

**VOLUNTARY MEASURES/ACTIVITIES**

\* Vehicle exhaust contributes a significant share of smog forming emissions. Iowa Department of Natural Resources (IADNR) began a voluntary Smoking Tailpipe Reporting Program to help clean up the heaviest emitters. In Iowa, report smoking tailpipes at 1-888-END SMOG. ([www.iowacleanair.com](http://www.iowacleanair.com))

\* All Iowa school districts have voluntarily had emissions tests for every diesel school bus statewide as part of the Bus Emission Education Program (BEEP). Emissions data helps schools target preventative maintenance efforts and creates a cleaner, efficient fleet to save money and clean the air. ([www.beeponline.org](http://www.beeponline.org))

\* Illinois Green Fleets Program is a voluntary program where businesses, governments and other organizations in Illinois gain recognition and additional marketing opportunities for having clean, alternative fuel vehicles in their fleet. It is a program to recognize a fleet manager's progressive efforts in using environmentally friendly vehicles and fuels to improve air quality while promoting our domestic fuels for greater national energy security. ([www.illinoisgreenfleets.org](http://www.illinoisgreenfleets.org))



**EXPERIMENT FOR KIDS: IS THE AIR THERE?**

**Materials:**

One small empty plastic soda bottle for each child.

One balloon for each child.

**Procedures:**

Help each child push a deflated balloon into the bottle and stretch the open end of the balloon back over the bottle's mouth.

Have the child guess what will happen to the balloon if they were to blow the balloon up inside the bottle. Will the balloon break the bottle, pop, or do nothing? Write down the their responses.

Have each child blow up their balloon!

**Evaluation:**

After each child completes the experiment, discuss why the balloon did nothing. Because air takes up space, the bottle was full of air. When you try to blow up the balloon, the air trapped inside the bottle prevents the balloon from inflating. (Texas Natural Resource Conservation Commission)

[Visit [www.bistateonline.org](http://www.bistateonline.org) for Aware of Air Teachers Resource and more KIDS fun! Learn more about the air over summer break and surprise your teachers this fall!]



**FOR MORE INFORMATION CONTACT:**

Bi-State Regional Commission offers a speakers' bureau on ground-level ozone and related transportation issues, if you know of an organization or group interested in a presentation, please contact:



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 E-mail: [gmccullough@bistateonline.org](mailto:gmccullough@bistateonline.org)

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# It all adds up to cleaner air



## Quad Cities - Blue Sky. Sunny Day. Do You Know Where Your Emissions Are Today?

The good news is Quad Cities doesn't have severe air pollution. The bad news is that over the last five years there have been days when air quality has been considered poor or unhealthy. These days have occurred between the months of May and September, our "Ozone Season". A Quad Cities Air Quality Task Force, formed in 1998, is making strides to raise awareness and encourage reductions in activities that contribute to smog. The Task Force is composed of local public works officials, transit operators, representatives of major industries, state resource agencies, universities and interested citizens. The Quad Cities Air Quality Task Force mission is:

**MISSION**

- To maintain clean air through voluntary emission reductions;
- To provide for communication between public and private agencies on voluntary emission reductions by sharing experiences and knowledge; and
- To support individual and group voluntary measures/activities such as public education, and mobile/stationary source reduction initiatives.

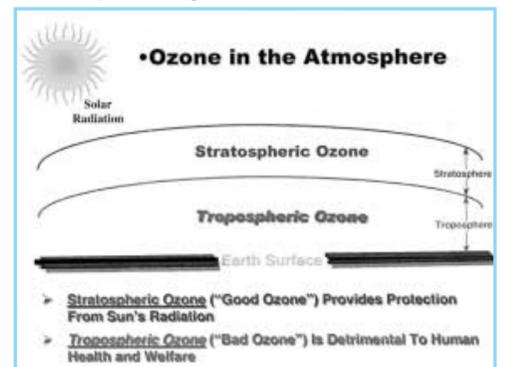


**HOW IS GROUND-LEVEL OZONE FORMED?**

Ground-level ozone (O<sub>3</sub>) forms when chemicals in the air — nitrogen oxide emissions from vehicles and industry, and evaporative fumes from gasoline, solvents and paints — react or "cook" in strong sunlight, warm temperatures and low wind speeds. This combination forms ground-level ozone, a major element of smog. Summer is ozone season!

**WHEN DOES UNHEALTHY OZONE LEVELS OCCUR?**

- Typical Weather Conditions:
- Temperature-Upper 80s to low 90s
  - Wind-Light Breeze or Less
  - Precipitation-Slight Chance to None
  - Humidity-Low or Slight



**WHAT IS THE IMPACT OF GROUND-LEVEL OZONE?**

Ground-level ozone is a pollutant, unlike stratospheric ozone in the upper layers of the atmosphere that protect the earth from ultra-violet rays. Ground-level ozone is also a severe irritant, often inflaming lung tissue and aggravating respiratory disease at higher concentrations. Sensitive groups, such as children and adults with respiratory ailments like asthma or bronchitis, are more prone to the effects of ground-level ozone. Symptoms may include reduced lung function, throat irritation and reduced immune function. When you consider that we breathe approximately 3,800 gallons of air per day compared to drinking 1 gallon of water, then it is vital to be "Aware of Air"!

### QUAD CITIES' STATUS

The Quad Cities generally experiences good air quality. Despite several days of unhealthy air, the Quad Cities is meeting federal air standards. However, the Quad Cities Area is pushing the limits with ozone levels at 94 percent of the allowed standard. Increased pollution could mean not meeting Clean Air Standards in the future and more stringent air quality regulations. This could affect new and existing businesses, construction of roadways, as well as include reformulated gasoline and vapor recovery at gas pumps. Increased health care costs could also be expected from increased lung disease and other illnesses. All costing our local economy!



