



Mayor Martin J. Walsh, City of Boston

*Breathe
easy*
at home program

WEB-BASED SYSTEM
LINKS ASTHMA
CLINICIANS TO HOUSING
CODE ENFORCEMENT

Eugene Barros & Darris Jordan

Boston Public Health Commission

Collaboration and Alignment of Resources

Who are the key clinical, legal, housing and advocacy partners in your community?

Are there asthma champions in your community?

Who are the major landlords?

What is covered under your sanitary code and who enforces?

Do you have the data to target resources?

Are there electronic medical records/electronic complaint system?

Boston Snapshot

With @ 617,591 residents

- @44.7% non-Latino White
- @22.9% non-Latino Black
- @19.5% Latino
- @ 9.5% Asian/Pacific Islander
- @ 2.3% 2 or more races
- @1.1% other race
- @ 20% of population living in poverty

17% of population age 18 or younger

Active advocacy and health care presence

Boston Housing Authority

- Houses about 10% of Boston population
- 14,000 units, 64 Developments
- Average Income @ \$15,573
for a family of four
- Aging properties
- Pest infestation



Asthma in Boston

Highest rate of asthma hospitalizations for children under 10 in state of Massachusetts*

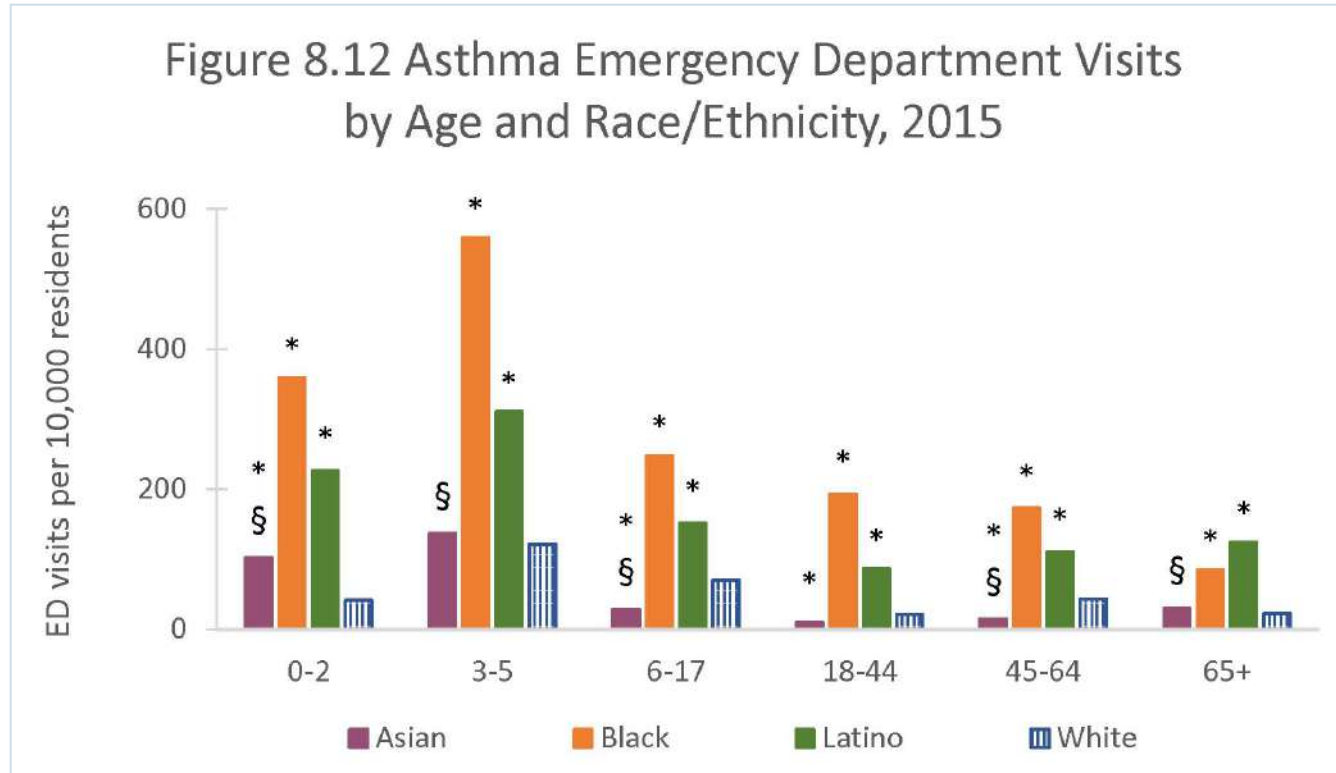
23.8% of adults in rental assistance & 10.8% in public housing report doctor diagnosed asthma compared to 9.% in market rate housing**

