

4 | Hay fever



The term ‘hay fever’ was originally used to describe the symptoms suffered by farm workers during haymaking, but what we now regard as hay fever has nothing to do with either hay or having a fever. It is a very misleading name: fever is rare, and the causes include a large number of allergens other than the grass from which hay is made.

Hay fever is very common, and is thought to affect up to a quarter of the population at some time during each year. Although it is not life-threatening, it causes a great deal of misery. I hope it will be useful for you to learn more about your hay fever, as this should make it possible for you to work out which allergens are causing your problems, to reduce your exposure to the culprits, and to discover how best to manage any remaining symptoms you may have.

HAY FEVER EXPLAINED

What exactly is hay fever?

If you have hay fever, you are allergic to one of the allergens with particles light enough to be carried through the air, known as aero-allergens. The nose and upper airway are designed to filter out any solid particles from the air you breathe, so that they don't go down into the lung. When an aero-allergen is inhaled, it settles on the lining of your nose and throat, which become inflamed (the process of inflammation is explained in the section 'Symptoms' in Chapter 1). The allergen also settles on the moist surface of the eyes, which are similarly affected.

In many people, hay fever is due to an allergy to a specific type of plant pollen, which is only released by the plant at certain times of the year. This causes a seasonal problem, more correctly called *seasonal allergic rhinitis*. The name 'rhinitis' comes from the Greek: *rhinos* means 'nose' and *-itis* means 'inflammation', so rhinitis is inflammation of the lining of the nose.

Sometimes hay fever symptoms can be caused by an allergy to other allergens; for example, the house dust mite or animal dander (the scales from their hair or fur, rather like dandruff in humans). These allergens are not seasonal but occur all year round, causing continual symptoms throughout the four seasons. The correct medical term for this problem is *perennial* (year-round) *allergic rhinitis*. It is, of course, possible for you to be allergic to more than one allergen, and so your symptoms may come and go throughout the year.

There is more information about the allergens that can cause hay fever in the section 'Triggers' later in this chapter.

How do pollens cause hay fever?

Once you have become allergic to a particular pollen, an allergic reaction is triggered the next time that those pollen grains come

into contact with the lining of your nose and throat or the membranes covering your eyes. The allergen in the pollen grains stimulates the cells of your immune system, which release histamine and other chemicals, causing the small blood vessels in the affected parts of your body to enlarge. Fluid leaking from these engorged blood vessels causes swelling and irritation, leading to the typical hay fever symptoms of a runny or stuffed-up nose, sneezing and watery eyes.

You asked specifically about pollens, but the same reaction would occur if you had the all-year-round type of hay fever (as explained in the answer to the previous question): only the allergen causing your symptoms would be different. The allergic process involved is the same as that discussed in more detail in the section 'Allergy explained' in Chapter 1, where you will also find more information on histamine and the immune system.

My daughter, who has asthma, is now 9 years old, and has no sign of hay fever. Does this mean that she has escaped it?

Hay fever can start at any time of life, although it is most common between the ages of 8 and 25 years. I am afraid it is therefore still possible that your daughter might develop it. If she does so, it is important that it is treated, because hay fever can make asthma worse.

Is hay fever getting more common?

Yes. Just as with the other allergic disorders, there seems to be an increase in the number of people with hay fever. Increased levels of air pollution may be partly to blame, as damage to the membranes of the eye and nose by these pollutants might make the allergic effect of pollens more potent.

IS IT REALLY HAY FEVER?

Is a runny, itchy nose always due to hay fever?

No, there are a number of other problems which can mimic hay fever. These include:

- the common cold;
- vasomotor rhinitis, a problem of the small blood vessels supplying the nose unrelated to allergy;
- nasal polyps, which are small harmless outgrowths of the lining of the nose, which can cause a blocked or runny nose;
- rhinitis medicamentosa, a problem resulting from the overuse of nasal decongestants (for more information, see the 'Treatment' section later in this chapter).

How can I tell whether I have a cold or whether my hay fever is playing up?

Sometimes this can be very difficult. Usually, however, a cold goes through definite stages. It starts with a feeling of itchiness in the nose and throat, and a general feeling of being poorly; it then moves on to a stage of having a very runny nose; and it finishes with a couple of days when the secretions from the nose become thick and discoloured, and the nose itself rather crusty. A cold generally lasts for three to six days, and then disappears.

In hay fever, the nasal secretions are usually thin and clear and watery, and the symptoms do not pass through these clear-cut stages. However, in severe hay fever, the nasal secretions can be yellow or even green in colour, and you may feel quite unwell, making it hard to tell the difference.

If these symptoms occur at the time you usually get hay fever, it will do no harm to take your hay fever medications.

During the hay fever season, for me June and July, I often get the feeling of having a tight chest, which gets worse with exercise. I had always thought that this was part and parcel of my hay fever, but now my GP has diagnosed asthma. Is she right?

