



DATA BRIEFING

ASTHMA

MAY 2023



Greater Waterbury
HEALTH
PARTNERSHIP

INTRODUCTION

Asthma continues to be a growing concern for Waterbury and Greater Waterbury. As an agency that operationalizes data to inform solutions, Greater Waterbury Health Partnership is releasing a series of deeper analytics into certain health indicators for the region. In this Brief we examine asthma and the incidence of asthma by race, ethnicity and age and across several scenarios like schools, towns, state and a Federally Qualified Health Center. The impact of asthma and the factors that contribute to it are clearly demonstrated in this report.

OVERVIEW OF ASTHMA

Asthma is a common chronic disease that has steadily increased in prevalence since the COVID-19 Pandemic. It affects children and adults and disproportionately affects certain racial and ethnic groups due to disparities related to social determinants of health and structural racism. The Asthma and Allergy Foundation of America defines asthma as, "...a long-term disease that causes inflammation and swelling of the airways. This results in narrowing of the airways that carry air from the nose and mouth to the lungs". While there is no cure for asthma, appropriate treatment and reduction of asthma triggers can prevent asthma attacks and keep symptoms under control.

ASTHMA SYMPTOMS, TRIGGERS, AND ENVIRONMENTAL FACTORS

Asthma symptoms can include coughing, wheezing, trouble breathing and chest pain or tightness. These symptoms can be exacerbated by certain triggers that can be environmental such as pet dander and dust or related to activities like sports and exercise. It is critical that those with asthma have access to and understand how to use appropriate medications, have an asthma action plan, and understand their triggers. Access to medications, education, and awareness of triggers can help keep asthma under control and prevent asthma attacks.

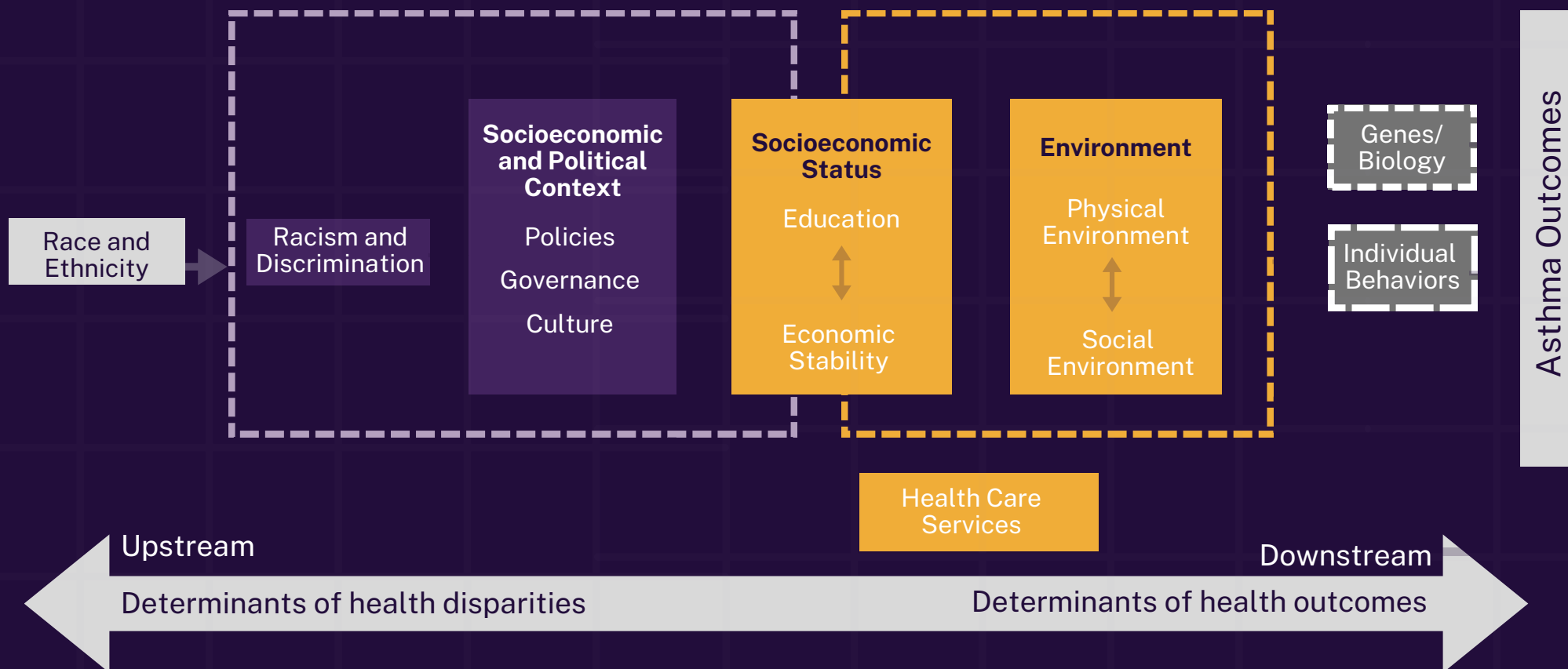
(Asthma and Allergy Foundation of America, 2023)

DISPARITIES IN ASTHMA

The prevalence of asthma has increased across the board, but affects People of Color and Latinos at a disproportionately high rate. Below is a graphic from the Asthma and Allergy Foundation of America showing the Framework for Root Causes of Asthma disparities.

(Asthma and Allergy Foundation of America, 2020)

AAFA'S FRAMEWORK FOR ROOT CAUSES OF ASTHMA DISPARITIES



NATIONAL DATA

The most recent asthma rates from the Centers of Disease Control and Prevention (2020) are represented in the graphic to the right.