66% of Boston residents live in renter-occupied housing units

*Health of Boston 2017, Boston Public Health Commission Research Office

**2017 Behavioral Risk Factor Surveillance System (BRFSS) Boston Public Health Commission

Figure 8.12 Asthma Emergency Department Visits by Age and Race/Ethnicity, 2015



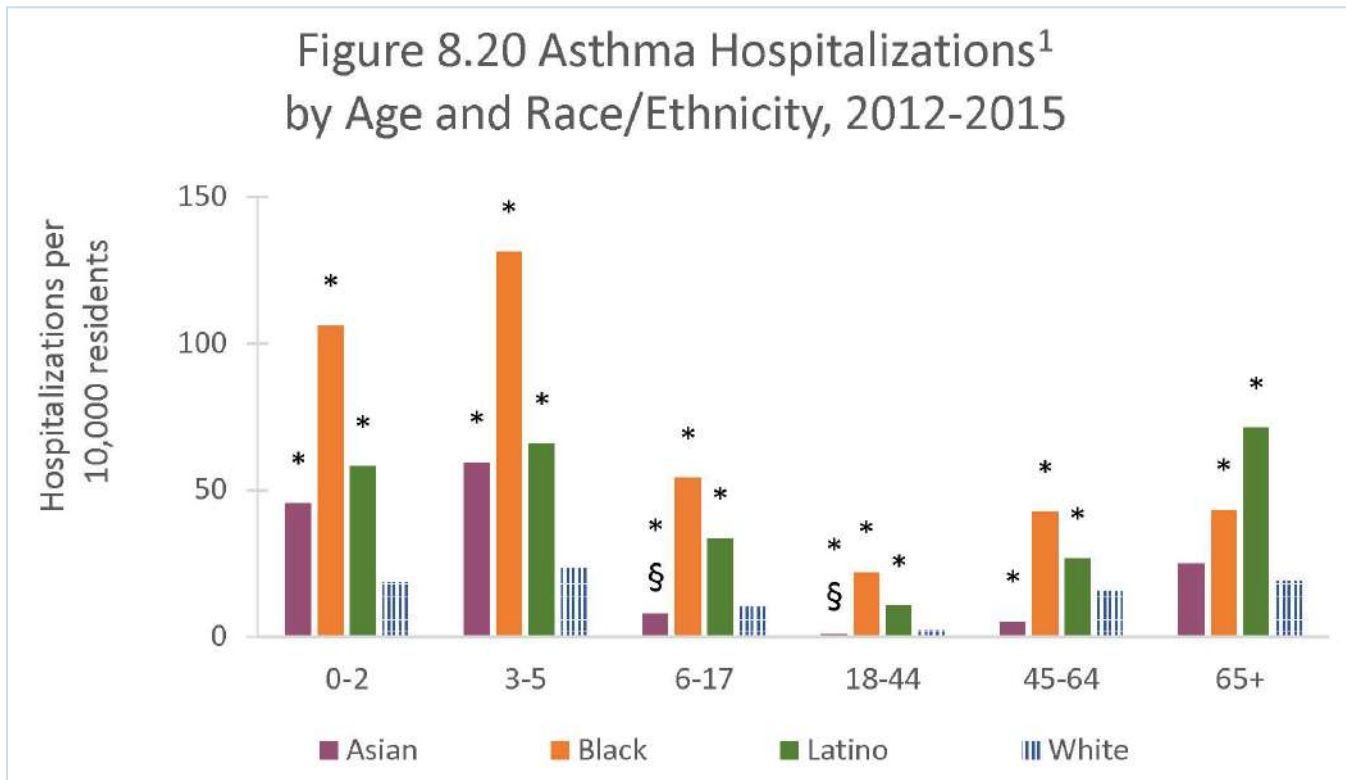
* Statistically significant difference when compared to reference group (striped bars)

§ Rates are based on 20 or fewer cases and should be interpreted with caution

DATA SOURCE: Acute hospital case-mix database, Massachusetts Center for Health Information and Analysis