If you think about it, the lining of your nose and throat is continuous with the lining of your windpipe and lungs, forming one uninterrupted system. If there is an allergic process going on in the lining of your nose, it is not surprising that the lining of your lungs could be affected by the same allergen. Inflammation in the lungs causes the symptoms of asthma – hence your feeling of chest tightness, a common symptom of mild asthma.

So the answer to your question is yes, I think your GP is right in diagnosing asthma. It would be worthwhile asking her whether she thinks you might benefit from treatment specifically for this, which, if your symptoms are seasonal, could be taken at the relevant times of year rather than all year round. Effective treatment of your hay fever itself will also reduce the symptoms you get from your chest.

SYMPTOMS

What are the symptoms of hay fever?

Common symptoms of hay fever are:

- sneezing;
- a runny or stuffy nose;
- itching of the eyes, nose and throat;
- itching on the roof of the mouth or the ears;
- a burning sensation in the throat;
- watery, inflamed eyes (conjunctivitis);

- dark circles under the eyes due to blocked sinuses, which may be accompanied by sinus headaches;
- snoring;
- loss of sense of smell.

If you have hay fever, these symptoms often combine to make you feel tired, lethargic and generally under the weather. You may find it is difficult to sleep well, and your enjoyment of many aspects of life, including eating, sporting activities and anything to do with the outdoors, can be affected. You may find that your concentration is impaired, and your performance at school or at work can be affected.

I have never had hay fever, so I find it difficult to understand why my husband gets so irritable when his hay fever is at its worst. What does having hay fever feel like?

The symptoms of hay fever range from a few sneezes right through to a condition that affects the whole body. In severe cases, people with hay fever feel as if they have a bad head cold with a fever, although their body temperature is normal. It sounds as if your husband has fairly bad hay fever.

Imagine a head cold at its worst phase, when your eyes and nose feel intensely irritated and itchy, and your head as if it is about to explode. Your nose runs constantly but at the same time feels stuffy and blocked up. Your nose quickly becomes red and sore, and the constant sneezing is embarrassing. Your sinuses may be blocked, leading to quite severe pain in your face and loss of your sense of smell. On top of all of this you would probably be feeling tired, because you can't sleep, and irritable, which could lead to a degree of depression. This is probably how your husband feels, so it is no wonder he is not at his best during his hay fever season. See if you can help him by encouraging him to go to his GP for a review of his medications. There might be other preparations available that would be more effective.

For me, one of the worst things about my hay fever is the way that my nose runs. Some days it is so bad it is quite embarrassing. Why does this happen?

When the lining of your nose is irritated by pollen grains or other allergens to which it is allergic, it becomes inflamed (tissue inflammation is discussed in more detail in the section ‘Symptoms’ in Chapter 1). This inflammation causes swelling in the lining of your nose and fluid to leak out of the small blood vessels there. Your nose also produces more mucus. The combination of the leaking fluid and the mucus can make your nose feel stuffy, can make it run (as in your case), or can do both at the same time. Go and see your GP, who should be able to prescribe some treatment for you that will considerably reduce your symptoms. An antihistamine preparation would be best for your particular problem.

Why does my nose itch when my hay fever is bad?

In people who have hay fever, the inflammation of the lining of the nose, which results from contact with pollen, comes from the release of certain chemicals in the body, including histamine (there is more about histamine in the section ‘Allergy explained’ in Chapter 1). One of the effects of histamine is itchiness. So, in the same way that an insect bite itches, the nose can itch. Histamine production in the nose can also lead to sneezing, and in hay fever this can occur in bouts of up to 20 sneezes.

Some people also find that the roof of their mouth and their ears itch. This is not due to histamine or to pollen landing in the ears, but is the result of irritation of a nerve that supplies both the back of the throat and the ear.

When my hay fever is at its worst, my nose feels completely blocked, but blowing my nose does not seem to make it any better. Why is this?

The blocked feeling in your nose is mainly due to swelling of the tissues rather than to blockage by mucous secretions. Because of this, no amount of blowing can relieve it. In fact, blowing your nose too much or too hard can actually make the problem worse.

A completely blocked nose not only causes local discomfort but can also lead to headaches, disturbed sleep, and a sore throat first thing in the morning (caused by breathing through your mouth during the night). Because of this, I think that you should see your GP, who will be able to suggest some effective treatment – most likely a nasal steroid spray, which will help with this symptom.

Why do I sometimes get pain above my eyebrows and beneath my eyes during the hay fever season?

The bones of your face are not solid, but have hollow spaces in them called sinuses, which are joined to the air passages of the nose by small openings. Air usually passes freely from the nose into the sinuses. However, when the lining of the nose is inflamed (as during a cold or during an attack of hay fever) the openings of the sinuses can become blocked and their drainage system disturbed. Once blocked, the pressure in the sinuses can increase because of the accumulation of secretions. The increase in pressure in these bony cavities can then cause severe pain that can be felt above the eyebrows, either side of the nose, or in the upper teeth.

If this pain persists, see your doctor, who will prescribe an antibiotic to treat any sinus infection present.