



CITY OF WORCESTER, MASSACHUSETTS
Department of Health & Human Services
Division of Public Health



Public Health
Prevent. Promote. Protect.

Matilde Castiel, MD
Health & Human Services
Commissioner

Karyn E. Clark
Public Health
Director

DATE: January 7, 2019
RE: WORCESTER BOARD OF HEALTH MEETING MINUTES
START TIME: 6:30 PM
LOCATION: WORCESTER DIVISION OF PUBLIC HEALTH
25 MEADE STREET, CONFERENCE ROOM 109
WORCESTER, MA 01610

Welcome & Introductions:

Meeting was called to order at 6:30pm.

Members present: David Fort, Chair, Jerry Gurwitz, MD, Abigail Averbach and Edith Claros, PhD, Vice Chair Staff: Karyn Clark, Director of DPH, Colleen Bolen, Deputy Director of DPH, Michael Hirsh, MD, Medical Director of DPH, Matilde Castiel, MD, Commissioner of HHS

Amanda Wilson, Director of Inspectional Services, Janice Thompson, Law Department, Martin Dyer, Deputy Chief, Worcester Fire Department, Adam Roche, District Chief, Worcester Fire Department

Approval of the December 3, 2018 Minutes:

Motion to approve the WBOH meeting minutes of December 3, 2018 made by Jerry Gurwitz, MD
Second - Abigail Averbach - Approved

Review and act on continued discussion regarding window guards:

Karyn Clark, Director of DPH: Reviewed with the Board their discussion at the last BOH meeting on December 3, 2018 regarding window guards. Since that meeting met with other departments to speak with Inspectional Services, Fire and Law Department to get a better understanding of what would be involved feasibility and legality of a possible regulation. Invited these city departments tonight to speak to this item and address what they feel concerns are creating a regulation for window guards.

Adam Roche, District Chief, WFD: There is a specific code that addresses these guards. Any window guard has to be releasable without the use of a tool, key, special knowledge or force it takes greater than a door. The bars may provide a false sense of security. They would hamper our operations at a fire and the ability of residents to self-rescue. The types of buildings and windows that these guards would be put in are all different sizes and dimensions. It may create other unintentional problems.

Jerry Gurwitz, MD: What kind of ideas or alternatives can you help us with if we wanted to address an issue like this?

25 Meade Street, Worcester, MA 01610-2715 Phone: (508) 799-8531 Fax: (508) 799-8572

health@worchesterma.gov



Martin Dyer , Deputy Chief WFD: We look at public education as number one priority. We suggest public education regarding the dangers of windows i.e. good parenting, teaching children to stay away from windows, not have furniture against or under the windows. We feel that putting up window guards is not the way to prevent falls. It's an unintentional problem. We are happy to help in other methods to address this issue.

Michael Hirsh, MD, Medical Director of DPH: Several large cities, including Boston, adopted a window guard's legislation. Is it possible to educate Firefighters and the residents to disengage these?

Adam Roche, District Chief, WFD: You could look at examples around the country where people are self-rescuing, hanging out of windows - when their house is on fire. If these bars are on the windows, that can't happen. Firefighters don't have a minute, they have a second.

Janice Thompson, Law Department: I'm not familiar with any regulation in Boston that requires window guards. There is an education program through Boston Public Health Commission. They support moving furniture away from windows and making sure that families are well educated.

Martin Dyer , Deputy Chief WFD : If this is something that we are going to consider, we have to implement the infrastructure with it to ensure the safety of the residents and others.

Amanda Wilson, Director of IS: There are 44,000 apartments in the City and that number is not a manageable number to do individual inspections. There are modern windows now that only open to a certain point. Some new windows have warranties where you can't drill into the frame because you will void the warranty.

David Fort, Chair: We need to have some type of alternative. I'm concerned about what we can do to prevent a child from falling out the window.

Abigail Averbach: Each fall is a tragedy. There is some type of education as I see that the rates of falls in Worcester are coming down.

Karyn Clark, Director of DPH: April is National Window Safety month. I would propose all of our Departments and Divisions work together to come up with some kind of campaign. This is not a regulation that the BOH can entertain. This would have to be petition at the state level for the building code to be amended.

Janice Thompson, Law Department: The action that the BOH can take is rather than passing regulations on the City level, you can support the State legislation. Pass a resolution to support legislation statewide.

Abigail Averbach: It's a statewide building code that needs to be changed in order to change a requirement if we wanted to go in that direction?

Janice Thompson, Law Department: Yes. There are building and fire code requirements that need to be impacted.

Edith Claros, PhD, Vice Chair: Maybe the BOH could endorse a position statement in support of the campaign?

Karyn Clark, Director of DPH: I will continue to work with other Departments to see what other steps we could take.

Review and act on update relative to opioid epidemic:

Matilde Castiel, MD, Commissioner of HHS: Briefed the BOH on the opioid epidemic on the number of calls made to 911, death rates, locations, victim data and racial/ethnic disparities. (presentation distributed). Worcester is one of the hotspots of fatal opioid overdoses. The numbers of overdoses between 2009 – 2018 have increased. There's a new program, Worcester Addresses Childhood Trauma (ACT's), which supports families with children under 10 who have witnessed violence. You can download the *Stigma Free Worcester* app on your phone; this will let you know the places in Worcester for treatment, housing and food. Briefed the BOH on need for treatment, reducing stigma and policy and advocacy.

David Fort, Chair: Is the prescribing of medication limited? What happens to the patient that comes in with an overdose? What could we do as the BOH to help?

Matilde Castiel, MD, Commissioner of HHS: Doctors have to cut back on opioid prescriptions. They are trying to provide patients with treatment. The BOH can help with advocacy.

Review and act on discussion relative to Hepatitis A Outbreak:

Matilde Castiel, MD, Commissioner of HHS: Uptick in Hepatitis A started in Boston in the fall - they noticed an increased number in the homeless population. WDPH sent out emails to all the non-profit agencies that work with the homeless population and individuals who are in treatment for substance abuse. WDPH nurses partnered with Community Health Link and AIDS Project Worcester and proactively started vaccinating the community. We have vaccinated 420 individuals so far.

Review and act on presentation with Casey Burns and Brenna Robeson relative to the review of health sector participation on boards and commissions:

Brenna Robeson: CHIP Priority Area 5: Economic Opportunity 5.2: Modify or implement municipal-level or institutional policies that have significant impact on health equity with an impact of at least 10,000 residents. 5.2.1: Inventory, assess feasibility, and advocate for health sector participation in all municipal boards and commissions pertaining to economic Development. Within Economic Opportunity there's a big focus on factors that help people participate in the Worcester economy. Looking at the different Economic Boards and Commissions in the City, you can see the current representation of public health expertise (distributed). We found that a lot of these Boards have either 1 or no members who brings traditional public health expertise to the table. Briefed the BOH on the significant impact on health equity. We have to think about how health disparities are created between communities, not just within certain silos in our City. BOH can make some recommendations to the Citizen Advisory Council that individuals with a public health background be appointed to these Boards and Commissions.

