Learn From EPA's 2023 Asthma Award Winner, the Wisconsin Asthma Program!
To post a question in the Discussion Forum, follow these directions:

1. If you are a Network member, log in to your AsthmaCommunityNetwork.org account.

   **Not a member?** Create an account at AsthmaCommunityNetwork.org by clicking the “Join Now” link at the top of the page. Your account will be approved momentarily, and you can begin posting questions.

2. Click on the “Discussion Forum” button on the home page.
3. Click on the “Live Online Q&A for 5/23/23 Webinar” link.
4. Click on the “Add new Forum topic” link to post your question.
5. Enter your question and click the “Save” button at the bottom of the page.
Learning Objectives

Wisconsin Asthma Program will share how they—

- Expanded the reach, effectiveness and sustainability of comprehensive asthma control services in the state of Wisconsin.

- Demonstrated improved asthma outcomes, including a 36 percent reduction in asthma-related emergency department visits and a 35 percent reduction in asthma hospitalizations.

- Established the Asthma-Safe Homes Program as the result of a successful collaboration with Medicaid to provide sustainable asthma funding.
Featured Speakers

**Tracey Mitchell, RRT, AE-C, Environmental Protection Specialist, U.S. Environmental Protection Agency (EPA)**

**Cristine Rameker, M.P.H., Wisconsin Asthma Program Manager, Wisconsin Department of Health Services**

**Carrie Tomasollo, M.P.H., Ph.D., Environmental Epidemiology and Surveillance Section Manager, Wisconsin Department of Health Services**

**Megan Elderbrook, M.P.H., CHES, Wisconsin Asthma Program Epidemiologist, Wisconsin Department of Health Services**
Polling Question 1

What best describes the type of organization that you represent?

1. Government agency
2. Health care provider
3. Community-based asthma program
4. Healthy homes program
5. Other
Environment Plays a Critical Role in Asthma Control

• Federal asthma guidelines recognize environmental trigger reduction as a critical component of comprehensive asthma care.*

• The evidence base demonstrates that in-home environmental interventions are effective at improving asthma control in children and adolescents.†

EPA is a federal lead for the integration of environmental risk reduction into standards of care.

---

The System for Delivering High-Quality Asthma Care
Solutions for the Indoor Environmental Determinants of Health

• High-quality asthma systems break down siloes to address the IEDOH in asthma.

• Systems require time, partnership, data and investment to scale and sustain.

• Assembling community systems to address the IEDOH in asthma is a model for the social determinants of health, or SDOH.
Indoor Environmental Determinants of Health

Expanding In-Home Environmental Intervention Scope
- Supplies and Services Tailored for Asthma Triggers
- Structural Services that Improve IAQ

Expanding Impacts
- Individual
- Community
About the Award

National Environmental Leadership Award in Asthma Management

The application focuses on three areas:

1. Comprehensive Asthma Management
   a. Management and Operations
   b. Integrated Health Care Services
   c. Tailored Environmental Services

2. Getting Results: Evaluation

3. Sustainability
About the Award

National Environmental Leadership Award in Asthma Management

Nation’s highest honor for exceptional asthma management programs

- **Goal:** The award program showcases and spreads best practices in comprehensive asthma care and management.

- **Eligibility:** Applicants must follow national guidelines (National Institutes of Health) and address published criteria for achieving improved health outcomes and program sustainability, especially for environmental justice communities.

- **Review:** Applications undergo a two-tiered review process, which includes reviewers from other federal agencies and national nongovernmental organizations.
Since 2005, 52 asthma programs been inducted into the Awards Hall of Fame.
Wisconsin Asthma Program: Using Asthma Surveillance to Drive Improvement and Sustainability

Cristine Rameker, M.P.H.
Megan Elderbrook, M.P.H., CHES
Carrie Tomasallo, M.P.H., Ph.D.

