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## Asthma in St. Louis: A Crisis of Equity

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# Asthma in St. Louis: A Crisis of Equity

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## Introduction

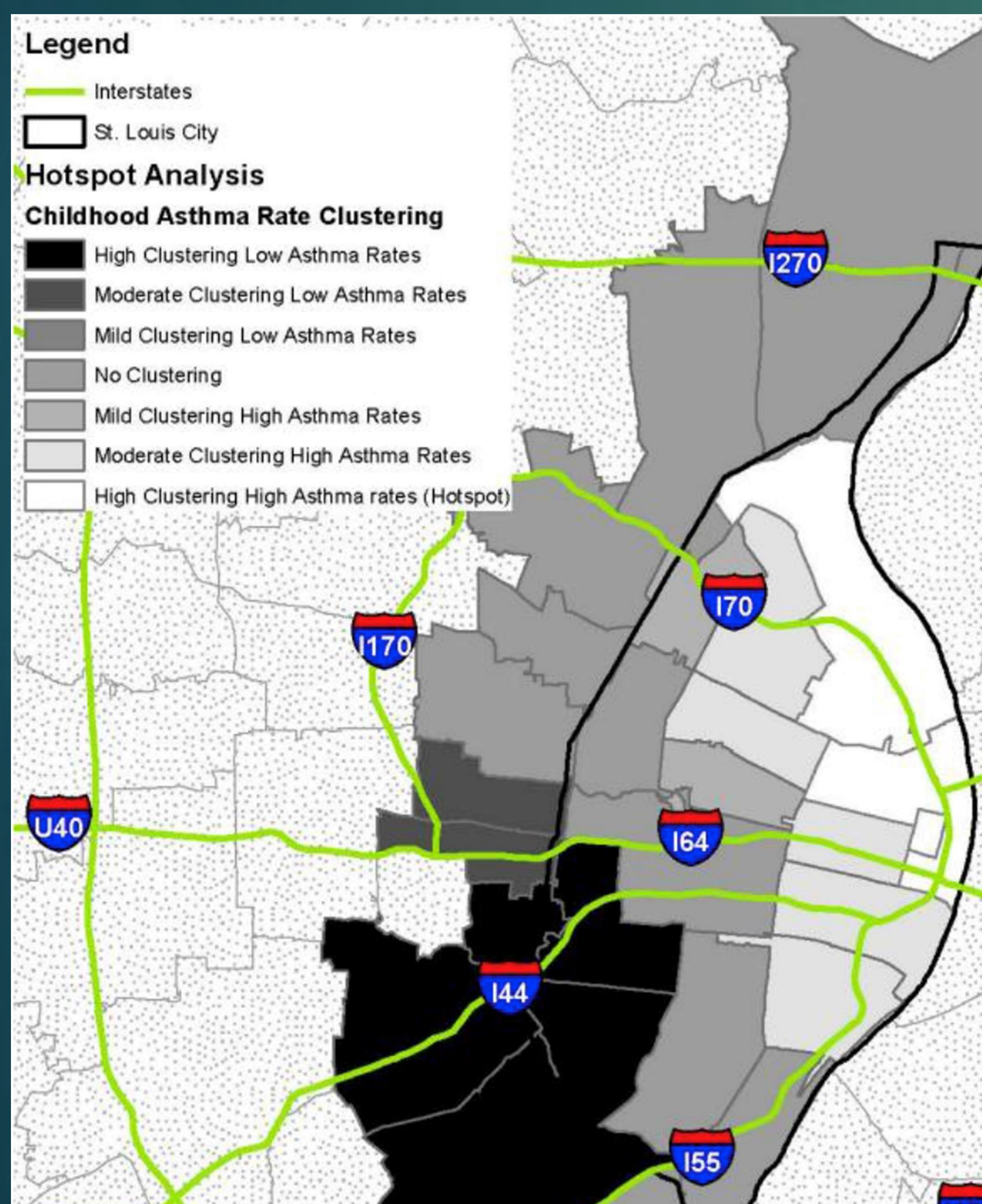
- Asthma is a complex disease where inflamed and swollen airways can trigger respiratory distress.
- Triggers include mold, pollen, tobacco use, lead, asbestos, and pollution.
- St. Louis is an automotive, post-industrial city, exposing it to potentially asthma-triggering pollutants.
- St. Louis City has “asthma hotspots” which are zip codes with high rates of asthma hospitalizations.
- These zip codes are all comprised of predominantly black neighborhoods.



St. Louis historically cleared black neighborhoods for roads and industries, resulting in further segregation and pollution.

## Conclusions

- Further research is needed on the specific sources of ozone and other pollutants in St. Louis for effective solution creation.
- Healthy housing is essential: well-ventilated homes free of lead, asbestos, household pests, and mold need to be accessible in St. Louis asthma hotspots.
- Preventative care in hotspot areas is limited by a lack of nearby providers and public transport, as well as low vehicle access.
- Access to nearby health providers and public transportation could help prevent asthma emergencies and reduce the burden on emergency rooms.



## Research Findings

- In 2015, St. Louis had 11.9 asthma-related hospitalizations and 81.4 ER visits per 10,000 people – nearly double state averages.
- African-American children made up 86.4% of 2015 asthma-related Emergency Room visits and 71% of inpatient hospitalizations, despite being half of the population.
- St. Louis asthma hospitalizations have been linked to day-to-day concentrations of ozone and other pollutants in time series studies.
- Zip codes with high asthma rates have 67% of all public housing facilities and exhibit high concentrations of condemned properties.
- 1.9% of pediatricians and allergy specialists are in areas with high asthma rates, and only 5 pharmacies are located in asthma hotspots.
- Hotspot zip codes have lower rates of vehicle ownership than non-hotspot zip codes.



It can take several hours to get to and from a health appointment on public transport – going to the doctor could mean taking a day off work.

## Sources:

Missouri Dept. of Health, MICA 2015.  
Ebelt et al., “Fine Particulate Matter Components in the St. Louis Area,” 2015.  
Harris, “Mapping Inequality: Childhood Asthma,” 2019.  
Missouri Environmental Public Health Tracking Program, “St. Louis City Environmental Profile,” 2019.