

# The temperature-asthma link: increasing heat is worsening symptoms in asthma patients, causing new cases among the healthy

Although severe temperatures can cause mild respiratory symptoms even in normal individuals, the growing frequency and duration of heat waves, combined with increased levels of allergens, could be tipping some over an edge, precipitating the onset of asthma



Estimates are difficult to get, but the Global Burden of Disease study (1990-2019) has estimated approximately 34.3 million individuals with asthma in India, which represents about 13.09% of the worldwide burden.

Asthma in India has a disproportionately high death rate, representing three times greater mortality and over two times greater Disability-Adjusted Life Years (DALYs) than the global share of the asthma burden. While asthma is recognised by a multitude of symptoms including shortness of breath, wheezing, coughing, and tightness in the chest, in the wake of rising temperatures, unprecedented heat, and the relentless progress of climate change, it is becoming an underappreciated threat to respiratory health, especially for those who already have asthma. Aside from the unpleasantness of the blistering heat, environmental changes can aggravate asthma symptoms and, worse, seem to be causing new cases among healthy people.

Patients with severe asthma have an enhanced sensitivity of their airways to dry air. This dryness causes a reduction in water content of the airway, which evokes an inflammatory response. This inflammation, in turn, makes the airways narrowed, a process also referred to as airway constriction, which further restricts breathing. The already vulnerable respiratory system cannot handle the additional load of intense heat and therefore, has more episodes of asthma attacks.

## **News Source:**

<https://www.thehindu.com/sci-tech/health/the-temperature-asthma-link-increasing-heat-is-worsening-symptoms-in-asthma-patients-causing-new-cases-among-the-healthy/article69547798.ece>