PUBLIC HEALTH

TOWN OF SOUTH HADLEY MASSACHUSETTS

SHARON HART, Director of Public Health

NOTICE

BOARD OF HEALTH MEETING
&
AGENDA

July 8, 2025

6:00 p.m.

Join Zoom Webinar from your Computer:
Join from PC, Mac, iPad, or Android:
Passcode: 706017
https://us02web.zoom.us/j/84381869148?pwd=aQ2DPSEI5s9clRX3pQ3k8XoYD4I1x8.1

Or join by phone
+1 305 224 1968 US
Webinar ID: 843 8186 9148
Passcode: 706017

NOTE: Not all the topics listed in this notice may actually be reached for discussion. In addition, the topics listed are those which the Chair reasonably expects will be discussed as of the date of this notice.

To: Board of Health Members

From: Sharon D. Hart, Director of Public Health

Re: A Board of Health Meeting will be held on Tuesday, June 10, 2025 at 6:00 p.m. at the South Hadley Library.

1: The Chair will announce that the meeting is being recorded by either the Board/Committee or a member of the audience.

2: Chair to Call the Meeting to Order

3: Acceptance of the Minutes of the June 10, 2025, meeting.

4: Announcements/Open Forum (10 Minutes)

5: Director's Report

6: New Business:

(a): Opioid and Substance Prevention Updates - Hannah Durham

(b): Hype Solutions/Mobile Correction Order

7: Old Business:

(a): Energy Facility Regulation

(b): PFAS Draft Law Document - Stephen Frantz

(c): Educational Event on State Sanitary Code - Chuck Scott and Georgina Maende

8 : Set Next Meeting Date – (_____) at 6:00 p.m. at South Hadley Public Library

9: Adjourn meeting

South Hadley
Board of Health Meeting

Date: 06-10-25 Time: 6:00 p.m.

Members: Karen Walsh Pio: Present Tony Judge Present Dr. Michael Rosner: Present
Stephen Frantz Present Charles Scott Present
Staff: Sharon Hart Present Jennifer Jernigan Present Hannah Durham Present
Guests: Steve McCray, Barry McPhee, Dr. Steven Markow, Joanna Brown, Linda Sachs, Rita Petithory, Sandra Ziminski

1. **Chair called the meeting to order 6:00 p.m.**

2. **Acceptance of the meeting minutes of 05-13-2025**

   Motion to accept: Michael Rosner, 2nd Tony Judge.
   All in Favor: Karen Walsh Pio – aye
   Tony Judge – aye
   Charles Scott - aye
   Michael Rosner - aye
   Stephen Frantz – abstain

3. **Announcements/Open Forum (10 Minutes) –**
   - **Ken Elstein, Belchertown Board of Health provided an update on additional municipalities in Massachusetts that have passed or are considering Nicotine-Free Generation regulations. 17 municipalities with combined population of 574,000 have passed NFG regulations. Have not received complaints from nicotine product distributors/vendors.**

4. **Director's Report – Director Hart provided an update on the latest activities and initiatives.**

Behavioral Health 360 (CredibleMind): Web platform is being tailored to include mental and behavioral health resources specific to South Hadley, Holyoke, and Chicopee communities. Set to roll out in August.

Health Communications: June is Sun Safety Month and July is Mosquito & Tick Awareness month – preventive health messaging in English and Spanish will be circulated throughout the community.

Blood Drive with Baystate Hospital: Successful May 27th blood drive at the library. Will partner with Baystate to host one every fall and spring.

Emergency Management & Accessibility: Facilitated transcending chair training for town employees at the public library in late May.

ServSafe Training: Coordinating a training for community partners and town employees whose roles may occasionally involve serving food.

Recovery Messaging: **Applied for MA Department of Transportation grant to have a substance use recovery message with MA Substance Use Helpline contact information posted on state billboards in August and September. Collaborating with PHE Coordinator to have substance use recovery message displayed on and in PVTA buses this summer.**

Narcan PSA: Public service announcement about availability of Narcan (naloxone) and how to use it to help someone experiencing an opioid overdose will air on South Hadley Community Television.

Residential Property Condemnation: A house was foreclosed and is now owned by the town - will be condemned on June 12. Address is forthcoming.

5. New Business:

a) Route 202 & 33 Corridor Re-Zoning Project

S. Frantz indicated a concern about an increase in maximum building height (from 40 feet to 60 feet) that would go into effect if this proposal passes.

Upcoming opportunities for public comment and Planning Board meetings related to this project:

- **6/23/25 – Open meeting discussion and presentation of planning process by consultant**
- **7/14/25 - Planning Board discussion on zoning & design guidelines**
- **7/28/25 – Public comment session**
- **8/11/25 – Planning Board discussion on input received during public comment session**
- **9/8/25 – Public hearing on project**

b) Chemical herbicides and McCray's Farm

Clarification that Steve McCray, Town Conservation Department, and a specialist from UMass have been working together to maintain the hay fields at the farm, considering the health of livestock and the environment.

