**FACES Fact:**
The word ‘asthma’ is derived from the Greek word for panting (άσθμα).

**New FACES Results Published:**
*Decreased lung function in children is related to exposure to traffic pollution during the mother’s pregnancy.*

Kathleen Mortimer and other FACES investigators recently published results from a study using data collected from FACES. The researchers found that higher exposures to traffic-generated air pollutants in a pregnant woman were associated with decreases in lung function later in her child. These associations were most noticeable in the children whose asthma was diagnosed before two years of age, in children who were black, and in children whose mothers smoked during their pregnancy.

These findings are important because they tell us that it is critical to protect pregnant women from high levels of air pollution. **Based on the study findings, recommendations for pregnant women include:**

- Understand and pay attention to daily air quality indexes
- Limit outdoor activities on days with high levels of air pollution
- Avoid smoking while pregnant

Daily air quality indexes tell us about the level of pollution in the air. Pregnant women should limit their outdoor activities on days when the index says the air is “unhealthy for susceptible people” and on “Spare the Air” days. Daily air quality indexes are published in newspapers and can also be found online at [http://www.airnow.gov](http://www.airnow.gov).

Without the involvement of our FACES participants, we could not have learned about these important findings. The results were published in the journal *Epidemiology* in July. Other researchers and public health practitioners can now use this information to continue the fight against asthma. **If you would like a copy of the journal article, please email Leah at lfaces@internet-zone.net**

**Upcoming Events:**
The final raffle is October 8th; so make sure to keep your appointments to get those tickets!

**We Want to Hear From You:**
FACES staff members will be contacting participants by phone in the coming weeks to ask your feedback about the study and what issues interest you. We hope that everyone will take a few moments to participate.

We want to thank all of our participants for your continued involvement.
**FACES Update:**

September 30, 2008 marks the end of the data collection phase of FACES. Your participation in the study has been greatly appreciated. As researchers begin their analysis of this important information, we will continue to keep you updated on the latest FACES publications and study results.

**Pine Needles and Your Health:**

Pine needles may help us learn more about traffic pollution in Fresno and its effects on children with asthma. How can this be?

We are using pine needles to measure concentrations of PAHs in different parts of the city. PAHs (polycyclic aromatic hydrocarbons) are pollutants produced when anything is burned. They are known to be associated with asthma. One major source of PAHs is found in traffic—car and truck exhaust.

This February, we collected pine needle samples from ninety-one trees in the Fresno area. This will help us to see what areas of Fresno have the highest and lowest PAH concentrations. These data will then be used to estimate our participants' exposures to PAH.

This is a totally new approach. Although PAHs have been measured in vegetation before, this method has not been used to estimate people's exposure to PAHs. By examining the PAH data along with the FACES asthma data, we will contribute to our understanding of how traffic pollution affects asthma in children.

This integral part of the FACES study is being funded by the Mickey Leland National Urban Toxics Research Center. With these samples, we will gain valuable information about the relationship between these vehicular pollutants and respiratory health in persons with asthma.

So the next time you see a pine tree on the side of the road, just think— they not only give off a fresh pine scent, they are also helping us to understand asthma.
In the News: Wildfires
This year’s fire season has been a rough one for California. Unfortunately, it has just begun. Officials predict a longer-than-usual season due to rare meteorological conditions and one of the driest years on record. In the June/July series of wildfires, there were:

- 2,096 fires in the state at the peak
- 511 buildings were destroyed
- 12,815 personnel were deployed to fight the blazes
- 1,131,655 acres were burned as of August 1, 2008.

In addition to the obvious dangers of the fires themselves, it is important to be aware of the health risks associated with wildfire smoke exposure.

Wildfire pollution can impact health:
According to the Air Quality Index, PM$_{2.5}$ reached some of its highest points in Fresno County from June 24$^{th}$ - 28$^{th}$. June 27$^{th}$ also had one of the highest peak concentrations of ozone statewide. Elevations in the levels of these pollutants coincided with the start of several large fires in nearby areas.

These recorded elevations of PM$_{2.5}$ concentrations also coincided with the start of the Basin-Complex fire in Monterey County in the last week of June. Burning 162,818 acres, this was the largest fire of the season thus far and took over a month to contain. As firefighters worked to control the Basin-Complex fire at the end of July, the Telegraph fire swept smoke across Yosemite National Park. This wildfire burned over 34,000 acres in Mariposa County in less than two weeks. The fire coincided with another peak PM$_{2.5}$ level in the Fresno area as well as high ozone levels.

What you can do to reduce exposure:
According to the Centers for Disease Control and Prevention (CDC), ways you can protect your health during wildfires include:

- Pay attention to local air quality reports
- Refer to visibility guides if available
- Stay indoor if advised and keep indoor air as clean as possible
- Do not add to indoor air pollution
- Follow your doctor’s advice

While the Telegraph fire is now 100% contained, residents should continue to consult daily air quality reports as officials predict that the fire season will last into October.

Get more information: We have included CDC’s Wildfire Fact Sheet for your convenience. It is also available online at http://emergency.cdc.gov/disasters/wildfires/facts.asp. Another resource is the Environmental Protection Agency’s brochure “How Smoke from Fires Can Affect Your Health”, available online at www.epa.gov/airnow/smoke/Smoke2003final.pdf.

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1 Calfire.com California Department of Forestry and Fire Protection. Statewide Fire Overview. August 1, 2008 9:00am.