Abigail Averbach: Would be in favor to think about how we could make this request to understand the demographics of other boards and commissions.

David Fort, Chair: Would like to find out the diversity that's on these different committees starting with the Citizen Advisory Council. See if we are having adequate representation. In terms of the public health part of it, how do we go about introducing them to the Advisory Council?

Karyn Clark, Director of DPH: There is a vacancy on the BOH and we will be interviewing. We would like to be able to understand the process, the questions, who is being put forward for the vacancies, also look at diversity. Will report back findings to board.

Motion to adjourn; Abigail Averbach, second by Edith Claros, PhD, Vice Chair

Adjourn: 8:20pm

Next Meeting -- February 4, 2019 at 6:30pm

Next Meeting Topics:

New BOH member update
Member diversity of City Boards
Review principles of operation
Reorganization of BOH
Review CHIP priority areas
Window safety campaign



Current Potential to Increase Public Health Representation on Worcester Economic Boards and Commissions

Coalition for a Healthy Greater Worcester

Data sourced from Worcester City Manager's Office, August 2018

CHIP Priority Area 5: Economic Opportunity

5.2: *Modify or implement municipal-level or institutional policies that have significant impact on health equity with an impact of at least 10,000 residents*

5.2.1: *Inventory, assess feasibility, and advocate for health sector participation in all municipal boards and commissions pertaining to Economic Development*

Economic

Board	Members with Health Background	Total Members	Percentage of Members with Background	Current Vacancies	District(s) Needed
Conservation	0	6	0%	2	Any District
Trust Funds	0	2	0%	2	Any District
Housing Authority	0	5	0%		
Redevelopment Authority	1	5	20%		
Zoning	1	5	20%	1	3
Community Development	3	9	33%	1	2
Historical	3	9	33%	1*	Any District
License	1	3	33%		
Memorial Auditorium	2	5	40%		
Civic Center	2	5	40%		
Planning	2	5	40%	2	1, 4
Off-Street Parking	2	4	50%	2	Any District
Community Development Block Grant (CDBG) Advisory Committee	-	-	-		

* vacancy for an alternate board/commission member

Other

	Members with Health Background	Total Members	Percentage of Members with Background	Current Vacancies	District(s) Needed
Board	0	4	0%		
Airport	0	6	0%	1	Any District
Arts	0	1	0%	5	Any District
Cable	0	5	0%	4	2, 3, 4, 5
GAR Memorial Hall	0	3	0%	3	Any District
Hope Cemetery	1	6	17%	2	Any District
Parks and Recreation	3	14	21%	2	Any District
Elder	3	9	33%	2	4, 5
Citizen Advisory Council	4	7	57%	3	1, 2, 3
Diversity & Inclusion	3	5	60%		
Election	5	8	63%	2	1, 2
Status of Women	8	11	73%	2	1, 3, 4 or 5
Disability	6	8	75%	2	Any District
Human Rights	3	4	75%	1	Any District
Thomas Early Scholarship	5	5	100%	1	Any District
Health					

Health in All Policies (HiAP) to CHIP away at Health Inequity in Municipal Economic Development

**Coalition for a Healthy Greater Worcester
Economic Opportunity Working Group**
Brenna Robeson, Summer 2018 Intern
brobeson@clarku.edu



Overview

- CHIP Strategy
- Current Makeup of Boards and Commissions
- Health in All Policies (HiAP) Model
- HiAP in Richmond, CA
- Possibilities for Worcester

5.2

Modify or impliment **municipal-level or institutional policies** that have significant impact on health equity with an impact of at least 10,000 residents

5.2

Modify or impliment **municipal-level or institutional policies** that have significant impact on health equity with an impact of at least 10,000 residents

5.2.1

Inventory, assess feasibility, and advocate for health sector participation in all municipal boards and commissions pertaining to Economic Development

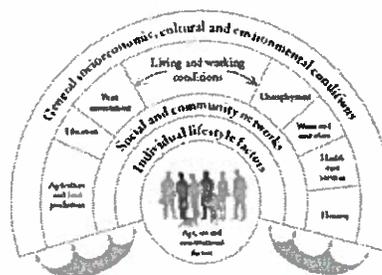
	<p>Civic Center Commission</p> <p>CDBG Advisory Commission</p> <p>Community Development Advisory Committee</p> <p>Conservation Commission</p> <p>Historical Committee</p> <p>License Commission</p> <p>Memorial Auditorium Board of Trustees</p> <p>Off-Street Parking Board</p> <p>Planning Board</p> <p>Redevelopment Authority</p> <p>Trust Fund Commission</p> <p>Worcester Housing Authority</p> <p>Zoning Board of Appeals</p>
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Current Representation of Public Health Expertise

Board/Commission	Members with Health Background	Total Members	Percentage of Members with Background
Conservation	0	6	0%
Trust Funds	0	2	0%
Housing Authority	0	5	0%
Redevelopment Authority	1	5	20%
Zoning	1	5	20%
Community Development	3	9	33%
Historical	3	9	33%
License	1	3	33%
Memorial Auditorium	2	5	40%
Civic Center	2	5	40%
Planning	2	5	40%
Off-Street Parking	2	4	50%
Community Development Block Grant (CDBG)	-	-	-

Health in All Policies: Breaking down silos to address social determinants of health

FIGURE 1. THE BROAD DETERMINANTS OF HEALTH
Dahlgren, G. and Whitehead, M. (1991). Policies and Strategies to Promote Social Equity in Health. Stockholm, Sweden: Institute for Future Studies. Used with permission.



Rudolph et al. (2013, 9)

HiAP Guiding Principles

Adverse Childhood Experiences

Find out how they affect our lives and society and why prevention matters.



<https://www.cdc.gov/violenceprevention/acesstudy/index.html>



<https://145frontapartments.com/gallery/>



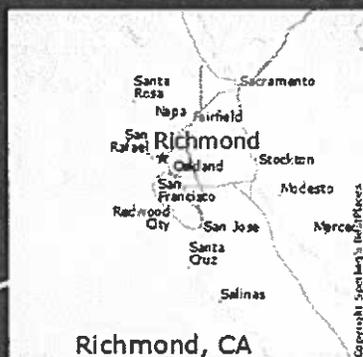
<http://www.com4200730/newsitem/1342-history>



<https://www.corburn.com/articles/trauma-in-parkville-colorado-their-garage>

Corburn et al. (2015);
Corburn (2013, 5-7)

Case Study: HiAP in Richmond, CA



- Near San Francisco, CA, high ethnic diversity, economic barriers and industrial air pollution
- Health Equity Planning as an Inside/Outside Effort
- Center toxic place-based stressors related to structural racism
- Cultural shift, institutionalization of HiAP over six year period



How can we cultivate a culture of HiAP Worcester, specifically within city economic boards and commissions?

