

ALLERGIC RHINITIS

WHAT CLIMATE AND POLLUTION ARE DOING TO OUR AIRWAYS

WHAT IS ALLERGIC RHINITIS?

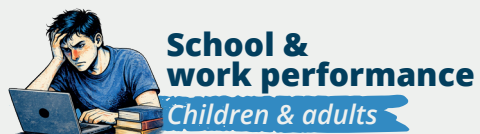
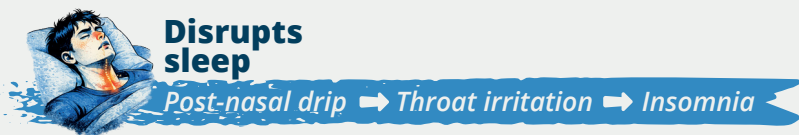
Allergic rhinitis (AR) is an inflammation of the nasal mucosa caused by an IgE-mediated allergic reaction to airborne allergens (such as pollen or dust mites).

HOW COMMON IS IT?

Affects around 1 in 3 people in Western countries, rising to 40% in highly industrialised societies.

AR typically appears in childhood and persists for life.

HOW DOES IT AFFECT DAILY LIFE?

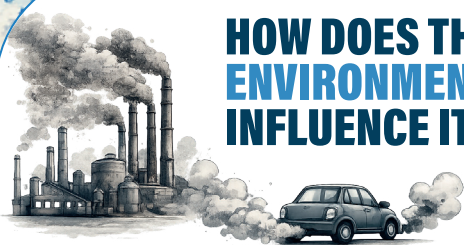


1 IN 3

SYMPTOMS

-  **Nasal discharge**
Front or post-nasal drip
-  **Nasal itching and sneezing**
-  **Nasal congestion**
-  **Allergic conjunctivitis**
With pollen and animal epithelium

HOW DOES THE ENVIRONMENT INFLUENCE IT?

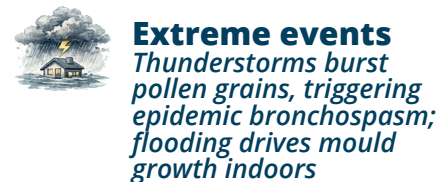


Traffic & industrial pollution
Particles, ozone and nitrogen oxides

Damages the nasal mucosa, allowing allergens to penetrate more deeply.

Chemically modifies pollen allergens, making them more allergenic.

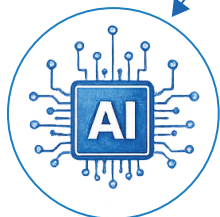
HOW DOES CLIMATE CHANGE INFLUENCE IT?



HOW DOES THE EUROPEAN PROJECT CLIMAIR HELP?



Combines clinical, environmental, and AI-driven research



Analyses the link between climate, pollution, and allergic disease



Builds a tool to predict each patient's allergy risk based on location, pollution levels, and climate forecast



Helps patients plan daily life and doctors decide on treatment

FOCUS ALLERGENS:



Olive
Mediterranean



Grass
Western Europe



Birch
North & Northeast Europe



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