Does BOH have any oversight on use of chemicals that can impact drinking water supply? BOH does not have a regulation about 2,4-D chemical, specifically.

Steve McCray offered contact information of herbicide provider he works with S. Frantz will connect with herbicide provider that works with McCray's with about what herbicides are used and whether they contain 2,4-D.

c) Follow-up on Mount Holyoke College Energy Center discussion at 05/13/25 meeting

Town Counsel is reviewing the old regulation that states the Department of Environmental Quality and Engineering (no longer exists – now Department of

Environmental Protection) is responsible for approving plans for construction of energy centers in South Hadley.

S. Frantz contacting Department of Environmental Protection about what methods were used in the gas remediation efforts and the plan for venting volatile organic compounds (VOCs) from site if remaining gasoline reaches surface level. Would also like to know the plan for managing sound emissions from the heat pumps and back-up generators.

At public listening session, project leads confirmed that project will not move forward in 2025.

Concerns voiced during BOH meeting include:

- **VOCs from underground gasoline not being vented properly**
- **Sound from heat pumps and generators exceeding noise regulations**
- **Not having enough information about the worst-case scenario emergency plan for the building**
- **The disruption and spread of underground gasoline during construction**
- **Lack of clarity about why the alternative site(s) explored were not pursued**

d) Substance Use Prevention Updates
K. Walsh Pio requests updates on community-wide prevention initiatives from Public Health Program Coordinator at future BOH meetings.

6. Old Business:

a) Big tech is exploiting teens with addictive social media feeds
K. Walsh Pio will ask SHHS Principal Liz Wood about current cell phone policies in school.

7. Set Next Meeting Date: July 8 at 6:00 p.m. at South Hadley Public Library

Motion to adjourn.
Motion Stephen Frantz; 2nd Tony Judge
All in favor: Karen Walsh Pio – aye
Tony Judge – aye
Charles Scott - aye
Michael Rosner - aye
Stephen Frantz – aye

8. Board of Health meeting adjourned: 7:20 p.m.

Respectfully submitted,

Hannah Durham
Public Health Program & Administrative Coordinator

H.5143

December 2024

Understanding the Massachusetts Substance Use Law

This law was created to:

- Help people who use drugs stay safer.
- Reduce overdose deaths and harm from drug use.
- Support families and individuals dealing with substance use.
- Improve access to life-saving tools and recovery support.

Drug Checking Legal Protections

What It Does:

Harm reduction programs can legally provide drug checking services to help people test samples of their drugs.

Who is Protected:

- Staff and volunteers at harm reduction programs.
- Participants who use these services.

Legal Protections Include:

- No one can be arrested for having drug-checking tools (like fentanyl test strips).
- Participants won't face charges for personal possession when using drug checking services.

Opioid Antagonist Access

What It Does:

Makes life-saving medications like naloxone (Narcan) easier to access.

Key Points:

- Insurance must cover naloxone without needing approval from a doctor
- Pharmacies in high-risk areas must always have naloxone in stock.

Pharmacy and Prescriber Rules

What It Does:

Adds new rules for healthcare professionals to ensure more access to harm reduction tools and safer prescribing.

Key Points for Pharmacies:

- Must stock naloxone in areas with high overdose rates.
- Must provide education about safer drug use.

Key Points for Prescribers:

- Must educate patients on overdose prevention and non-opioid pain management.

Plans of Safe Care for Mothers and Infants

What It Does:

Requires health care providers to create Plans of Safe Care for infants born with prenatal substance exposure.

What's in a Plan of Safe Care?

Helps families access the resources they need, such as support services for the baby and family, (like housing, healthcare, and substance use treatment).

Key Points:

- Prenatal substance exposure alone is NOT considered child abuse or neglect.
- Focuses on keeping families together rather than child removal.

Recovery Coach Licensure

What It Does:

Establishes formal licensing for recovery coaches, who use their lived experience to support people in recovery.

Key Points:

- Recovery coaches must meet education, training, and ethical standards.
- Insurance will cover recovery coaching services.

Non-Opioid Pain Management

What It Does:

Requires insurance companies to cover treatments that don't involve opioids, like:

- Acupuncture
- Massage therapy
- Physical therapy

Key Points:

- No prior approval is needed for non-opioid pain management.

Scan the QR code to learn more!

H.5143

Diciembre 2024

Comprensión de la ley sobre consumo de sustancias de Massachusetts

Esta ley fue creada para:

- Ayuda a las personas que consumen drogas a mantenerse más seguras.
- Reducir las muertes por sobredosis y los daños causados por el consumo de drogas.
- Apoyar a familias e individuos que enfrentan el consumo de sustancias.
- Mejorar el acceso a herramientas que salvan vidas y al apoyo para la recuperación.

Protecciones legales de análisis de drogas

Qué hace:

Los programas de reducción de daños pueden proporcionar legalmente servicios de análisis de drogas para ayudar a las personas a analizar muestras de sus drogas.