May 23, 2023
Outline

Overview of Wisconsin’s Asthma Program
How we use surveillance data to inform decisions
Sustainable reimbursement for asthma services
Our History

Located within the Bureau of Environmental and Occupational Health in the Wisconsin Department of Health Services

1992  Surveillance focused
2001  CDC grant began
2003  First Wisconsin Asthma Plan
Partnerships

Wisconsin Department of Health Services

Children's Health Alliance of Wisconsin

Wisconsin Asthma Coalition

Children's Health Alliance of Wisconsin
Targeted Education and Tailored Services

Medication Therapy Management

Patient Voice

Asthma-Safe Homes Program
Medication Therapy Management

Five Core Elements
- Medication therapy review
- Personal medication record
- Medication action plan
- Intervention or referral
- Documentation and follow-up
Patient Voice

Provider communication
Trusted information sources
Patient advocacy
Communication tools
Support groups
Improving Health Systems
Asthma Control

Developing performance measures for health systems
Quality Improvement

Developing performance measures for health systems
Provider Training

Pediatric Asthma Guidelines trainings
Tailored Environmental Services
Asthma-Safe Homes Program

Asthma self-management education

Durables

Home assessment

Repair services

Introducing Wisconsin’s Asthma-Safe Homes Program

Create Your Asthma-Safe Home

Delivering free in-home asthma services to help families breathe easier

Learn how to control your asthma and live your best life with the Wisconsin Department of Health Services’ Asthma-Safe Homes Program. This program provides free, in-home asthma education and home repair services to eligible families.

To be eligible, participants must:
- Live in Milwaukee or Kenosha counties.
- Be eligible for Medicaid state health insurance.
- Be 2-16 years old or pregnant.
- Have poorly controlled asthma.

This program provides:
- Education on how to manage asthma.
- A home assessment tool for asthma triggers.
- Up to $1,000 of asthma supplies for your home.
- Up to $5,000 in eligible home repairs.

These services can help you or your child use less medication, make fewer trips to the emergency department, avoid overnight stays at the hospital, and miss less school and work.

Ask your health care provider, school nurse, pharmacist or asthma educator for a referral.

Questions?
DHS.wisconsin.gov/asthma/ashp.htm
DHSAsthmaSafeHomes@wi.gov
608-266-1112

How to access the services

1. Ask your health care provider, school nurse, pharmacist or asthma educator for a referral to the Asthma-Safe Homes Program.

2. Meet an asthma educator for two to six sessions and get home supplies. If eligible, you will be referred for a detailed home assessment.

3. Receive home repairs if the assessment uncovers major asthma triggers. Repairs are available to renters or owners.
Community Air Monitoring and Anti-Idling
School-Based Initiatives
School-Based Asthma Management Program

Four key components

- Circle of support
- Asthma management plans
- Asthma education plans
- Comprehensive environmental asthma plan
Asthma-Friendly School Mini Grants

Staff education

School walkthrough program

Asthma Action Plan on file
“With the help of the WAC school walkthrough program, I was able to impact the lives of more than 1,400 students in our district living with asthma by learning how to identify common triggers and positively modify their learning environment. This program not only helped our students, but it also benefited our entire community by improving the air quality within our schools.”

School nurse and asthma educator
Making Data-Based Decisions
Asthma Prevalence by State, 2021

U.S. Overall: 9.7%
Wisconsin: 10.8%
15% of Adults and 10% of Kids Reported Ever Being Diagnosed With Asthma
There Are Large Asthma Disparities by Race and Ethnicity

- Black: 18%
- Indigenous: 17%
- Other: 11%
- White: 9%
- Hispanic: 8%

Wisconsin Adult Prevalence: 10.8%

Behavioral Risk Factor Surveillance System, 2021
There Are Large Asthma Disparities by Income

- <$15,000: 20%
- $15,000 – <$25,000: 19%
- $25,000 – <$50,000: 10%
- $50,000 – <$75,000: 8%
- $75,000+: 8%

Wisconsin Adult Prevalence: 10.8%
Asthma Rates Among People on Medicaid Are Doubled When Looking by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Not on Medicaid</th>
<th>On Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>12%</td>
<td>27%</td>
</tr>
<tr>
<td>Indigenous</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>White</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Behavioral Risk Factor Surveillance System, 2021
39% of Adults With Asthma Reported Well-Controlled Asthma

Behavioral Risk Factor Surveillance System, 2016-2020
42% of Adults With Asthma Reported Not Well-Controlled Asthma

Behavioral Risk Factor Surveillance System, 2016-2020
<table>
<thead>
<tr>
<th>Control Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Poorly Controlled</td>
<td>19%</td>
</tr>
<tr>
<td>Not Well-Controlled</td>
<td>42%</td>
</tr>
<tr>
<td>Well-Controlled</td>
<td>39%</td>
</tr>
</tbody>
</table>

61% of Adults With Asthma Are **Not Well** or **Poorly Controlled**

Behavioral Risk Factor Surveillance System, 2016-2020
Adults in the Highest Income Group Were Twice as Likely to Report Well-Controlled Asthma

