FACES Fact:
Asthma is the #1 cause of school absenteeism among children in the U.S. and accounts for more than 14 million total missed days of school annually (from the Department of Education).

FACES Update:
We will be holding meetings in the coming months with local organizations and community groups in Fresno to discuss FACES and the data that we have gathered. We will notify you about the dates of these meetings and encourage you to attend and see the results of all your hard work over the years.

We Need You:
FACES staff members have been contacting participants about taking part in a new extension of FACES. We will collect a small amount of blood so that we can learn more about how air pollution changes the cells in the body. Changes to these cells (called "T-helper cells" or "regulatory T-cells.") are a major part of what causes asthma. This study is being conducted with Dr. Kari Nadeau at Stanford Medical Center who is an expert in this field. Participants will be asked to make a one-time visit that will take about 10-15 min. altogether. Participants will receive a $20 Target gift card for completing the blood collection. If you would like to participate in this new extension of FACES, please call Leah Melendez at (559) 294-6700.

In the News: Diesel Regulations
Diesel exhaust contributes to the fine particulate matter (PM_{2.5}) air quality problems throughout the state. Diesel pollution results in premature deaths, thousands of hospital admissions, asthma attacks and other respiratory symptoms, and lost workdays.

On December 12, 2008, the California Air Resources Board (CARB) adopted regulations that will:
- Require nearly all truck owners that operate in California to install diesel exhaust filters by 2014
- Replace engines older than the 2010 model year according to a staggered implementation schedule between 2012 and 2022
- Install fuel-efficient tires and aerodynamic devices that lower greenhouse gas emissions and improve fuel economy

Background
The December 2008 legislation follows in the footsteps of the identification of diesel exhaust particulate matter (PM) as

1 From the CARB “Diesel Health Effects Fact Sheet” found at http://www.arb.ca.gov/research/diesel/diesel-health.htm.
a toxic air contaminant by CARB in 1998. This categorization was based on its potential to cause cancer, premature death, asthma and other health problems. That 1998 decision was based partially on results of studies on railroad worker diesel exposure. One of the FACES researchers, Dr. Katharine Hammond contributed to those studies in the late 1980s. She presented her work to CARB’s Scientific Review Panel in 1998 before their decision was made.

In 2000, the ARB approved the Diesel Risk Reduction Plan to reduce exposure to particulate matter by 80% by 2020. The new December 2008 regulations follow in result of that plan. Research on children’s exposure to air pollution by FACES investigators Helene Margolis and Fred Lurman in 2004 also contributed to the adoption of the December 2008 regulations. Dr. John Balmes, on the FACES study, serves on the California Air Resources Board and was part of adopting these new diesel regulations.

Benefits of the new regulations
As a consequence of these regulations, it the following health affects will likely be avoided:

- 1,000 hospital admissions due to respiratory causes.
- 2,000 hospital admissions due to cardiovascular causes
- 150,000 causes of asthma-related and other lower respiratory symptoms
- 12,000 cases of acute bronchitis
- 950,000 work loss days
- 5,500,000 minor restricted activity days.

The economic benefit from reducing these health effects has been estimated between $48 and $69 billion. If you would like to read more about the benefits of these regulations, we have attached the CARB fact sheet.

Other FACES contributions
Data from FACES as also contributed to stricter regulations for diesel school buses. In 2003 CARB adopted an airborne toxic control measure that reduces idling in diesel vehicles near schools. It requires a driver of a school bus or vehicle, transit bus, or other commercial motor vehicle to manually turn off the engine upon arriving at a school and to restart no more than 30 seconds before departing. A driver of a school bus or vehicle is subject to the same requirement when operating within 100 feet of a school and is prohibited from idling more than five minutes at each stop beyond schools.

2 Published by CARB March 13, 2009 http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm
3 Published by CARB in 2003. http://www.arb.ca.gov/toxics/sbidling/sbidling.htm
This measure is aimed at significantly reducing exposure of children to particulate matter from diesel exhaust that concentrates in the bus cabin.