DATA ANALYSIS: Research and Evaluation Office, Boston Public Health Commission

Figure 8.20 Asthma Hospitalizations¹
by Age and Race/Ethnicity, 2012-2015



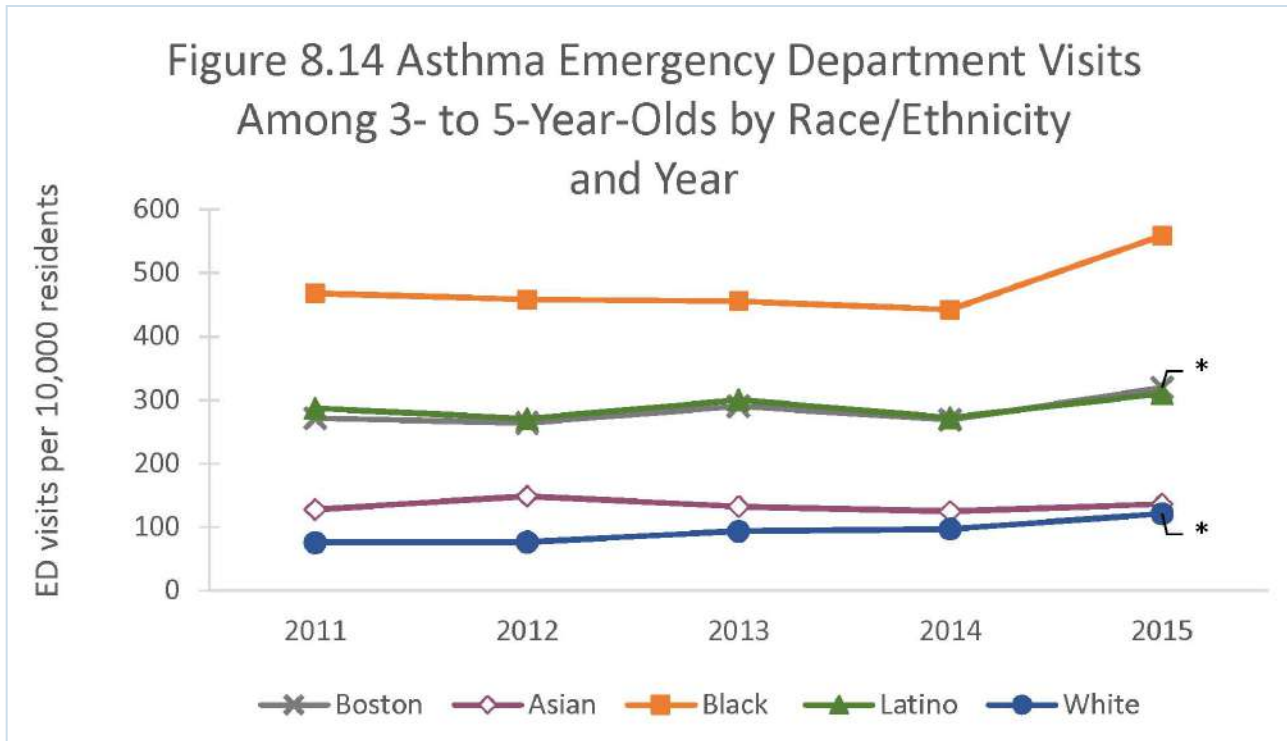
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¹ 4-year average annual rates per 10,000 residents

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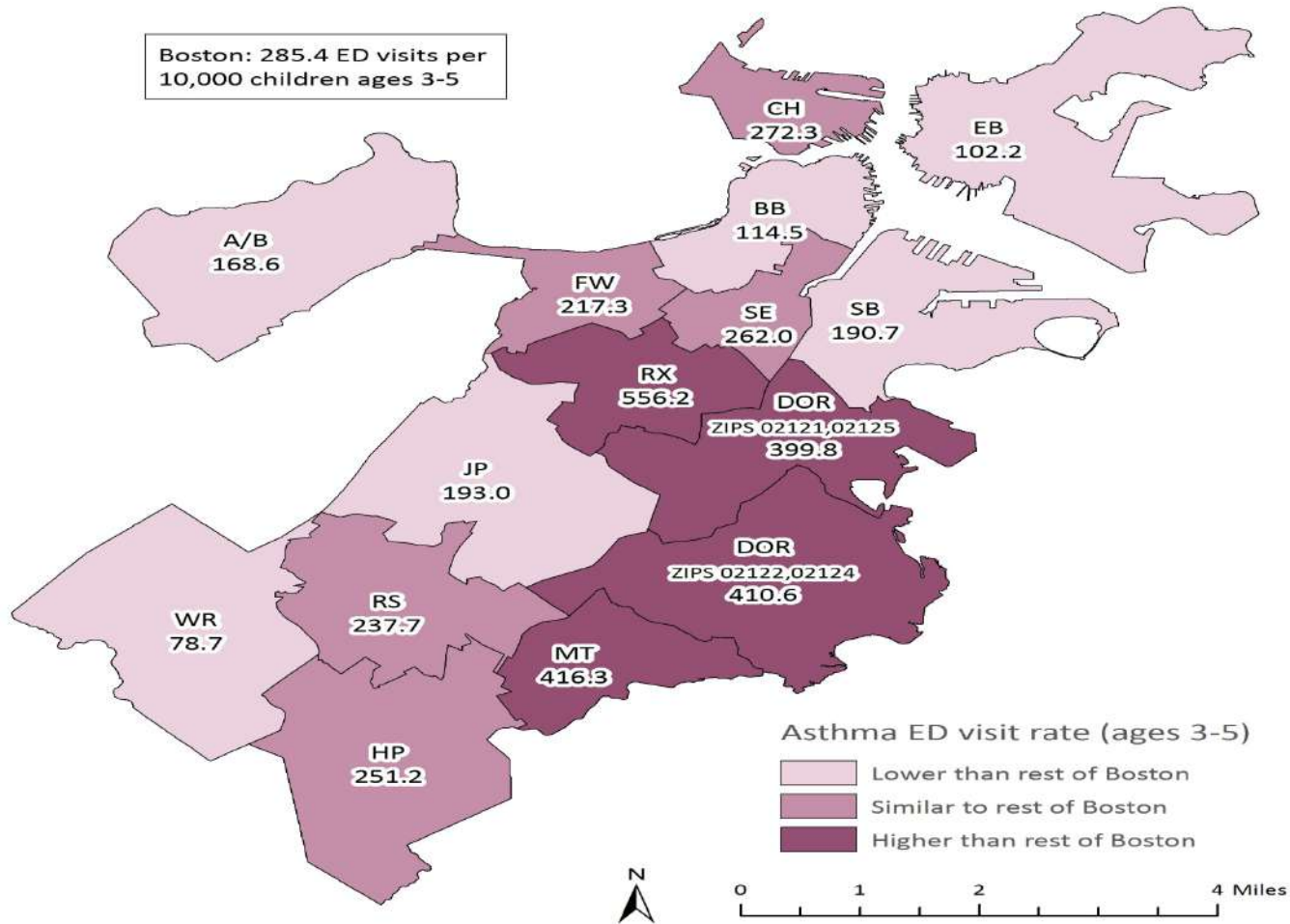


