My Community Advisory Board

In This Newsletter

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<u>August Events</u>

- Teen Summer Reading Sign Up, Wyandanch Public Library, Until August 16
- Summer Concert,

 Wyandanch Public Library,

 August 21.
- Bilingual Storytime, Wyandanch Public Library, August 26
- Classes Start. Wyandanch Public Schools. September 4.

Editor: Tara Lauther

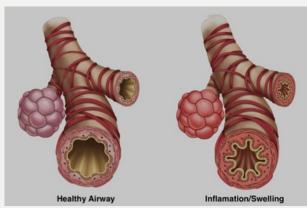
CAB Coordinator:
Dr. Scott Carlin
NYSCHECK.ORG/Wyandanch



A Report on Asthma in Wyandanch

By Zachary Lee, Roslyn High School, Wyandanch CAB Intern

sthma is a chronic lung disease, which inflames the airways, fills them with mucus, and tightens them, making breathing difficult. Symptoms include coughing, wheezing, shortness of breath, and chest tightness. It can affect people of all ages, and often begins development in early childhood. Pollen, dust, mold, and other air pollutants have been associated with asthma.



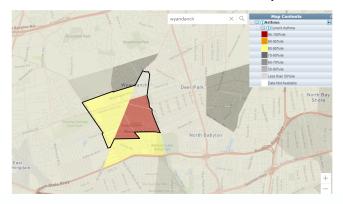
Shutterstock image ID: 1357052156, Reference 1.

When inhaled, they can inflame the airways, shown above. This increases the possibility of an asthma attack or infection. Asthma affects 262 million people worldwide; in the United States the Center for Disease Control estimates there are 25 million cases. This report looks at asthma in Wyandanch and Suffolk County.

Asthma in Wyandanch

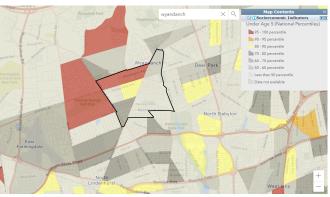
Asthma rates are higher in Wyandanch than in Suffolk County. In 2024, asthma prevalence in parts of Wyandanch ranked in the 95 to 100th percentile nationally. Most of these cases in Wyandanch

Asthma Prevalence as a National Percentile in Wyandanch



Asthma Prevalence Within Wyandanch. Source: Environmental Protection Agency EJSCREEN (2024)

Proportion of the Population Under Age 5 as a National Percentile

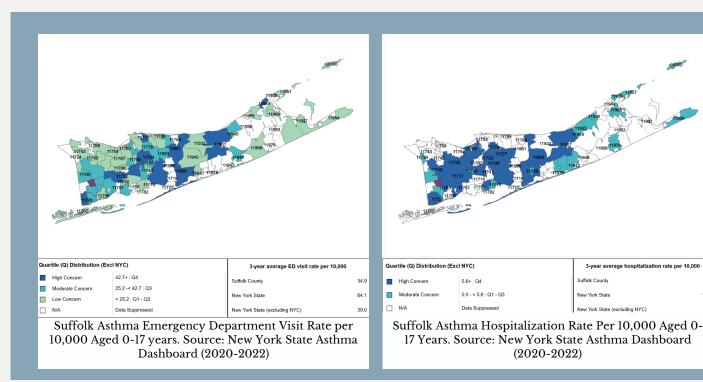


Proportion of Wyandanch Population Under Age 5. Source: Environmental Protection Agency EJSCREEN (2024)

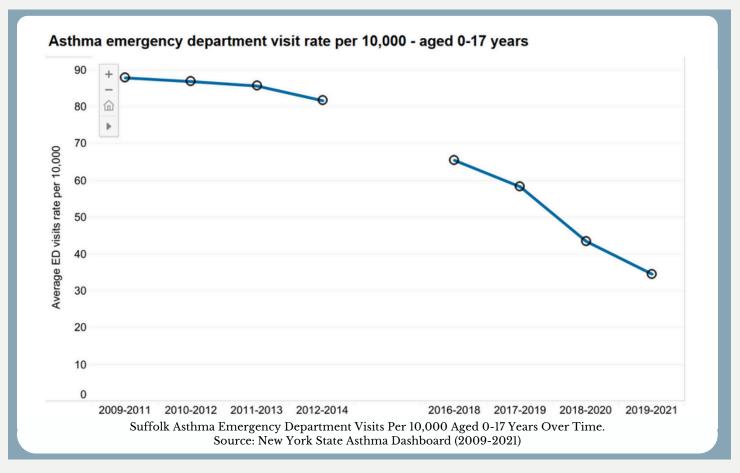
(outlined in the map above) are concentrated in the southeastern portion of the community in the red zone, south of Long Island Avenue and east of Straight Path. The yellow area south of (below) the red zone on the asthma map is in West Babylon. The yellow area to the west of the red area is also part of Wyandanch; asthma rates here are in the 80 to 90th percentile. Asthma usually starts development in children below the age of 5. The second map, to the right, shows areas of Wyandanch and surrounding communities by their proportion of children under age five. The neighborhood centered on Washington Avenue has the highest proportion of young children (95 to 100th percentile). Just south of that, along Garden City Avenue, is shown in yellow (80 to 90th percentile). These high percentage neighborhoods should receive more attention to reduce their environmental risks.

Wyandanch Compared to Suffolk

In Wyandanch, asthma emergency department visits and hospitalization rates, shown below, are at moderate to high concern, with rates of 85.9 per 10,000 people and 16.6 per 10,000 people, respectively, between 2020 and 2022 on average.



