# 2021-2024 Rhode Island Asthma Strategic Plan

February 2021





## Table of Contents

OVERVIEW	4
Background	4
Guiding Principles in Planning	5
RI Core Cities	5
The Planning Process	12
Data Gathering	12
Priority Areas	13
PLANNING SESSIONS	13
The Strategic Framework	14
Final Plan Development	14
RHODE ISLAND ASTHMA CONTROL PROGRAM'S STRATEGIC PLAN	16
Mission	16
What we do	16
Our Services	16
Strategic Plan Priorities & Goal Statements	16
Priority Area 1: Housing	17
Priority Area 2: Healthcare/System	20
Priority Area 3: Education System & Schools	23
Priority Area 4: Air Quality & Transportation	25
APPENDICES	27
Appendix A: Strategic Planning Session Organizations	27
Appendix B: Acronyms Used in this Strategic Plan	29
Appendix C: Partners & Resources	30
Appendix D: Data Sources	33
Appendix F: Action Planning	34

## Overview

This strategic plan contains the results of a comprehensive planning process undertaken by the Rhode Island Department of Health Asthma Control Program (RIACP) during the fall of 2020. The strategic planning process included participation from a wide variety of internal and external RIACP stakeholders, including leadership and staff, and subject matter experts from state agencies and non-state agency partners, to identify and refine the key focal areas for the RIACP over the next five years.

The mission and values of RIACP, along with the priorities identified from the data gathering, were used to develop goals, objectives, and strategies with interactive input from RIACP leadership and staff, who joined four virtual planning sessions to develop plan components. The outcome of this process demonstrates the deep commitment of RIACP to sustain its collaborative work serving the asthma prevention and control needs of the citizens of Rhode Island.



## **Background**

RIACP contracted with Health Resources in Action, Inc. (HRiA), a nonprofit, public health consulting firm located in Boston, MA, to facilitate its strategic planning process. The goals of the process were threefold: 1) to identify priority areas where the RI Asthma Control Program could direct its strategic planning efforts; 2) to determine how the RI Asthma Control Program could focus efforts on these priorities to achieve the maximum impact and results for the State, including people who live, work and play in RI and are affected by Asthma; and 3) to develop a strategic plan with goals, objectives and strategies to direct this work over the next three years.

# Helping to set the future direction for addressing asthma in Rhode Island

#### PURPOSE FOR THE PLAN:

This plan is an opportunity for cross-collaboration and collective impact in how programs and organizations address asthma across the state. This plan is not a comprehensive representation of all asthma control work. However, it offers a foundation and guidance for what has been lifted in terms of areas of focus. This plan was developed to meet the following needs:

- To help set priorities for RI Asthma Control Program;
- To provide unified directions and ideas to stakeholders working on programs, policies, etc. related to asthma;
- To highlight opportunities to address racial and health equity — focusing on the core cities;
- To meet requirement from the Centers for Disease Control and Prevention (CDC) for five-year funding to RIDOH Asthma Prevention & Control Program.

## OPPORTUNITIES TO USE THIS PLAN MAY INCLUDE:

- To set priorities for asthma, healthy housing or other coalitions or programs, with the goal to have collective impact:
- To cite in grant proposals to provide rationale and validation for funding requests;
- To reference for Community Health Improvement Planning.



## Guiding Principles in Planning

The following guiding principles were used to guide the work and development of this plan.

#### 1. PROMOTING HEALTH EQUITY

Racial and Social Determinants of Health factors in:

- Access to services and supports (translation services)
- Leadership and engagement
- Data and evidence
- Policies, systems and approaches

#### 2. CLIMATE CHANGE

- Transportation
- Disaster recovery work
- Metrics between climate change and behavior patterns of asthma populations
- Heating and cooling intersection with housing

The Rhode Island Climate and Health Program is part of a national effort to anticipate and prepare for human health effects related to global and local climate change. The project is supported by the Climate-Ready States & Cities Initiative of the Centers for Disease Control and Prevention's Climate and Health program. The Building Resilience Against Climate Effects (BRACE) framework is a five-step process that allows health officials to develop strategies and programs to help communities prepare for the health effects of climate change.

In Rhode Island, increased storm intensity poses a threat of injuries and deaths due to a potential loss of power for air conditioning, heat, or medical needs; the loss of other critical infrastructure; and difficulty accessing resources. Residents also experience exposure to vector-born disease, declining air quality, increased pollen, aeroallergens, and pollution exposure, increasing risk for asthma and allergy exacerbations. Extreme heat is increasing the risk of heat-related illness for outdoor workers, seniors, and those with underlying medical conditions.

The Climate Change and Health Program works with RIDOH Health Equity Zones and community partners to help build community resilience to storms, flooding, heat, and other extreme events.

We work with a variety of community partners and other state agencies to educate the public about threats to public health from climate change and ways that they can mitigate and adapt to these threats.

RIDOH has a demonstrated commitment to health equity through their Health Equity Institute Health Equity Institute: Department of Health (ri.gov), as well as their Health Equity Zone (HEZ) initiative Health Equity Zones (HEZ) Initiative: Department of Health (ri.gov). A HEZ is an economically disadvantaged, geographically defined area with documented health risks and are funded through the RIDOH Health Equity Institute. In addition to these initiatives, RIACP will be collaborating with at least three HEZs on housing and environmental health efforts. As of Sept 2019, there will be 10 HEZ collaboratives [1] across the state using innovative, place-based strategies to build healthier, more resilient, and more equitable communities at the local level. In Y1-5, RIACP will work with partners to: 1) focus on target populations in RI and address health disparities in the high asthma burden areas; 2) collect and analyze data on available asthma services and initiatives; 3) implement the EXHALE strategies; 4) monitor and evaluate outcomes from comprehensive asthma services.

### RI Core Cities

RI data show striking racial/ethnic and socioeconomic disparities in pediatric asthma outcomes. Black and Hispanic children are more likely than White and Asian children to live in neighborhoods of concentrated poverty. RIACP serves children with asthma ages 0-17 living in the high poverty, urban "core cities" of Providence, Pawtucket, Central Falls, and Woonsocket, Rhode Island (RI), where the burden of asthma is highest. In these four cities the child poverty rate exceeds 25%. The burden of asthma falls disproportionately on black and Hispanic children, children in low-income households and children living in high poverty urban neighborhoods. These children are not only at high risk of developing asthma, but also are at risk of having more severe asthma once the disease develops.

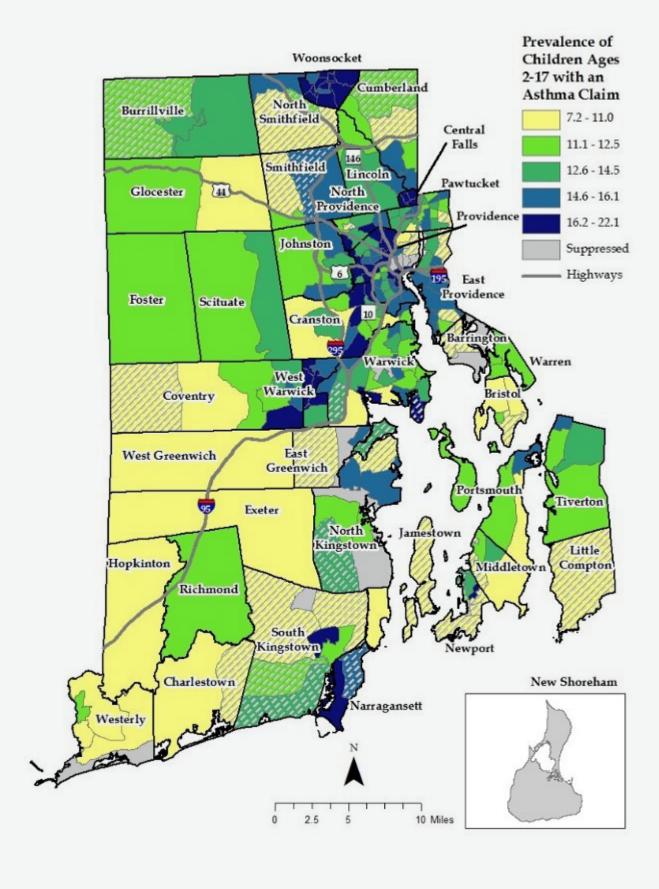
Almost two-thirds (64%) of RI's children living in poverty are concentrated in just four cities (Central Falls, Pawtucket, Providence, and Woonsocket). Three of these cities, Central Falls, Pawtucket, and Providence, are adjacent to one another (Greater Providence area). The four core cities also have substantial numbers of children living in extreme poverty, defined as families with incomes below 50% of the federal poverty threshold, or \$10,299 for a family of three with two children and \$12,963 for a family of four with two children in 2019.1