Connecticut is shaded red representing a 10.6-12.4 percent quintile for adults.

In the second graphic,

Connecticut is also shaded red representing an 8.5-11.6 percent quintile for children.

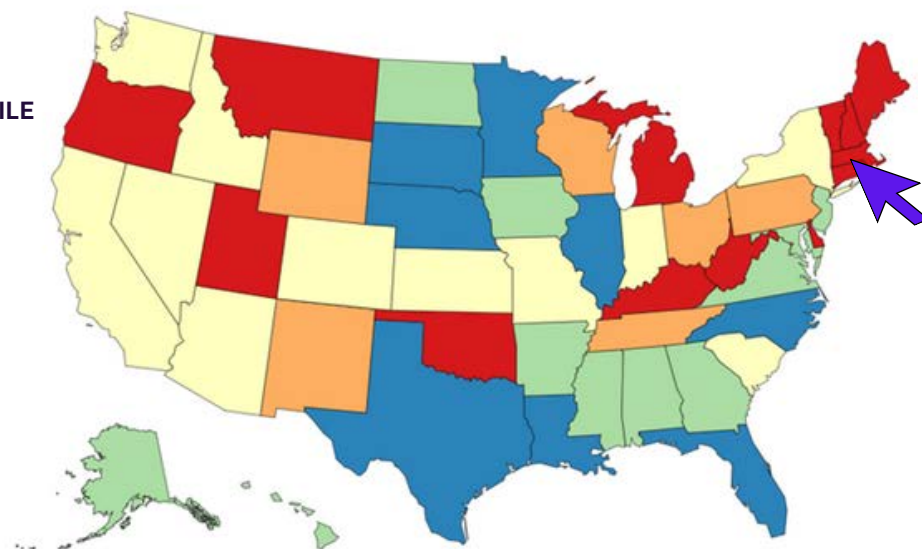
Looking at the two map images, it is evident that

Connecticut is one of the states experiencing the highest asthma prevalence, nationally.

(Centers for Disease Control and Prevention, 2023)

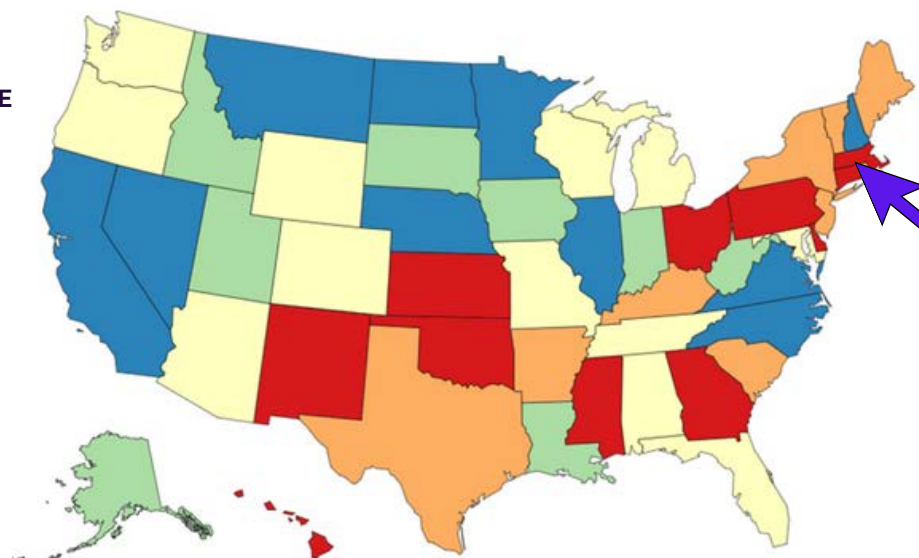
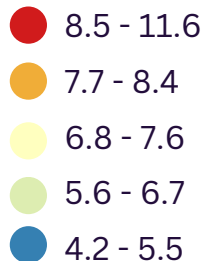
CENTERS FOR DISEASE CONTROL AND PREVENTION