* Statistically significant change over time

Health Information and Analysis
 DATA ANALYSIS: Research and Evaluation Office, Boston Public Health
 Commission

DATA SOURCE: Acute hospital case-mix database, Massachusetts Center for

Figure 8.15 Asthma Emergency Department (ED) Visits¹ Among 3- to 5-Year-Olds by Neighborhood, 2012-2015



¹ 4-year average annual rates per 10,000 children ages 3-5

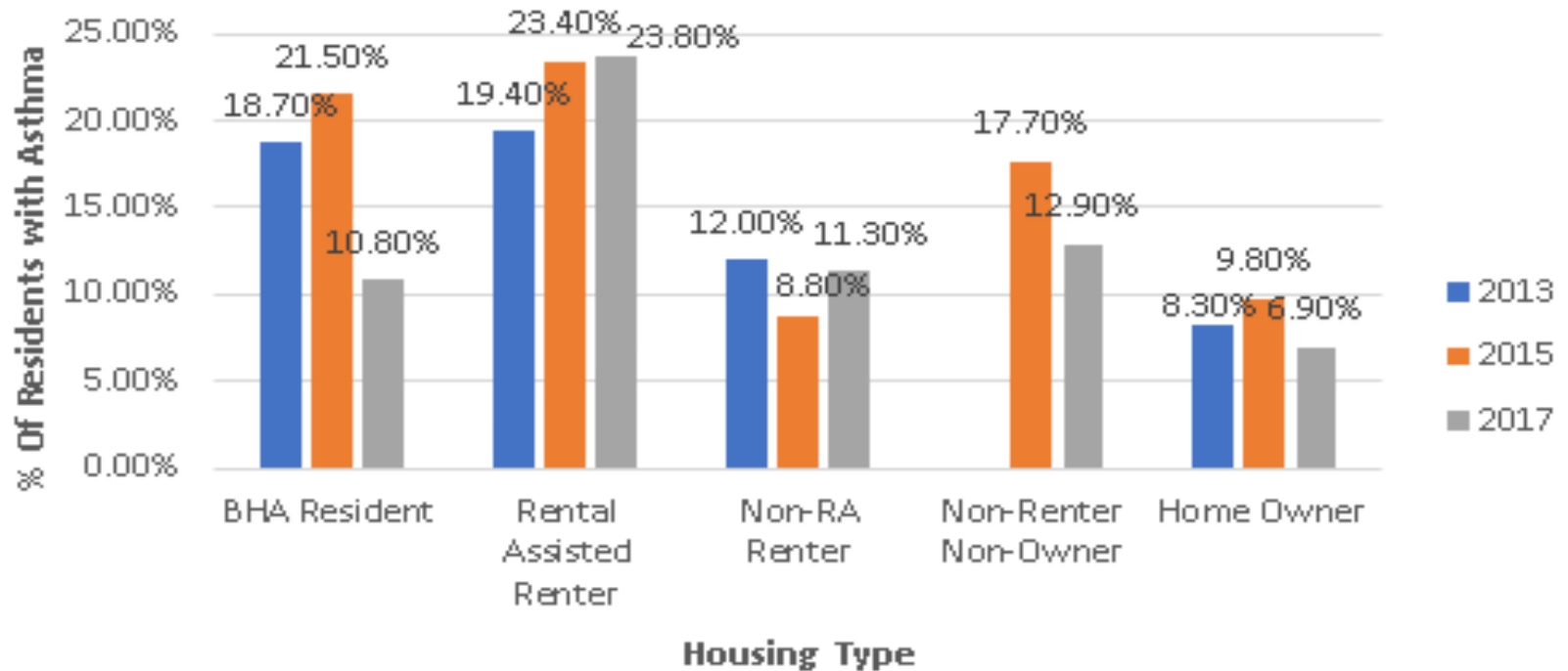
Note: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown.