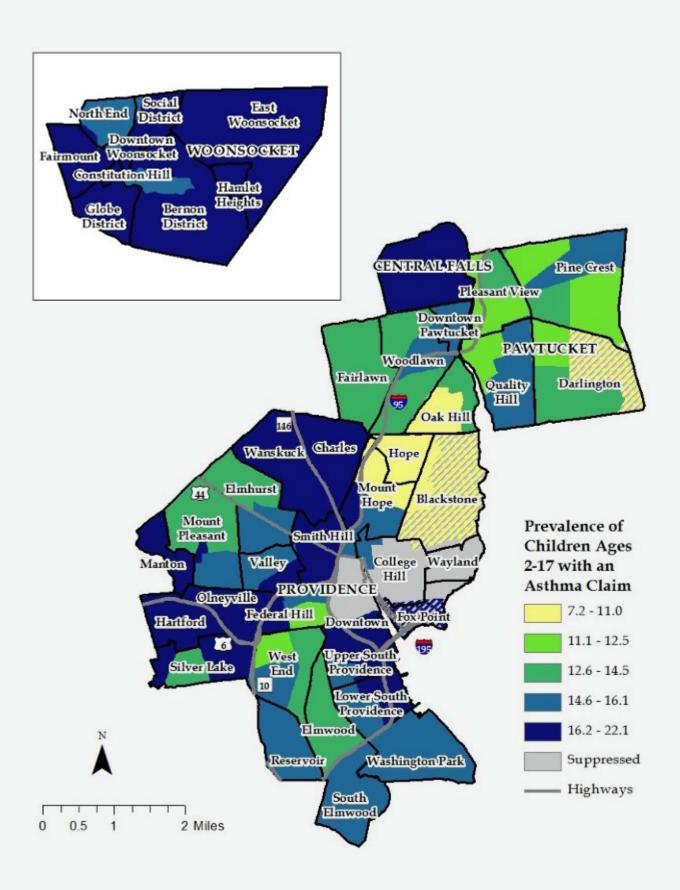
Children living in RI's high poverty core cities face challenges above and beyond the burdens of individual poverty; many directly impact the development of asthma and severity of the disease. Please refer to Figure 1, which is a hotspot map showing asthma prevalence across the state. Figure 2 is a hotspot map which highlights asthma prevalence within the core cities. Racial/ethnic and socioeconomic health disparities in pediatric asthma are the result of multiple factors, including exposure to family stress, poverty, neighborhood violence, poor housing, and environmental asthma triggers. These factors increase a child's risk of developing asthma and having more severe asthma. This is borne out by Rhode Island data.

Current asthma prevalence among children is higher in Rhode Island's high poverty urban core cities than the state average. Emergency department visit rates for a primary diagnosis of asthma are higher for children living in the core cities than for children overall in Rhode Island (11.1 per 1,000 children vs. 6.2 per 1,000 children). In 2016-2017, nearly 75% of ED visits where asthma was the first-listed discharge diagnosis were for Medicaid enrolled children (73%); 24% of children had commercial insurance: 3% were self-insured. Among the children enrolled in Medicaid who were seen in an ED because of asthma 51% were Hispanic, 26% White, and 16% non-Hispanic Black.

<sup>1</sup> 2020 RI KIDSCOUNT Factbook-Children in Poverty RIKCFactbook2019 (rikidscount.org)







#### PREVALENCE.2

In 2019, the prevalence of current asthma in Rhode Island was 7.3 (95% confidence intervals [CI] 5.6 to 9.0) among children aged 0 to 17 years and 11.2 among adults aged 18 and older (95% CI: 10.4 to 12.0). Data are from the Rhode Island Behavioral Risk Factor Surveillance System and are weighted to be representative of the state's population. The prevalence estimates highlight the burden of asthma among Rhode Island children and adults.

#### HOSPITALIZATIONS AND **EMERGENCY DEPARTMENT** (ED) VISITS.1

Between 2015 and 2019, there were 1,075 hospitalizations for children under 18 years of age in Rhode Island where asthma was the primary diagnosis, a rate of 1.0 per 1,000 children. Among children living in Rhode Island's four high poverty urban cities, the asthma hospitalization rate was higher than the rest of the state, at 1.6 per 1,000 children. During this 5-year period, there were 6,919 ED visits for children under 18 years of age in Rhode Island where asthma was the primary diagnosis, a rate of 6.2 per 1,000 children. In the four high poverty cities, the pediatric ED visit rate when asthma was the primary diagnosis was nearly twice that of the rest of the state, at 11.1 per 1,000 children.

Shown in Tables 1 and 2 are inpatient hospital admission rates (Table 1) and emergency department (ED) visit rates (Table 2) per 1,000 Rhode Island children when asthma was the primary diagnosis. Data are aggregated over five years and shown statewide and by city/town. Also displayed is the Relative Standard Error (RSE). Rates are reported if the RSE is < 20 as the RSE affects the accuracy of the estimates and, therefore, the importance that can be placed on interpretations drawn from the data. When the RSE is between 20 and 29 the findings are reported with caution. Data are suppressed (not shown) if the RSE is 30 or higher.

Table 3 displays ED visit rates per 1,000 Rhode Island adults when asthma was the primary diagnosis. The five-year aggregated data are shown statewide, by Rhode Island's largest cities/towns, and by high poverty urban cities. ED visits rates were highest in Woonsocket (8.79 per 1000 adults) and Central Falls (7.48 per 1000 adults). In 2019, the percent of persons living in poverty in these two cities was 21.8% and 30.2%, respectively, which was significantly higher than the poverty rate for the state overall (10.8%).<sup>3</sup> The median household income (in 2019 dollars) aggregated over five years (2015-2019) was \$32,982 in the city of Central Falls and \$42,595 in the city of Woonsocket; well below the median household income for Rhode Islanders statewide (\$67,167).<sup>2</sup> The cities of Central Falls and Woonsocket also had high pediatric ED visit rates when asthma was the primary diagnosis (12.1 per 1,000 children and 10.2 per 1,000 children, respectively).