ADULT PERCENT QUINTILE



Current Asthma Prevalence by State or Territory | 2020 Adults

CHILD PERCENT QUINTILE



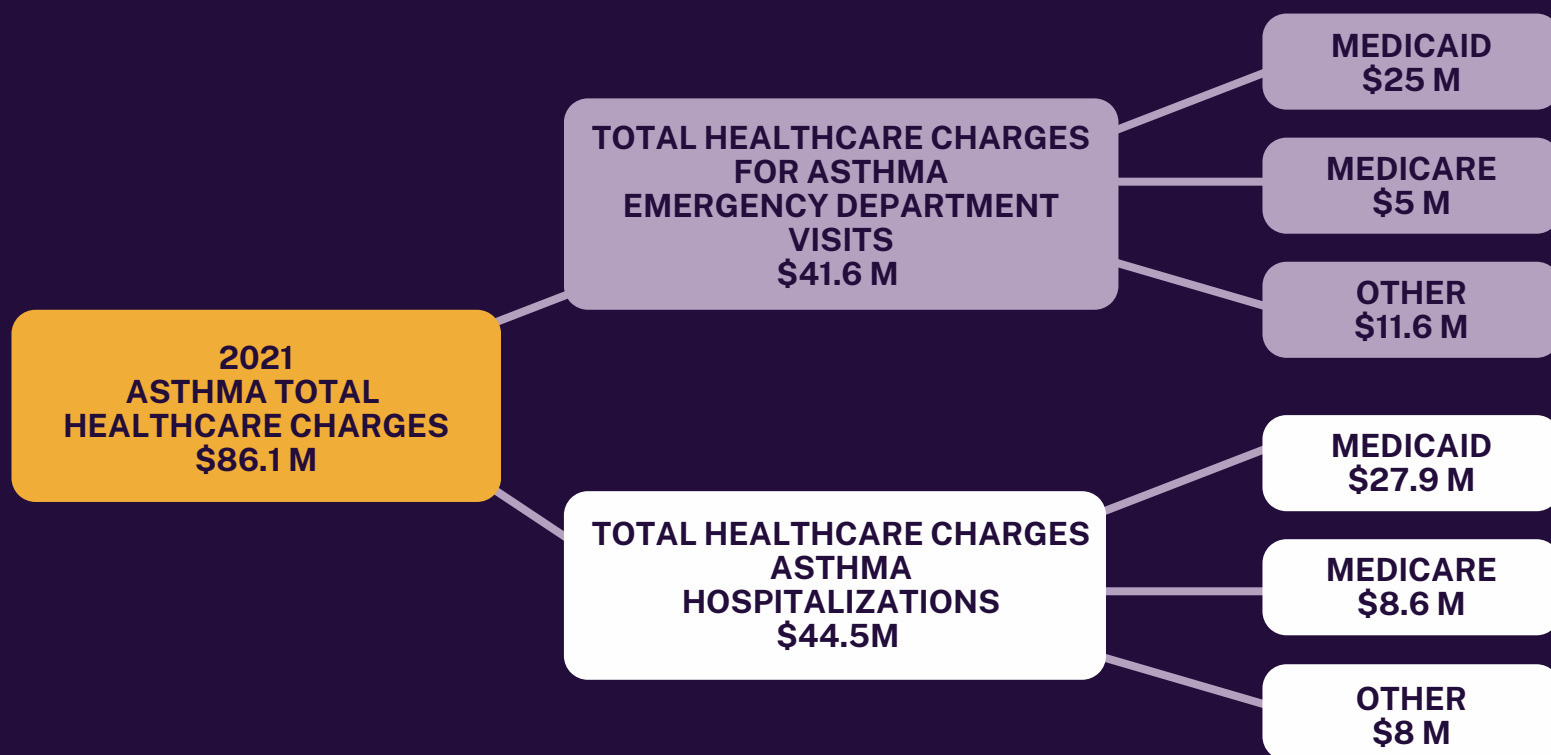
Current Asthma Prevalence by State or Territory | 2020 Children

CONNECTICUT THE COST OF ASTHMA



In CT it has been found that women and residents of Hispanic and non-Hispanic black communities are disproportionately affected by asthma. The state's five largest cities (Bridgeport, Hartford, New Haven, Stamford, and Waterbury), with a total population of 652,568, represent only 18% of Connecticut's total population, yet they account for nearly half (45%) of the \$86.1million for asthma total healthcare charges.

(Connecticut Department of Public Health, 2021)



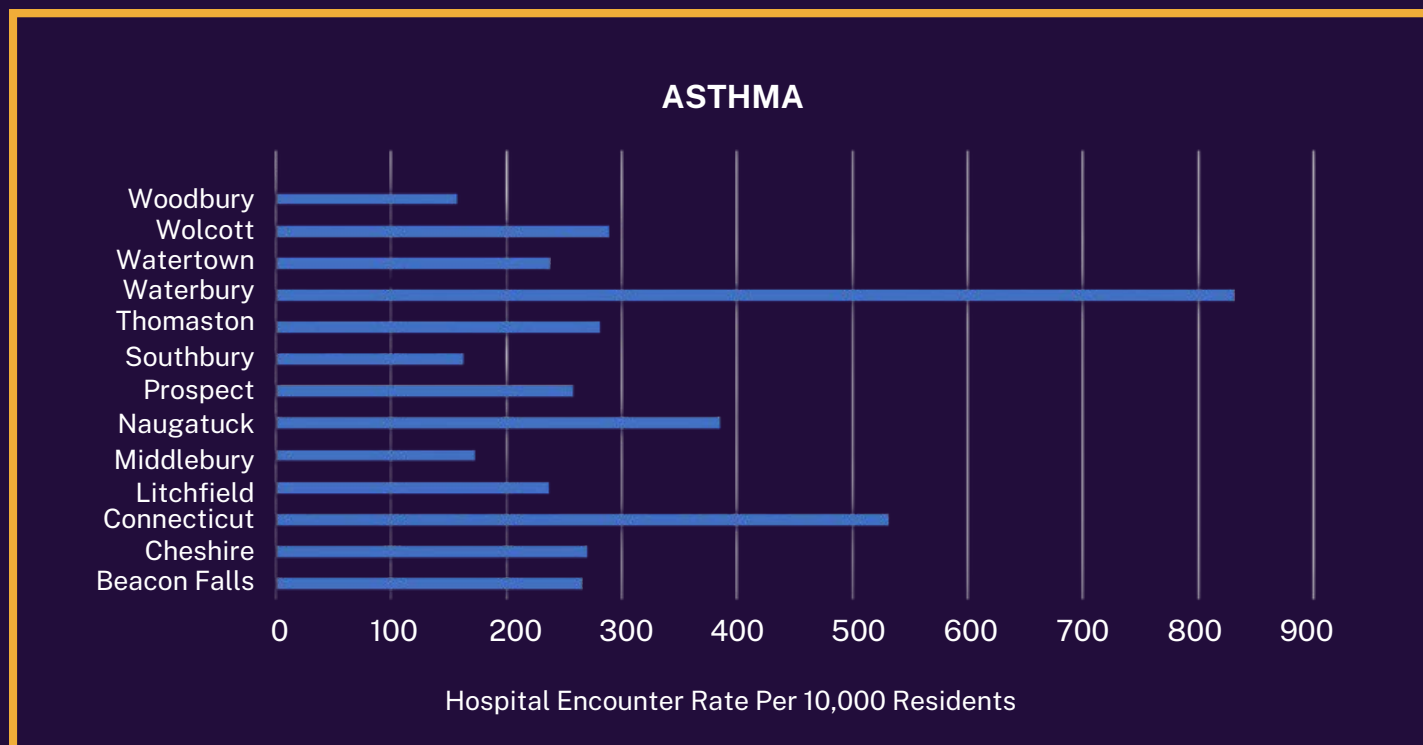
ASTHMA

IN GREATER WATERBURY

Data from the Community Health Needs Assessment compares asthma rates in each of the towns of Greater Waterbury and the State of Connecticut overall.

