

Asthma

Data Brief



Lyda Krewson
Mayor



Melba R. Moore, MS, CPHA
Acting Director / Commissioner of Health

City of St. Louis Department of Health
Center for Health Information, Planning, and Research

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314.657.1524

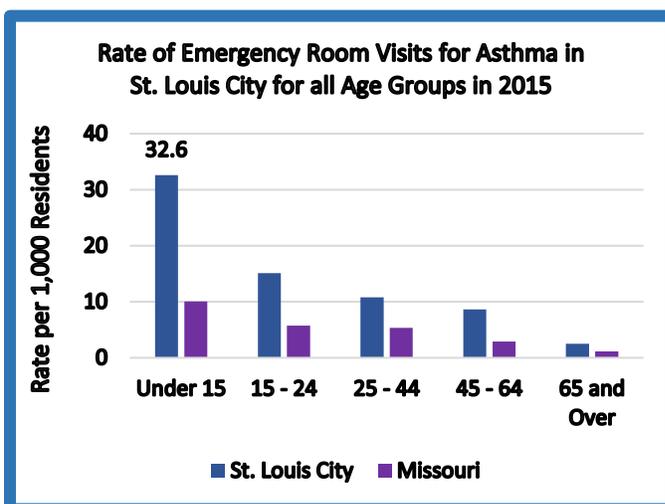
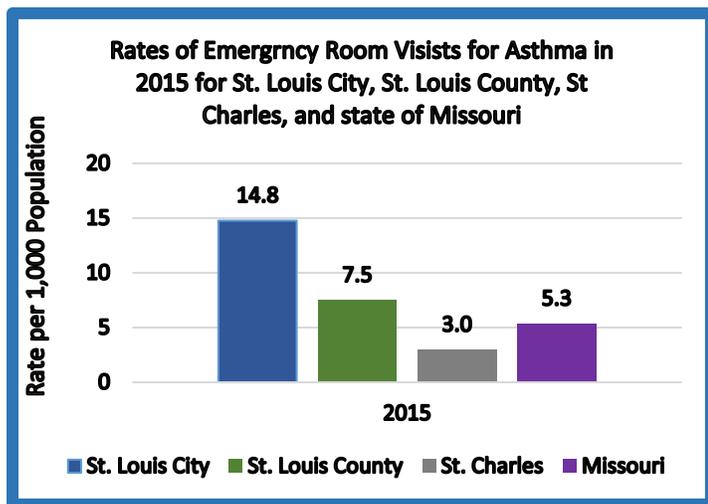
Background

Asthma is a chronic inflammatory disorder of the airways of the lungs. It is characterized by recurrent attacks of breathlessness and wheezing. These symptoms vary in severity and frequency from person to person. Asthma is triggered by various environmental factors. These include dust, pollens, allergens, molds, indoor and outdoor air pollution, environmental tobacco smoke (passive and active smoking), and occupational sensitizers (many chemicals substances). Other factors include viral infections, exercise and food allergies.

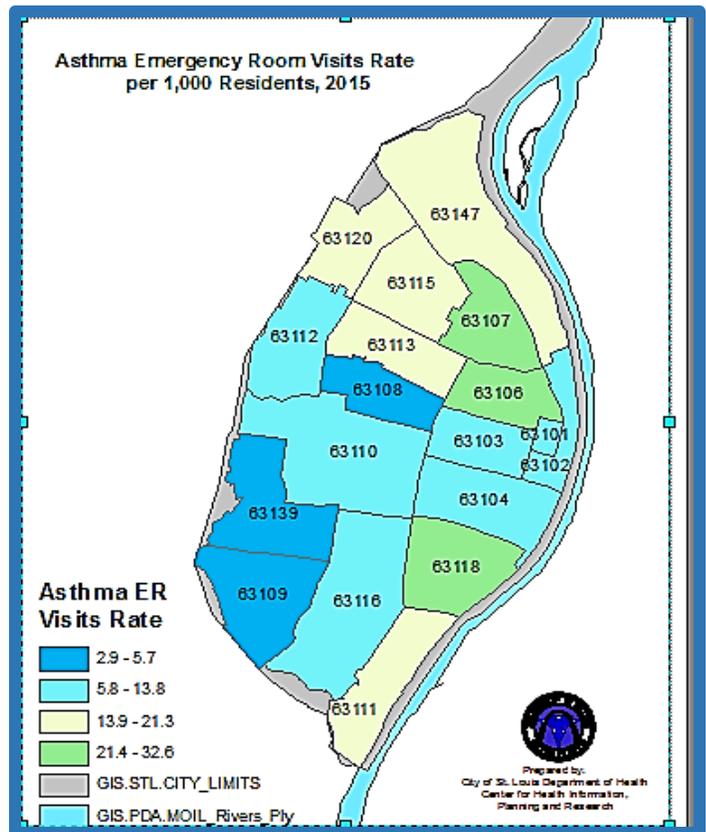
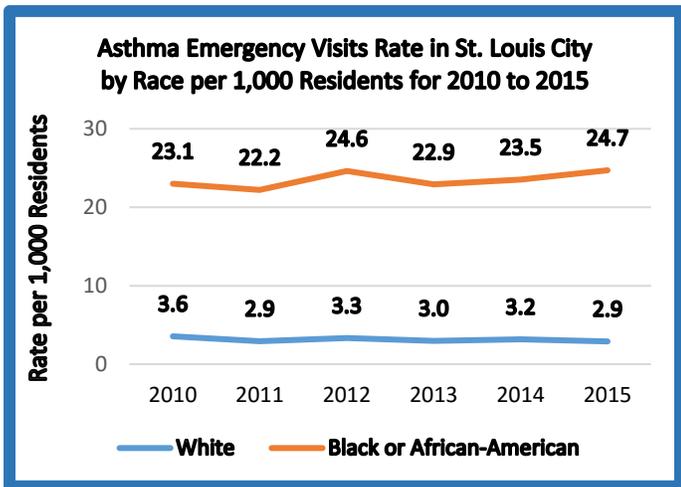
Asthma is increasing in prevalence. It attacks all age groups, but often starts in childhood. There are significant disparities in asthma morbidity and mortality for low-income and minority populations. In 2015, an estimated 7.8% of the U.S. population had asthma. Asthma prevalence was higher among children (8.4%) than among adults (7.6%).¹ Asthma is significantly greater among females (9.1%) than males (6.5%).¹ African-Americans are more affected than other racial groups. Asthma costs the US economy more than \$80 billion annually in medical expenses, days missed from work and school, and deaths.¹