- <sup>2</sup> The 2019 Rhode Island Behavioral Risk Factor Surveillance System and the 2015-2019 Rhode Island Emergency Department Visit and Hospital Discharge Data were analyzed by the Rhode Island Asthma Control Program epidemiologist for the Rhode Island State Strategic Plan.
- <sup>3</sup> United States Census Bureau. QuickFacts. Rhode Island. https://www.census.gov/quickfacts/fact/ table/RI/PST045219

TABLE 1. Hospitalization rate per 1,000 children under age 18 for a primary diagnosis of asthma by municipality, core cities and the state, 2015-2019 (aggregated data)

CITY/TOWN	Estimated # Children <18 yr. (2010 Census)	Estimated # of Children under Age 18 (*5 years)	# pediatric ED visits asthma primary DX (*5 years)	Rate pediatric ED visit asthma pri- mary DX per 1,000 Children	Relative Standard Error (RSE)
Barrington	4,597	22985	34	1.5	17.13720
Central Falls	5,644	28220	48	1.7	14.42147
Coventry	7,770	38850	25	0.6	19.99355
Cranston	16,414	82070	58	0.7	13.12597
Cumberland	7,535	37675	23	0.6	20.84500
East Providence	9,177	45885	43	0.9	15.24275
Johnston	5,480	27400	18	0.7	23.56241
Lincoln	4,751	23755	13	0.5	27.72734
Middletown	3,652	18260	29	1.6	18.55478
Newport	4,083	20415	26	1.3	19.59910
North Providence	5,514	27570	22	0.8	21.31158
Pawtucket	16,575	82875	123	1.5	9.00999
Providence	41,634	208170	358	1.7	5.28062
Tiverton	2,998	14990	12	0.8	28.85589
Warwick	15,825	79125	37	0.5	16.43597
West Warwick	5,746	28730	28	1.0	18.88900
Westerly	4,787	23935	12	0.5	28.86034
Woonsocket	9,888	49440	54	1.1	13.60082
Four core cities	73,741	368705	583	1.6	4.13830
Remainder of state	150,215	751075	492	0.7	4.50687
Rhode Island	223,956	1119780	1075	1.0	2.90834





TABLE 2. ED visit rate per 1,000 children under age 18 for a primary diagnosis of asthma by municipality, core cities and the state, 2015-2019 (aggregated data)

CITY/TOWN	Estimated # Children <18 yr. (2010 Census)	Estimated # of Children under Age 18 (*5 years)	# pediatric ED visits asthma primary DX (*5 years)	Rate pediatric ED visit asthma primary DX per 1,000 Children	Relative Standard Error (RSE)
Barrington	4,597	22985	100	4.4	9.97821
Bristol	3,623	18115	53	2.9	13.71594
Burrillville	3,576	17880	39	2.2	15.99534
Central Falls	5,644	28220	341	12.1	5.38248
Coventry	7,770	38850	149	3.8	8.17659
Cranston	16,414	82070	358	4.4	5.27362
Cumberland	7,535	37675	102	2.7	9.88807
East Greenwich	3,436	17180	30	1.7	18.24148
East Providence	9,177	45885	227	4.9	6.62079
Exeter	1,334	6670	24	3.6	20.37565
Glocester	2,098	10490	20	1.9	22.33936
Hopkinton	1,845	9225	25	2.7	19.97289
Johnston	5,480	27400	119	4.3	9.14706
Lincoln	4,751	23755	79	3.3	11.23216
Middletown	3,652	18260	105	5.8	9.73089
Narragansett	2,269	11345	23	2.0	20.83026
Newport	4,083	20415	191	9.4	7.20181
Newport	4,083	20415	191	9.4	7.20181
North Kingstown	6,322	31610	87	2.8	10.70635
North Providence	5,514	27570	191	6.9	7.21063
North Smithfield	2,456	12280	31	2.5	17.93784
Pawtucket	16,575	82875	714	8.6	3.72624
Portsmouth	3,996	19980	51	2.6	13.98491
Providence	41,634	208170	2519	12.1	1.98035
Richmond	1,849	9245	16	1.7	24.97839
Smithfield	3,625	18125	34	1.9	17.13375
South Kingstown	5,416	27080	66	2.4	12.29413
Tiverton	2,998	14990	24	1.6	20.39608
Warren	1,940	9700	40	4.1	15.77875
Warwick	15,825	79125	308	3.9	5.68693
West Greenwich	1,477	7385	19	2.6	22.91203
West Warwick	5,746	28730	187	6.5	7.28888
Westerly	4,787	23935	87	3.6	10.70161
Woonsocket	9,888	49440	506	10.2	4.42273
Four core cities	73741	368705	4080	11.1	1.55687
Remainder of state	150215	751075	2839	3.8	1.87324
Rhode Island	223957	1119780	6919	6.2	1.19848

TABLE 3. ED visit rate per 1,000 adults aged 18 and over for a primary diagnosis of asthma by selected municipalities, core cities and the state, 2015-2019 (aggregated data)

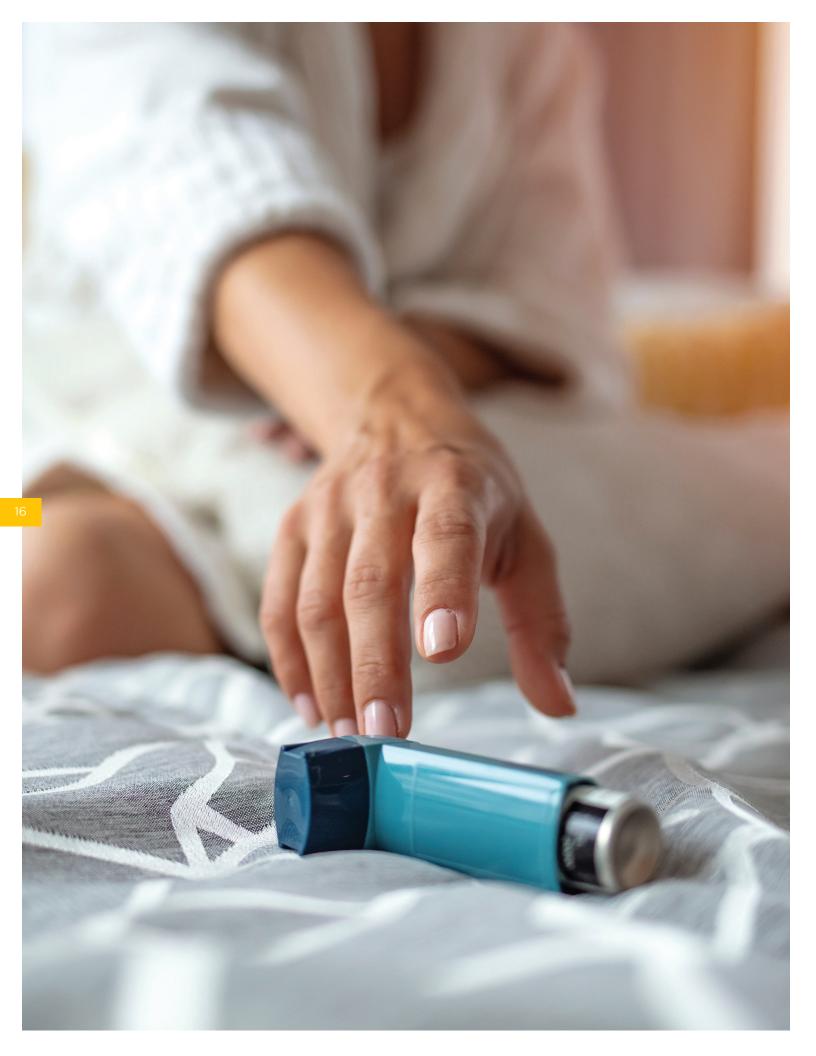
CITY/TOWN	Estimated # Children <18 yr. (2010 Census)	Estimated # of Children under Age 18 (*5 years)	# pediatric ED visits asthma primary DX (*5 years)	Rate pediatric ED visit asthma primary DX per 1,000 Children	Relative Standard Error (RSE)
Central Falls	13990	69950	523	7.48	4.356317
Cranston	64149	320745	685	2.14	3.816721
East Providence	38477	192385	372	1.93	5.179743
Newport	21194	105970	403	3.8	4.971873
Pawtucket	56279	281395	1345	4.78	2.720185
Providence	138161	690805	3954	5.72	1.585751
Warwick	68040	340200	795	2.34	3.542488
West Warwick	24014	120070	509	4.24	4.423017
Woonsocket	32290	161450	1419	8.79	2.642967
Four core cities	240720	1203600	7241	6.02	1.171629
Rhode Island	849422	4247110	13449	3.17	0.860926

From 2014-2018, the number of child emergency department visits with asthma as the primary diagnosis were highest among children living in the four core cities compared to the rest of the state. Asthma tends to be located in areas where there are high rates of poverty.