Possible Strategies

- BoH makes appointment recommendations to the Citizen Advisory Council

Board/Commission	Members with Health Background	Total Members	Percentage of Members with Background	Current Vacancies	District(s) Needed
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Off-Street Parking	2	4	50%	2	Any District
Community Development Block Grant (CDBG) Advisory Committee	-	-	-	-	-

* vacancy for an alternate board/commission member

Possible Strategies (continued)

- Board/commission member HiAP trainings
- Board/commission CHIP alignment plans
- BoH requests more data on demographics of board/commission membership



Thank you!
Thoughts and Comments?

Sources

Corburn, Jason. 2007. "Community Knowledge in Environmental Health Science: Co-Producing Policy Expertise." *Environmental Science & Policy* 10 (2): 150–61. <https://doi.org/10.1016/j.envsci.2006.09.004>.

Corburn, Jason, Shasa Curl, Gabino Arredondo, and Jonathan Malagon. 2015. "Making Health Equity Planning Work: A Relational Approach in Richmond, California." *Journal of Planning Education and Research* 35 (3): 265–81. <https://doi.org/10.1177/0739456X15580023>.

Rudolph, Linda, Julia Caplan, Karen Ben-Moshe, and Lianne Dillon. 2013. "Health in All Policies A Guide for State and Local Governments." Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute. <http://www.phi.org/uploads/application/files/udt4vq0y712qpb1o4p62dexjlgxlnogpq15gr8pti3y7ckzysi.pdf>.



Addressing the Opioid Epidemic in Worcester

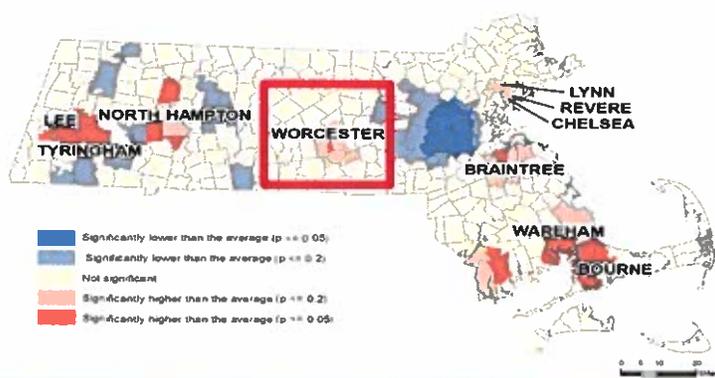
Mattie Castiel, M.D.
Worcester Commissioner of Health and Human Services

WORCESTER
DEPARTMENT OF
HEALTH & HUMAN SERVICES

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Worcester is hotspot of fatal opioid overdoses

Hot Spots of Fatal Opioid Overdose Rates



- Significantly lower than the average ($p \leq 0.05$)
- Significantly lower than the average ($p \leq 0.2$)
- Not significant
- Significantly higher than the average ($p \leq 0.2$)
- Significantly higher than the average ($p \leq 0.05$)

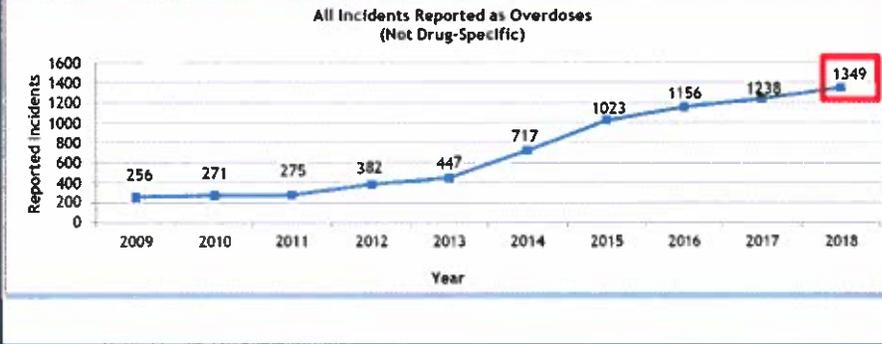
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WPD 911 Overdose Calls as of December 2018: Trends Over Time

Worcester Police Department - Overdose Report
Prepared By Crime Analysis on 1/02/19

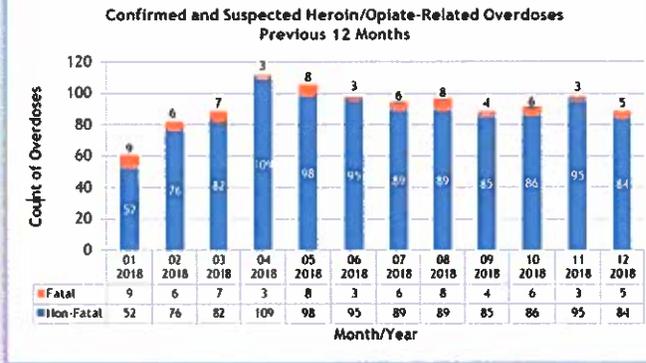
December 2018
Reported Heroin/Opiate ODs in Dec.: 89

Long Term Overdose Trends (Previous 10 Years)



WPD 911 Overdose Calls as of December 2018: Trends Over Time

Confirmed & Suspected Heroin/Opiate-Related Overdoses in the Previous 365 Days



Temporal Data

Incidents By Day of Week

Sun	146
Mon	144
Tue	161
Wed	148
Thu	161
Fri	184
Sat	163

Incidents By Shift

Days	387
First Half	519
Last Half	201



WPD 911 Overdose Calls as of December 2018: Victim Demographics

Top Locations for Repeat OD Activity*

Address	Incidents
25 QUEEN ST	15
2 WASHINGTON SQ	11
12 QUEEN ST	8
119 PROVIDENCE ST	8
664 MAIN ST	7
47 WEST ST	7
1350 MAIN ST	7
25 TOBIAS BOLAND WAY	6

* More than 5 in the last year.

Gender

Male	762	69%
Female	345	31%

Residency*

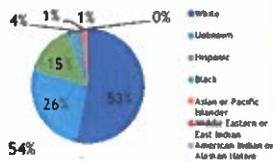
From In-City	770	73%
From Outside City	279	27%

Race*

White	555	54%
Unknown	271	26%
Hispanic	151	15%
Black	46	4%
Asian or Pacific Islander	12	1%
American Indian or Alaskan Native	1	0%

Victim Data

Average Victim Age: 38

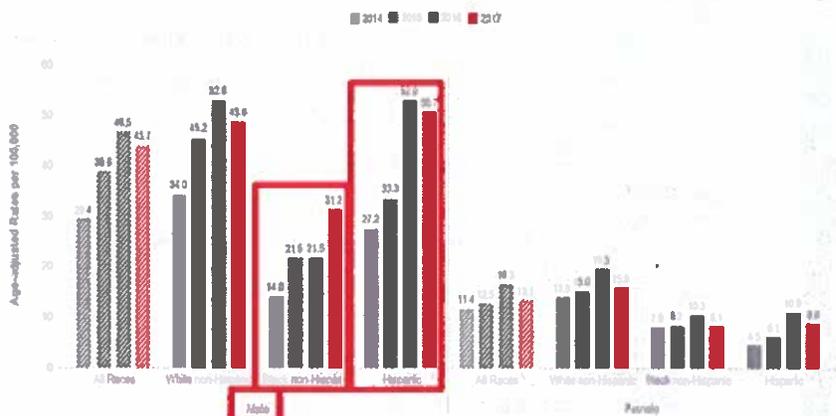


* Residency and Racial data are not available for every reported incident.