Studies like FACES play a key role in policy-making in California and the entire country. California's Air Resources Board is in a unique position to affect air pollution regulations in the state. Many of California's stricter regulations have been adopted by other state regulatory agencies throughout the country. Your participation in FACES contributes to our growing body of knowledge about air pollution and public health, leading to tighter regulations and cleaner air for everyone.

**Getting Involved, CH. 2:**

In the last newsletter, we highlighted some of the governmental agencies working with air quality and asthma in the Central Valley. In this newsletter, and the second installment of this column, we describe some of the non-governmental and grassroots organizations in the Central Valley and share how you can get involved. Local organizations such as the ones we highlight thrive with the participation of concerned community members and have greatly influenced air quality regulations in the area.

**Coalition for Clean Air**
The California Coalition for Clean Air was founded more than 35 years ago and now operates offices in Sacramento, Los Angeles and Fresno. Their mission is to restore clean, healthy air to all of California and strengthen the environmental movement by promoting broad-based community involvement, advocating responsible public policy and providing technical expertise.

In 1981, the Coalition contributed to California’s original Smog Check program, which reduces 100 tons of automobile pollution every day. Their current campaigns include:

- **Preventing Port Pollution**, centered at the Port of Los Angeles
- **Hung Out To Dry: Getting Toxics Out of Dry Cleaning**, which has already resulted in the California Air Resources Board deciding to phase out the toxic dry cleaning chemical, perchloroethylene, also known as perc, by 2023
- **Will the Governor Keep His Promise**, a campaign to enforce Gov. Arnold Schwarzenegger’s promise to "Cut air pollution statewide by up to 50% and significantly reduce California's dependence on foreign oil before the end of this decade"
- **A Breath of Toxic Air** which lobbies the state Air Resources Board to reduce pollution from household consumer products

The Coalition for Clean Air welcomes all prospective volunteers to contact Vanessa Briones at vanessa@coalitionforcleanair.org or call 213-630-1192 to get more information. For more information about this organization, visit their website at www.coalitionforcleanair.org.

**Central Valley Air Quality (CVAQ) Coalition**
CVAQ currently boasts over 70 coalition members from state advocacy groups like the American Lung Association of California and large grassroots organizations like the National Resources Defense Council (NRDC) and the Sierra Club, California to local groups such as California Communities Against Toxics (CCAT) and the Fresno-Madera Medical Society.
The CVAQ Coalition’s mission is

- To work toward awareness, act as a watchdog, advocate for policy, and mobilize communities to create clean air in the San Joaquin Valley
- To ensure that all communities, of all races, cultures, class or creed, have the opportunity to be involved in the policy development and regulatory processes improving regional health

You can contact the CVAQ Coalition using the contact form available at their website www.calcleanair.org or you can contact their Community Organizer Catherine Garoupa by email at catherine@calcleanair.org or by phone at (559) 232-1698.

Asthma and Allergy Foundation of America (AAFA), California Chapter

The Asthma and Allergy Foundation of America (AAFA), a not-for-profit organization founded in 1953, is the leading patient organization for people with asthma and allergies, and the oldest asthma and allergy patient group in the world. The California Chapter of AAFA was established in 1976 and is the largest chapter in the nationwide network.

Their mission is to control asthma and allergic diseases by:

- Educating individuals and organizations on steps that can be taken to improve sufferers quality of life
- Supporting medical research and specialized training for the healthcare community
- Increasing public awareness of the severity of asthma and allergic diseases
- Providing medication and treatment to the under-served

The California Chapter of the AAFA operates several programs including:

- the Breathmobile®, an "asthma clinic on wheels" that provides asthma diagnosis, education, treatment and research for children with asthma
- The Childhood Asthma Initiative (CAI), an in-home asthma education program designed to address the many factors that contribute to a child’s asthma
- Asthma Camp, where children with severe asthma attend summer camp. Doctors, nurses and respiratory therapists volunteer their time to teach children how to manage their asthma, while they participate in outdoor activities that will not impact their breathing.

Volunteers started the California Chapter of the AAFA more than 30 years ago and they continue to welcome volunteers today. You can sign up at their website www.aafa-ca.com or you can call their toll-free number (800) 624-0044 for more information.