¿Quién está protegido?

- Personal y voluntarios en programas de reducción de daños.
- Participantes que utilizan estos servicios.

Las protecciones legales incluyen:

- Nadie puede ser arrestado por poseer herramientas para controlar drogas (como tiras de prueba de fentanilo).
- Los participantes no enfrentarán cargos por posesión personal cuando utilicen servicios de análisis de drogas.

Acceso a antagonistas opioides

Qué hace:

Mejora el acceso a medicamentos que salvan vidas, como la naloxona (Narcan).

Puntos clave:

- El seguro debe cubrir la naloxona sin necesidad de aprobación médica
- Las farmacias en zonas de alto riesgo deben tener siempre naloxona en stock.

Normas de farmacia y prescriptores

Qué hace:

Agrega nuevas reglas para los profesionales de la salud para garantizar un mayor acceso a herramientas de reducción de daños y una prescripción más segura.

Puntos clave para las farmacias:

- Es necesario almacenar naloxona en zonas con altas tasas de sobredosis.
- Debe proporcionar educación sobre el uso seguro de drogas.

Puntos clave para los prescriptores:

- Debe educar a los pacientes sobre la prevención de sobredosis y el manejo del dolor sin opioides.

Planes de atención segura para madres y bebés

Qué hace:

Requiere que los proveedores de atención médica creen Planes de Atención Segura para los bebés nacidos con exposición prenatal a sustancias.

¿Qué incluye un plan de atención segura?

Ayuda a las familias a acceder a los recursos que necesitan, como servicios de apoyo para el bebé y la familia (como vivienda, atención médica y tratamiento por uso de sustancias).

Puntos clave:

- La exposición prenatal a sustancias por sí sola NO se considera abuso o negligencia infantil.
- Se centra en mantener unidas a las familias en lugar de separar a los niños.

Entranador de Recuperación

Qué hace:

Establece una licencia formal para los entrenadores de recuperación, quienes utilizan su experiencia vivida para apoyar a las personas en recuperación.

Puntos clave:

- Los entrenadores de recuperación deben cumplir con estándares de educación, capacitación y ética.
- El seguro cubrirá los servicios de asesoramiento para la recuperación.

Tratamiento del dolor sin opioides

Qué hace:

Requiere que las compañías de seguros cubran tratamientos que no involucren opioides, como:

- Acupuntura
- Terapia de masaje
- Fisioterapia

Puntos clave:

- No se necesita aprobación previa para el tratamiento del dolor sin opioides.

Para obtener más información:

Hampshire HOPE Executive Committee

Monday, June 16

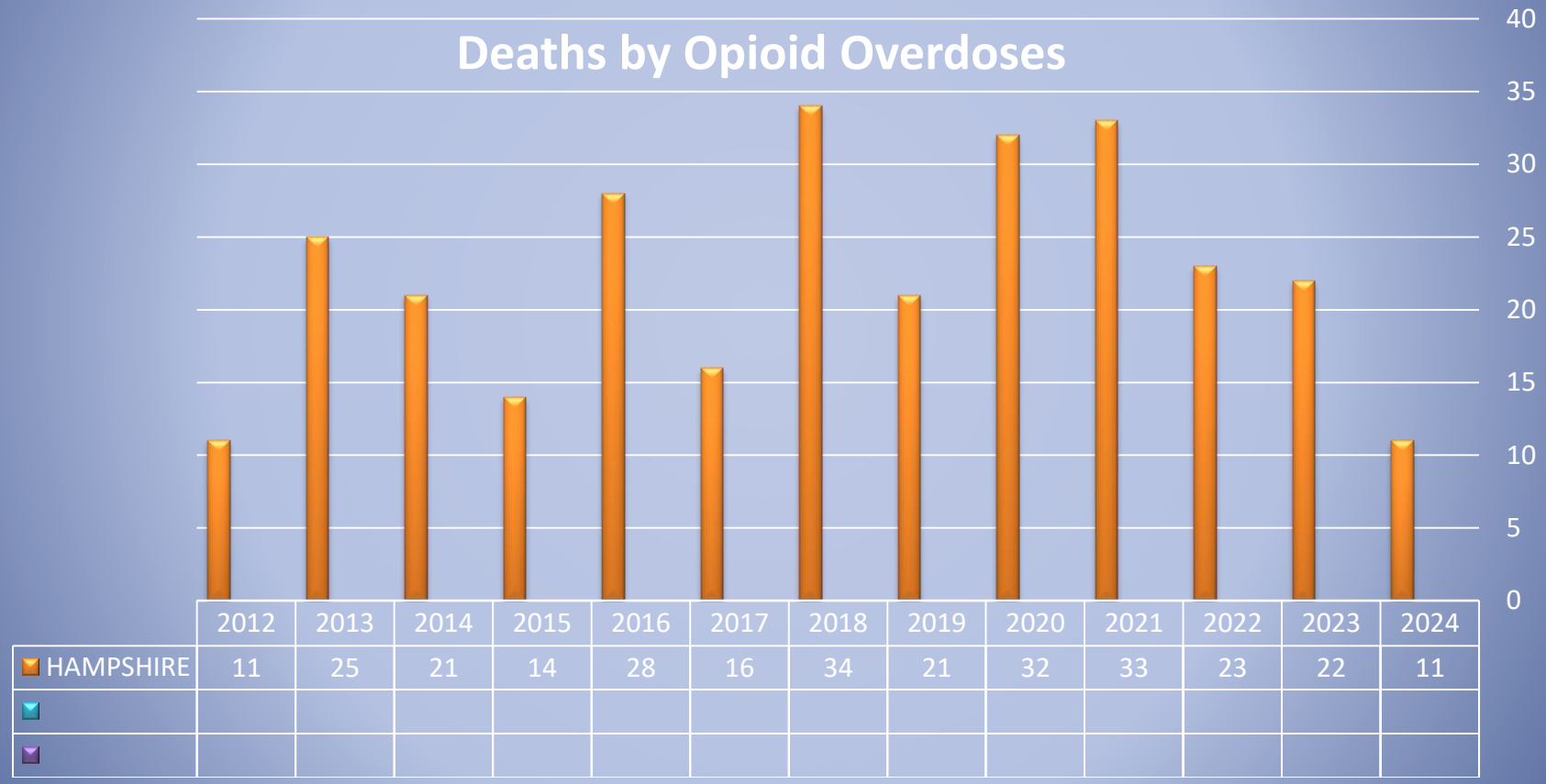
HEROIN/OPIOID PREVENTION & EDUCATION
HAMPSHIRE HOPE

Opioid Related Overdose Fatalities in Hampshire County

2023 - 2024

Updated June 2025

Office of the Northwestern District Attorney
Unintentional Opioid Overdose Death Rates
2012 – 2024



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
HAMPSHIRE	11	25	21	14	28	16	34	21	32	33	23	22	11

Source: MSP 2012 through 2024 confirmed overdoses

Updated June 2025

Office of the Northwestern District Attorney

Unintentional Opioid Overdose Deaths

	2023	2024	
	Number	Number/Rate	% CHG
– Hampshire County: (161,000 2018 census)	22	11/**6.83**	**50 ↓**
– All NWDA: (243,584 2018 census)	54	23/**9.44**	**57.41 ↓**

*Populations based on 2018 census and rates per 100,000

Source: MSP Activity Reports 2023 and 2024 confirmeed overdoses

Updated June 2025

22 Confirmed Unintentional Opioid Overdose Deaths Hampshire **2023**

Hampshire County

- Amherst 2
- Belchertown 1
- Easthampton 3
- Granby 1
- Northampton 7
- South Hadley 5
- Ware 2
- Westhampton 1

- Hampshire Total: 22

Source: MSP Activity Reports 2023 confirmed overdoses.

Updated June 2025

11 Confirmed Unintentional Opioid Overdose Deaths: Hampshire **2024**

Hampshire County

- Easthampton 2
- Granby 1
- Hadley 2
- Northampton 1
- South Hadley 3
- Ware 2

- Hampshire Total: 11

Source: MSP 2024 confirmed overdoses.

Updated June 2025

Suspected Unintentional Opioid Overdose Deaths:
Hampshire County 2023 v. 2024

Hampshire County 2023

- Amherst 2
- Belchertown 1
- Easthampton 3
- Granby 1
- Northampton 7
- South Hadley 5
- Ware 2
- Westhampton 1

- Hampshire Total: 22

Hampshire County 2024

- **Easthampton 2**
- **Granby 1**
- **Hadley 2**
- **Northampton 1**
- **South Hadley 3**
- **Ware 2**

- **Hampshire Total: 11**

Source: MSP 2023 and 2024 suspected overdoses.

Updated April 2025

22 Unintentional Opioid Overdose Deaths in Hampshire County

2023

Month	Deaths YTD
January	3
February	1
March	1
April	1
May	2
June	#N/A
July	3
August	3
September	1
October	1
November	4
December	2
Total Monthly	22

Ethnicity	Deaths YTD
White	21
Black	#N/A
Hispanic	1
Asian	#N/A
Unknown	#N/A
Other	#N/A

Age Bracket	Deaths YTD
Under 15	#N/A
15-24	1
25-34	2
35-44	8
45-54	7
55-64	2
65+	2

Gender	Deaths YTD
M	13
F	9
X	#N/A

Fentanyl Present?	
Yes	82%
No	18%
Unknown	0%

	Total County	Fentanyl	Non Fentanyl	Toxicology Pending
Athol	0	0	0	0
Franklin	0	0	0	0
Hampshire	22	18	4	0
Total	22	18	4	0

Source: MSP Activity Reports 2023 confirmed overdoses.
OCME confirmed manner of death.