In Massachusetts, while overall opioid-related deaths are trending downward, racial/ethnic disparities persist

Confirmed Opioid-Related Death Rates, All Intents, by Gender and Race and Hispanic Ethnicity



Massachusetts Department of Public Health, "Opioid-Related Overdose Deaths, All Intents, MA Residents - Demographic Data Highlights Massachusetts Department of Public Health, 2018.

In Massachusetts, the opioid death rate is...

- 16-30x higher for individuals experiencing homelessness [1]
- 120x higher for individuals with histories of incarceration [1]
- 3x higher among veterans [2]

[1] Massachusetts Dept. of Public Health. Data Brief: An Assessment of Opioid-Related Overdoses in Massachusetts 2011-2015, August 2017.
 [2] Massachusetts Department of Public Health. An Assessment of Fatal and Nonfatal Opioid Overdoses in Massachusetts (2011-2015). August 2017.



City of Worcester

- **Prevention**
 - Worcester Addresses Childhood Trauma (ACTs)
 - Trauma-informed family support for children under 10 and their families who have witnessed violence
 - Within 72 hours of a call to the police, a culturally competent Community Health Worker will help the family with emergent and long-term needs
 - Worcester Public Schools collaboration to improve school climate
 - Reduce suspensions among Latino youth
 - Provide counseling and treatment for substance use
- **Engagement**
 - Hub program
 - Coordinated mobilization of resources to address individuals or families facing acute levels of elevated risk
 - Quality of life team with homeless outreach and recovery coach
 - Trafficked women initiatives
 - Living in Freedom Together
 - Diversion efforts
 - Stigma free Worcester app
 - Coordinating Council on homelessness



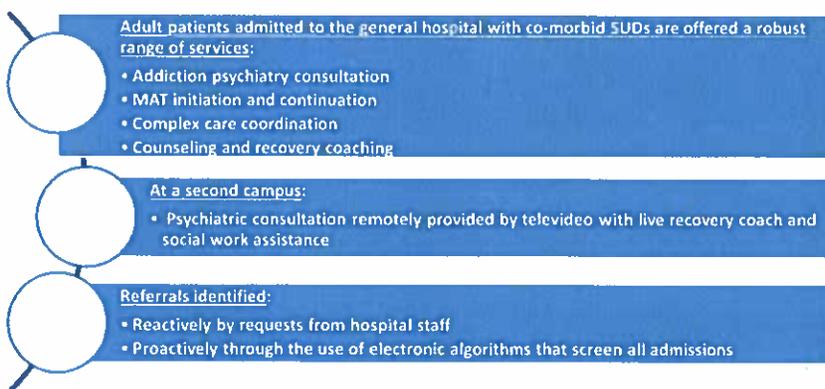
City of Worcester

- **Treatment**
 - MAT induction as outpatient (bypassing detox)
- **Reducing Stigma**
 - “Addiction as a disease” training to all fire fighters, police, and other agencies to reduce stigma
- **Policy and Advocacy**
 - MAT advocacy with the 14 largest health departments in Massachusetts
 - Mass Medical Society collaboration to advocate expanding MAT prescribing among physicians in the state
 - Improving reentry upon release from Worcester County Jail
 - Narcan upon release
 - MAT treatment in jail and upon release
 - Mayor’s Mental Health Task Force



UMass Memorial Medical Center Psychiatry Department

Alan P. Brown, MD, Professor of Psychiatry and Family Medicine and Addiction Consultation Team



UMass Memorial Medical Center Emergency Department

Kavita Babu, MD, Assistant Professor of Emergency Medicine

- ED-based MAT prescribing
- Reducing buprenorphine prescribing barriers
 - Incentivizing ED physicians to get waived (\$1000 incentive)
 - PCFS training
 - One on-site physician gets trained to offer waiver training
- Engaging GI and rheumatology regarding chronic pain treatment of patients with chronic pancreatitis
- Further development of bridge service/clinic
- Integration of PDMP into EPIC workflow
- Completion of a Naloxone-CPR video
- Installation of the University Campus Disposal Box



Homeless Outreach and Advocacy Project (HOAP)

Community Healthlink

Erik Garcia, MD, Assistant Professor, University of Massachusetts Medical School

- Offers same day initiation of Suboxone/Vivitrol treatment
 - Treating 60+ patients
 - Runs support groups and 1:1 counselling
- Helping women transition from the Chicopee Correctional Facility directly into MAT and counselling (collaboration with LIFT)
- Provide medical and psychiatric care, substance abuse counselling and MAT to women who have been sexually trafficked
- Addressing Hepatitis A outbreak with Worcester DPH
 - Providing immunizations, hand sanitizer and education in the city's shelters and detox facilities



Spectrum Health Systems

Jeffrey Baxter, MD, Chief Medical Officer, Spectrum Health Systems

Treatment is Harm Reduction	Opioid Overdose Prevention	Recovery-Oriented Medication Assisted Treatment
<ul style="list-style-type: none"> ▪ • Methadone services • Walk-in, same-day methadone starts 1-2 days per week at every site • No wait lists or turning patients away • Direct transfer from inpatient settings to OTP • Expansion of OTP network to try to meet treatment demand • Now more than 5,200 methadone clients in MA ▪ • Buprenorphine Walk-in Induction Hub • Walk-in, same-day access to office-based buprenorphine treatment • No wait list, no turning patients away • Induction, followed by continued treatment or connection to "spoke" treatment resource in patients' home communities • Direct transfer from inpatient settings where buprenorphine initiated (detoxification centers, hospitals, emergency) 	<ul style="list-style-type: none"> • Overdose prevention education integrated into OTP orientation and inpatient curriculum • Naloxone offered to every patient, distributed through partnership with commercial pharmacy, at all OTP sites and both inpatient campuses 	<ul style="list-style-type: none"> • Clinical services meet individual needs with a focus on retention and a client centered treatment plan • Motivational Interviewing and Cognitive Behavioral Therapy integrated into MAT • Harm reduction approach focused on reducing and moving toward eliminating use and overdose prevention

 The City of WORCESTER

Living in Freedom Together (LIFT)

Providing resources, advocacy and support to empower individuals to exit the sex trade
Nicole Bell, Chief Executive Officer

