

Thunderstorm Asthma

It seems reasonable to think that rain would relieve allergic rhinitis (hay fever), and asthma triggered by pollen by washing pollen out of the air. However, rain from thunderstorms can make some people's symptoms worse.

Around one in four people with allergic rhinitis also have asthma

Pollen can trigger asthma as well as allergic rhinitis symptoms, most often in spring and summer.

Grass pollen can be wind-blown for long distances

Grasses rely on wind to spread pollen grains. Pollen counts will be highest near the source, but strong winds can spread pollen grains over long distances.

Intact pollen grains are usually trapped in the upper airways and do not reach the lungs. Other allergen carrying particles can carry grass and tree pollen allergens. Unlike intact pollen, smaller particles can reach the small airways of the lungs and trigger asthma attacks.

Thunderstorms and weather changes can trigger asthma attacks

Thunderstorm asthma is triggered by massive loads of small pollen allergen particles being released into the air with fast changes in wind, temperature and humidity. When it rains, or is humid, pollen grains can absorb moisture and burst open, releasing hundreds of small pollen allergen particles that can enter the small airways of the lungs.

It is important to note that:

- Not all thunderstorms trigger thunderstorm asthma, even on days with high pollen counts.
- Other weather factors are involved in thunderstorm asthma.
- It is not only people with pollen allergy who may be affected by thunderstorm asthma.
- Other allergens such as fungal spores, massive humidity and temperature changes over a short period of time can affect some people with asthma, and other respiratory diseases during a thunderstorm.

Pollen asthma can be treated effectively

If your asthma is triggered by pollens and is worse in spring and summer, see your doctor for advice. It is important to have a current asthma action plan, and regularly use preventer medication to manage symptoms.

How to protect from thunderstorm asthma

Thunderstorms are common in spring, so if you have allergic rhinitis try to stay inside on high pollen days.

See your doctor to make sure that allergic rhinitis is well treated.

If you experience symptoms of asthma such as chest tightness, wheeze, shortness of breath, or cough, see your doctor for a plan to manage asthma. Use preventer medication every day, particularly if high pollen counts or thunderstorms are predicted.

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