# The Planning Process



## Data Gathering

Gathering data is an important foundation for guiding and constructing a strategic plan. Data gathering efforts for this plan included a document review, key informant interviews, and community conversations. Four community conversations were held; one in Spanish, to engage stakeholders throughout the state and priority populations in dialogues regarding asthma prevention, education, intervention, and impact around the four priority areas. Interview and discussion questions were designed to explore perceptions of the internal strengths and weaknesses of RIACP, as well as the external opportunities and threats in the dynamic healthcare environment in which RIACP operates.

This process engaged organizations from many sectors including public health, communitybased organizations, education, medicine, and research. HRiA synthesized and compiled the key themes and recommendations from these efforts, which were presented to RIACP and stakeholders during a Key Themes meeting to review the findings, recommended priority areas of focus, criteria for selection and guiding principles for the strategic plan.

#### PRIORITY AREAS

On October 14, 2020, HRiA presented RIACP leadership and stakeholders with the key themes from the data gathering efforts as well as recommended priorities for planning based on those themes. The recommendations were discussed and finalized into the following Priority Areas and subtopics of focus for the RIACP strategic planning sessions:

PRIORITY AREA	SUB-CATEGORIES (Potential Objectives)
Housing	<ul> <li>Housing conditions/quality</li> <li>Impact of poverty — SDOH</li> <li>Home visits</li> <li>Housing resources for IPM</li> </ul>
Healthcare/System	<ul> <li>Legislative level changes</li> <li>Reimbursement for non-traditional interventions</li> <li>Insurance</li> <li>Health outcomes — SDOH</li> <li>Health literacy</li> <li>Asthma Action Plans</li> </ul>
Education System & Schools	<ul> <li>Absenteeism</li> <li>Healthcare — school — absences</li> <li>School environment/indoor air quality</li> <li>Deferred school maintenance</li> </ul>
Air Quality & Transportation	<ul> <li>Neighborhoods bordering highways &amp; asthma rates</li> <li>Air quality and air pollution reduction</li> <li>Air quality and school absences</li> <li>ALA report card</li> </ul>

### Planning Sessions

HRiA's trademarked strategic planning approach is called Facilitating Alignment and Strategic Thinking (FAST™). It is an efficient and effective planning process, which, unlike a traditional strategic planning approach that can take many months, is a shorter, more cost-effective way of planning that produces high-quality results and delivers high value and satisfaction for stakeholders.

Using this approach, HRiA worked with RIACP leadership to design four virtual, "rapid" strategic planning sessions that took between November and December 2020 (See Figure 1). RIACP staff, leadership and stakeholders engaged in interactive discussions in four groups organized by priority area, and through a structured,

iterative process facilitated by HRiA, developed a set of goals, objectives, and strategies that will enhance the development and delivery of RIACP programming and services throughout the State. See Appendix B for a list of planning organizations.

#### VIRTUAL PLANNING FOR STRATEGIC PLAN

#### Participation Criteria

- Able to participate via Zoom (audio AND visual)
- Available to participate in ALL sessions

#### Time Commitment

Per participant: 9.5 hours of sessions + homework (assumes participation in only one (1) Priority Area).

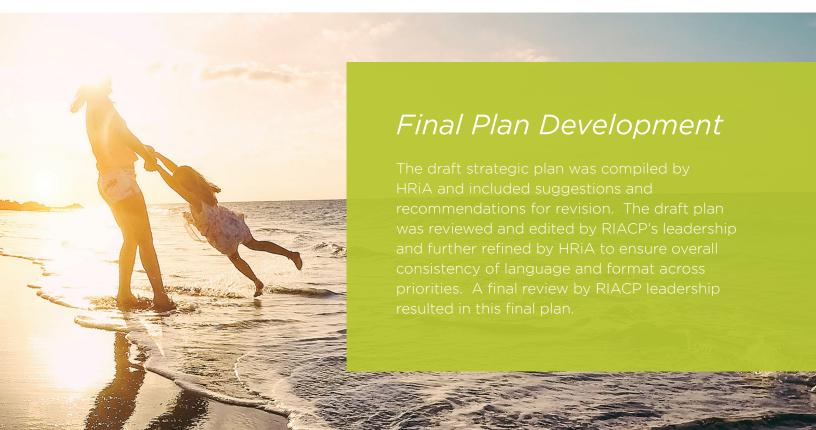


## The Strategic Framework

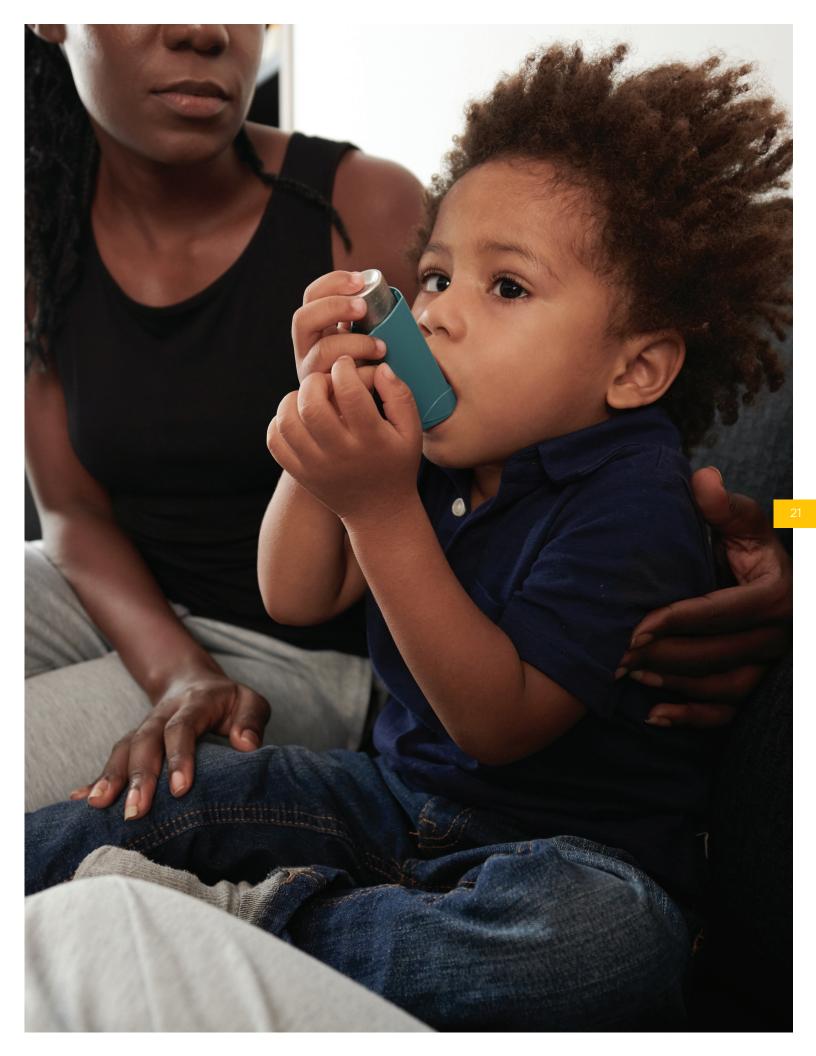
A strategic plan includes several key elements: a vision which articulates the preferred future RIACP is trying to create as a result of its work; a mission statement that articulates a central purpose: whom do we serve, for what purpose, and in what ways that are unique or distinct?; and the key principles that guide every aspect of RIACP's work, from decision-making to priority-setting, and from partnerships to engagement strategies. Based on prioritization of key themes identified through the data gathering and analysis process, specific goals, objectives, and strategies are developed to accomplish the mission and vision, in alignment with the core values and beliefs.