Providing harm reduction resources for prostituted women:

- Survivor support person with lived experience providing direct care and case management
- Narcan to individuals in prostitution
- Wound care kits and bleach/clean kits
- Onsite HIV/STI Screenings and referrals for medical care
- Instant access to recovery supports and treatment
- **Reentry support for individuals at high risk of overdose and exploitation**
- Onsite medical care and MAT intakes (starting Jan 2019)
- Legal advocacy for prostituted women in the criminal justice system
- Immediate access to domestic and sexual violence advocates

 The City of WORCESTER

AIDS Project Worcester (APW)

Michelle Smith, Executive Director

- Outreach
 - Tabling Events
 - Recovery Homes and Treatment Centers
 - Bar Outreach
 - LGBTQ+ Outreach
 - African Immigrant Outreach
 - Narcan Training
 - Street Outreach
 - Online Outreach
- Supply drop-off
 - Provide flyer and bleach kits to willing organizations for distribution
- Post-overdose follow-up
 - APW staff team up with first responders and visit those who have survived an overdose
 - Information shared on APW's Syringe Services Program; Narcan enrollment; HIV, HCV, syphilis, gonorrhea and chlamydia testing; the Tuesday medical clinic; referrals to MAT or detox or treatment; linkage to Learning to Cope for family/friends
 - Transportation provided if the person is interested in detox or treatment



What We Need

- Narcan available to all
 - Given out in ER, not just prescription
- Fentanyl strip distribution
- Outreach workers offering clean supplies and monitoring overdoses
- Mental health services available to all (like diabetes or hypertension treatment)
- MAT provided by all clinicians, PAs, and NPs
- Recovery coaches following patients (detox, hospitals, residential, and outpatient)
- More collaborative work linking to social determinants of health and healthcare



Review of Falls From Windows / Balconies / Buildings

Review of Trauma Registry Data from UMass Memorial Healthcare
1/1/2006 to 4/30/18

Michael Hirsh, MD
Prepared by Robert McLoughlin, MD

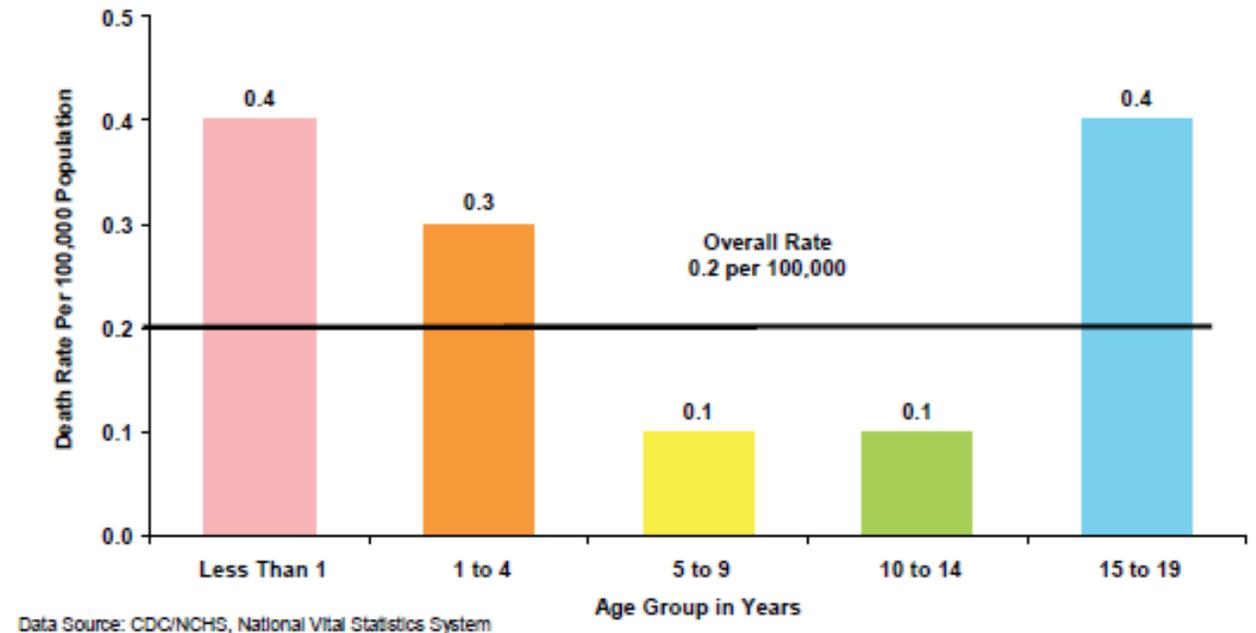
Overview

- Scope
- Literature Review
- Local Data
- Case Review
- Conclusions

Scope

- Falls represent the 7th leading cause of unintentional injury pediatric deaths for < 1 year and 6th leading cause for 1-4 year and 5-9 year olds¹
 - All falls, not specific to window
- Rate: 0.2 deaths per 100,000 (CDC 2000-2005)

Figure 25: Unintentional Injury Death Rates due to Falls among Children 0 to 19 Years, by Age Group, United States, 2000 - 2005



1) <https://www.cdc.gov/safecild/pdf/cdc-childhoodinjury.pdf>

Literature Review

- 2011 study of window falls 1990-2008¹:
 - An estimated 98 415 children were treated in US hospital EDs for window fall-related injuries during the 19-year study period
 - Average: 5180 patients per year
 - The mean age of children was 5.1 years, and boys accounted for 58.1% of cases
 - One-fourth (25.4%) of the patients required admission to the hospital
 - 30.8% fell from first story window, 62.7% fell from second story window
 - 85.9% were not engaged in risky behavior at the time (i.e. playing on windowsill)

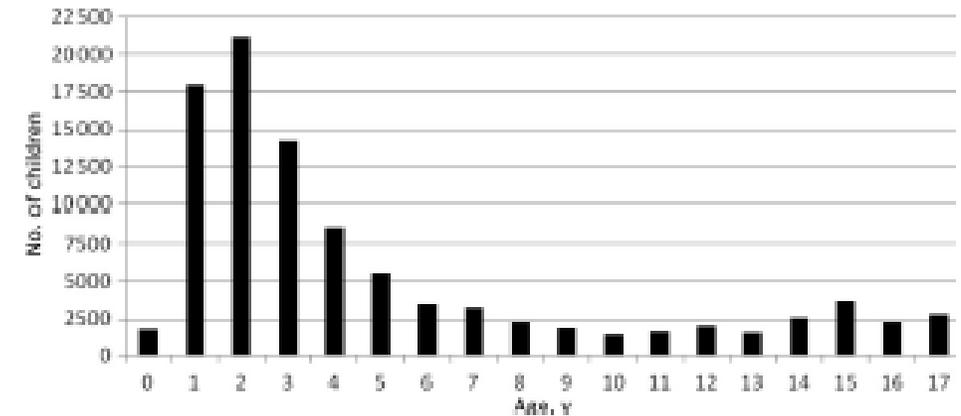


FIGURE 1
Numbers of children treated in US hospital EDs for injuries attributable to falls from windows in 1990–2008, according to year of age.

