Asthma in California: A Surveillance Report

California Breathing and the California Department of Public Health
Description of the Report

• Comprehensive picture of the burden of asthma in CA.
• Shows trends over time-grouped by age, sex, race/ethnicity, and income to examine disparities.
• Used to monitor/evaluate public health programs, provides framework for asthma education, interventions, and policy.
Asthma Surveillance Pyramid

1. Asthma Prevalence/Severity
2. Scheduled Office Visits
3. Unscheduled Office Visits
4. ED/Urgent Care
5. Hospitalization
6. Mortality
7. Quality of Life
8. Cost
9. Pharmacy
10. Triggers
Asthma Disparities

- Race/Ethnicity: Blacks have significant disparity. Also, AI/AN, Puerto Ricans, European Hispanics, Pacific Islanders, Filipinos.
- Income: Hospital/ED visits 4x times higher for lower income.
- Sex: female adults, male children
- Age: highest among children ages 5-17. Hospitalization rates increasing among 65+
Surveillance Main Topics

• Nine key areas of examination:

1. **Asthma Prevalence**: asthma prevalence among adults and children in CA.

2. **Asthma Morbidity/ Management**: symptoms, missed school days, work/ activity limitations, routine check-ups, medication use, self-efficacy.

3. **Health Status of People w/ Asthma**: co-morbidities, smoking status, access to care, and flu vaccinations.

4. **Environmental Triggers for Asthma**: exposure to secondhand smoke, indoor exposures, type of housing by asthma status, outdoor exposures.
5. **Work-Related Asthma**: 1) New-onset asthma, 2) work-aggravated asthma, pre-existing asthma made worse by workplace conditions; Industries and occupational exposures.

6. **Asthma ED Visits**: age-adjusted visits, race/ethnicity, sex, household income, by month, and expected source of pmt.

7. **Asthma Hospitalizations**: same as ED, ALOS, average charge, and repeat hospitalizations

8. **Asthma Among Medi-Cal Beneficiaries**: prescriptions, ED visits.

9. **Asthma Mortality**: age-adjusted death rates by race/ethnicity, sex YPLL, comparisons to Healthy People 2010 targets.
Healthy People 2010

• Based on comparisons to HP2010/2020 objectives, CA should focus asthma efforts on:
  – Decreasing hospitalization among 65+
  – Decreasing ED visits children (0-4) and adults (65+)
  – HP advising patients on environmental changes
  – HP providing written asthma management plans
  – HP instructing patients on proper inhaler use
Key Findings

• 1 in 8 – have been diagnosed with asthma.
• In 2010, over $1 billion in annual charges.
• Blacks, have 40% higher asthma prevalence, 4x higher asthma ED visit and hospitalization rates, and 2x higher asthma death rates than Whites.
• Low income status is a determinate for increased asthma rates, hospitalization, ED visits, and asthma control.
• On average, exposed to 2-3 asthma triggers in the home. About 10% of adults and 5% of children with current asthma are exposed to secondhand smoke in the home.