DATA SOURCE: Acute hospital case-mix database, Massachusetts Center for Health Information and Analysis

DATA ANALYSIS: Research and Evaluation Office, Boston Public Health Commission

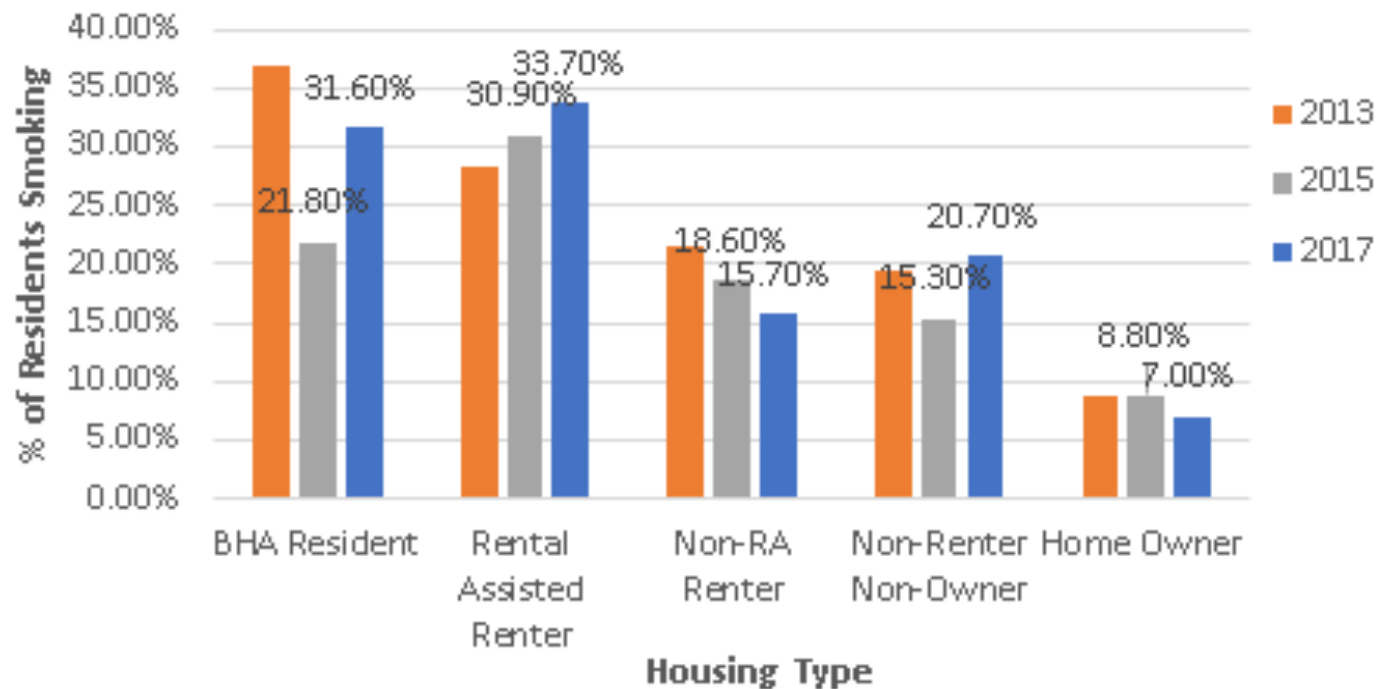
Boston Asthma Data by Housing Type

Boston Asthma Rates By Housing Type in 2013 and 2015



Boston Smoking Data by Housing Type

Boston Smoking Rates By Housing Type in 2013, 2015, 2017



Health Impact of Substandard Housing Conditions

- Rodent and cockroach infestation
- Water leaks and resultant mold
- Exposed wires and uncovered radiators
- Insufficient heat or running water
- Overcrowding
- Increased asthma
- Injuries
 - Radiator burns
 - Fires from improper wiring, lack of smoke detectors, use of space heaters
- Increased infectious diseases

Breathe Easy at Home Overview



Breathe Easy at Home (BEAH) is a public/private partnership to improve the health of Boston residents with asthma

Doctors or nurses screen for housing problems among their patients with asthma

- Log onto the BEAH web-based referral system/database
- Refer families for housing code inspection and sign up for updates
- Housing code inspectors put results up on website, automatically emailed to referrers

BEAH's design allows for evaluation and data collection

Patient consent is required for referral and at the time of inspection

BEAH Background

- Piloted in 2005 and launched May 2006
- Founding partners: Boston Medical Center, Medical Legal Partnership, Boston Inspectional Services Department, Boston Urban Asthma Coalition, The Bowdoin Street Health Center, the Boston Public Health Commission, Health Resources in Action (New England Asthma Regional Council)
- Children's Hospital Boston and Boston Housing Authority soon joined the partnership



BEAH Inspectors

ISD Housing Inspectors trained on in-home environmental asthma triggers

Mold and chronic dampness, leaks

pest infestations, overcrowding

drafty doors and windows

proper ventilation, lack of heat

other code violations/ asthma triggers

Inspector “buy-in” is critical!