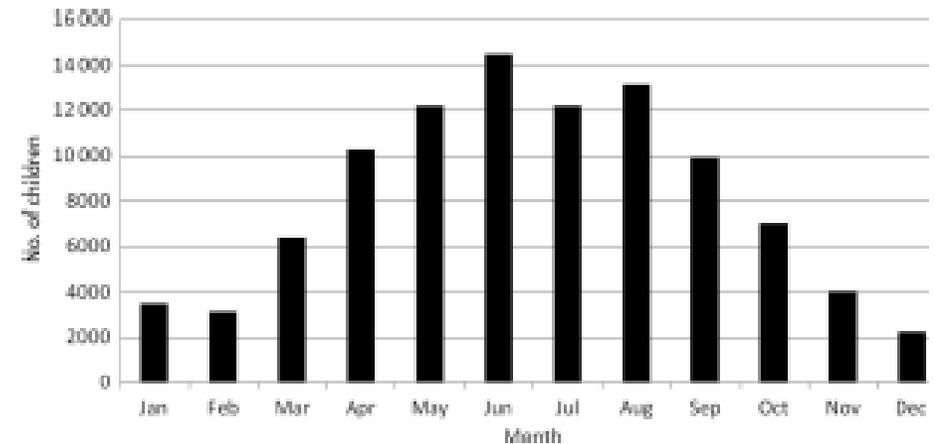


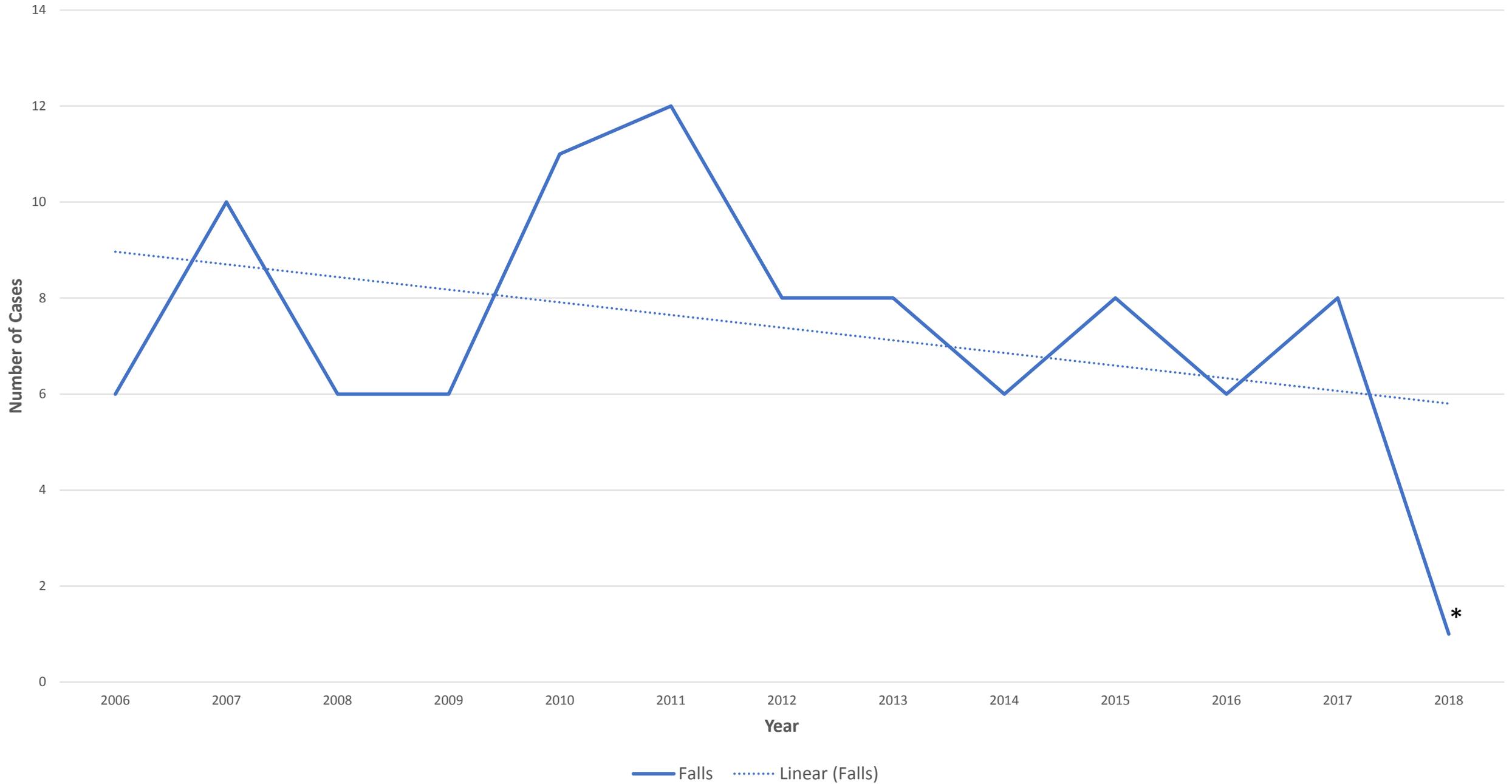
FIGURE 3
Numbers of children 0 to 17 years of age treated in US hospital EDs for injuries attributable to falls from windows in 1990–2008, according to month of injury.

Local Data over the last 11 years...

