# Climate change drives unprecedented hay fever severity with longer pollen seasons



Hay fever, a common allergic condition, has been reported to be more severe this year, leaving many individuals struggling with its persistent symptoms even when their usual remedies seem ineffective. This uptick in discomfort is not merely a matter of seasonal nuisance; several interconnected factors are exacerbating the situation.

One significant contributor is climate change, which has been altering pollen seasons globally. Prolonged periods of above-average temperatures and reduced rainfall have intensified the release of allergens. In the UK, for instance, early spring conditions in 2025 have resulted in an unprecedented peak of birch pollen—affecting approximately 25% of sufferers. The unusual dry weather has not only facilitated a greater dispersal of pollen but has also left it lingering in the air, subsequently increasing exposure and subsequently worsening symptoms. Similarly, in the United States, cities like Atlanta have reported record-high pollen counts, with residents experiencing allergy symptoms starting as early as mid-February. This pattern reflects a broader trend, with nearly 90% of major U.S. cities seeing extended growing seasons, which allows for longer allergy seasons.

To mitigate the discomfort associated with hay fever, individuals are encouraged to adopt proactive measures in managing their symptoms. One important strategy is to consult local pollen forecasts and to engage in outdoor activities during periods of lower pollen counts. Typically, mid-morning on dry, windy days will see the highest pollen levels. Wearing protective clothing, such as face masks during peak seasons, can further minimise exposure. Those who venture outside should take care to wash off any pollen immediately upon returning home—changing clothes and showering can help remove allergens physically.

Over-the-counter antihistamines remain a first-line treatment for many individuals, with options such as loratadine, cetirizine, and fexofenadine commonly recommended. Research indicates that fexofenadine, in particular, may provide more consistent relief for those suffering moderate to severe symptoms. However, medications often work best when taken proactively, ideally beginning at least one to two weeks prior to the onset of pollen release.

For individuals experiencing significant distress, advanced treatment options are available. Immunotherapy—often referred to as allergy shots—can offer long-term relief by gradually desensitising an individual to specific allergens, functioning like a vaccine for allergies. While commitment to a multi-year course is necessary, many patients report substantial symptom relief for years following treatment, underscoring the potential of this approach in improving quality of life for those with chronic hay fever.

Emerging technologies are transforming the landscape of allergy management, too. Smart monitoring devices and mobile applications can now provide real-time updates on pollen counts and pollution levels, empowering individuals to avoid exposure proactively. As climate change continues to extend and intensify pollen seasons, strategies rooted in both scientific advancements and behavioural practices become increasingly crucial.

As such, while hay fever can disrupt daily life during peak seasons, effective management techniques and a better understanding of the underlying causes provide a roadmap for navigating the challenges posed by seasonal allergies. Emphasising a combination of preventive measures, timely medication, and emerging treatments lays the groundwork for improved outcomes in managing this pervasive condition.

Samuel J. White is an Associate Professor and Head of Projects at York St John University. Philippe B. Wilson is an Associate Pro Vice-Chancellor for Innovation and Knowledge Exchange at York St John University.

### Reference Map:

1. Paragraph 1, 2, 3, 6, 8
2. Paragraph 3
3. Paragraph 2
4. Paragraph 2, 3
5. Paragraph 4
6. Paragraph 1, 4

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.independent.co.uk/life-style/health-and-families/hay-fever-symptoms-best-treatment-b2756523.html> - Please view link - unable to able to access data
2. <https://www.apnews.com/article/d15a53710905ee7dec70c8e6ea7df6e0> - This article discusses the return of spring allergies, affecting millions of Americans with symptoms like itchy eyes, runny noses, and sneezing. It highlights how climate change is lengthening allergy seasons, with cities like Atlanta experiencing record-high pollen counts. The piece offers management strategies, including checking pollen forecasts, wearing protective clothing, and using over-the-counter medications. It also notes that persistent symptoms may require consultation with an allergist and mentions that remedies like local honey lack scientific support.
3. <https://www.axios.com/local/atlanta/2025/03/10/allergy-season-atlanta-climate-change> - This article examines how climate change is extending Atlanta's allergy season. It reports that the growing season without frost has lengthened between 1970 and 2024 in nearly 90% of major U.S. cities, leading to longer allergy seasons. Atlanta is seeing more days with moderate to high pollen levels, with patients reporting seasonal allergy symptoms since mid-February. The piece also notes that climate change not only prolongs pollen seasons but also intensifies them due to thermal pollution, and suggests treatments like saline rinses, nasal steroid sprays, and eye drops.
4. <https://time.com/6278183/allergy-season-worse-health-impact/> - This article explores how climate change is significantly contributing to longer and more intense allergy seasons. It explains that higher carbon dioxide levels and increased temperatures lead to earlier and more prolific pollen production. Research indicates a 20% increase in pollen concentrations and extended allergy seasons from 1990 to 2018. The piece discusses the resulting severe symptoms, such as itchy eyes, congestion, and fatigue, and recommends proactive measures like starting medications before symptoms begin and considering immunotherapy for severe cases.
5. <https://www.tomsguide.com/wellness/sleep-problems/how-to-sleep-with-hay-fever> - This article provides strategies to manage hay fever symptoms that disrupt sleep. It suggests taking evening showers to remove allergens, using silk pillowcases to reduce allergen retention, and drinking decaffeinated green tea for its natural antihistamine properties. Other tips include using essential oils like eucalyptus or peppermint to ease nasal congestion, regularly washing bedding and vacuuming to reduce allergen exposure, chewing gum before bed to help clear nasal passages, and keeping bedroom windows closed during high pollen times, typically early evening.
6. <https://www.idealhome.co.uk/house-manual/laundry/the-best-time-to-dry-laundry-outside-if-you-have-hay-fever> - This article advises hay fever sufferers on the best times to dry clothes outdoors to minimize pollen exposure. It recommends hanging laundry between midday and 4 pm, when pollen counts are at their lowest, and advises avoiding drying clothes in the early morning and from 5 pm to 8 pm, when pollen levels peak. The piece also suggests monitoring local pollen levels through apps and considering indoor alternatives like tumble dryers or heated airers for those with severe symptoms.
7. <https://www.allergyuk.org/climate-change/> - This page from Allergy UK discusses how climate change affects hay fever and offers management strategies. It emphasizes the importance of identifying specific pollen triggers and tracking pollen counts using tools like pollen calendars and forecasts. Recommendations include starting treatments at least two weeks before symptoms begin, practicing pollen avoidance measures such as keeping windows closed, showering and changing clothes after being outdoors, and wearing wraparound sunglasses and hats to protect against pollen exposure.