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Well-Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$25,000</td>
<td>24%</td>
</tr>
<tr>
<td>$25,000 – 49,999</td>
<td>40%</td>
</tr>
<tr>
<td>≥$50,000</td>
<td>52%</td>
</tr>
</tbody>
</table>

Behavioral Risk Factor Surveillance System, 2016-2020
About 45% of People Making Under $50,000 Reported Not Well-Controlled Asthma

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Well-Controlled</th>
<th>Not Well-Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$25,000</td>
<td>24%</td>
<td>45%</td>
</tr>
<tr>
<td>$25,000 – 49,999</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>≥$50,000</td>
<td>52%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Behavioral Risk Factor Surveillance System, 2016-2020
## Poorly Controlled Asthma is Greatest Among the Lowest Income Group

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Well-Controlled</th>
<th>Not Well-Controlled</th>
<th>Very Poorly-Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$25,000</td>
<td>24%</td>
<td>45%</td>
<td>31%</td>
</tr>
<tr>
<td>$25,000 – 49,999</td>
<td>40%</td>
<td>44%</td>
<td>17%</td>
</tr>
<tr>
<td>≥$50,000</td>
<td>52%</td>
<td>36%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Behavioral Risk Factor Surveillance System, 2016-2020
Asthma Emergency Department (ED) and Hospitalization Rates per 10,000 People Were Stable Until the COVID-19 Pandemic.
The Highest **ED** and **Hospitalization** Rates per 10,000 People Are in Younger Age Groups

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Hospitalization Rates</th>
<th>ED Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>5.3</td>
<td>36</td>
</tr>
<tr>
<td>5-14</td>
<td>2.6</td>
<td>30</td>
</tr>
<tr>
<td>15-34</td>
<td>1.4</td>
<td>34</td>
</tr>
<tr>
<td>35-64</td>
<td>2.1</td>
<td>22</td>
</tr>
<tr>
<td>65+</td>
<td>2.1</td>
<td>8</td>
</tr>
</tbody>
</table>
Southeast Wisconsin and Menominee County Continue to Have the Highest ED Rates

Overall State Rate: 26.6 per 10,000 Population
Our Program Activities Primarily Focus in Those High-Burdened Counties
Asthma-Related Mortality Rates per 1 Million People
Black people are 4X more likely to die from asthma than white people in Wisconsin.
Asthma Care Program Results
Results From a Case-Control Study of Our Asthma Care Program Showed:

36% reduction in asthma-related ED visits
Results From a Case-Control Study of Our Asthma Care Program Showed:

- 36% reduction in asthma-related ED visits
- 35% reduction in asthma-related hospitalizations
Results From a Case-Control Study of Our Asthma Care Program Showed:

- 36% reduction in asthma-related ED visits
- 35% reduction in asthma-related hospitalizations
- 37% reduction in total days of inpatient stays
Results From Pre/Post Survey Data of Our Asthma Care Program Showed:

79% of participants had improved in Asthma Control Test scores
Results from Pre/Post Survey Data of Our Asthma Care Program Showed:

- 79% of participants had improved in Asthma Control Test scores
- 54% had fewer missed days of school or work
The Return on Investment (ROI) of Our Asthma Care Program
The Return on Investment (ROI) of Our Asthma Care Program

$2.34
Asthma-Safe Homes Program
Children’s Health Insurance Program (CHIP) Health Services Initiative (HSI)

State option since 1990s, with flexibility to determine focus, scope and design

Combination of CHIP and state funding required; up to 10 percent of total CHIP spending allowed

State plan amendment (SPA) submitted, describing populations served, improvements to children’s health, and updated budget

Timeline

Sept 2014
Developed Asthma Care Program under CDC-RFA-EH14-1404

Oct 2019
Approval of WI SPA with CHIP HSI to provide lead hazard abatement

June 2016
Approval of WI SPA with CHIP HSI for Poison Control Center services

June 2021
Drafted and submitted WI SPA with CHIP HSI for asthma services

Aug 2022
Launched Asthma-Safe Homes program

Feb 2020
Reimbursement TA received through Green & Healthy Homes Initiative

Sept 2021
Approval of WI SPA with CHIP HSI for asthma services

Jan 2023
First hospital-HMO payment model implementing Asthma-Safe Homes program
Timeline