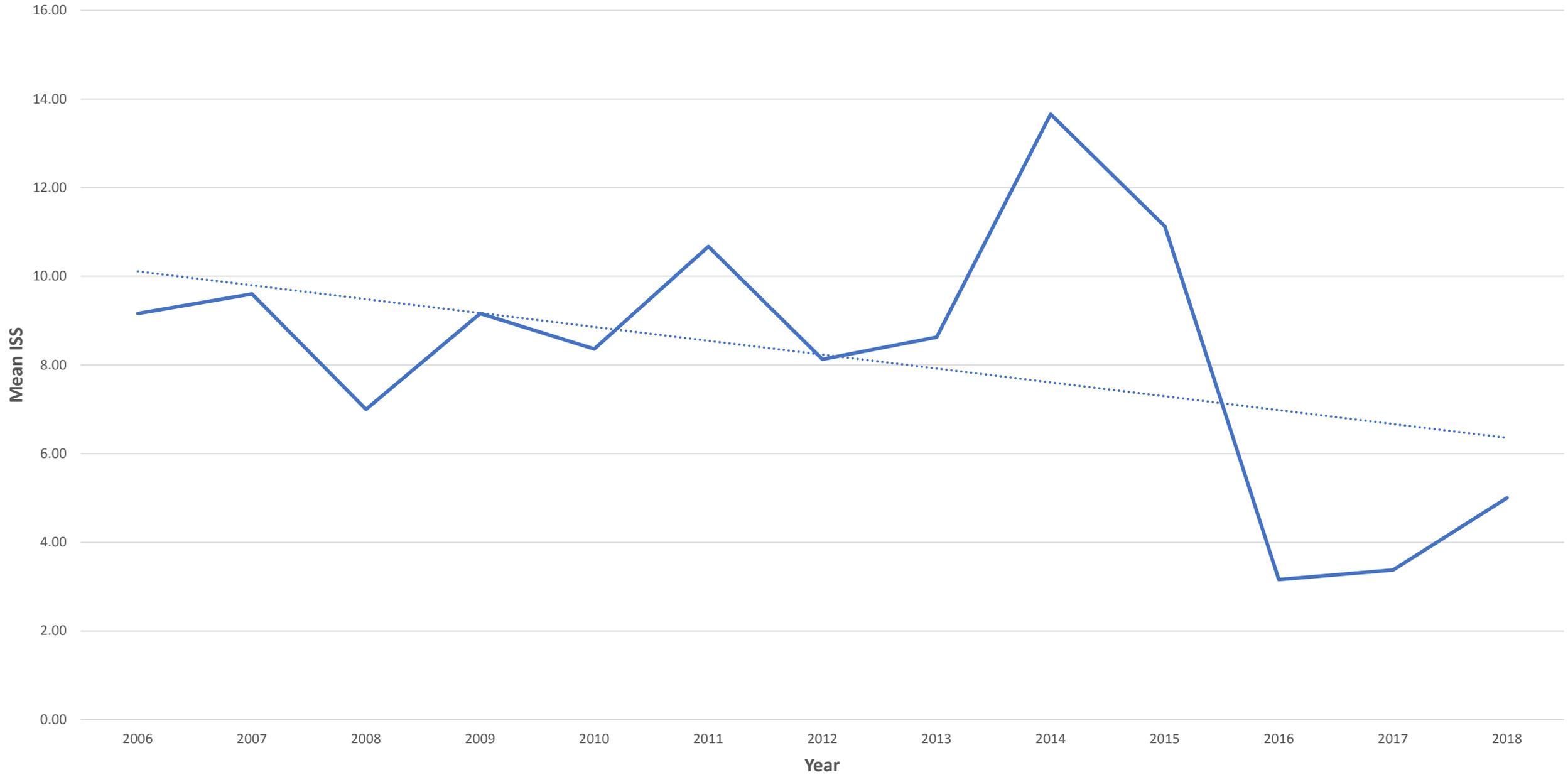
- Total Number of Cases: 96
- Mean Age: 5.28 years \pm 4.74
 - Median: 3
 - 16 cases aged \geq 10 years old
- Male 60.4%, Female 39.6%
- Average Injury Severity Score: 8.58
 - > 15 is defined as major trauma – there were 19 during this time frame
- Average Length of Stay: 2.76 days
- One death

Data selection: All pediatrics patients aged < 17 years who presented to UMass Memorial Healthcare Emergency Department and underwent an evaluation by the Pediatric Trauma team.

Window Falls



Mean Injury Severity Score by Year

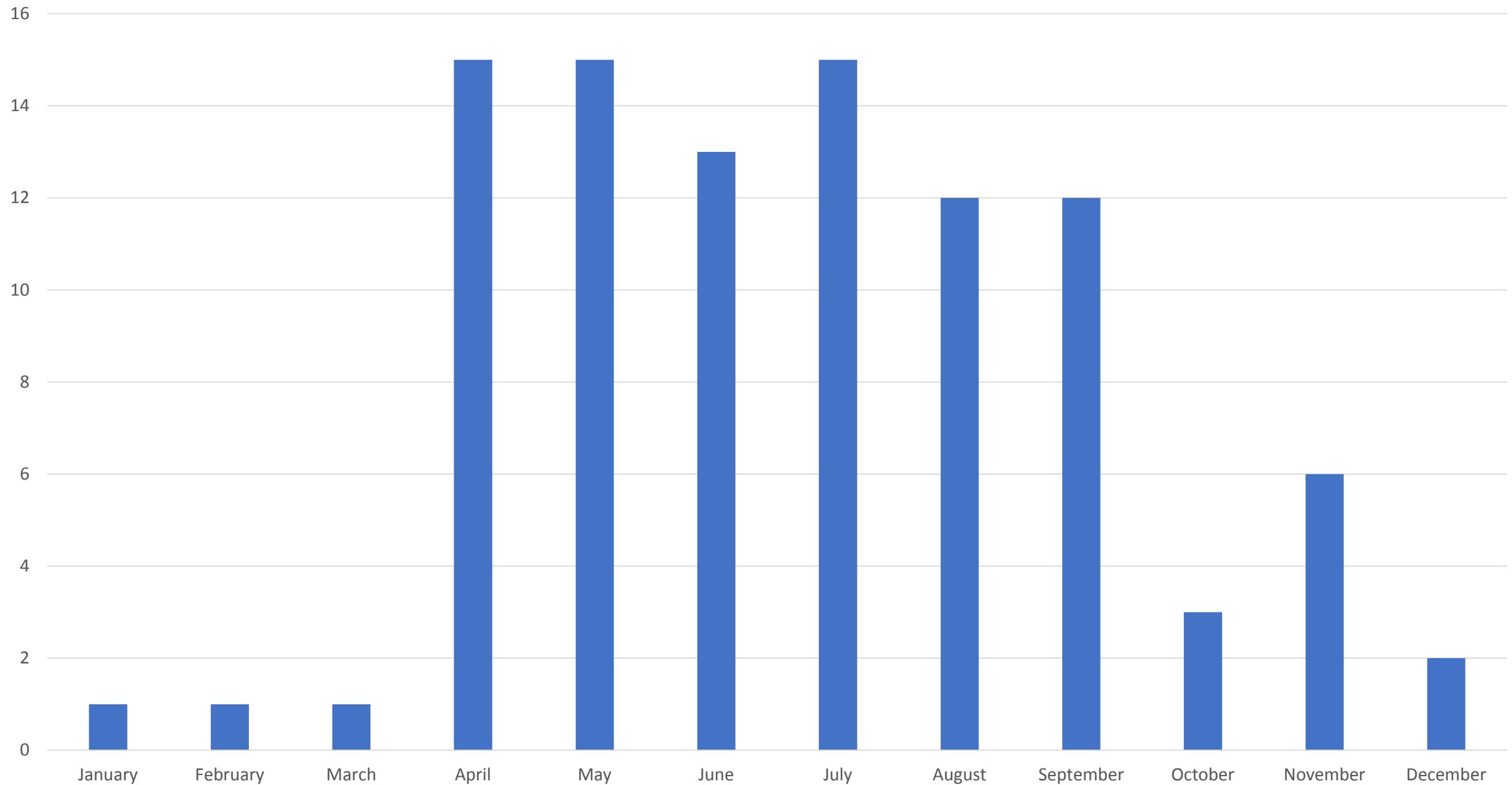


— Mean ISS Linear (Mean ISS)