It is important to clarify the nomenclature of the plan so that those engaged in implementing and refining the plan operate from the same definitions and assumptions. Strategic plans are organized in categories that range from broad to narrow, as follows:

- Priorities are key areas of focus that provide specific categories for planning.
- A goal describes in broad terms a desired result or change in the priority area.
- Objectives articulate goal-related outcomes in specific and measurable terms. Objectives are narrow, precise, tangible, concrete and SMART (specific, measurable, achievable, relevant, time-phased). In the case of RIDOH ACP, they are also Inclusive and Equitable.
- Success Measures are interim indicator(s)
   of progress toward completion of a goal
   or objective.
- A strategy describes an approach to getting things done. It answers the question, "How can we get from where we are now to where we want to be?"



# Rhode Island Asthma Control Program's Strategic Plan



## Mission

To reduce overall asthma burden and asthma health disparities in Rhode Island.

## What we do

Serve as a unified access point for community-based services and interventions.





## Our Services



CLINICAL



SCHOOL



#### HOME-BASED

- Breathe Fasy at Home
- Home Asthma Response Program

## Strategic Plan Priorities & Goal Statements

#### PRIORITY 1:

## Housing

GOAL 1: All Rhode Islanders live in healthy and affordable housing that is free of harmful conditions that increase asthma related risks.



#### PRIORITY 2:

# Healthcare/ System

GOAL 2: Improve health outcomes and achieve health equity by enhancing access to affordable, holistic, and comprehensive asthma care for all people in RI.



#### PRIORITY 3:

# Education System & Schools

GOAL 3: Collaboration among key stakeholders to support equitable K-12 healthy school environments that promote respiratory health, wellness, and readiness to learn.



#### PRIORITY 4:

# Air Quality & Transportation

GOAL 4: Ensure all Rhode Islanders, particularly low-income communities of color, have clean and healthy indoor and outdoor air quality.



#### PRIORITY AREA 1:

# Housing



GOAL 1: All Rhode Islanders live in healthy and affordable housing that is free of harmful conditions that increase asthma related risks.



#### **OBJECTIVE 1.1:**

Create/adapt innovative education campaigns to educate key stakeholders on their role in reducing asthma rates in RI, and the resources available by 2025.

#### SUCCESS MEASURES:

- 1. Number of innovative education campaigns created/adapted
- 2. Outcomes Measured by:
  - All Payer Claims Database (existing secondary data that would enable us to track this issue)
  - RIDOH Healthy Homes Survey data
  - KidsNet

- 1.1.1: Identify the key stakeholder groups (e.g., consumers, tenants and landlords, medical providers/healthcare professionals, schools).
- 1.1.2: Establish a knowledge baseline for each key stakeholder group utilizing a survey and/or other sources of evidence.
- 1.1.3: Conduct an assessment of what education campaigns already exist in order to identify what campaign(s) need to be adapted or created.
- 1.1.4: Create innovative campaigns where none exist (consider including Healthy Homes information).
- 1.1.5: Pilot education campaigns, prioritizing high risk groups.
- 1.1.6: Revise content & approach as needed based on pilot feedback.

- 1.1.7: Roll out education campaigns state-wide.
- 1.1.8: Assess impact and share results of the education campaigns and the improvement of key stakeholders understanding of their role.
- 1.1.9: Determine changes needed based on assessment, and recurring frequency or availability.







#### **OBJECTIVE 1.2:**

Coordinate efforts with other housing groups to explore dedicated funding streams for the creation of healthy and affordable housing that reduces asthma triggers by 2025.

#### SUCCESS MEASURES:

- 1. Number of dedicated funding streams
- 2. Outcomes Measured by:
  - · State Feasibility Study data (funding for asthma interventions)
  - RIDOH
  - RI Life Index

- 1.2.1: Convene/Reconvene housing groups around the topic of funding dedicated for asthma (e.g., Homes RI, housing, health, energy, and climate groups).
- 1.2.2: Expand existing network to make sure that all key stakeholders are on newsletters and/or are attending events/meetings (e.g., Health Equity Fund, housing, health, energy, and climate groups).
- 1.2.3: Coordinate advocacy efforts to secure a dedicated funding stream with existing groups and other partners.
- 1.2.4: Build in an asthma piece in the funding streams conversations (i.e., make sure that conversation happens around asthma).
- 1.2.5: Explore innovative alternative funding streams for asthma and healthy housing.



#### **OBJECTIVE 1.3:**

Pass at least two (2) pieces of legislation that would ensure rental properties meet minimum quality standards by 2025.

#### SUCCESS MEASURES:

1. Number of pieces of legislation passed

#### STRATEGIES:

- 1.3.1: Collaborate with the RI Center for Justice. League of Cities and Towns to build upon the work already done to draft legislation.
  - Pass the Certificate of Rental Habitability or something comparable
  - Add asthma triggers (e.g., mold) to Minimum Housing Standards
- 1.3.2: Identify and engage key stakeholders to gather support for the legislation.

- 1.3.3: Coordinate efforts of key stakeholders to lobby for passing the legislation.
- 1.3.4: Educate the legislators on the importance of the legislation (advocacy around the issue, involving community members).
- 1.3.5: Identify an ambassador for leading the charge on building support for the legislation.



#### **OBJECTIVE 1.4:**

Incorporate Healthy Home building standards into current building code and regulations by 2025.

#### SUCCESS MEASURES:

Healthy Home building standards incorporated into building code and regulations

- 1.4.1: Collaborate with housing groups, builders' association, realtor's association, etc. to build support for changes to codes & regulations.
- 1.4.2: Develop a brief of the Health Homes Building Standards to educate and inform members of the State Building Commission.
- 1.4.3: Amend the state enabling law to change the minimum codes/laws in order for towns to have the authority to change the codes and regulations (should investigate whether this would be needed).
- 1.4.4: Work with city and town councils to amend existing regulations in communities with the highest need (e.g., highest number of asthma cases).



#### **OBJECTIVE 1.5:**

Incorporate nationally recognized healthy housing strategies into the way energy programs are designed and implemented, and how services are provided by 2025.

#### SUCCESS MEASURES:

Nationally recognized Healthy Housing strategies incorporated into energy programs

#### STRATEGIES:

- 1.5.1: Identify the existing energy programs.
- 1.5.2: Conduct an assessment of what existing energy programs already incorporate Healthy Housing strategies and which populations are utilizing those programs in order to identify gaps and establish a baseline.
- 1.5.3: Provide training on Healthy Housing strategies and standards to energy program providers, to emphasize the importance of including these strategies in their energy programs.
- 1.5.4: Coordinate efforts with energy program providers to implement their programs in areas where the most vulnerable populations, including high utilizer asthma patients, reside.



#### **OBJECTIVE 1.6:**

Reform the current system of housing code enforcement for improved accessibility for the public by 2025.