Updated June 2025

11 Unintentional Opioid Overdose Deaths
Hampshire County
2024

Month	Deaths YTD
January	1
February	#N/A
March	1
April	2
May	1
June	#N/A
July	2
August	1
September	1
October	#N/A
November	2
December	#N/A
Total Monthly	11

Ethnicity	Deaths YTD
White	11
Black	#N/A
Hispanic	#N/A
Asian	#N/A
Unknown	#N/A
Other	#N/A

Age Bracket	Deaths YTD
Under 15	#N/A
15-24	1
25-34	1
35-44	4
45-54	2
55-64	2
65+	1

Gender	Deaths YTD
M	6
F	5
X	#N/A

Fentanyl Present?	
Yes	91%
No	9%
Toxicology Pending	0%

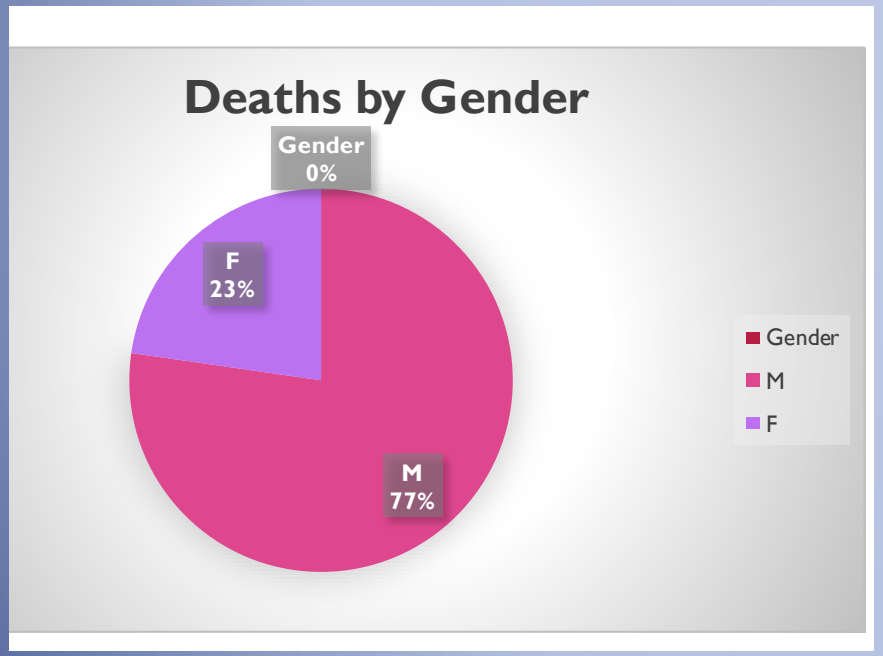
	Total County	Fentanyl	Non Fentanyl	Toxicology Pending
Athol	#N/A	0	0	0
Franklin	#N/A	0	0	0
Hampshire	11	10	1	0
Total	11	10	1	0

Source: MSP Activity Reports 2024 confirmed overdoses. OCME confirmed manner of death.