It is evident in the chart below that Waterbury residents are significantly and disproportionately affected by asthma, with rates surpassing all other towns in Greater Waterbury and the State overall.

(Greater Waterbury Health Partnership. (2022). Community Health Needs Assessment: 2023-2026)



WHY IS ASTHMA A CRITICAL ISSUE FOR WATERBURY?

The 2022 Community Health Needs Assessment shows that

Waterbury residents experience a significantly higher rate of asthma than the rest of the Greater Waterbury region and the State of Connecticut.

The social determinants of health create barriers to appropriate treatment and disease management.

Asthma rates are rising in Waterbury since the pandemic

Action, advocacy, and improved health literacy are needed to raise awareness around asthma to remove barriers to equitable asthma care.

AIR QUALITY

Air Pollution can exacerbate asthma symptoms. Ozone and airborne particles are two types of air pollution. Ozone is a gas that is known to irritate the lungs and airways, reduce lung function, and is directly related to asthma attacks. Airborne particles are found in haze, dust, and smoke. These particles can make asthma symptoms worsen.

(Asthma and Allergy Foundation of America, 2015).

AIR QUALITY IN WATERBURY

This table from the 2023-2026 Greater Waterbury Community Health Needs Assessment represents the Respiratory Hazard Index Score in Waterbury as compared to the State of Connecticut and United States. This score represents the potential for non-cancer adverse health effects. While scores less than 1.0 indicate adverse health effects are unlikely, and scores of 1.0 or more indicate a potential for adverse health effects.

REPORT AREA	TOTAL POPULATION	RESPIRATORY HAZARD INDEX SCORE
WATERBURY CT	110,365	0.23
CONNECTICUT	3,574,094	0.23
UNITED STATES	312,566,557	0.32

StayWell Health Center Data

2018 - 2022 ASTHMA DATA

StayWell Health Center is a Federally Qualified Health Center and the largest pediatric provider in Waterbury.

ASTHMA VISITS OVER THE PAST 5 YEARS BY RACE/ETHNICITY

This chart illustrates the change in number of asthma visits over the past 5 years by race/ethnicity. Overall, there has been a

111% increase in asthma visits from 2018 to 2022

Non-Hispanic Black or African American individuals experienced a

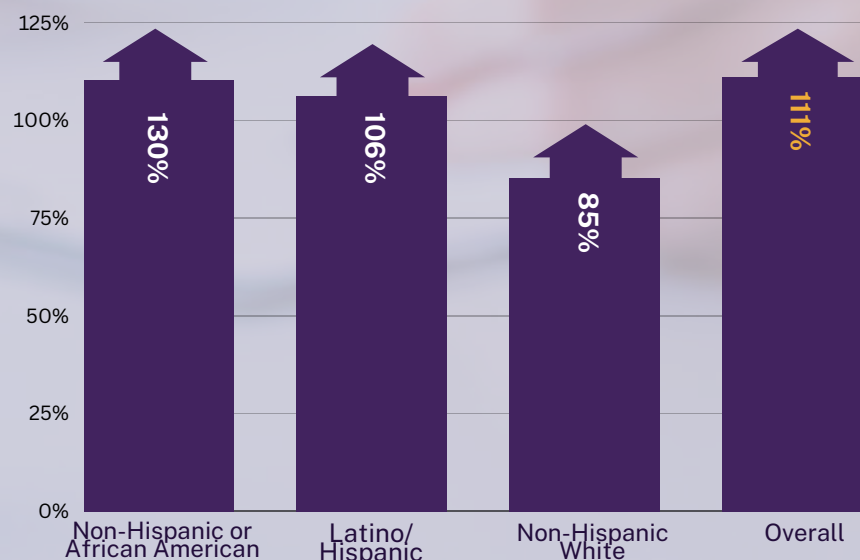
130% increase in asthma visits.

Latino/Hispanic individuals experienced a

106% increase. These increases are greater than the

85% increase in visits by Non-Hispanic White individuals.