Sept 2014
Developed Asthma Care Program under CDC-RFA-EH14-1404

Oct 2019
Approval of WI SPA with CHIP HSI to provide lead hazard abatement

June 2016
Approval of WI SPA with CHIP HSI for Poison Control Center services

June 2021
Drafted and submitted WI SPA with CHIP HSI for asthma services

Aug 2022
Launched Asthma-Safe Homes program

Feb 2020
Reimbursement TA received through Green & Healthy Homes Initiative

Sept 2021
Approval of WI SPA with CHIP HSI for asthma services

Jan 2023
First hospital-HMO payment model implementing Asthma-Safe Homes program
Timeline

- Sept 2014: Developed Asthma Care Program under CDC-RFA-EH14-1404
- Oct 2019: Approval of WI SPA with CHIP HSI to provide lead hazard abatement
- June 2016: Approval of WI SPA with CHIP HSI for Poison Control Center services
- Feb 2020: Reimbursement TA received through Green & Healthy Homes Initiative
- June 2021: Drafted and submitted WI SPA with CHIP HSI for asthma services
- Sept 2021: Approval of WI SPA with CHIP HSI for asthma services
- Aug 2022: Launched Asthma-Safe Homes program
- Jan 2023: First hospital-HMO payment model implementing Asthma-Safe Homes program
Timeline

- **Sept 2014**: Developed Asthma Care Program under CDC-RFA-EH14-1404
- **June 2016**: Approval of WI SPA with CHIP HSI for Poison Control Center services
- **Aug 2016**: Approval of WI SPA with CHIP HSI for lead hazard abatement
- **Oct 2019**: Approval of WI SPA with CHIP HSI to provide lead hazard abatement
- **Feb 2020**: Reimbursement TA received through Green & Healthy Homes Initiative
- **June 2021**: Drafted and submitted WI SPA with CHIP HSI for asthma services
- **Sept 2021**: Approval of WI SPA with CHIP HSI for asthma services
- **Aug 2022**: Launched Asthma-Safe Homes program
- **Jan 2023**: First hospital-HMO payment model implementing Asthma-Safe Homes program
Timeline

- **Sept 2014**: Developed Asthma Care Program under CDC-RFA-EH14-1404
- **Oct 2019**: Approval of WI SPA with CHIP HSI to provide lead hazard abatement
- **June 2016**: Approval of WI SPA with CHIP HSI for Poison Control Center services
- **Feb 2020**: Reimbursement TA received through Green & Healthy Homes Initiative
- **June 2021**: Drafted and submitted WI SPA with CHIP HSI for asthma services
- **Sept 2021**: Approval of WI SPA with CHIP HSI for asthma services
- **Aug 2022**: Launched Asthma-Safe Homes program
- **Jan 2023**: First hospital-HMO payment model implementing Asthma-Safe Homes program
Developed Asthma Care Program under CDC-RFA-EH14-1404

Sept 2014

Approval of WI SPA with CHIP HSI to provide lead hazard abatement

Oct 2019

Reimbursement TA received through Green & Healthy Homes Initiative

June 2020

Drafted and submitted WI SPA with CHIP HSI for asthma services

June 2021

Approval of WI SPA with CHIP HSI for asthma services

Sept 2021

Launched Asthma-Safe Homes program

Aug 2022

First hospital-HMO payment model implementing Asthma-Safe Homes program

Jan 2023
Developed Asthma Care Program under CDC-RFA-EH14-1404

Sept 2014

Approved WI SPA with CHIP HSI for Poison Control Center services

June 2016

Approval of WI SPA with CHIP HSI to provide lead hazard abatement

Oct 2019

Reimbursement Technical Assistance (TA) received through Green & Healthy Homes Initiative

Feb 2020

Drafted and submitted WI SPA with CHIP HSI for asthma services

June 2021

Approval of WI SPA with CHIP HSI for asthma services

Sept 2021

Launched Asthma-Safe Homes program

Aug 2022

First hospital-HMO payment model implementing Asthma-Safe Homes program

Jan 2023
Asthma-Safe Homes
Program Goal

To address asthma and its housing-related environmental contributors among Medicaid-eligible children and pregnant adults
HSI Provides $2.5 Million Annually

- Asthma education home visits
- Durables to address home asthma triggers
- Home assessment and remediation services
- Training to expand workforce
- Program administration
Program Components

Referral

Part A. Asthma Educational Services

Part B. Environmental and Remediation Services
**Program Components**

**Referral.** Client referred to asthma educator.

DHS checks Medicaid status.