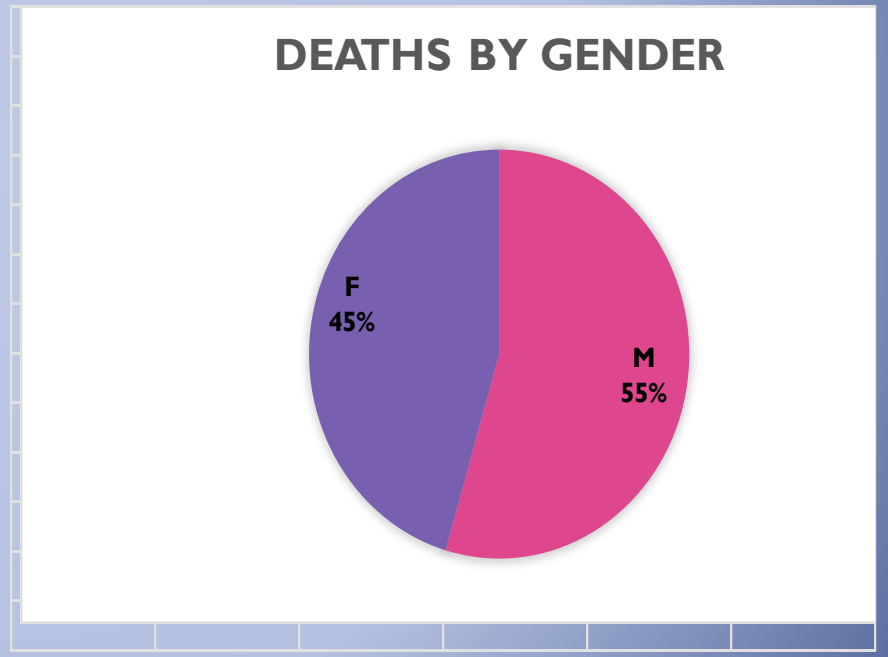
Updated June 2025

Gender

2023



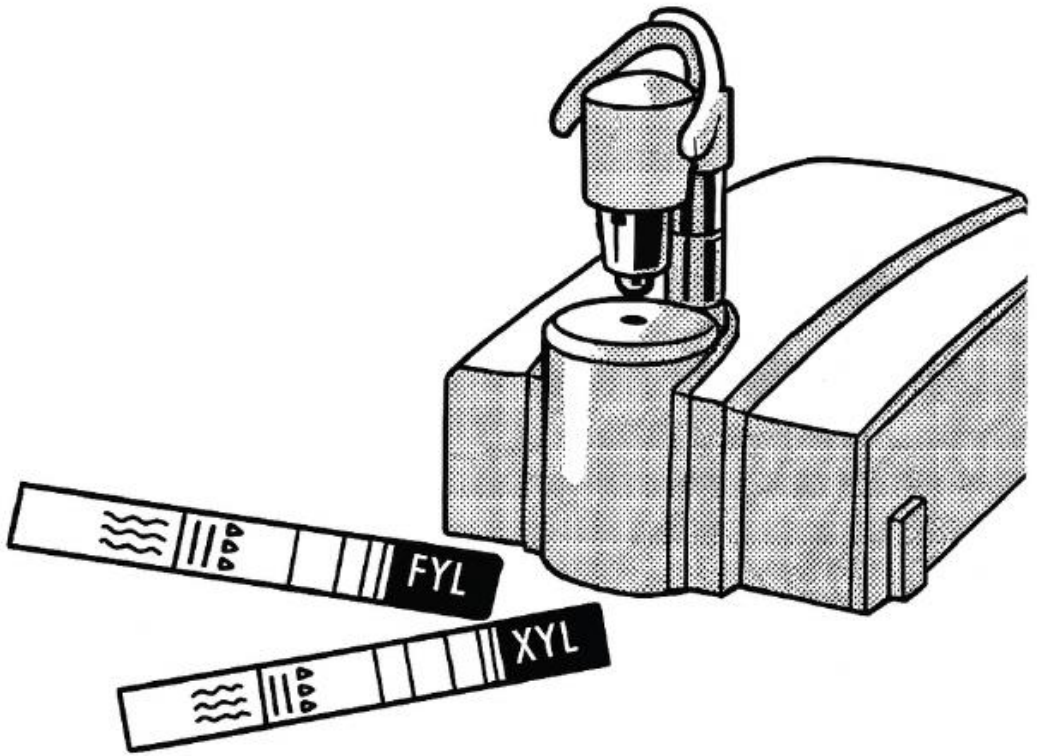
2024



Source: MSP Activity Reports 2023/2024 confirmed overdoses.OCME confirmed manner of death

June 17, 2025

COMMUNITY DRUG CHECKING & DRUG SUPPLY INFORMED HARM REDUCTION



Kyle Harrington

Harm Reduction Training & Drug Checking Manager

Tapestry Health

Drug checking is a strategy that allows people who use unregulated drugs to better understand the substances they are using.

WHAT RESEARCH TELLS US - WHY DRUG CHECKING MATTERS

Increases knowledge and changes behavior

- Participants often reduce dose, use more slowly, or decide not to use after receiving results (Measham, 2020; Peiper et al., 2019)
- Higher impact when combined with supportive dialogue and trusted relationships (Falzon et al., 2023)

Builds engagement with care

- Drug checking can act as a gateway to services, especially among people who avoid traditional systems (Bardwell et al., 2019)
- Encourages return visits and longer-term relationships when embedded in community spaces

Centers participant autonomy

- People use results to make informed decisions, not necessarily to abstain
- Reduces stigma and fear by validating participants' knowledge and goals (Moran et al., 2023; Campbell, 2021)

BILL H.5143

DECEMBER 2024

An Act relative to treatments and coverage for substance use disorder and recovery coach licensure

This legislation establishes liability protections to support the expansion of drug checking services as a public health intervention.

Legal Protections for Harm Reduction Organizations & Staff

Public health and harm reduction organizations, along with their staff, are shielded from civil or criminal liability and professional disciplinary actions when providing drug checking services in good faith.

Protections for Individuals Seeking Drug Checking

People who bring substances for personal use to a harm reduction or public health organization for testing are protected from criminal liability while on the premises.

Image Credit: Interior Health BC

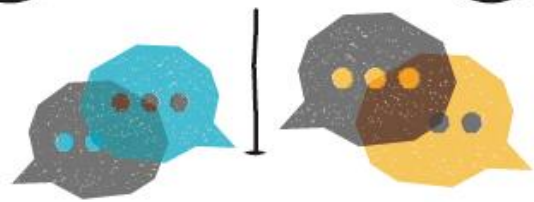
POINT OF CARE DRUG CHECKING PROGRAM OVERVIEW

Participant brings in sample & has initial conversation with Harm Reduction Counselor

Drug Checking Technicians analyze sample using FTIR.