These maps (page 2) show that much of Suffolk County is of moderate to high concern for asthma among young people. There has been a significant decline in the number of asthma-related emergency department visits for young people in Suffolk, shown in the graph below. For places like Wyandanch, more progress is needed. This can begin with further reductions of outdoor and indoor air pollutants. Many younger individuals can develop asthma as a result of these air pollutants (see page 4).



Jamason's Story⁶

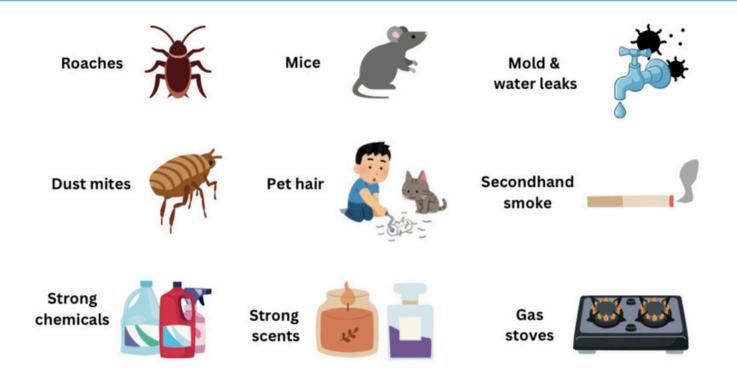
The CDC tells the story of 18-year-old Jamason to highlight the struggles teens face who experience asthma. Jamason knew he had to avoid smoking cigarettes, even when his friends tried to peer pressure him to do so. Despite his efforts, he became a victim to secondhand smoke. While working, his coworkers were smoking near him, causing a severe asthma attack. For the 4 days he was hospitalized, he

underwent breathing treatments until he was comfortable breathing again, but he knew once he left the hospital, he could be exposed to secondhand smoke again. This fear gnawed at him, and continues to remain with him even to this day.

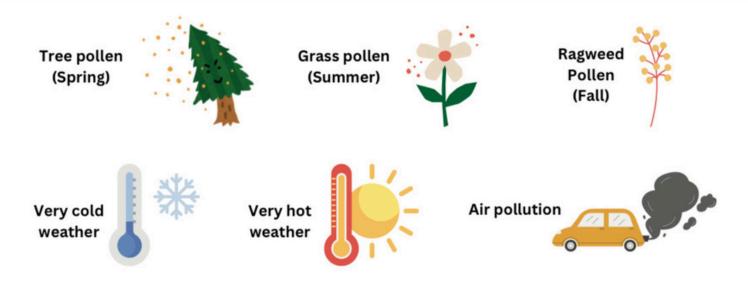
Jamason's story shows how dangerous smoking can be, even if it's just second hand smoke. In fact, this is true for many pollutants; they can irritate the lungs and cause severe asthma attacks, leading to loss of breath, hospitalizations, as in Jamason's case. The most severe attacks can even lead to death. (See Ella's story on page 5.)

Source: US CDC, 2025

Common Indoor Asthma Triggers



Common Outdoor Asthma Triggers



Source: Shutterstock: various images/Team Kids! Environmental Asthma Program, Icahn School of Medicine at Mount Sinai. Reference 1.

Ella Roberta⁴

Ella Roberta was born in 2004 a healthy child. However, at the age of 7, she developed asthma. Little concern was raised about the ailment because asthma is a common childhood condition and isn't typically associated with lethality.

Life continued as normal for Ella, participating in sports and school as any healthy child. This all changed when she suffered a severe coughing episode resulting in a lack of oxygen getting to the brain. She survived this incident, but just a week later, she suffered another coughing fit, resulting in a coma and hospitalization. The next couple of years she had to undergo multiple tests to find the cause of her asthma and was hospitalized often. On February 15, 2013, she suffered a severe asthma attack, and passed away.

Ella lived in an area with high levels of pollution, such as Wyandanch, and it was only after her death that doctors realized her asthma was linked to the air pollution. Asthma is not usually thought of as a deadly condition, however, in the right circumstances, it can be. This story is from the U.K. It is a warning for other communities around the world.

Conclusion

Asthma is a dangerous condition, and its risks deserve our serious attention. Asthma is an inflammatory disease of the lungs. There is no cure for asthma, but symptoms can be controlled by limiting exposure to irritants or using inhalers.

NYSCHECK's website provides several educational resources for families seeking information on asthma, especially for children (see page 4 and the references below). Families can use these resources to help reduce the risks of harmful asthma attacks, with guidance from your family pediatrician.

It is better that preventative action, such as pollution prevention, takes place to stop the spread of asthma early. This will reduce stress on the health care system, improve the health of children, and it will also help to reduce the other negative impacts from air pollution. Although asthma hospitalizations have been on the decline among young people in Suffolk County, asthma prevalence is still high. While genetics is a risk factor for developing asthma, the symptoms are often triggered by indoor or outdoor air pollution. More research is needed to understand if specific pollutants are responsible for elevated levels of childhood asthma in Wyandanch and other communities on Long Island. With that understanding, those pollution sources could be better regulated for the safety of vulnerable children and adults.

Selected References

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- 5. U.S. Centers for Disease Control and Prevention. (2023, May 10) Most Recent National Asthma Data. https://www.cdc.gov/asthma/most recent national asthma data.htm
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- 7. U.S. Environmental Protection Agency. (2024). *EJSCREEN* (2.3) [Data set]. Environmental Protection Agency. https://ejscreen.epa.gov/mapper/