BEAH Inspections



Once a referral is received from a Clinician:

Patient contacted within 24 hours to schedule a home inspection.

Inspections are conducted, asthma triggers and other code violations are given to the property owner.

Property owners are provided a compliance deadline & inspectors are instructed to work with them.

Property owner retaliation is a critical factor.

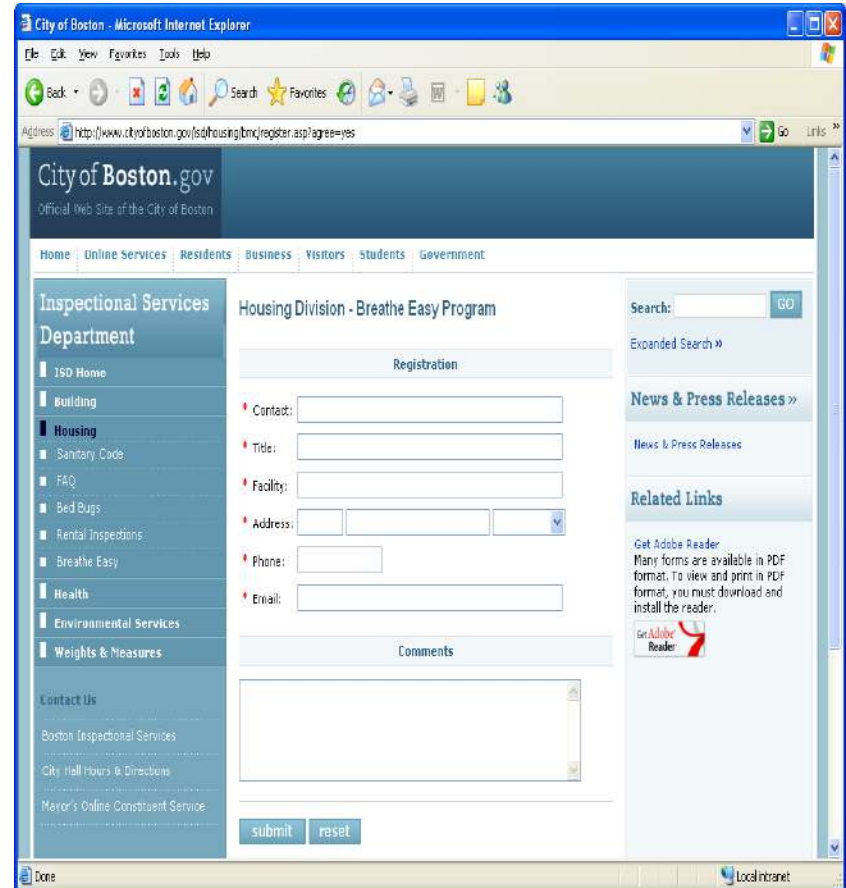
Non-compliant owners are taken to court.

Registering with BEAH

Clinicians join BEAH referral network through the website:
<https://www.cityofboston.gov/isd/housing/bmc/isd/isdlogin.asp>

Clinical sites have a “super-user” and the ability to add other site users.

Clinical sites are password protected for HIPAA protections



The screenshot shows a Microsoft Internet Explorer browser window displaying the City of Boston website. The address bar shows the URL: <http://www.cityofboston.gov/isd/housing/bmc/register.asp?agree=yes>. The page title is "City of Boston.gov" and the subtitle is "Official Web Site of the City of Boston". The navigation menu includes: Home, Online Services, Residents, Business, Visitors, Students, and Government. The main content area is titled "Housing Division - Breathe Easy Program" and contains a "Registration" form with the following fields: Contact, Title, Facility, Address (with a dropdown menu), Phone, and Email. Below the registration form is a "Comments" section with a text area and "submit" and "reset" buttons. The left sidebar contains a "Department" menu with categories: ISD Home, Building, Housing (with sub-items: Sanitary Code, FAQ, Bed Bugs, Rental Inspections, Breathe Easy), Health, Environmental Services, and Weights & Measures. The right sidebar contains a search box, "News & Press Releases" link, and "Related Links" section with a note about Adobe Reader.