Some samples are sent to a partner lab for additional, complementary analysis.

Drug Checking Technicians analyze sample using immunoassay test strips



Analysis and tailored harm reduction messaging shared with participant, staff, and community.

Education, training, and public health strategies created and shared based on trends

What drugs can we analyze?

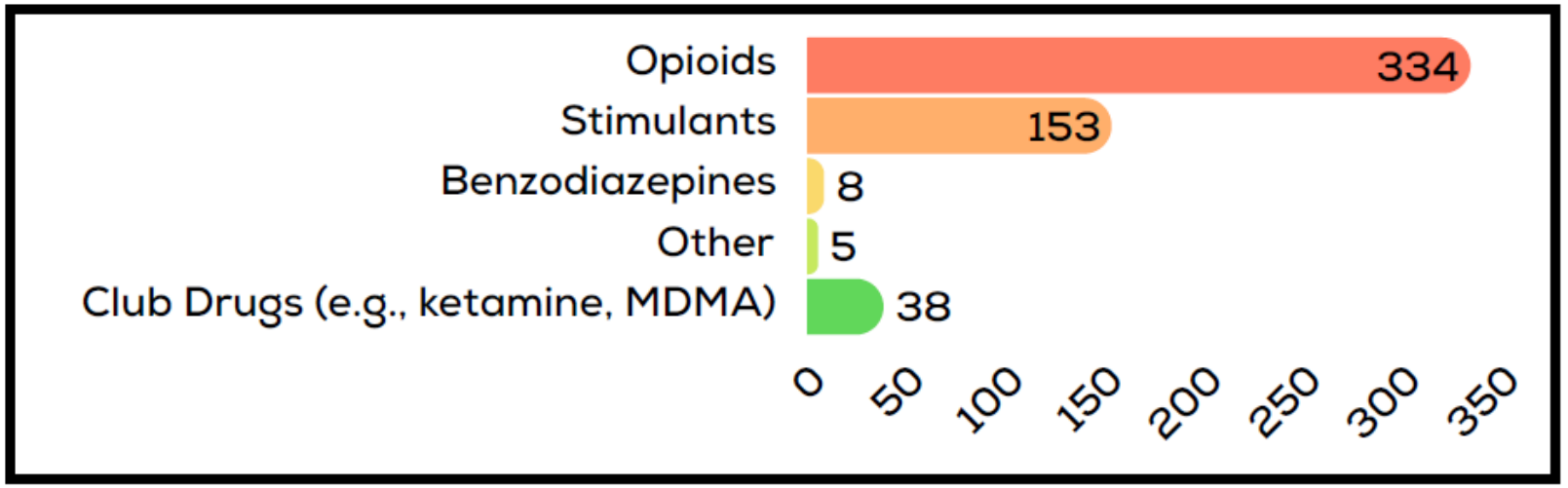
- Dope (heroin, fentanyl, xylazine, etc.)
- Crack and Powder Cocaine
- Meth and other stimulants
- Club and party drugs (ketamine, ecstasy/molly/sass, 2cb, etc.)
- Non-pharmaceutically pressed pills (opioids, benzos, adderall, etc.)
- Non-pharmaceutically produced hormones and steroids

Our technology isn't very helpful for testing:

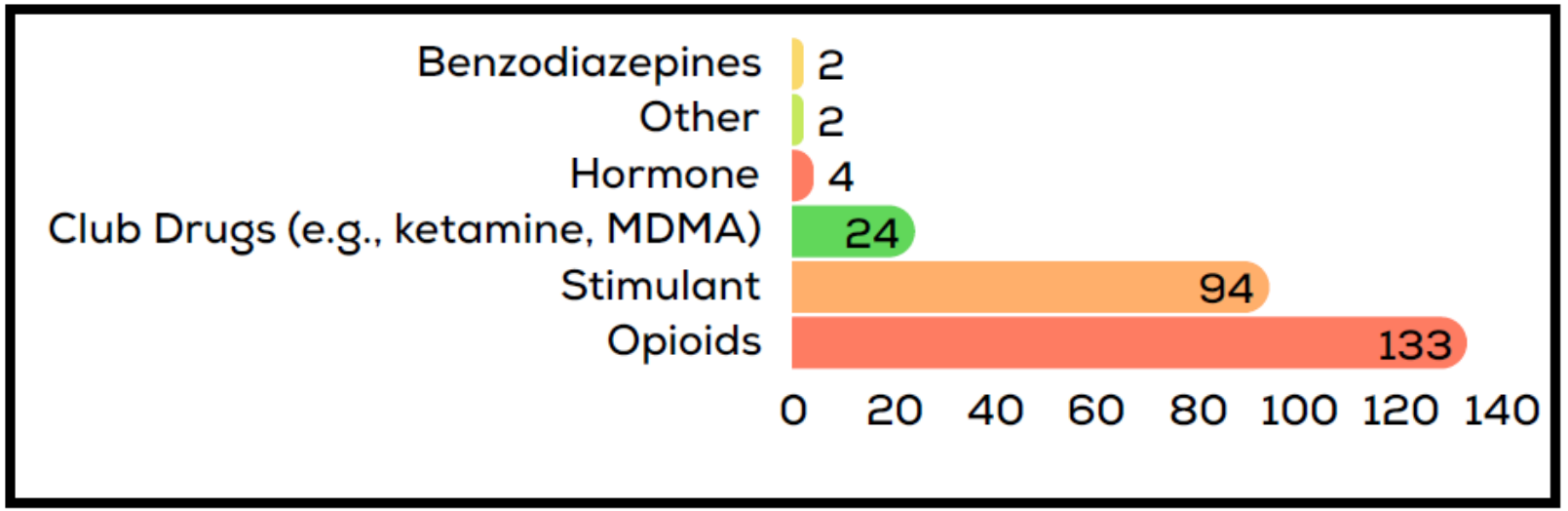
- plant matter (cannabis or mushrooms),
- drugs in foods (candies or brownies),
- drugs that are active at extremely low levels (LSD),
- pipes/cookers/cottons that have been used multiple times.