City of St. Louis Asthma Surveillance

Prevalence: In Missouri, 9.9% of the adult population and 12.8% of children under the age of 18 were living with asthma in 2016.² A similar trend was observed in the City of St. Louis, having higher prevalence among children (11.2%, 95% CI 7.3 – 15.2), compared to adults (9.9%, 95% CI 7.8 – 12.0) in 2014.⁴



Asthma-related Emergency Room (ER) Visits and Hospitalizations: In 2015, asthma ER visits rates in St. Louis City were higher than the state rate and surrounding counties. There were 4,292 ER visits (14.8 per 1000 residents) and 824 inpatient hospitalizations (27.1 per 10,000 population) for asthma in the city. Children under age 15 had the highest burden of asthma ER visits (32.6 per 1,000 residents). Within that group, ER visit rates were higher in males than females (38.4 versus 26.5 per 1000 respectively).⁵ During 2010 – 2015, African Americans residents had a higher rate of asthma ER visits and inpatient hospitalizations per year than whites. Asthma ER visit rates were 24.7 per 1,000 residents among African Americans compared to 2.9 per 1000 residents for whites in 2015. Asthma ER visits were the highest in zip codes 63106, 63107, 63118 and the lowest in zip codes 63139, 63109, 63108.⁵



Asthma Deaths: Asthma deaths are uncommon and have decreased nationwide since the mid- 1990’s. During 2010-2016, there were, on average 9 deaths per year in the City of St. Louis. Although, there had been a decline in asthma death rates from 2.5 per 100,000 residents in 2010 to 2.3 per 100,000 residents in 2016. Asthma death rates in the City of St Louis in 2016, remained higher than the state of Missouri (1.2 per 100,000 residents), and St Louis County (1.32 per 100,000 residents). Death rates were the highest among adults age 65 years and over. There were more asthma deaths among African Americans compared to white residents.⁵

Asthma Control: According to the CDC, controlling asthma requires a multifaceted approach focusing on patient behaviors; home, work, and school environments; knowledge and skills of health care providers; and public health programs and policies that influence asthma management practices. The City of St. Louis Department of Health promotes asthma awareness across home, school (including daycare), and health care settings as well as outreach programs. The department educates the community on environmental triggers and also on action plans that can greatly help those who suffer from asthma. The department has a program, Asthma Friendly, which conducts home assessments and connects residents to healthcare providers and educates families on ways to reduce asthma triggers.

Trends and Future Directions.³ The CDC has launched: “Comprehensive Asthma Control through Evidenced-Based Strategies and Public Health-Health Care Collaboration.” The program uses a stepwise approach that focuses on:

- Ensuring availability and access to guidelines-based asthma care management for all people with asthma
- Increasing individualized services like home –based trigger reduction for poorly controlled asthma
- Encouraging structures and strategies that enable people with asthma to receive more coordinated and complete asthma care

Sources:

1. www.cdc.gov/asthma/asthmadata.htm
2. <http://health.mo.gov/data/brfss/2016> BRFSS Key Findings Report.pdf
3. www.cdc.gov/asthma/nacp.htm
4. health.mo.gov/asthma
5. <http://health.mo.gov/data/mica/MICA/>