

## What is climate change?

The Earth is getting warmer mainly because people are adding greenhouse gases, like carbon dioxide (CO<sub>2</sub>), to the atmosphere that trap extra heat. Warmer temperatures lead to other changes that are known as climate change. Climate change describes a change in average weather conditions over time. In Illinois, temperatures are getting warmer, there are more and worse flood events, and air quality is poorer.

## How can climate change trigger asthma?

Climate change is making air quality worse in Illinois and poor air quality can trigger asthma.

## What can you do to improve air quality?

Plant a tree native to your area. You can do this in your backyard or with a community group. Trees help absorb carbon dioxide and filter out air pollutants.

Conserve energy. Set your air conditioner at a higher temperature in the summer, your heating at a lower temperature in the winter, and use energy efficient lightbulbs.

## Fact or Fiction? Take the air quality and climate change quiz to test your knowledge!

1. More than 100 million people in the US live in communities where air pollution is very bad and does not meet air quality standards.
2. Ozone pollution does not make breathing more difficult.
3. Pollen production has been decreasing in Illinois, with pollen season starting later and lasting shorter.
4. Climate change is worsening air quality by making allergy season longer, worsening ozone pollution, and causing flooding to be more frequent and severe.
5. Exercising outside during high traffic time does not increase your exposure to air pollution.



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**Fact or Fiction Answer Key:** 1. Fact; 2. Fiction;  
3. Fiction; 4. Fact; 5. Fiction

## Asthma and Climate Change

Asthma triggers and climate change impacts in Illinois - what you need to know



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## How can you prevent triggering your asthma when the air quality is bad outside?

- ◆ Spend less time outside.
- ◆ Avoid burning leaves, trash, and other materials.
- ◆ If you are able to, spend more time in air-conditioned spaces.
- ◆ Avoid traveling during rush hour if possible. Stick to back roads when driving. If you are stuck in traffic, keep your car windows closed.
- ◆ Avoid outdoor physical activities close to main roads when pollution levels are high.

## How is climate change making air quality worse in Illinois?

Rising temperatures, more CO<sub>2</sub>, and climate change can make:

1. Allergy season longer
  - Winters are warmer and shorter, springs start earlier, and falls last longer. This means the growing season is longer for plants that make pollen and other airborne allergens.
2. More pollen
  - Higher levels of carbon dioxide increase the amount of pollen produced by plants.
3. Ozone pollution worse
  - Ozone pollution is made through a combination of sunlight, heat, and air pollution that comes out of the exhaust pipes of cars and from factories.
  - Ozone levels can get very high in hot, sunny weather. As the world becomes warmer, we can expect more ozone pollution in the air we breathe.
  - Ozone pollution makes it more difficult to breathe for people with asthma and may increase how often asthma attacks occur.
4. Floods worse and occur more often
  - When a home floods, mold can develop and may trigger asthma, an asthma attack, and other breathing difficulties.



## Air Quality and Asthma Resources and Apps

Ever wonder how fresh or polluted the air is that you breathe? Check out these resources to find out.

- ◆ Track ozone levels and other daily air quality information at: [www.airnow.gov](http://www.airnow.gov)
- ◆ Receive air quality notifications at: <http://www.enviroflash.info/>
- ◆ Track air pollution locally and around the world with Plume Labs app: <https://plumelabs.com/en/air/>
- ◆ Listen to this podcast series featuring asthma experts: <https://www.asthmacommunitynetwork.org/podcasts>
- ◆ Read the Environmental Protection Agency's Asthma website for numerous resources: <https://www.epa.gov/asthma>



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