

Long Beach Alliance for Children with Asthma



Community Health Impacts of the Goods Movement

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The Long Beach Alliance for Children With Asthma (LBACA)



- **Vision:** LBACA is a partnership to improve the lives of children with asthma in our community
- Focus is on Long Beach and Surrounding Areas
- **Recognition:**
 - One of 7 grantees nationwide of the RWJ Foundation's *Allies Against Asthma* program
 - One of 12 grantees of CA Endowment's *Community Action to Fight Asthma (CAFA)* program

Long Beach, CA

- 5th Largest City in California
- Population: 461,522 and approximately 150,000 are children
- THE most diverse city in California
 - 45.2% Caucasian
 - 35.8% Latino
 - 14.9% African American
 - 12% Asian/Pacific Islander
- 6th in the US for % of residents living below poverty level (26.4%) and 45.2% of children are poor.



Asthma in Long Beach

- Approximately 15% of children in Long Beach have asthma.
- The most prevalent diagnosis in admissions to pediatric intensive care units.
- Hospital discharge data for 2000:
 - 879 hospital days and 1254 ER visits due to asthma for children <18 years
- Identified by nurses in the Long Beach Unified School District as the leading cause of missed school days.

Costs of Asthma

- Cost to schools for lost school days for children and to families for lost work days.
- Cost for Emergency room visits and hospital stays.
- Asthma Medications
- Just looking at our participants at baseline of enrollment total cost=\$4,792.17/patient per year (these are low income families)
- Not to mention, emotional, loss of productivity, opportunity costs (caregiver for work and child for education), family stresses...etc.

LBACA's Activities

- Individual/Family Management—Community Health Worker Program, Asthma Resource Center, Free Community Asthma Classes
- Provider, School and After-School support—Provider education, Medical Assistant Education, School Asthma screening, School nurse education
- Community Awareness—Media Campaign, Newspapers in Education Program, Coalition Development, Pharmacy Education, Targeted Outreach, Community Asthma Events, Web site and Monthly Newsletter
- Policy and Environment—Asthma-related policies, procedures and legislation, Community education and involvement in 710 Freeway Expansion, Truck Idling Bill (AB 2650), Uniform Asthma Medication Formulary, Local Air Quality Sampling and more.



Goods Movement Case Study

WEST LONG BEACH

- 90810: the zip code in Long Beach with the 4th highest hospitalization rates for asthma
- Hudson School (K-8) 1200 students
- Cabrillo High School
- Daycare center
- Center for homeless veterans
- Homeless shelter (The Village)

*CONCERN: heavy nearby truck traffic

Goods Movement Case Study

- Hudson School is immediately adjacent to the Terminal Island (103) Freeway
- Trucks on the freeway carry containers from the Ports to a nearby rail yard
- A new rail yard has just been proposed directly across the freeway from the school

Goods Movement Case Study Hudson School



What do we know about
living or going to school
close to traffic?

Children living closest to the freeways have a 2-fold risk of asthma

Gauderman at al., [USC Children's Health Study] *Epidemiology*, 2005

How Do NO₂ (from Exhaust) and Traffic Correlate with Asthma Prevalence?

Exposure metric	Odds Ratio per IQR	
	OR ^a	(95% C.I.)
Measured NO ₂	1.83	(1.04, 3.21)
Distance to Freeway	1.89	(1.19, 3.02)

Gauderman at al., [USC Children's Health Study] *Epidemiology*, 2005

18-year olds growing up in polluted communities in Southern California have a 5-fold risk of having abnormal lungs – related to a package of traffic-related pollutants (e.g., PM, NO₂, elemental carbon)