StayWell Health Center Asthma Visit Count
5-Year Change by Race



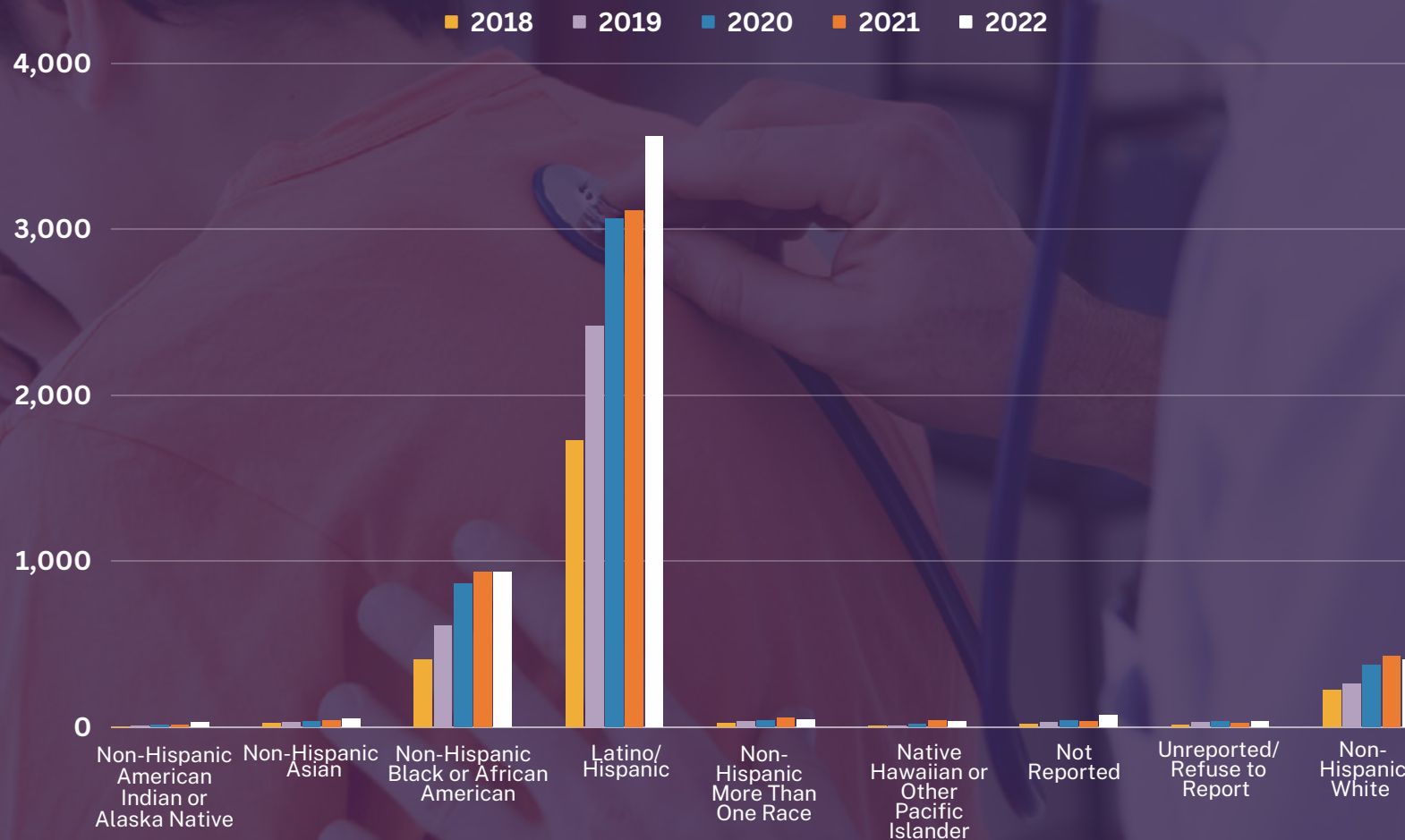
The next pages demonstrate the impact of asthma on StayWell's population.

ASTHMA

VISITS BY RACE/ETHNICITY

When stratified by race/ethnicity, data from StayWell Health Center asthma coded visits shows that asthma disproportionately affects Latino and Non-Hispanic Black individuals at a higher rate.

StayWell Health Center Asthma ICD Code Visits 5-year trend by Race/Ethnicity

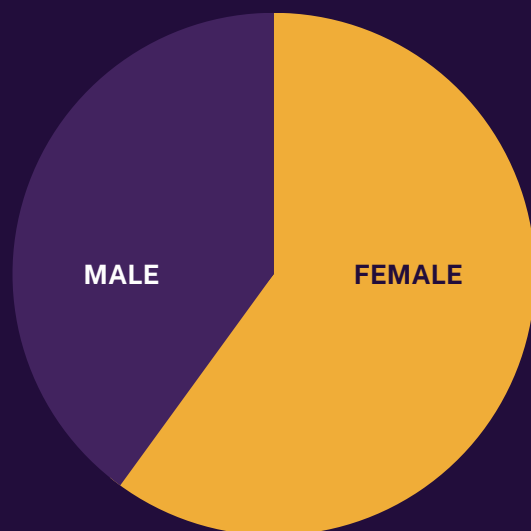



StayWell Health Center Asthma Data

VISITS BY GENDER

Data from StayWell Health Center (2018-2022) shows that the majority of asthma visits over the last five years were for female patients.

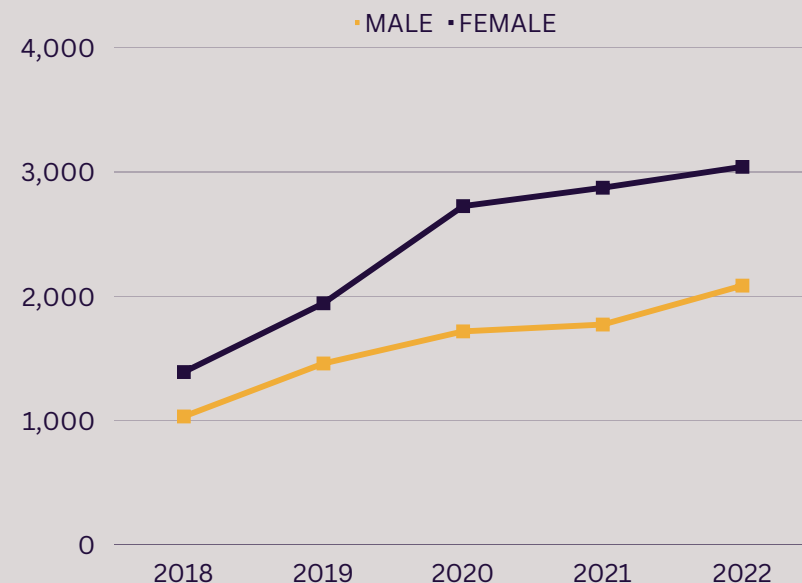
% OF ASTHMA VISITS BETWEEN 2018 - 2022 BY GENDER




60% of patients seen for Asthma over the last 5 years were **Female**

While asthma visits have increased over the past five years for both male and female patients, the gap between male and female patients has also increased, with female patients having significantly more asthma visits.