#### SUCCESS MEASURES:

System of housing code enforcement reformed

- 1.6.1: Conduct an assessment of towns and municipalities to determine the landscape that we are operating in and to identify gaps.
- 1.6.2: Explore other housing code models (e.g., Providence) to identify models that could be implemented statewide.
- 1.6.3: Work with partners (e.g., RI League of Cities and Towns) to identify and adapt a model for RI.

- 1.6.4: Roll out the model state-wide.
- 1.6.5: Assess impact and share results.
- 1.6.6: Determine changes needed based on assessment, and revise model accordingly.



#### PRIORITY AREA 2:

# Healthcare/System



GOAL 2: Improve health outcomes and achieve health equity by enhancing



#### **OBJECTIVE 2.1:**

Decrease asthma related ED visits among children aged 2-17 by 5% in Rhode Island by 2024.

#### SUCCESS MEASURES:

- 1. Number of asthma related ED visits among children aged 2-17
- 2. Outcomes Measured by:
  - · Medicaid claims data
  - Hasbro referrals
  - RIDOH ED dataset
  - All-Payor Claims database



- 2.1.1: Promote asthma screening for children aged 2-17.
- 2.1.2: Increase the number of health care providers that address environmental factors related to asthma.
- 2.1.3: Implement targeted outreach to populations who report disparate asthma outcomes.







#### **OBJECTIVE 2.2:**

Increase the number children with well controlled asthma by 15% in RI by 2024.

#### SUCCESS MEASURES:

- 1. Number children with well controlled asthma
- 2. Outcomes Measured by:
  - Medicaid claims database
  - HARP data for AAP's
  - RIDOH KidsNet
  - EHR data

- 2.2.1: Identify and promote 20 opportunities for RI children to receive affordable. comprehensive asthma care.
- 2.2.2: Children with asthma and their caregivers receive, understand, and can use their Asthma Action Plans.
- 2.2.3: Children receive a referral to a certified asthma educator following a positive asthma screen.
- 2.2.4: Provide culturally and linguistically appropriate literature for asthma triggers, control, programs, and treatment.
- 2.2.5: Explore medication adherence among children who have asthma enrolled in Medicaid.

- 2.2.6: Collaborate with pharmacists on medication use, adherence, and education.
- 2.2.7: Using systems approach to train providers on best practices for asthma care and management
- 2.2.8: Provide asthma education programs that offer CEU's to providers.
- 2.2.9: Advocate for the inclusion of CAE and CHW's in value-based or other payment arrangements.



#### **OBJECTIVE 2.3:**

Increase utilization of RIACP-funded programs by 10% by 2024.

#### SUCCESS MEASURES:

- 1. Utilization of RIACP-funded programs
- 2. Outcomes Measured by:
  - HARP REDCap database
  - RIDOH KidsNet

#### STRATEGIES:

- 2.3.1: Promote awareness of RIACP-funded programs among community health centers, pharmacies, and school nurse teachers that serve target populations with disparate asthma outcomes.
- 2.3.2: Promote referrals to RIACP-funded programs from community health centers, pharmacies, etc.
- 2.3.3: Promote RIACP-funded programs as an opportunity for health care providers to address environmental factors related to asthma.
- 2.3.4: Promote the use of multi-lingual and cultural services among RIACP-funded programs.



#### **OBJECTIVE 2.4:**

Increase the number of certified asthma educators by 30 and CHW's by 50, who are trained in asthma and healthy housing by 2024.

#### SUCCESS MEASURES:

- Number of certified asthma educators (AE-Cs) who are trained in asthma and healthy housing
- Number of CHWs who are trained in asthma and healthy housing

- 2.4.1: Promote certification testing for asthma educators to health professionals through recruitment and retention efforts
- 2.4.2: Establish Certified CHW specialty certification for asthma and healthy housing to include asthma triggers, inhaler use, ACT's and CASI for asthma control, how to understand asthma action plans and referrals.
- 2.4.3: Promote bilingual and multicultural asthma education for and among CAE's and CHW's.

- 2.4.4: Explore and promote scholarship opportunities for CAE and CHW education: particularly for populations that are underrepresented in this area.
- 2.4.5: Promote the incorporation of information about asthma, asthma triggers and healthy housing into the certification process/ licensure renewal for housing professionals (including home visitors such as energy auditors, healthy homes inspectors and energy efficiency and home improvement contractors).





#### **OBJECTIVE 2.5:**

Increase the number of payors or provider practices that utilize the home asthma response program (HARP) or an evidence-based asthma home visit program into their health care transformation efforts by 3 by 2024.

#### STRATEGIES:

- 2.5.1: Advocate for the inclusion of asthma home visiting in value-based or other payment arrangements.
- 2.5.2: Promote referrals to HARP among provider practices and ED's.



#### **OBJECTIVE 2.6:**

Engage 50 school nurses in asthma training to increase asthma management within schools in RI by 2024.

- 2.6.1: Identify (or convene) a school nurse collaborative to learn about existing programs, gaps, and barriers to managing asthma in Rhode Island Schools
- 2.6.2: Implement management training to school nurse collaborative that addresses gaps and barriers
- 2.6.3: Promote the use of bilingual and multicultural asthma education materials by school nurses in RI.



# Education System & Schools



GOAL 3: Collaboration among key stakeholders to support equitable K-12



#### **OBJECTIVE 3.1:**

Increase and sustain infection control measures by maintaining signage on handwashing, respiratory hygiene practices (coughing into elbow), soap and wipes in all K-12 schools by 2021.

#### SUCCESS MEASURES:

- 1. Number of infection control measures
- 2. Outcomes Measured by:
  - · Annual School Health Report, CDC, EPA

- 3.1.1: Survey schools in collaboration with RIDE'S annual school health report to identify existing infection control measures and identify gaps, including maintaining signage on handwashing, respiratory hygiene practices (coughing into elbow), soap and wipes.
- 3.1.2: Establish a partnership with Rhode Island Association of School Maintenance Directors (RIASMD) to sustain infection control measures established during the COVID-19 pandemic.

- 3.1.3: Ensure utilizing all available federal funding.
- 3.1.4: Continue education of students and staff around appropriate respiratory hygiene practices.
- 3.1.5: Collaborate with RIDE on guidance for school buildings.





#### **OBJECTIVE 3.2:**

Increase asthma health literacy of students and parents in K-12 schools to achieve optimal asthma management by 2024.

#### SUCCESS MEASURES:

- Number of families who participate in Hasbro Children's Hospital's Draw a Breath Asthma Self-Management Education program.
- 2. ACT

- 3.2.1: Ensure equity by increasing collaboration between medical home and school health professionals to provide wrap around care for all students.
- 3.2.2: Educate students and caregivers (e.g. HASBRO's Draw a Breath) on comprehensive asthma management focusing on districts where asthma rates are highest (culturally and multilingually appropriate).
- 3.2.3: Educate teachers and staff on asthma triggers and asthma action plans (AAPs) to provide continuity of safe care throughout the school day.
- 3.2.4: Identify and refer virtual students with asthma to home visiting programs (e.g. RIACP's Home Asthma Response Program) as appropriate for asthma management in their home environment.





#### **OBJECTIVE 3.3:**

Develop a statewide system to track absenteeism due to asthma in all K-12 schools by 2025.

#### SUCCESS MEASURES:

- 1. Statewide system developed
- 2. Outcomes measured by
  - RIDE (RI Department of Education) attendance data
  - Attendance Works (national data)

#### STRATEGIES:

- 3.3.1: Survey schools to identify existing tools that capture absenteeism data (related to asthma).
- 3.3.2: Identify existing best practices for capturing absenteeism data due to asthma.
- 3.3.3: Coordinate with RIDF and RIDOH to add reason for absence to current collection tool.
- 3.3.4: Coordinate and educate administration and families on importance of reporting reason (asthma) for absence.



