

Background information about Hay Fever and Grass Pollen

The grass pollen season (late May to early August) is the most important in the UK pollen calendar as it affects about 95% of hay fever sufferers. Typically grasses are specialised for wind pollination. In most cases vast amounts of pollen are produced and released to the airflow, but the quantities differ considerably between species.

Generally, grasses of lowlands and meadows tend to produce more pollen than those of acidic moorlands and uplands. There are about 150 species of grass in the UK but only about 12 of these are most important as contributors to the grass pollen count as they are widespread and release a lot of pollen. There is a high degree of cross reactivity between the pollen from different grass species so if someone is allergic to one type they will react to most of the others as well.

Factors influencing the start and severity of the grass pollen season

The grass pollen season in the UK usually starts about the end of May or first week of June in the South and Midlands and during the first week or second week of June in the north but it can differ from year to year by about 30 days in any location. The factors influencing the start date include winter weather, spring weather, early summer weather, local species of grass, latitude, altitude, topographic situation and soil type.

Most UK grasses are sensitive to day length and need the longer days of late spring/early summer to start flowering. In warm springs the starts are typically gradual with grasses starting to flower at slightly different times but in cold springs the starts are more sudden as many of the grass species start to flower at the same time.

The season usually starts in the SW and spreads to the N and E but this pattern can differ according to the weather. The lag time in start dates from South to North can be as little as a few days or it can be several weeks. The severity of the season overall depends on weather in late spring/ early summer for grass growth and pollen production and on the weather through June and July for the release and dispersal of pollen. The relative severity in any location depends mostly on the weather factors, the local species of grass and the geographical location e.g. coastal or inland, lowland meadow or upland moor.

What is meant by the “start of the grass pollen season”?

The term “the start of the grass pollen season” refers to the beginning of the main flowering season for the grasses. Some grass pollen may be in the air throughout the autumn, winter and early spring months because a few species of grass can flower at these times if the weather is warm enough. However most species of grass start to flower in late spring or early summer and have their peak flowering times in June or July.

Most hay fever sufferers who react to grass pollen will have symptoms (if they are not controlled by medication or treatments), when the pollen count reaches high or very high but some people will react when the counts are medium or even low. The threshold of response differs a lot between individuals and it can also differ through the season in one person due to reasons such as diet, stress, hydration and exposure to pollen which can make the person more sensitive.