Major Trauma Secondary to Window Falls

- ISS > 15
- 19 cases with average age of 7.03 years
 - 6 of which were over the age of 14
 - One death
 - Length of stay: Mean 5.32 days, ranging from 0-15 days
- One death
 - 22 month old fell out of a 3rd story window in 2010

Falls



Case Report

Cost

- In Boston:
 - Run anywhere from \$35 to \$75 depending on window size, and City of Boston subsidizes them to Boston residents with a 50% discount
- Local provider, Guardian Angel Window Guards (Marlborough, MA), provided quotes:

GUARDIAN ANGEL WINDOW GUARDS - PRICE LIST EFFECTIVE OCTOBER 1, 2013				
Window Height OR Width is between: <small>*See notes below</small>	Model Numbers	Number of Bars	Maximum Window Opening <small>*See notes below</small>	PRICE
14 - 17 inches	1417-43	3 bars (13" length of end post)	17 ¼ inches	\$35.00
	1417-44	4 bars (17 ⅜" length of end post)	21 ½ inches	\$37.00
	1417-45	5 bars (21 ¾" length of end post)	26 inches	\$44.00
17 - 23 inches	1723-43	3 bars (13" length of end post)	17 ¼ inches	\$38.50
	1723-44	4 bars (17 ⅜" length of end post)	21 ½ inches	\$39.50
	1723-45	5 bars (21 ¾" length of end post)	26 inches	\$45.00
23 - 35 inches	2335-43	3 bars (13" length of end post)	17 ¼ inches	\$41.00
	2335-44	4 bars (17 ⅜" length of end post)	21 ½ inches	\$42.00
	2335-45	5 bars (21 ¾" length of end post)	26 inches	\$47.00
35 - 58 inches	3558-43	3 bars (13" length of end post)	17 ¼ inches	\$51.00
	3558-44	4 bars (17 ⅜" length of end post)	21 ½ inches	\$52.00
	3558-45	5 bars (21 ¾" length of end post)	26 inches	\$57.00
58 - 90 inches	5890-43	3 bars (13" length of end post)	17 ¼ inches	\$81.50
	5890-44	4 bars (17 ⅜" length of end post)	21 ½ inches	\$83.50
	5890-45	5 bars (21 ¾" length of end post)	26 inches	\$89.50

Ongoing research efforts...

- Multi-institutional effort lead by Dr. Michael Flaherty, DO at MGH to further investigate the epidemiology of pediatric window falls in New England leading to intensive care unit admission, in order to better design and implement successful preventive strategies.
- Status: Data collection until Fall 2018
- Participating sites:
 - Boston Children's Hospital
 - Yale-New Haven Hospital
 - University of Vermont Children's Hospital
 - UMass Memorial Medical Center
 - Baystate Children's Hospital
 - Hasbro Children's Hospital
 - Tufts Floating Hospital for Children
 - Maine Medical Center
 - University of Connecticut Children's Hospital
 - Dartmouth-Hitchcock Medical Center
 - Boston Medical Center

In Conclusion...

- Falls from windows / balconies / buildings appear to be generally on the decline over the last 11 years
 - Can expect 6-8 window falls per year
- There is no data to support the hypothesis that there have been more falls recently than historically
- When a person does fall from a window / balcony / building, they appear to be suffering less severe injuries over the last 5 years.



Reducing the Incidence of Child Falls with Window Guards

Lindsey Weiss, RN

Thomas Bruemmer, RN

UMass Medical School, Graduate School of Nursing

Overview of Problem

- Falls are **preventable** and are a nationwide public health issue
- Recent headlines in Massachusetts -
 - **“3-year-old suffered concussion, fractures in fall from third-floor window in Worcester”**
 - **“Girl Dies After Falling From 4th Floor Window of Brookline Building”**
 - **“5-year-old girl survives fall from second-story window in Lynn”**
 - **“6-Year-Old Falls From Third-Story Window in Boston”**
 - **“Boy, 4, falls from 7-story window in Quincy Point”**
- In the United States, over 3,300 children fall out of windows each year
- Unintentional injuries (ex: falls) are the leading cause of morbidity and mortality in children



Our Project (UMass Medical School)

- Community of interest: city of Worcester
- Population of interest: children
- Main issue:
 - In Worcester, child falls continue to be a prominent public health issue due to the existence many three family (triple decker) homes. Currently, there are no laws that enforce the use of window guards in the homes of families with children.
- Purpose of project - working together with the Worcester Department of Public Health:
 - To gain a better understanding of the use and purpose of window guards
 - Determine best practices of window guard use in other urban areas
 - Present info to the Worcester Board of Health in hopes to inform policy
 - Eventually reduce the incidence of child falls through windows in the city of Worcester

What are Window Guards?

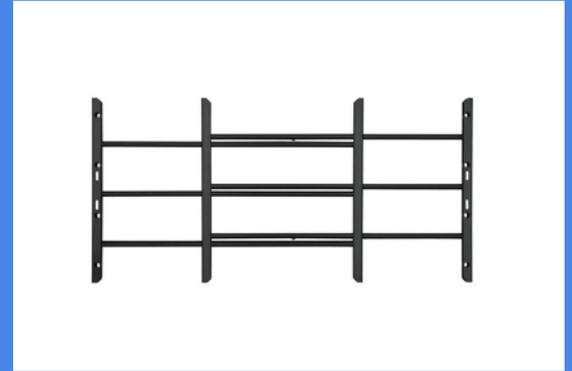
- Metal (iron or aluminum) bars that are installed in conjunction with window stops to prevent a fall from a window
- Placed on the interior of a window jam
- Window screens are designed to keep bugs out and are not strong enough to stop a person from falling
- Emergency release in case of needed egress
- Can withstand 150 lbs of pressure



Window Guard Examples/Pricing



Grisham Window
Guards
SPAG 3 Bar
Model = \$26.47
(Home Depot)



Guardian Angel Window
Guard (Northborough, MA)
4 Bar Guard \$54 (amazon)



Sentry
Window
Guard \$40

Made in
Brooklyn,
NY

Best Practices in Other Cities

- NYC has window guard law
 - Large infrastructure of support to back it up
 - Annual documents to be submitted by landlords
 - List of approved manufacturers, NYC approval number printed on window guards
 - Documents for installation, explaining policy, handouts in PDFs, etc.
 - 93% reduction in high falls in NYC from campaigns and regulation
 - 1972 “Children Can’t Fly”
- Boston Public Health Commission
 - Voluntary ordinance - encouraged landlords to install window guards - saw 83% decrease in window falls in 2 years following the ordinance
 - Web page with information about best practices and pamphlet
 - Bilingual videos (English and Spanish) for proper installation
(<https://www.youtube.com/watch?v=P90nQ4liQjl>)

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