STAYWELL HEALTH CENTER ASTHMA VISIT COUNT YEARLY TREND BY GENDER

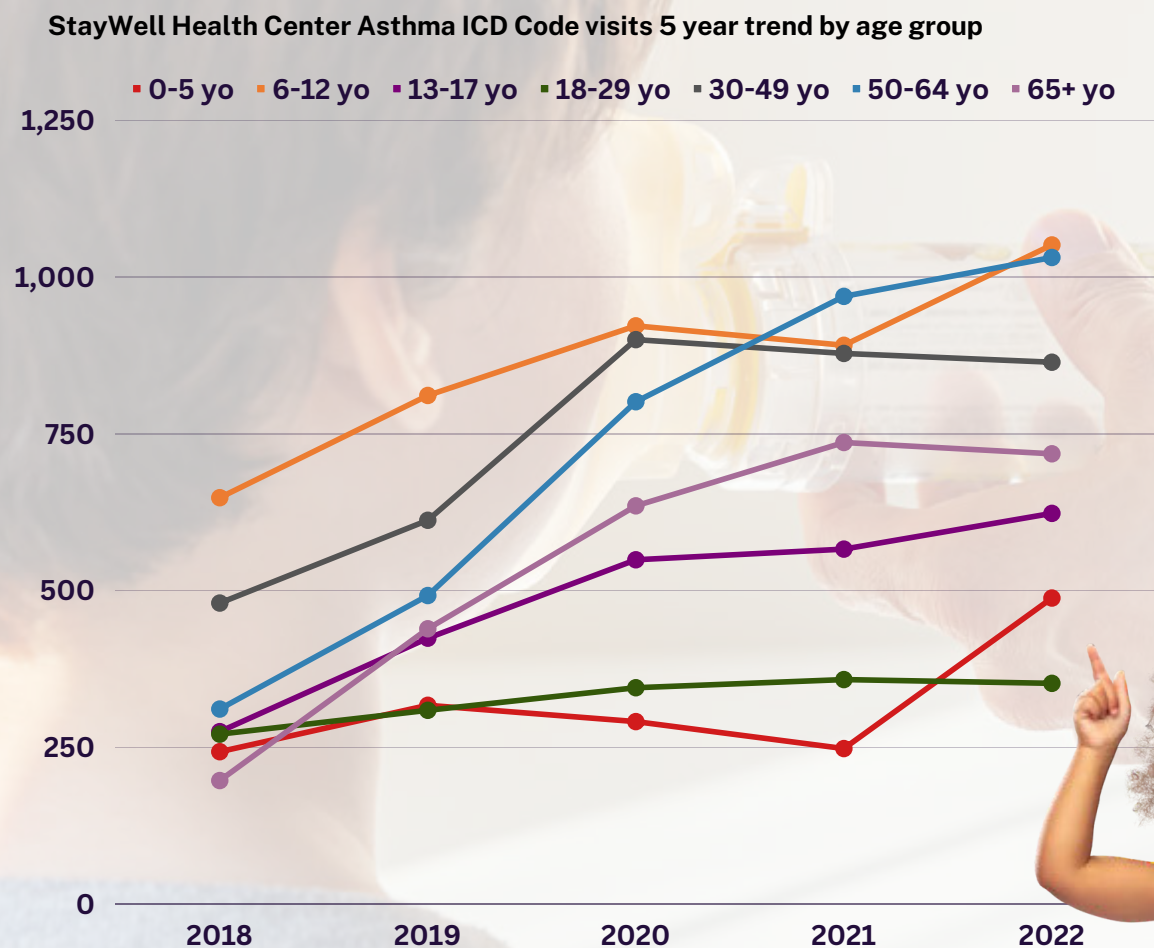


StayWell Health Center Asthma Trends

Asthma

is one of the leading causes of absenteeism in school children!

The chart below illustrates asthma encounters of StayWell Health Center patients in Waterbury. These trends demonstrate that children, particularly ages 0-5, are experiencing the largest increase.



