QUICK FACTS: DISPARITIES IN ASTHMA
Asthma Coalition of Los Angeles County
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Prevalence & Morbidity
- LA County Asthma Prevalence, age 0-17: Latino 6.4%, White 8.1%, African American 18.4%, API 6.7%.\(^1\)
- LA County Asthma Hospitalizations (per 10,000 residents), all ages: Latino 11.3, White 8.0, African American 29.0, API 6.8.\(^2\)
- LA County Asthma ED Visits (per 10,000 residents), all ages: Latino 38.4, White 30.9, African American 122.7, API 16.3.\(^2\)

Clinical
- LA County Uninsurance, all ages: Latino 24.2%, White 7.2%, African American 11.8%, API 14.9%.\(^3\)
- In Los Angeles, African Americans are 2 times and Latinos 3 times more likely than whites to have difficulty accessing necessary medical care. (LACHS 2007)
- Parents of Black and Hispanic children worry more about their child's asthma but have lower expectations for symptom control and functionality, more competing priorities, and more concerns about medications.\(^4\)
- Blacks and Hispanics have worse medication compliance even when controlling for insurance.\(^5\)
- Blacks are more likely to have asthma severity underestimated by treating physicians.\(^6\)
- Nationwide, Blacks and Hispanics are twice as likely as Whites to be using beta-agonists daily, while 1/3 less likely to be on any controller medications.\(^7\)
- Hispanic children are less likely to receive an asthma action plan upon discharge from an asthma hospitalization.\(^8\)

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1 LA County Health Survey 2007.
2 California Office of Statewide Planning and development (OSHPD) Patient Discharge Database 2006.
3 California Health Interview Survey 2007.
Schools
- Estimated number of LAUSD students with asthma: 63,000.\(^9\)
- Asthma is the leading cause of school absenteeism from a chronic disease.\(^9\)
- Schools with higher rates of leaks, mold, and pest infestations have higher rates of asthma.\(^10\)
- School-based asthma education and outreach programs are known to reduce asthma symptoms and complications in participants,\(^11\) and have been shown to be cost-effective.\(^12\)
- LAUSD has a multifaceted Asthma Program, including education, case management, referrals to medical care, which has demonstrated improvement in asthma outcomes through various programs.\(^9\)
- Childcare centers are also important. The highest rate of ED visits for asthma in LA County is in the 0-4 yr old age group,\(^2\) and 43% of LA children age 0-5 spend significant time in childcare centers.\(^1\)

Outdoor/Environment
- Ozone, Nitrogen dioxide, and particulate matter are known causes of asthma and asthma exacerbations.
- LA children living in communities with higher NO2 levels have 10% slower lung growth.
- NO2 and diesel exhaust particles are associated with increased asthma symptoms.
- School absence rates increase when ozone levels increase.
- Children with asthma experience more bronchitis and persistent phlegm when living in communities with high levels of NO2 and PM2.5 levels.\(^13\)
- Proximity to heavy traffic correlates with hospitalizations.\(^14\)

Indoor/Healthy Homes
- Indoor allergens levels are higher in low-income urban households, especially when multiple families live together.
- Latinos and blacks are also more likely to develop allergic reactions to certain indoor allergens than are whites.
- The prevalence of smoking, an important trigger of asthma symptoms, is inversely correlated to education and income.\(^15\)
- Healthy home interventions are known to improve asthma outcomes.\(^16\)

A Few Other Considerations
- Genetic factors, including reactivity to environmental pollutants, contribute to poorer asthma outcomes among certain ethnic groups.
- Obesity worsens asthma symptoms, and there are higher rates of obesity among blacks and Hispanics.
- There are higher rates of anxiety/depression among low-income individuals, and this affects asthma symptoms as well as medication adherence.
- Exposure to stress and violence, single parent home, increase risk of asthma morbidity
- Lack of collective efficacy in low income neighborhoods contributes to worse asthma severity.

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