#### **OBJECTIVE 3.4:**

Increase and maintain indoor air quality and ventilation in school buildings to reduce asthma triggers by 2023.

#### SUCCESS MEASURES:

- 1. (air quality)
- 2. (ventilation)
- 3. Outcomes measured by
  - ISIAQ (International Society of Indoor Air Quality and Climate)
  - Harvard School of Public Health (school environment and IAQ data)

#### STRATEGIES:

- 3.4.1: Survey school population (staff, faculty, and students) for school-based asthma triggers.
- 3.4.2: Review Indoor Air Quality Management Plan with facilities to maintain a multidisciplinary risk reduction approach.
- 3.4.3: Identify existing gaps.
- 3.4.4: Advocate for funding to maintain indoor air quality (use EPA—Tools for Schools).

3.4.5: Advocate for a collaboration between RIDE and LEA's (Local Education Agencies) to maintain optimal indoor air quality and ventilation.



# Air Quality & Transportation



GOAL 4: Ensure all Rhode Islanders, particularly low-income communities of color, have clean and healthy indoor and outdoor air quality.



#### **OBJECTIVE 4.1:**

Leveraging RIACP's existing asthma hot spot mapping through convening relevant state agencies and municipalities (e.g., RIDOH, RIDEM, RIDOT and RIPTA) four times a year to discuss indoor and outdoor air quality around hot spot maps by 2025.

#### SUCCESS MEASURES:

Asthma hospital and ED data maps

- 4.1.1: Create lasting partnerships and collaboration between regulatory agencies and the communities they cover.
- 4.1.2: Enhance collaboration between RIDOH, RIDEM and RIDOT to develop collaborative approach that focuses on asthma and air quality.
- 4.1.3: Create asthma program technical workgroup that includes agencies and members of the community to inform agency planning around environmental justice and health equity.
- 4.1.4: Ensure that low income communities of color are fairly represented in the enabling legislation for the Transportation Climate Initiative Program and that RIACP has a seat on the equity committee.





#### **OBJECTIVE 4.2:**

Improve transportation infrastructure and reduce traffic congestion in and around low income and communities of color by 2025.

#### SUCCESS MEASURES:

RI Division of Planning has vehicle miles traveled (VMT) and single occupancy rides data

#### STRATEGIES:

- 4.2.1: Reduce overall vehicle miles traveled per capita by X%.
- 4.2.2: Promote and work with towns to pass, fund, and implement complete street ordinances.
- 4.2.3: Improve the public transportation system, both adequate service and infrastructure (e.g., bus shelters for winter (heating) and summer (cooling)), particularly in low income and communities of color.
- 4.2.4: Ensure that 35% of the investments from the Transportation Climate Initiative Program are designated for low income and communities of color

- 4.2.5: Engage community around Rhode Island's Zero Emission Vehicle Plan and ensure that rebates and benefits go to low -and middle-income consumers.
- 4.2.6: Educate local law enforcement on the importance of anti-idling and enforcement mechanisms.
- 4.2.7: Incentivize carpooling through priority parking.



#### **OBJECTIVE 4.2:**

Improve air quality by promoting construction best practices for HVAC systems, enhancing building codes, and enhancing green spaces in low income and communities of color by 2025.

#### SUCCESS MEASURES:

Tree Equity Score Analyzer tool provides tree equity scores and canopy cover numbers

- 4.3.1: Prioritize asthma hot spots for investments in the heating sector transformation project.
- 4.3.2: Increase efficiency of heating, ventilatin, and air conditioning (HVAC) systems.
- 4.3.3: Improve green infrastructure, around schools, public housing, and other vulnerable communities with things such as tree barriers in roadways; tree benches/living walls; tree canopy.

# Appendices

# Appendix A: Strategic Planning Session Organizations



## HOUSING ORGANIZATIONS

Blackstone Valley Health Center

Brown University

Childhood Lead Action Project

City of Central Falls Code Enforcement

City of Central Falls Office of Health

Community Health Worker Association of RI

Green and Healthy Homes Initiative of RI

Hasbro Children's Hospital

Housing Works RI

Integra Community Care Network

LISC-Pawtucket/Central Falls HEZ

Medical Legal Partnership of Boston

Neighborhood Health Plan of RI

Newport Family Partnership

Newport HEZ

ONE Neighborhood Builders (Olneyville HEZ)

Pawtucket Code Enforcement

Providence Code Enforcement

Providence Housing Authority

Providence Office of Sustainability

Providence Planning and Development

Racial and Environmental Justice Committee

(REJC)

RI Alliance for Healthy Homes

RI Attorney General

RI Building Code Commission

RI Center for Justice

RI Housing

RI Housing Resources Commission

Woonsocket Code Enforcement

Woonsocket HEZ



## SCHOOLS/EDUCATION ORGANIZATIONS

American Lung Association Blackstone Valley Health Center Brown University School of Public Health City of Central Falls Office of Health Hasbro Children's Hospital Hassenfeld Child Health Innovation Institute Providence Public School Department RI Association for Certified Asthma Educators RI Attorney General

RI Certified School Nurse Teachers

RI College of Nursing

RI Department of Education

St. Joseph Health Center

Women's Medicine Collaborative

Woonsocket HEZ



#### HEALTHCARE/SYSTEMS ORGANIZATIONS

American Lung Association Asthma Regional Council

Blackstone Valley Health Center City of Central Falls Office of Health

Brown University

Childhood Lead Action Project

Community Health Worker Association of RI Green and Healthy Homes Initiative of RI

Hasbro Children's Hospital

Hassenfeld Child Health Innovation Institute

HousingWorks RI

Integra Community Care Network Medical Legal Partnership of Boston Neighborhood Health Plan of RI

Newport HEZ

ONE Neighborhood Builders (Olneyville HEZ)

PCMH-Kids

Providence Community Health Center

RI Alliance for Healthy Homes

RI Association for Certified Asthma Educators

St. Joseph Health Center

Women's Medicine Collaborative

RI Attorney General RI Center for Justice

RI Certified School Nurse Teachers

RI College of Nursing

RI Department of Education RI Health Center Association

RI Medicaid

RI Primary Care Physicians Corporation United Health Care of New England

Woonsocket HEZ



## AIR QUALITY & TRANSPORTATION ORGANIZATIONS

Asthma Regional Council

Brown University School of Public Health City of Central Falls Code Enforcement

EPA Region 1

Green and Healthy Homes Initiative of RI

HousingWorks RI

LISC-Pawtucket/Central Falls HEZ

Newport Family Partnership

Newport HEZ

ONE Neighborhood Builders (Olneyville HEZ)

One Square World-Racial & Environmental

Justice Committee

Pawtucket Code Enforcement Providence Office of Sustainability Providence Planning and Development

Racial and Environmental Justice Committee (REJC)