*the youngest people
are seeing the biggest
INCREASE*



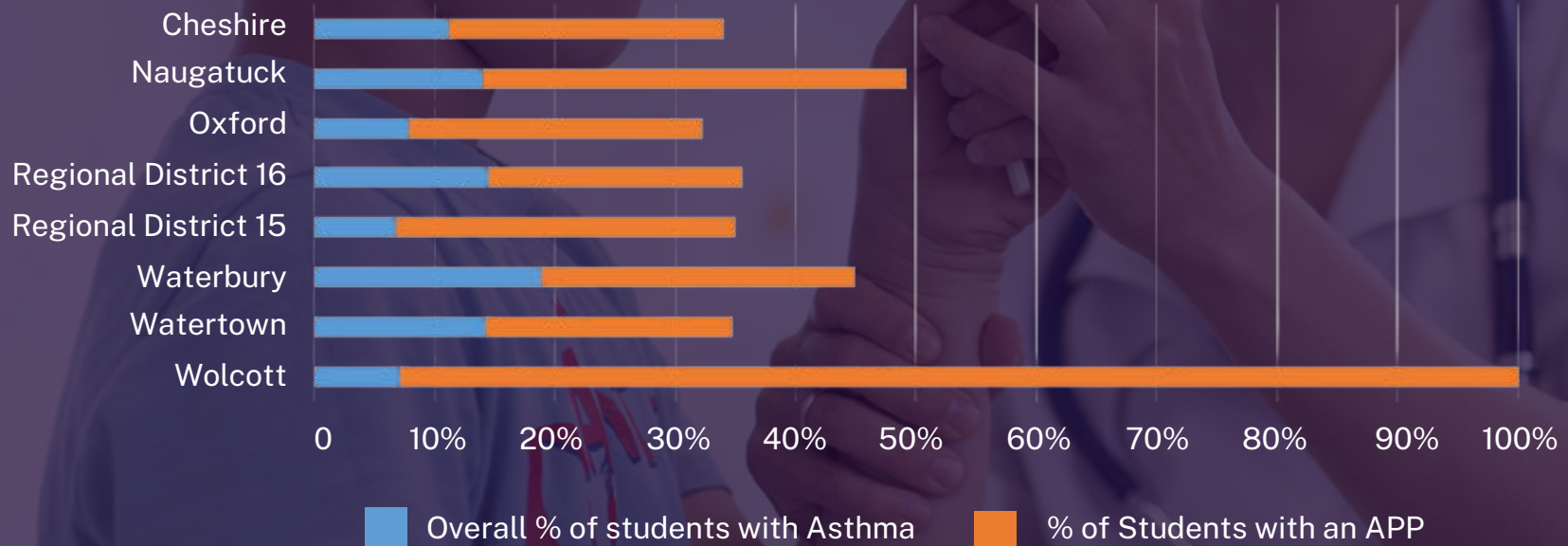
ASTHMA ACTION PLANS | AAPS

Asthma Action Plans (AAPs) are designed to help identify and control asthma episodes.

They are developed by a physician with the patient and are intended to be submitted to school nurses to help manage asthma at school.

This graphic illustrates the relationship between Asthma Prevalence in Greater Waterbury and the prevalence of students with Asthma Action Plans in place at school.

GREATER WATERBURY PUBLIC SCHOOLS ASTHMA PREVELANCE AND APP 2020

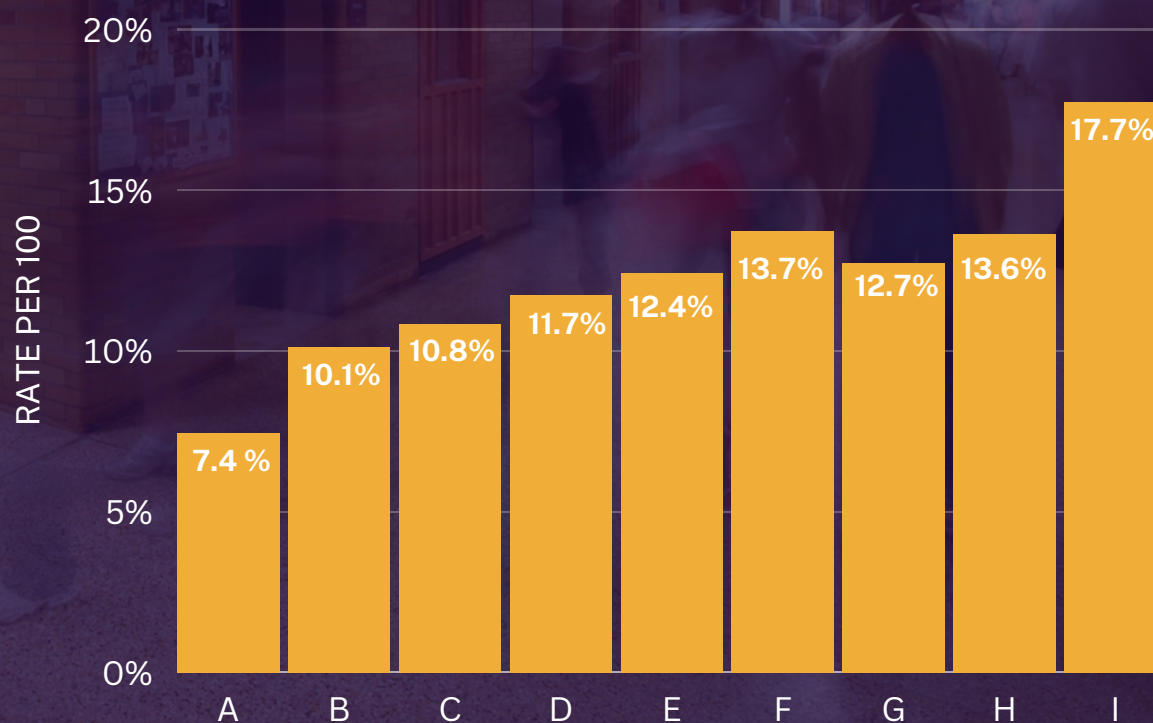


DISTRICT REFERENCE GROUPS | DRG

DRG I has the highest rate of asthma prevalence at 17.7%

Waterbury schools have some of the highest rates of asthma. A District Reference Group (DRG) is a classification system used to group local public-school districts according to indicators of socioeconomic status, indicators of need, and enrollment data.

