Environmental Justice

Chicano/Latino Youth Conference

Sacramento City School District

March 25, 2007

Álvaro Alvarado
Air Resources Board
Respiratory Risk and School Performance in Los Angeles

Air pollution data from
cars
trucks
factories

LA Unified School District

Academic Performance Index

Photo: Green Action

Rachel Morello-Frosch, Manuel Pastor, And James Sadd (2002). Integrating Environmental Justice and the Precautionary Principle in Research and Policy Making: The Case of Ambient Air Toxics Exposures and Health Risks among Schoolchildren in Los Angeles. ANNALS, AAPSS, 584, November 2002
Funded by: CA Wellness Foundation, CA Endowment, and National Science Foundation
Respiratory Risk and School Performance in Los Angeles

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Funded by: CA Wellness Foundation, CA Endowment, and National Science Foundation
Association between respiratory risk and Academic Performance Index (API) score persists after controlling for:

- % Students receiving free school lunch
- % Teachers with emergency credentials
- % English learners
- % Students new to that school
- Average class size
- Parents’ educational attainment
Race/Ethnicity and Proximity to a Toxic Release Facility in California

- Toxic Release Inventory (TRI)
- Demographics:
  - Race/Ethnicity and income

Rachel Morello-Frosch, Manuel Pastor, And James Sadd. Unpublished data, with permission, ARB contract, ‘Air Pollution and Environmental Justice’ (04-308).
California’s Major Air Basins

San Joaquin Valley

South Coast Air Basin
Percent Living Near TRI Facility

Rachel Morello-Frosch, Manuel Pastor, And James Sadd. Unpublished data, with permission, ARB contract, ‘Air Pollution and Environmental Justice’ (04-308).
Demographics and Birth Outcomes

- Pre-term Births
- High Traffic
  - Distance Weighted Traffic Density (DWTD)
- 59,700 births in LA County, 1994-1996
- Disadvantaged neighborhoods
  - high unemployment, high public assistance, and low income

DWTD and preterm delivery
Los Angeles 1994-1996

OR (95% CI)

Summer Winter
Low Neighborhood SES

Summer Winter
High Neighborhood SES

Ponce et al EHP (2005)
Is Climate Change a Latino Issue?
Projected Increase in Extreme Heat Days

Source: Hayhoe et al, 2004
In California, Heat Is Blamed for 100 Deaths

By JENNIFER STEINHAUER
Published: July 26, 2008

Correction Appended

FRESNO, Calif., July 27 — A searing heat wave nearly two weeks old is responsible for more than 100 deaths across California, the authorities said Thursday. So overwhelmed is the local coroner’s office here that it has been forced to double-stack bodies.
Increase in Wildfires

Source of data: Westerling and Bryant, “Climate change and wildfire in and around California: Fire modeling and loss modeling” (2006), www.climatechange.ca.gov
What you can do
What you can do

- Calculate your carbon footprint
- Carpool
- Get better gas mileage
  - Every 5mph you drive over 60 is like paying 20 cents more per gallon
  - Low tire pressure wastes 2 million gallons of gas each day
Replace your light bulbs with CFLs
Turn off the lights

- CFLs last 10 times longer than standard bulbs & use 66% less energy
- If every house used only 1 CFL, it would remove the equivalent of 1 million cars from the roads
- Replace 3 of the most-used bulbs in your home and save up to $60 / yr
- Proper disposal of CFL
  - They contain mercury!
  - See SMUD web page for locations
Many people are not aware of how serious a problem global warming is or what they can do about it.

- Talk to your parents
  - A television uses 25% of its energy when it is turned off
  - Seal and insulate ducts, doors and windows
  - The average home causes more pollution than our car
  - Energy Star appliances use up to 40% less energy
Additional Resources

- ARB’s Climate Change page:
  - www.arb.ca.gov/cc/cc.htm
- Carbon footprint calculator:
  - www.coolcalifornia.org/
- Children’s Health, Environmental Justice and Neighborhood Assessment
  - www.arb.ca.gov/ch/programs/programs.htm