Your mom  
always told you  
to take good care  
of your stuff.

Right as usual. Regular maintenance keeps your car running smooth and keeps the air clean. Your mom's advice still holds true today, especially when it comes to your car. Regular tune-ups, changing the oil and checking tire inflation can improve gas mileage, extend your car's life and increase its resale value. Plus, regular maintenance can reduce traffic congestion due to preventable breakdowns and could help reduce your car's emissions by more than half. So keep it up because—

*It all adds up to cleaner air*



### DID YOU KNOW?

**NEW CARS.** New cars today are capable of emitting 90 percent less air toxics on a per-mile basis than the uncontrolled models of 1970. (U.S. Environmental Protection Agency)

**DRIVING.** Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by 33 percent at highway speeds and by 5 percent around town. Sensible driving is also safer for you and others, so you may save more than gas money. Transportation vehicles produce anywhere from 25% to 75% of key chemicals that pollute the air, causing smog, and health problems. ([www.fueleconomy.gov](http://www.fueleconomy.gov))



**COLD STARTS.** Starting a car cold increases trip emissions compared to starting the car warm. For a 5-mile trip, starting the car cold generates about 30 percent more nitrogen oxide and 60 percent more carbon monoxide than starting the car when it is warm. (Federal Highway Administration)

**ENERGY EFFICIENT LIGHTING.** If 5,000 households, each were to replace 5 burned out incandescent light bulbs with 5 compact fluorescent light bulbs, 4 tons of ozone-forming pollutants would be removed from the air every year. (Clean Air Counts) In Scott and Rock Island Counties, there are a total of 123,046 households. They could represent a reduction of 96 tons of ozone-forming pollutants if each took this energy savings tip.



**LAWNMOWERS.** For every 1,000 old lawnmowers replaced with electric and manual lawnmowers, 17 tons of ozone-forming emissions will be avoided annually. (Clean Air Counts) New small spark engines have fewer emissions than the older models. Go ahead, splurge for that new lawn equipment... "It all adds up to cleaner air!"

**PAINTING.** Oil-based paints and varnishes can contribute to 1.5 tons of ozone-forming pollutants. They contain a high percentage of solvents that evaporate into the air and can create smog. Water-based, latex paints emit less and are easier to clean up! (Bay Area Air Quality Management District)



### SUMMER BRIDGE CONGESTION

Since 1981, an agreement has existed between the agencies maintaining Quad City Mississippi River Crossings to reduce overlapping bridge construction projects, whenever possible. In the last 10 years, a number of construction projects have been completed. For example, redecking and painting of the Centennial Bridge, redecking and painting on the Government Bridge, and other work efforts on I-74, I-80, etc. A concerted effort to defer larger projects has occurred so only one inner-city Mississippi River crossing is impacted per year. Unfortunately, plans were that the Centennial Bridge construction was to begin last year and be finishing up when work on I-74 over the Mississippi River began this year in 2003. Due to delays in the Centennial Bridge project, follow-up work due to deficiencies in the painting project on the Government Bridge and the inability to change plans on I-74 because of safety concerns, each project is moving forward simultaneously.

Both the Illinois and Iowa Departments of Transportation (DOT) meet regularly to coordinate their bridge construction and maintenance projects. Iowa DOT is utilizing the traffic controls set up by Illinois DOT from the Illinois approach to I-74. The effort appears seamless to the public but is an example of significant coordination between two states. The same can be said of the work on the Centennial Bridge between the Cities of Davenport and Rock Island and the Illinois Department of Transportation who will be assuming ultimate responsibility for the bridge after construction.

It is recognized that other solutions may exist to improve traffic flow through current construction zones and reduce emissions from idling vehicles. Discussions are ongoing with engineers and law enforcement to address some of these issues. See the travel tips below for other options to reduce congestion and improve air quality.

Under these conditions, now is an excellent opportunity to comment on future bridge plans. A direct link to I-74 Bridge long-range information is available on the Bi-State Regional Commission website, [www.bistateonline.org](http://www.bistateonline.org). Project comments can be directed to Catherine Cutler, with the Iowa DOT, at 1-800-866-4368 or [Catherine.Cutler@DOT.STATE.IA.US](mailto:Catherine.Cutler@DOT.STATE.IA.US). Bridge construction information is also available on the Bi-State website.

### TEN TRAVEL TIPS TO REDUCE CONGESTION & HELP OUR AIR QUALITY

1. Limit Driving. Combine trips or carpool.
2. Choose the bus, bicycle or walking instead of driving.
3. Shift your schedule to avoid high traffic times in the morning/afternoon.
4. Avoid excessive idling and jack-rabbit starts. Plan an alternate route before leaving home.
5. Plan ahead by leaving early. Give yourself extra time for commuting.
6. Avoid trips... Use direct deposit. Pack a lunch. Try mail-order or Internet shopping. Buy in bulk.
7. Postpone trips for non-work hours.
8. Schedule deliveries for early or late in the day.
9. Choose cleaner emitting vehicles and cleaner fuels.
10. Keep your vehicle maintained, filled with fuel & tires properly inflated!



For more information on congestion reduction and voluntary emission reduction measures, contact:

Bi-State Regional Commission –  
(309)793-6300 or visit the website at  
[www.bistateonline.org](http://www.bistateonline.org)

#### DAILY PREDICTIONS & INFORMATION

During Ozone Season, consumers can check the status of air quality daily at these websites: Bi-State Regional Commission's "Aware of Air" page [www.bistateonline.org](http://www.bistateonline.org) and [www.epa.gov/airnow](http://www.epa.gov/airnow).