DISTRICT REFERENCE GROUPS



Waterbury is in DRG I which also represents

Hartford
Bridgeport
New Britain
New Haven
New London
and Windham

SOCIAL DETERMINANTS OF HEALTH | SDOH



HOUSING QUALITY SUBSTANDARD HOUSING

The next page reports the number and percentage of owner -and-renter occupied housing units having at least one of the following conditions:



Lacking complete plumbing facilities



Gross rent as a percentage of household income greater than 30%



Selected monthly owner costs as a percentage of household income greater than 30%

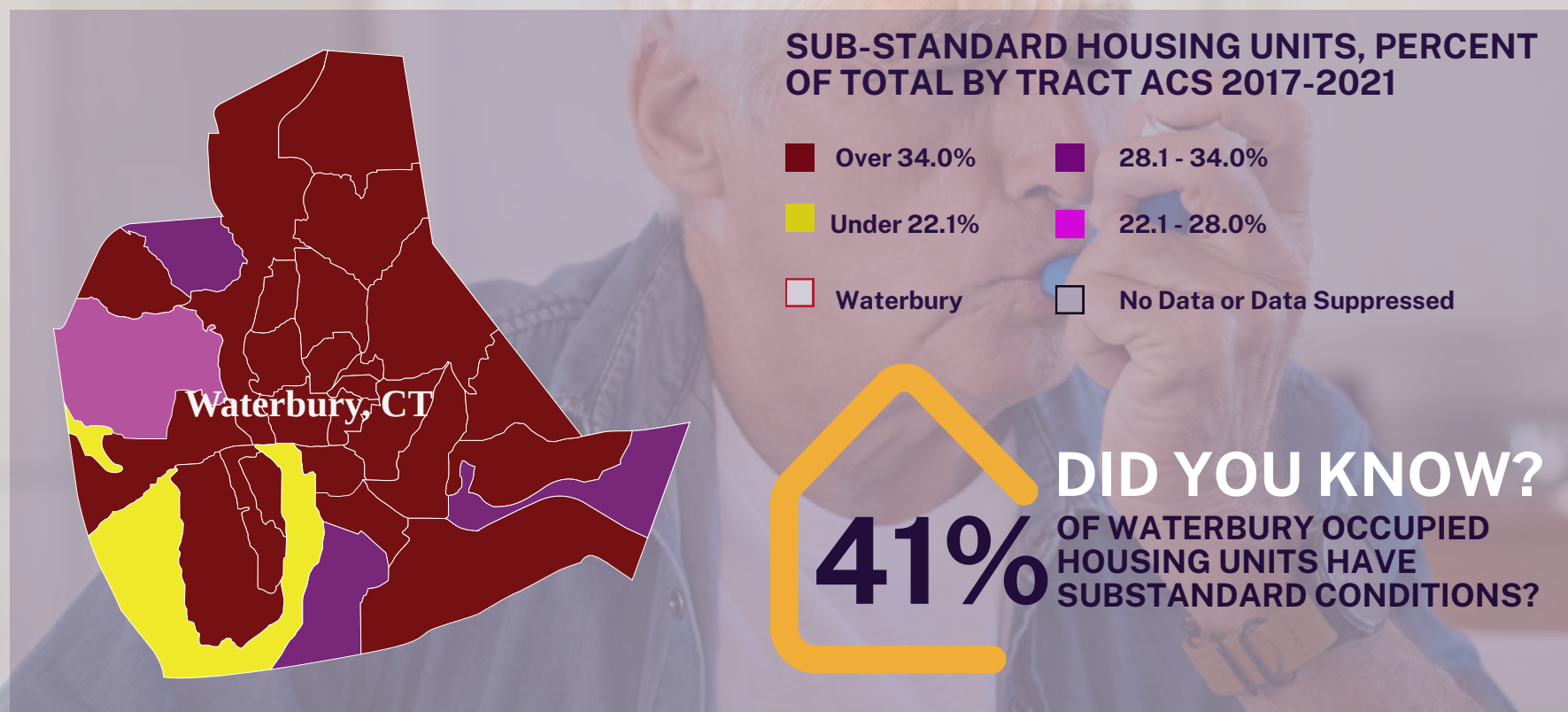


with 1 or more occupants per room



Lacking complete kitchen facilities

REPORT AREA	TOTAL OCCUPIED HOUSING UNITS	OCCUPIED HOUSING UNITS WITH ONE OR MORE SUBSTANDARD CONDITION	OCCUPIED HOUSING UNITS WITH ONE OR MORE SUBSTANDARD CONDITIONS, PERCENT
Waterbury, CT	45,114	18,558	41.14%
New Haven County, CT	336,400	118,689	35.28%
Connecticut	1,397,324	476,424	34.10%
United States	124,010,992	39,49,569	31.49%



ACTION AND RESOURCES

- 1** The Connecticut Asthma Program
- 2** Putting on AIRS: The Putting on AIRS program is led by the State of Connecticut Department of Public Health with the goal of increasing asthma awareness and education through a series of home visits.
- 3** Waterbury Community Health Improvement Plan | CHIP

ACKNOWLEDGMENTS

GREATER WATERBURY HEALTH PARTNERSHIP

GREATER WATERBURY REGIONAL ASTHMA COALITION

PUTTING ON AIRS PROGRAM – REGION # 1

Megin Coleman BSN, RN, AE-C & Maria Thomas, RN MPH Regional Program Coordinator

STATE OF CT DEPARTMENT OF PUBLIC HEALTH

Marie Christine Bournaki PhD, RN Asthma Program Supervisor

STAYWELL HEALTH CARE, INC.

Josh Jordan, Institutional Research Specialist

WATERBURY DEPARTMENT OF PUBLIC HEALTH

Dierdre Gruber , Director of Clinical Services

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THANK YOU TO OUR COMMUNITY PARTNERS & FUNDERS

