

# Air Pollution and Our Health

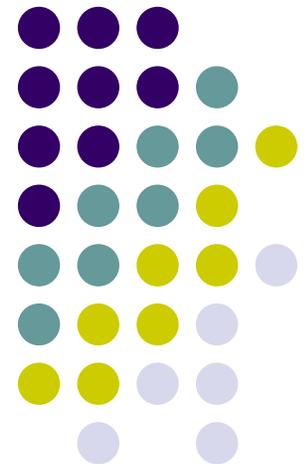
---

How our communities are impacted

Presentation to the Gateway Cities COG by:

David Pham, M.D., F.C.C.P.

June 2, 2010



# What is asthma?



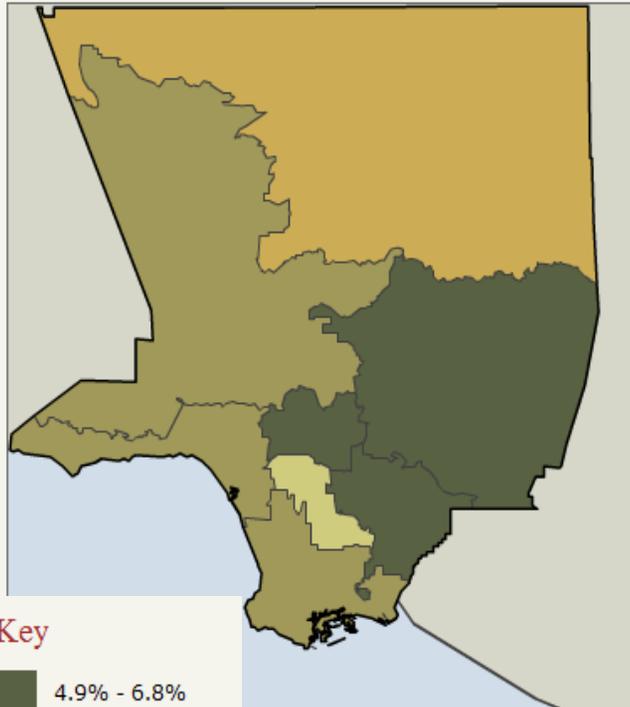
- What is it like to have asthma?
  - For children?
  - For adults?
  - For the parents of children?

# Who is impacted?

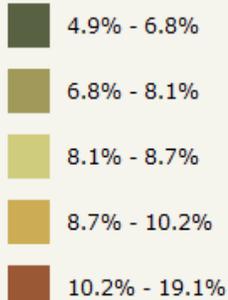


## Adults with Active Asthma, 2007

Los Angeles Service Planning Areas



### Key



- **Asthma is prevalent, and more cases are being diagnosed every day.**
- **Adults:** Over 1 in 12 adults in California has active asthma
  - 6.8% of adults in Los Angeles county:
    - South Bay 8.1%,
  - Orange County: 6.5%
- **Children:** Over 1 in 10 children in California have active asthma. It is the leading chronic condition for children.
  - LA: 10.9% in Los Angeles,
    - South 12.3%,
  - Orange County: 9.2%
- **General Trend:** In the past 10 years, asthma prevalence has increased.

# Who is impacted?



- **Disparate Impacts:**

- **Prenatal Exposure:** The children of pregnant mothers exposed to air pollutants in the first and second trimester are more prone to wheezing up to age of 4.
- **Child Exposure:** Children who lived 400 meters from the freeway had an 89 percent higher risk of asthma than children living 1,600 meters away from the freeway.
  - Rates of ED visits, hospitalizations, and mortality are two to three times higher among Blacks than the next highest race/ethnicity groups.
- **Low Income:** Prevalence of severe symptoms is almost seven times higher among adults with household incomes below \$20,000 (19.5%) compared to adults with household incomes over \$100,000 (2.8%).

# Why does air quality matter?



- We have bad air quality in this region:
  - The 2010 State of the Air report by the American Lung Association ranks the Los Angeles - Long Beach - Riverside, CA region:
    - #1 in Ozone pollution
    - #3 in year Round Particle Pollution
    - #4 in Short term Particle pollution
- ***Bad air quality triggers asthma***, and potentially causes asthma:
  - The most common hospital-based medical care triggered by elevated air pollution levels are emergency room visits for **asthma** among children aged 17 and under, with more than 12,000 visits over the three-year study period.

# Can we make a difference?



- **Smog and soot** worsen asthma and trigger attacks, and evidence suggests that diesel exhaust particles can cause asthma.
- **Key Point:** Reducing pollution levels can make a difference.

# Thank You



- Please contact me if you have any question, or would like additional information.
- David N. Pham, M.D., F.C.C.P.
  - (714) 887-0400