Educator verifies client qualifies based on asthma screening.
Program Components

**Referral.** Client referred to asthma educator.

DHS checks Medicaid status.

Educator verifies client qualifies based on asthma screening.

**Part A.** Asthma educator conducts home visits to provide self-management education, durables, and basic home assessment with recommendations.
Program Components

**Referral.** Client referred to asthma educator.

DHS checks Medicaid status.

Educator verifies client qualifies based on asthma screening.

**Part A.** Asthma educator conducts home visits to provide self-management education, durables, and basic home assessment with recommendations.

**Part B.** In subset of referred homes, assessor completes comprehensive environmental assessment to identify and address asthma triggers (up to $5,000).
Client Eligibility Criteria

Children aged 2–18 years or pregnant adults

Medicaid-eligible

Referred due to uncontrolled asthma

Living in Wisconsin and in a program service area
Part A: In-home Asthma Education

Asthma education providers conduct 2–6 home visits and 2-week and 3-month follow-ups to provide:

- Asthma self-management education
- Home walkthrough and recommendations
- Durables up to $1000 per client
- Referrals to Part B: Environmental Services
Part B: Environmental Services

Environmental services include:

- Comprehensive environmental assessment of home
- Scope of work to identify and prioritize asthma-related hazards
- Remediation and repairs to home
Program Grantees 2022–2023

Part A
Milwaukee
• Children’s Wisconsin
• One Choice Concepts, Inc.
• Revitalize Milwaukee
• Sixteenth Street Community Health Centers
• UniteWI

Kenosha
• Kenosha County Public Health

Part B
Milwaukee
• Revitalize Milwaukee
• Social Development Commission

Training provided by Green & Healthy Homes Initiative
Lessons Learned

Participate in all relevant reimbursement TA opportunities.
Lessons Learned

Participate in all relevant reimbursement TA opportunities.

Conduct state pilot program, even on small scale. Build those partnerships!
Lessons Learned

Participate in all relevant reimbursement TA opportunities.

Conduct state pilot program, even on small scale. Build those partnerships!

Collect program performance metrics and keep up-to-date.
Lessons Learned

Participate in all relevant reimbursement TA opportunities.

Conduct state pilot program, even on small scale. Build those partnerships!

Collect program performance metrics and keep up-to-date.

What’s your pitch (selling points)?
Lessons Learned

Participate in all relevant reimbursement TA opportunities.

Conduct state pilot program, even on small scale. Build those partnerships!

Collect program performance metrics and keep up-to-date.

What’s your pitch (selling points)?

Be ready when the opportunity presents itself.
Lessons Learned

Participate in all relevant reimbursement TA opportunities.

Conduct state pilot program, even on small scale. Build those partnerships!

Collect program performance metrics and keep up-to-date.

What’s your pitch (selling points)?

Be ready when the opportunity presents itself.

Time and investment needed to establish program.
Future

Expand Asthma-Safe Homes Program service areas

Promote Asthma-Safe Homes Program and other asthma quality improvement activities to Medicaid HMOs
Cristine Rameker, M.P.H.
cristine.rameker@wi.gov
Program Manager

Megan Elderbrook, M.P.H., CHES
megan.elderbrook@wi.gov
Epidemiologist

Carrie Tomasallo, M.P.H., Ph.D.
carrie.tomasallo@wi.gov
Principal Investigator

Wisconsin Asthma Program
Bureau of Environmental & Occupational Health
Division of Public Health
Department of Health Services
Congratulations to the 2023 Award Winner
Polling Question 2

Based on today’s presentation, what action do you feel more equipped to take in your asthma program?

1. Approach and enlist new community partners
2. Expand and enhance your programs’ in-home asthma visits
3. Refine my program’s tracking to demonstrate more effective health outcomes and ROI data
4. Request a mentor on AsthmaCommunityNetwork.org
5. Apply for the 2024 National Environmental Leadership Award in Asthma Management
To post a question in the Discussion Forum, follow these directions:

1. If you are a Network member, log in to your AsthmaCommunityNetwork.org account.

2. Click on the “Discussion Forum” button on the home page.

3. Click on the “Live Online Q&A for 5/23/23 Webinar” link.

4. Click on the “Add new Forum topic” link to post your question.

5. Enter your question and click the “Save” button at the bottom of the page.

Not a member? Create an account at AsthmaCommunityNetwork.org by clicking the “Join Now” link at the top of the page. Your account will be approved momentarily, and you can begin posting questions.