

Protecting Children From Air Pollution

Tips to Help Clean the Air

- Ride the train or bus, walk, bike or carpool to work and events
- Refuel your car after 6 p.m.
- Keep your car engine tuned
- Combine your errands into one trip
- Avoid burning leaves and trash

Smog is a mixture of air pollutants. These pollutants can be harmful to our health. Some sources of smog are cars, trucks, power plants and factories. It is important to pay attention to individual responses to air pollution. You should be aware of your local air quality and take steps to keep your family healthy.

When is Smog a Problem?

- Smog is a problem for some people even at low levels. As smog levels rise, more people are likely to suffer ill effects. Smog can cause health problems, including shortness of breath, coughing, wheezing and chest tightness. Children, older adults and people with asthma, lung disease or heart disease may be more sensitive to smog.
- Smog contains ozone and particle pollution.
 - Ozone forms when pollutants react to heat and sunlight. This is why we see more smog in the spring and summer.
 - Ozone levels are usually the highest from May 1 to Sept. 30 and peak from 2 p.m. to 7 p.m.
 - Particle pollution is a mix of small particles in the air such as smoke and dust. High levels can occur at any time of the year.

Why Does Smog Affect Children More Than Adults?

- For their size, children take in more air (and pollution) than adults when they breathe.
- Children's lungs are developing. Their airways are more likely to narrow in response to pollutants.
- Children spend a lot of time playing outdoors.
- Children breathe faster and more deeply when they are active. This allows pollution to reach more sensitive areas of the lungs.

How to Find Out the Smog Level

- Check local weather reports on TV or radio.
- Visit www.cleanaircampaign.com and sign up to receive smog alerts via e-mail.
- The Air Quality Index (AQI) and smog levels:

| | | |
|---------------------|---|--------------------------------|
| Green (0 to 50) | = | Good |
| Yellow (51 to 100) | = | Moderate |
| Orange (101 to 150) | = | Unhealthy for sensitive groups |
| Red (151 to 200) | = | Unhealthy |
| Purple (201 to 300) | = | Very unhealthy |
| Maroon (301 to 500) | = | Hazardous |

*See the back of this sheet for sample activities for children.

How to Avoid the Effects of Smog

- On days when smog levels are high (smog alert days):
- Change children's playtime from outdoors to indoors, especially from 2 p.m. to 7 p.m., when smog levels are higher.
 - Be aware of the child's response to smog. Some children may be sensitive even at low levels.
 - If the child has asthma, follow the doctor's treatment plan. Make sure the child always has easy access to quick-relief medicine.
 - Parents, teachers and coaches should be sensitive to a child's response to smog. Watch for signs of any breathing trouble. Refer to a doctor if needed.
 - Please do your part to help clean the air.

Sample Activities for Children

*Pay attention to the child's response to smog. Change activities based upon the child's needs.

| | Infant/Toddler (Age 2 and younger) | Pre-K (Ages 3 to 5 years) | Elementary (Ages 6 to 11 years) | Middle/High School (Ages 12 to 18 years) |
|---|--|---|---|--|
| GREEN (Good day) Be sure to go outside today and have fun | <ul style="list-style-type: none"> – Go for a walk around the block – Read together outside – Blow bubbles and chase them | <ul style="list-style-type: none"> – Walk to the park or playground – Go outside—learn to hop, skip and jump | <ul style="list-style-type: none"> – Students can walk to and from school – Hold physical education class outdoors | <ul style="list-style-type: none"> – Students can walk to and from school – Go biking or roller-skating and wear your helmet |
| YELLOW (Moderate) Consider limiting long outdoor activities | <ul style="list-style-type: none"> – Take a walk to the park – Take push-and-pull toys outdoors and practice walking | <ul style="list-style-type: none"> – Take a trip to the zoo and visit the animals – Go for a walk and pick flowers – Play outside with friends | <ul style="list-style-type: none"> – Students can walk to and from school – Go outside for recess | <ul style="list-style-type: none"> – Students can walk to and from school – Hold gym classes outdoors |
| ORANGE (Unhealthy for children with asthma) Limit outdoor activities | <ul style="list-style-type: none"> – Go for a walk in the early morning – Learn new songs that have motions | <ul style="list-style-type: none"> – Go to the park in the morning – Practice throwing and catching a ball | <ul style="list-style-type: none"> – Students can walk to school—may want to ride the bus home – Monitor children with asthma during recess | <ul style="list-style-type: none"> – Students can walk to school—may want to ride the bus home – Spend up to an hour outdoors playing sports or other activities |
| RED (Unhealthy for all children) Plan outdoor activity for early morning or evening | <ul style="list-style-type: none"> – Only take infants and toddlers outdoors when necessary – Play indoors with favorite toys | <ul style="list-style-type: none"> – Go for a walk after breakfast or dinner – Stay inside and turn on the music and dance | <ul style="list-style-type: none"> – Hold recess and gym classes indoors – No more than one-half hour outside; plan to play indoors | <ul style="list-style-type: none"> – Limit outside wait time for bus – Hold team practices before school |
| PURPLE (Very unhealthy) Avoid outdoor activity | <ul style="list-style-type: none"> – Only take infants and toddlers outdoors when necessary – For some active playtime, go to an indoor facility | <ul style="list-style-type: none"> – Read a story and allow child to act it out – For some active playtime, go to an indoor facility | <ul style="list-style-type: none"> – Limit outside wait time for bus – Have recess in the gym | <ul style="list-style-type: none"> – Limit outside wait time for bus – Hold team practices inside |
| MAROON (Hazardous) Stay indoors and keep activity levels low | <ul style="list-style-type: none"> – Look at books together indoors – Play indoors with favorite toys | <ul style="list-style-type: none"> – Play a game indoors – Read a story indoors – Listen to favorite songs indoors | <ul style="list-style-type: none"> – Play a board game indoors – Play a game on the computer | <ul style="list-style-type: none"> – Read a book or magazine indoors – Watch a movie at home with your family |

To Learn More

- For non-emergency questions about air quality safety for children, call the Southeast Pediatric Environmental Specialty Unit toll-free at 877-337-3478.
- For ways to help improve air quality, call the Clean Air Campaign at 877-CLEANAIR.

Go to www.choa.org/asthma to learn more about asthma.

For additional information, visit the following:*

- www.cleanaircampaign.com
- www.epa.gov/airnow
- www.cdc.gov/nceh/airpollution/
- www.aafa.org

*Children's Healthcare of Atlanta is not responsible for the accuracy or content of these Web sites.