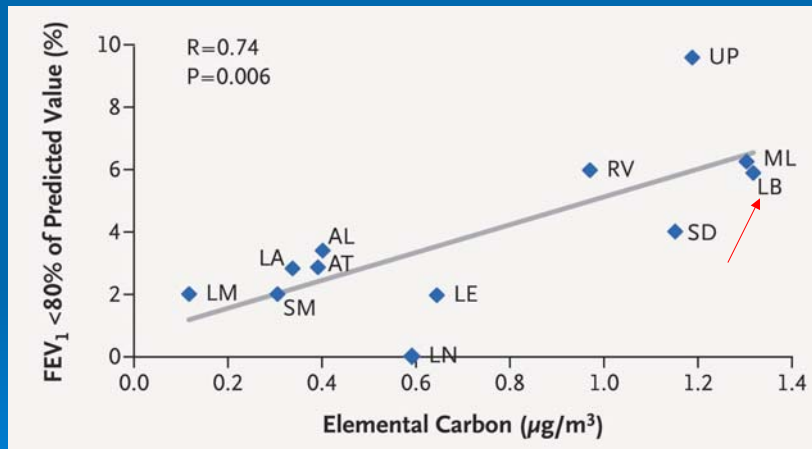
Gauderman et al. USC Children's Health Study, *NEJM*, 2004

Findings from the 10-year USC Children's Health Study (CHS)

➤ In the more polluted communities, children have:

- More school absences
- Asthma exacerbation
- New cases of asthma
 - related to high ozone levels in active children
- Reduced lung function
 - See next slide

Abnormal Lung Function



Gauderman et al [USC], *NEJM*, 2004

Case Study: Truck Traffic Near Hudson School

- We were concerned about the respiratory health of children going to school and playing near these sources of diesel emissions and other air pollutants
- So LBACA, with guidance from the University of Southern California, had a team conduct traffic counts to document the problem.

Case Study: Hudson School



Case Study: LBACA's Traffic Count Results

- 600 trucks an hour on July 19, 2005 in the afternoon
- 60 trucks in an hour on a Sunday
 - Most Port traffic is during the week day



Case Study: Verification of Heavy Traffic near Hudson

- We recently reviewed the Port of Los Angeles Baseline Transportation Study:

- “There are currently 3,300 Port trucks a day on the Terminal Island Freeway south of Sepulveda” [i.e., near Hudson School].
- One of the highest reported truck volumes in the entire Port area.



Meyer, Mohaddes Associates, Inc. April 2004



Daycare Center along Terminal Island Freeway



Suggested Solutions

- Dedicated set of “clean” (lower diesel emissions) trucks to run along the TI Freeway—doesn’t account for locomotive emissions, and still have problems with noise from trucks.
- On-Dock Rail
- Retrofitting all equipment (cleaner fuels, add on’s and/or replace engines)
- Non-diesel solutions for transport (Mag Lev)
- Adoption of POLB “Green Port Policy” recommendations
- Educate and involve community groups along the way—build trust

Community Turnout for W LB Public Hearing Re: BNSF Proposed Rail Yard



Testimony

“My name is Silvia Peña. I live in Long Beach, CA. I have 4 children and two of them have been diagnosed with asthma. My son Jonathan was diagnosed at 8 months and Giovanni at the age of 12. I believe it is caused by the contamination from the trucks idling to enter the Port of Long Beach. There are ways to reduce and eliminate triggers in the home to better the health of my child. What can I do to reduce triggers once my children walk outside our home? I ask you to please work to help make changes in our community. If we continue the way we are our children will be sick and they will not enjoy the lives we have worked so hard to provide them with.”

“The Californians who live near ports, rail yards, and along high traffic corridors, are subsidizing the goods movement sector with their health.”



Conclusions

- Long Beach and its surrounding communities bear the burden of the goods movement with their quality of life/health and with costs associated to the same.
- Community participation is key for rebuilding of trust—there is great fear about additional goods movement burdens to these communities.
- Improvements must be made to outdoor air quality for the health of the communities and its future generations.

Together We CAN Control Asthma Now!



We can all learn how.

FOR FREE INFORMATION CALL
LONG BEACH ALLIANCE FOR CHILDREN WITH ASTHMA
1-800-555-1234

