Outdoor Air Quality and Stroke

Poor air quality is unhealthy for everyone, but especially for older adults and people at risk for stroke. If you have had a stroke in the past, poor air quality can make you more likely to have another one. For people at risk for stroke, poor air quality can cause:

**NOW**
- Stroke
- Heart attack
- More hospital and emergency visits

**LONG TERM**
- Greater risk of stroke, blood clots, heart attack, and early death

The Air Quality Index (AQI) is a number for reporting how clean or unhealthy your air is every day. You can find it on the Internet at AirNow.gov. It’s also reported in local news sources:

**When AQI is:**

1. **1–50 GOOD**
   - Enjoy usual outdoor activities
2. **51–100 MODERATE**
   - Reduce outdoor exercise— not as long, not as hard
   - If you have symptoms, stay indoors
3. **101–150 UNHEALTHY for sensitive groups**
   - Plan outdoor activities in the morning, when air quality is usually better
4. **151–200 UNHEALTHY**
   - Exercise indoors
5. **201–300 VERY UNHEALTHY**
   - Get emergency help immediately

**A person at risk for stroke should:**

- Always take your medicines as prescribed by your doctor, especially when air quality is unhealthy
- Traffic pollution is harmful even when AQI is good
- Whenever possible, avoid outdoor air in places with a lot of traffic
What causes poor air quality?

Particulate matter is tiny particles in the air like dust, dirt, soot, and smoke. In northern Utah, it’s more common and more of a problem in winter months. Symptoms may come several hours after exposure.

Ground-level ozone is a colorless gas. It forms when polluted air comes in contact with heat and sunlight. This is more common in summer months and late in the day. Symptoms usually come right away.

Particulate matter and stroke

Particulate matter is sometimes reported as PM 2.5 or PM 10

PM 2.5 particles are extremely tiny. Even a face mask won’t protect you from them. They can get into your blood and cause blood vessels to narrow.

PM 10 particles are a bit bigger. They include things like dust and pollen. Your nose and airways can filter some of these.

Narrowed blood vessels can lead to a stroke

More ways to take action

Pay attention to the air in your home
Be sure indoor air is free of smoke and chemical fumes. Ask your doctor if you should get an air filter.

Listen to your body
Get to know your own responses at different AQI levels — and when you need to change your plans.

Get to know your neighborhood
Pay attention to places and times of day where air quality affects you most.

Learn more
Get more information about how you can help improve air quality — both outdoors and in your home.