

What is Hayfever?

Hayfever is the common name given to cold-like symptoms caused by breathing in plant pollen 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 cause allergic responses.

Hayfever affects one in four people in the UK and approximately nine out of ten hay-fever sufferers will be allergic to grass pollen. Symptoms of grass pollen allergy occur from May to July. The various trees release their pollen in the air during springtime between February and May and therefore cause an earlier onset of symptoms. Approximately half of UK hay-fever sufferers have a tree pollen allergy. Some individuals are allergic to both tree and grass pollen and will have symptoms that last for several months of the year.

Hay-fever often starts in childhood and may regularly occur at the same time each year. Sometimes the symptoms of hay-fever are experienced all year round and this is referred to as perennial rhinitis. Perennial rhinitis happens when the inflammation inside the airway become persistent. Both seasonal and perennial rhinitis can lead to asthma development. In known asthmatics, untreated hayfever will increase 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 sufferers 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 cross reaction with pollen and is referred to as oral allergy syndrome.

- Some hayfever 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 patients are so severely affected that they cannot go outdoors during the pollen season.

How to diagnosis hayfever?

The regular seasonal pattern of symptom 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 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 is no more sensitive than skin prick test, 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 test have little or no hayfever symptom.

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 out doors 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 widows 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

2. Medication

For many people, hayfever symptoms can be controlled with over the counter medication: saline sprays/douches, 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.

Over the Counter Medications

Which medication is most effective for which symptom?

SYMPTOM	MEDICATION	EXAMPLE
Blocked nose	Steroidal nasal spray 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 Watery eyes	Eye drops Chromone eye drops Antihistamine tablets / syrups or eye drops	Eye drops e.g sodium cromoglycate Oral tablets / syrups e.g Loratidine or Cetirizine
Itchy nose Runny nose	Antihistamine tablets/ syrups or nasal sprays	Oral tablets or syrups e.g. Loratidine or Cetirizine and or nasal spray e.g. Azelastine

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. Chlorphenamine (such as Piriton) works well but is required every four to six hours and will make some people feel drowsy, so should not be taken if you are driving or operating machinery. Some people however, find sedating antihistamines useful when taken at night to reduce irritant symptoms and help them sleep. Non sedating antihistamines such as Loratidine or Cetirizine, which are taken only once a day, are more advisable. Ask your pharmacist for advice on which to buy.

If your regular treatment is no longer effective, try switching to another brand.

Alternatively, some people will need medication that requires a prescription. Your GP will also be able to prescribe alternative brands of medication that may help to reduce your symptoms.

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

Doctors do not generally recommend injection steroid therapy for hay-fever sufferers, as this has severe side effects. They do sometimes prescribe short courses of steroid tablets for severe cases.

3. Disease altering immunotherapy

For patients with severe hayfever symptoms that cannot be controlled by medications, your GP may refer you to an Allergy Specialist for allergen specific immunotherapy.

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) in increasing quantities. The relief of the symptoms continues even after the treatment is finished. The idea is that your body will become 'desensitized' to pollen,

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 before the pollen season begins and 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.

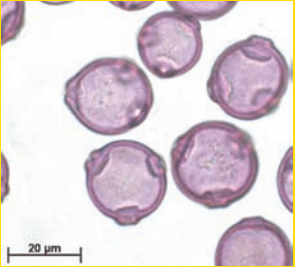
Uncertainties

- Why some patients with pollen allergy develop very few symptoms

Why some hay-fever sufferers grow out of their disease, whilst others progress to more persistent problems .



Grass pollen
as seen under a light microscope



Silver Birch pollen
as seen under a light microscope

Pollen images with kind permission from the National Pollen and Aerobiology Research Unit (NPARU) Worcester UK and Laboratory of Aeropalynology, Adam Mickiewicz University, Poznań, Poland

Further source of information:

National Pollen and Aerobiology Research Unit
www.pollenuk.co.uk
British Society for Allergy and Clinical Immunology
www.bsaci.org
World Health Organisation Guideline for Allergic Rhinitis and It's Impact on Asthma **www.whiar.org**
Allergy UK **www.allergyuk.org** Helpline **Tel: 01322 619898**

If you have any problems or questions, please contact:

Please insert local department routine and emergency contact details here

Disclaimer: This publication is designed for the information of patients. Whilst every effort has been made to ensure accuracy, the information contained may not be comprehensive and patients should not act upon it without seeking professional advice.

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Hayfever

**By Janette Bartle, Glenis Scadding
and Matthew Yung**

ENT-UK is the professional Association for British Ear, Nose and Throat Surgeons and related professionals. This leaflet provides some background information about hayfever. It may be helpful in the discussions you have with your GP or specialist when deciding on possible treatment. This information leaflet is to support and not to substitute the discussion between you and your doctor. Before you give your consent to the treatment, you should raise any concerns with your GP or specialist.



ENT.UK
The Royal College of Surgeons of England
35-43 Lincoln's Inn Fields
London WC2A 3PE