RI Alliance for Healthy Homes

RI Attorney General

RI Building Code Commission

RI Department of Education

RI Department of Environmental Manage-

ment

RI Public Transit Authority

RI Statewide Planning

Washington Park Neighborhood Association

Woonsocket Code Enforcement

Woonsocket HEZ

# Appendix B: Acronyms Used in this Strategic Plan

AAP — Asthma Action Plan

ACBS — Asthma Call Back Survey

ACT — Asthma Control Test

AE-C — Certified Asthma Educator

AIS — Asthma in Schools

ARC-NE — New England Asthma Regional Counsel

BCBSRI — Blue Cross Blue Shield of Rhode Island

BEAH — Breathe Easy at Home

BRFSS — Behavioral Risk Factor

Surveillance System

CASE — Controlling Asthma in Schools Effectively

CASI — Composite Asthma Severity Index

CCDM — Chronic Care & Disease Management

CDOE — Certified Diabetes Outpatient Educator

CEU — Continuing Education Unit

CFHE — Community, Family Health and Equity

CHDA — Center for Health Data and Analysis

CHIP — Children's Health Insurance Program

CHW - Community Health Worker

CMS — Centers for Medicare and Medicaid

CPS — Center for Preventive Services

CSI — Chronic Sustainability Initiative

CPHC — Center for Public Health Communication

DAB — Draw A Breath

ED — Emergency Department

EHR — Electronic Health Record

EJL — Environmental Justice League

**EPR** — Electronic Patient Record

FQHC — Federally Qualified Health Centers

HARP — Home Asthma Response Program

HDD — Hospital Discharge Data

HEDIS — Healthcare Effectiveness Data Information Set

HEI — Health Equity Institute

**HEZ** — Health Equity Zone

HRHH — Healthy Residents, Healthy Homes

HVAC — Heating, ventilation, and air conditioning

IAQ — Indoor Air Quality

IEP — Individual Evaluation Plan

ISIAQ — International Society of Indoor

Air Quality and Climate

NAECB — National Asthma Education Certification Board

NEAIC — New England Asthma Innovation Collaborative

NHLBI — National Heart, Lung, and **Blood Institute** 

NCQA — National Committee for Quality Assurance

NHPRI — Neighborhood Health Plan of Rhode Island

MCH — Maternal Child Health

MIECHV — Maternal, Infant, and Early Childhood Home Visiting

OHIC — Office of the Health Insurance Commissioner

PCMH — Patient Centered Medical Home

QI — Quality Improvement

RIDE — Rhode Island Department of Administration

RSE — Relative Standard Error

SEP — Strategic Evaluation

RIACAE — Rhode Island Association of Certified Asthma Educators

RIACC — Rhode Island Asthma Control Coalition

RIACP — Rhode Island Asthma Control Program

RIAPCD — Rhode Island All Payer Claims Database

RIDE — Rhode Island Department of Education

RIDEM — Rhode Island Department of **Environmental Management** 

RIDOH — Rhode Island Department of Health

RIDOT — Rhode Island Department of Transportation

RIPTA — Rhode Island Public Transit Authority

SNT — School Nurse Teacher

VMT — Vehicle miles traveled

# Appendix C: Partners & Resources



#### HOUSING

AE's (accountable entities, e.g., Integra)

Builders association

CAP agencies (weatherization and

energy efficiency) Center for Justice

Community Based Advocacy Groups

(e.g., Refuge Dream Center)

DARE (Direct Action for Rights of Equality)

Daycare Center Providers and Groups DBR (Division of Business Regulation)

**Energy Program providers** 

Governor's Office

Health Equity Fund

Health Equity Zones

Homes RI

Hospital settings

Housing groups

Housing groups

Housing, health, energy, and climate groups

Impacted community members

Individual Towns and Cities

Labor and Building Trades

Lead Centers (some do asthma work as well)

Local Planning Departments

MCOs. EOHHS

Municipalities (e.g., Healthy Communities of-

People implementing the State Energy Plan

Realtors association

Representation from each of the Kev

Stakeholder groups

RI Alliance for Healthy Homes

RI Foundation

RI League of Cities and Towns

RIDOH

Schools and medical providers

Tennent Network of RI



## HEALTHCARE/SYSTEM

Current Care

Landmark Health Center. Woonsocket

RI school nurses' association

St. John's Health Center



## EDUCATION SYSTEM & SCHOOLS

CDC

EPA (Tools for Schools-as resource)

HASBRO

Healthy Schools Network (national level)

RI School Building Authority

RIASMD

RIDE

RIDEM (Department. of Environmental

Management)

RIDOH

RIHSC (RI Healthy Schools Coalition)

SSNC (state school nurse consultants)



## AIR QUALITY & TRANSPORTATION

CAP Agencies (weatherization)

Community health workers

DEM

Division of Statewide Planning

DOT

Gov. office (need money in a bond)

Green Schoolyards America

Health care systems

HEZ

Housing agencies

OER

RI Alliance for Healthy Homes

RI Infrastructure Bank

RIDF

# Appendix D: Data Sources

#### HOUSING

- BRFSS
- American Community Survey
- Census Data
- EOHHS Ecosystem
- Housing Court Data (Maybe)
- RIDOH Lead Inspection Data



## **EDUCATION SYSTEM & SCHOOLS**

- AHERA IAQ
- Absenteeism Data
- Harvard Schools IAQ Report
- Johns Hopkins Providence Schools Report
- Department of Education Conditions of Schools Report (2017)



## HEALTHCARE/SYSTEM

- RI Emergency Department Data
- RI Hospital Discharge Data
- Medicaid Claims Data
- Medicaid Maps
- BRFSS
- PCMH-Kids/CTC-RI



## AIR QUALITY & TRANSPORTATION

- Environmental Public Health Tracking Network
- Windy
- National Weather Service
- PurpleAir
- RI Department of Environmental Management
- RIDOH Lab Air Quality Data (e.g., air quality alert days)
- RIPTA



# Appendix E: Action Planning

This is a sample Action Planning template that can be used for annual action planning for implementation. Stakeholders can use this as a guide for developing annual action plans for their programs that reflect strategic planning elements that are most relevant to them and their individual programs.

DD	$\cap$	$\Box$	ITY	1.
PK.		ĸ	l I Y	

## GOAL 1:

#### Objective 1.1:

Success Measures (can be at the goal level or by objective, depending on the measurability of the objectives)

1.

2.

	Actions	Person(s) Responsible L=Lead, M=Manage, I=Implement	Timeline			
Strategies			Y1	Y2	Y3	
Resources Required (human, partnerships, financial, infrastructure or other)  •						
Monitoring/Evaluation Approaches						

	TERM	DEFINITION/DESCRIPTION
Strategic Plan	Priority	A category of focus.
	Goal	A projected state of affairs that a person or a system plans or intends to achieve. Identifies in broad terms how your initiative is going to change things in order to solve the problem you have identified. A result that one is attempting to achieve.
	Objective	Objectives articulate goal-related outcomes in specific and measurable terms.
		Objectives are narrow, precise, tangible, and concrete.  Objectives are SMART (specific, measurable, achievable, Relevant, time-phased)
	Success Measures	Measure(s) of progress toward the objective. These measures ultimately let your team know if the plan was successful in impacting the objective. This may help you identify activities that are useful in meeting your objective(s), and those that are not. Success Measures are NOT how you will know that the strategy has been implemented.
	Strategies	A strategy describes your approach to getting things done. It is less specific than action steps but tries broadly to answer the question, "How can we get from where we are now to where we want to be?" The best strategies are those which have impact in multiple areas, also known as leverage or "bang for the buck."
© Action Plan	Actions	The actions/activities outline the specific, concrete steps you will take to achieve each strategy. It is best to arrange these chronologically by start dates.
	Person(s) Responsible	Identify by name the key person(s)/group(s)/department(s) that will lead the activity, provide support for the work, and implement the strategy.
	Timeline	State the projected date of completion for each activity (e.g., Q1, Q2, Q3, or Q4 for Y1, or check Y2 and/or Y3)
	Resources Needed	The, human resources, partnerships, financial, infrastructure or other resources required for successful implementation of the strategies and activities.
	Monitoring/ Evaluation Approaches	The approaches you will use to track and monitor progress on strategies and activities (e.g., quarterly reports, participant evaluations from training)

<sup>&</sup>lt;sup>1</sup> Rhode Island Department of Health, Health Equity Zones (HEZ). http://www.health.ri.gov/hez