City of Boston - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Mail Print Address Book

Address <http://www.cityofboston.gov/isd/housing/bmc/admin/login.asp> Go Links >>

City of Boston.gov

Official Web Site of the City of Boston

Home Online Services Residents Business Visitors Students Government

Inspectional Services Department

- ISD Home
- Building
- Housing**
 - Sanitary Code
 - FAQ
 - Bed Bugs
 - Rental Inspections
 - Breathe Easy
- Health
- Environmental Services
- Weights & Measures

Contact Us

- Boston Inspectional Services
- City Hall Hours & Directions
- Mayor's Online Constituent Service

Housing Division - Breathe Easy Program

Login is required. Please sign in:

User Name:

Password:

Search:


[Expanded Search >>](#)

News & Press Releases >>

[News & Press Releases](#)

Related Links

Get Adobe Reader
Many forms are available in PDF format. To view and print in PDF format, you must download and install the reader.



Local intranet

City of Boston - Microsoft Internet Explorer

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Address <http://www.cityofboston.gov/isd/housing/bmc/admin/newcase.asp> Go Links

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Inspectional Services Department

- ISD Home
- Building
- Housing
- Breathe Easy**
 - Case List
 - New Case
- Health
- Environmental Services
- Weights & Measures

Contact Us

- Boston Inspectional Services
- City Hall Hours & Directions
- Mayor's Online Constituent Service

Housing Division - Breathe Easy Program

New Case Referral

Patient Information hide

* **Salutation:**

* **First Name:**

Last Name:

* **Language:**

* **Gender:**

* **Phone (a):** Home Cell Other
(primary phone)

Phone (b): Home Cell Other
(alternate phone)

* **Under Six?** Yes No

Address Information hide

Search: GO

Expanded Search >>

News & Press Releases >>

News & Press Releases

Related Links

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City of Boston - Microsoft Internet Explorer

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Address <http://www.cityofboston.gov/isd/housing/bmc/admin/newcase.asp> Go Links

Referral Information hide

* **Clinic:** Public Health Commission

* **Group Email:** Emily_Litonjua@bphc.org

* **Referred by:**

* All updates to this case are returned to the above address

Inspectional Services Department

ISD Home

Building

Housing

Breathe Easy

Case List

New Case

Health

Environmental Services

Weights & Measures

Contact Us

Boston Inspectional Services

City Hall Hours & Directions

Mayor's Online Constituent Service

City Departments

Select Department

Housing Division - Breathe Easy Program

View Case Referral

Patient Information

show

MICHELLE STRAW
(617)459-9745

Click the "show" link to view the Patient information.

Address Information

show

37 - 0 MSGR REYNOLDS WAY
Ward: 09

Click the "show" link to view the Address information.

Nature of the Problem and Inspection Information

show

WAS AN OPEN CSAE, AND NEEDS REOPENED CHILD WITH ASTHMA

Click the "show" link to view the Problem information.

Referral Information

show

Search: GO

Expanded Search »

News & Press Releases »

