a severe asthma attack during the pollen season.

## Why is hayfever seasonal?

Plants only disperse their pollen during their growing season and therefore individual plant pollen is not in the air all year round.

Plants release their pollen at the same time every year, when the weather is dry. Wet weather conditions will influence pollen dispersal and will affect how long it remains in the air. Throughout the pollen season, specialist pollen monitoring centres trap pollen and calculate the daily concentration of the various airborne

pollens. The daily pollen count is broadcast by media outlets, along with the weather forecast and is reported as low, medium or high.

Highly sensitive individuals can suffer hayfever symptoms even when the pollen count is low. When the pollen count is high, most people sensitised to the pollen are likely to have symptoms.

#### Symptoms of hayfever include:

- · Itchy nose, with or without itchy ears, throat and eyes
- Sneezing
- Watery discharge from the nose and sometimes eyes
- Blocked nose
- Some people who are allergic to tree pollen also experience irritation in the throat when eating certain raw fruit and vegetables, such as apples and celery. This is due to a crossreaction with pollen and is referred to as oral allergy syndrome.
- Some sufferers have poor quality sleep, reduced ability to concentrate and function effectively at work
  or at school. Examination performance is reduced especially if the sufferers are on sedating
  antihistamine medication.
- Some sufferers are so severely affected that they cannot go outdoors during the pollen season.

# How to diagnose hayfever?

The regular seasonal pattern of symptoms often allows self-diagnosis. For some people, however, symptoms may be less defined or even persistent for several months, and therefore allergy testing may be required. Allergy skin prick testing at an NHS allergy clinic is the most reliable way to confirm hayfever.

A skin prick test is carried out by placing a small drop of fluid containing an allergen on the skin. The skin is then pricked through the liquid. If a person is sensitised to the allergen the body releases a chemical called histamine at the site of the prick causing a red itch bump to occur. This reaction indicates that a person is likely to have symptoms of allergy to that particular allergen.

There are also blood tests for people on whom skin prick tests are not possible: people with severe eczema or very sensitive skin and those who can not stop taking their antihistamine medication because of troublesome symptoms. A blood test can be done but is no more sensitive than skin prick testing, and it takes time for the results to come back.

Your doctor will need to consider the allergy test results together with the symptoms. Some people with positive allergy tests have little or no hay fever symptoms.

# **Treatment of hayfever**

### 1. Avoiding exposure to pollen in the air

- Be aware of the pollen count
- Avoid the countryside when the pollen count is high
- Keep your windows shut when travelling in a car and ensure your car has a pollen filter
- Avoid being outdoors at times when the pollen count is high, for example, when the air is warming in the mornings and cooling in the evenings

- Keep the bedroom windows closed early morning and evening when the pollen concentration is high
- Hide your pillow under the bed covers during the day to prevent pollen from settling on it when the windows are open
- Wear glasses to protect your eyes from pollen when outside Wash your face and hair and change your clothes when coming indoors on days when the pollen count is high
- Wipe Vaseline around your nose and eyes to trap pollen and prevent some from entering your nose and eyes
- Consider using a nasal air filter www.nasalairfilter.com
- Carry out nasal douching ( www.sterimarnasal.co.uk / www.neilmed.com/uk )

#### 2. Medication

For many people, hayfever symptoms can be controlled with over-the-counter medication: steroid nose sprays, antihistamine tablets/syrup/nose sprays and eye drops. Ask a pharmacist to guide you if you have never bought this type of medication before.

Saline sprays/douches are not medicated but will support nasal hygiene, wash away any trapped allergens such as pollen and therefore help reduce symptoms. Adults and children will benefit from nasal douching as preparation to clean the nose before using a steroid nasal spray. This is also useful after being exposed to airborne allergens in everyday activities.

Over-the-Counter Medications: Which medication is most effective for which symptom?

SYMPTOM	MEDICATION	EXAMPLE
Blocked nose	Steroidal nasal sprays are the most effective treatment for all nasal symptoms and may also help reduce eye symptoms. They can be used together with eye drops and antihistamine medication.	steroid nasal spray e.g. Fluticasone or Beclometasone
Itchy eyes	Eye drops Chromone eye drops Antihistamine tablets/syrups or eye drops	Eye drops e.g sodium cromoglycate
Watery eyes		Oral tablets/syrups e.g Loratidine or Cetirizine
Itchy nose	Antihistamine tablets/ syrups or nasal sprays	Oral tablets or syrups e.g. Loratidine or Cetirizine and or nasal spray e.g. Azelastine
Runny nose		

Nasal decongestant sprays can be used for up to five days, only occasionally, but never regularly because they cause rebound congestion which causes swelling inside the nose when the spray is no longer used.

#### Steroid nasal spray treatment works best when:

- started before symptoms usually start, early in the hayfever season
- when used regularly

If you are pregnant or breastfeeding, steroid nasal sprays is the usual treatment of choice. It is advisable to avoid antihistamine tablets and treatment should always be discussed with your doctor.

Antihistamine medication will reduce symptoms of irritation but are not good at reducing a blocked nose. They can be taken as a tablet or syrup for children and also come as nasal sprays and eye drops. One dose usually works within half an hour and therefore if symptoms are mild or come and go, can be taken 'as required'. If your symptoms are continuous you can also take this medication daily.

There are several brands of antihistamines. Non-sedating antihistamines such as Loratidine or Cetirizine, which are taken only once a day, are advised, rather than the older, cheaper ones which cause drowsiness or psychomotor retardation and can cause reduced performance in examinations or driving. Ask your pharmacist for advice. If your regular treatment is no longer effective try switching to another brand.

Alternatively, some people will need medication that requires a prescription from the GP. Recent advances include a spray which contains both antihistamine and topical steroid spray. Some patients with asthma and hayfever benefit from antileukotriene tablets.

Homoeopathy treatments, herbal remedies, nasal creams and powder sprays are available, but these treatments are not recommended as there is no scientific proof that they work.

We do not recommend that steroid tablets or injections are used during the COVID-19 pandemic. Doctors do not generally recommend injection steroid therapy for hayfever sufferers as this has severe side effects. They do sometimes prescribe short courses of steroid tablets for severely affected patients.

### 3. Disease-altering immunotherapy

For patients with severe hay fever symptoms that cannot be controlled by medications, your GP may refer you to an Allergy Specialist for allergen-specific immunotherapy. This may also be relevant for allergies to pets, insect stings and house dust mites.

Immunotherapy or 'desensitization' can reduce allergy to pollen and therefore a reduction in hayfever symptoms. It is done by a series of injections (subcutaneous immunotherapy), or by daily medication under the tongue (sublingual immunotherapy). The relief of symptoms continues for some years even after cessation of treatment.

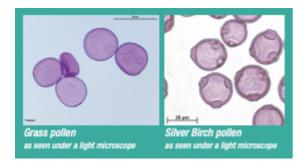
Immunotherapy is used mainly for patients whose symptoms are severe and not helped by other treatments. You should discuss with your GP or allergy specialist whether you are suitable for this treatment. It should start well before the pollen season begins and be continued for 3 years. Most patients will have some reduction in allergy symptoms from the first year onwards. There is evidence that immunotherapy also reduces the progression of rhinitis to asthma in some patients.

# Monitoring the hayfever sufferer

A yearly review by your GP is advisable particularly in children, which should include growth assessment where steroid treatments are used regularly. An annual review before the pollen season starts allows your GP to provide early and therefore more effective prescriptions, before the airborne pollen causes troublesome symptoms.

### **Uncertainties**

- Why not everyone with a positive allergy test to pollen has symptoms
- Why some hayfever sufferers grow out of their disease, whilst others progress to more persistent problems.



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Date Published: 05/11/2021 Review Date: 05/11/2024