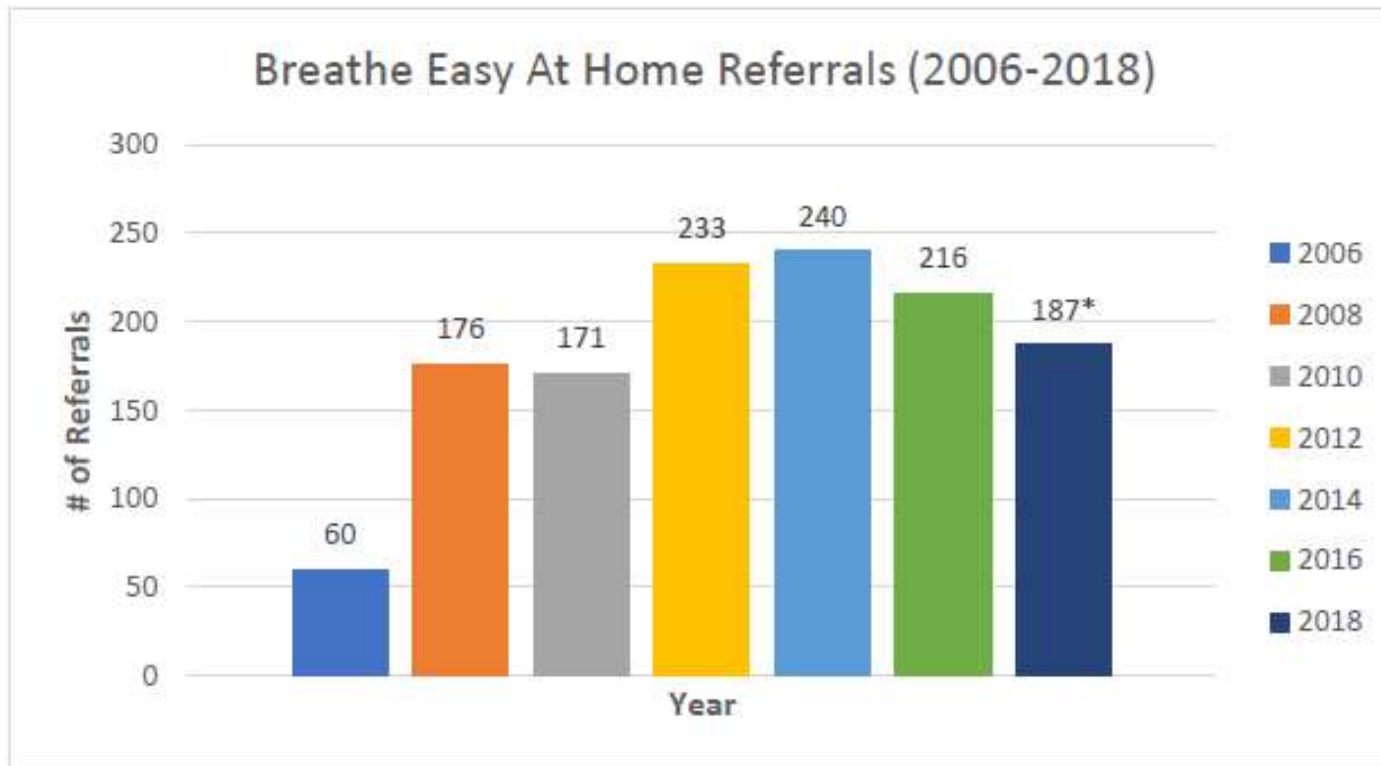
News & Press Releases

Related Links

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Breathe Easy Growth



BEAH Data 2015-2017

Neighborhood	Referrals	Percentage	Hospitalizations Under Age 5
Allston/Brighton	16	2.50%	168.6
Backbay/Beacon Hill	3	0.47%	114.5
Charlestown	10	1.56%	272.3
Dorchester	237	37.09%	410.6
East Boston	58	9.08%	102.2
Hyde Park	24	3.76%	251.2
Jamaica Plain	30	4.69%	193.0
Mattapan	32	5.01%	416
Roslindale	31	4.85%	237.7
Roxbury	117	18.31%	556.2
South Boston	51	7.98%	190.7
South End	27	4.23%	262.2
West Roxbury	3	0.47%	78.7
Total	639	100.00%	

BEAH Status

- BEAH has a full-time coordinator
 - 37 Boston health institutions are registered
 - Quarterly newsletter to clinical sites and quarterly report to Steering Committee
 - Educational materials for residents (legal rights, BEAH process)
 - Rapid response agreement with Boston Housing Authority
 - Using data to plan prevention efforts (outreach to landlords, pest control contractor training)
- 70% of cases have violations solved without housing court!

BEAH Findings Through the Years

2006	#	%
Carpet	4	7%
Rodents	25	42%
Mold	11	18%
Roaches	8	13%

2017	#	%
Mold/Leaks/ Dampness	103	25%
Rodents	83	20%
Structural	53	13%
Roaches	27	7%

2016	#	%
Roaches	109	22%
Mold/Leaks/ Dampness	73	14%
Rodents	67	13%
Structural	62	12%



Breathe Easy- A Replicable Model

Has been replicated in Multnomah county, Oregon and Rhode Island DPH

- **Facilitating Factors for replication**

- ✓ Leadership from the top
- ✓ Missions aligned
- ✓ Frequent communications including meeting regularly
- ✓ Data collection and monitoring
- ✓ Memorandums of understanding
- ✓ Annual meetings of agencies
- ✓ Boston has a public hospital to serve the underserved

BEAH-A Replicable Model

- Leadership from the top
- Missions aligned
- Leverage of each other resources & systems
- Frequent communications including meeting regularly
- Data collection and monitoring
- Memorandums of understanding
- Annual meetings of agencies
- Boston has a public hospital to serve the underserved



- **Inspections (20,000 yearly)**
- **Rental Registration & inspection Ordinance**
- **BEAH inspections**

Inspectional Services

Boston Public Health Commission

- **Health data**
- **Public awareness and information**
- **Asthma Home Visits**
- **Research and evaluation**
- **Grant writing**
- **BEAH management**

Boston Office of Fair Housing and Equity

- **Data monitoring/collection**
- **Investigation**
- **Enforcement**
- **Education and outreach**
- **Mediate second hand smoking complaints**

-Community Residents
-Clients
-Patients
-Advocacy groups
-Tenants groups
- Public Officials

Boston Medical Center

- **BEAH referrals**
- **Assessing patient for environmental health**
- **Research**
- **Medical legal partnership support**
- **Policy advocacy**
- **Grant writing**

Boston Housing Authority

- **Home to 25,000 residents**
- **Section 8 administrator**
- **IPM policy**
- **Smoke free housing**
- **Healthy design and construction**
- **Resident education**

THANK YOU!

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