TYPES OF SAMPLES SUBMITTED

Samples submitted in 2024 (n=538) by drug category.

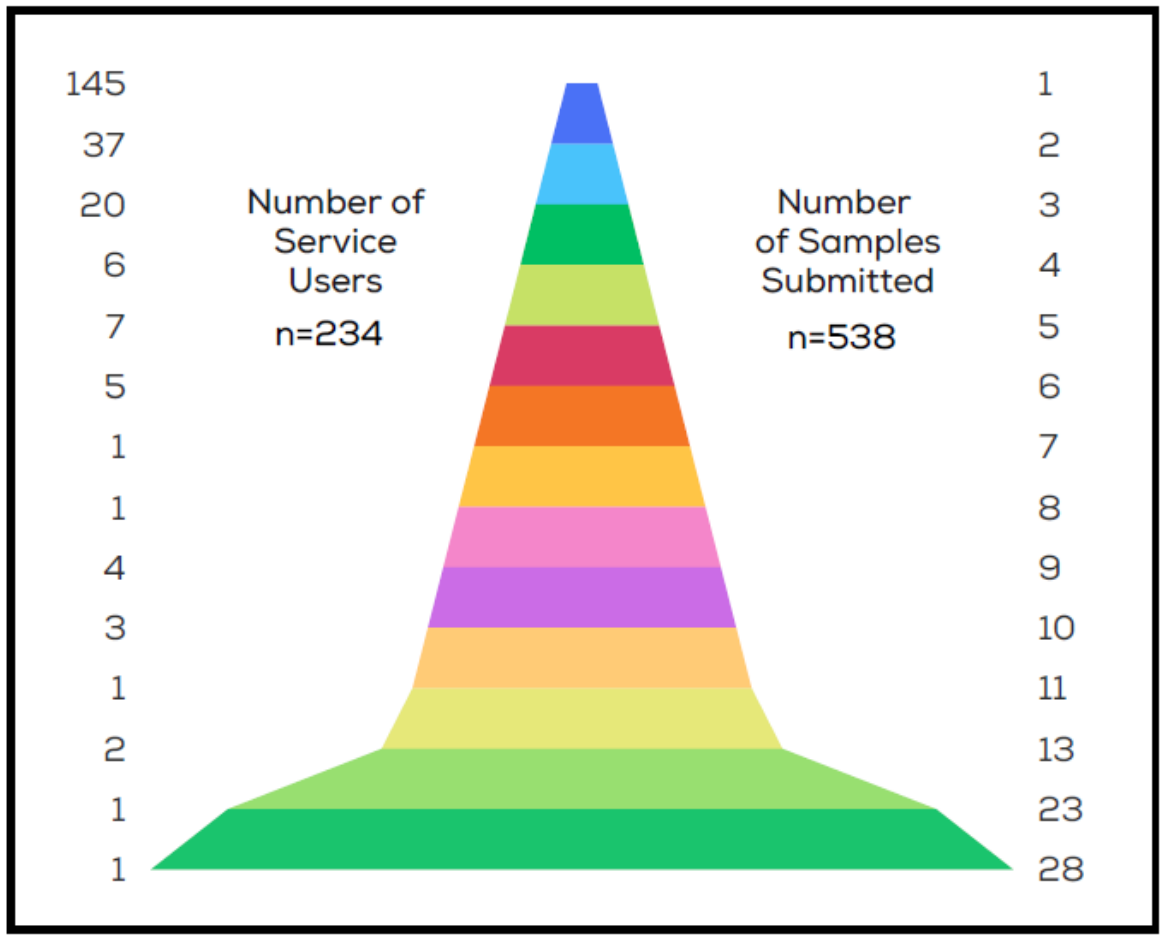


Samples submitted in 2025 (n=257) by drug category.

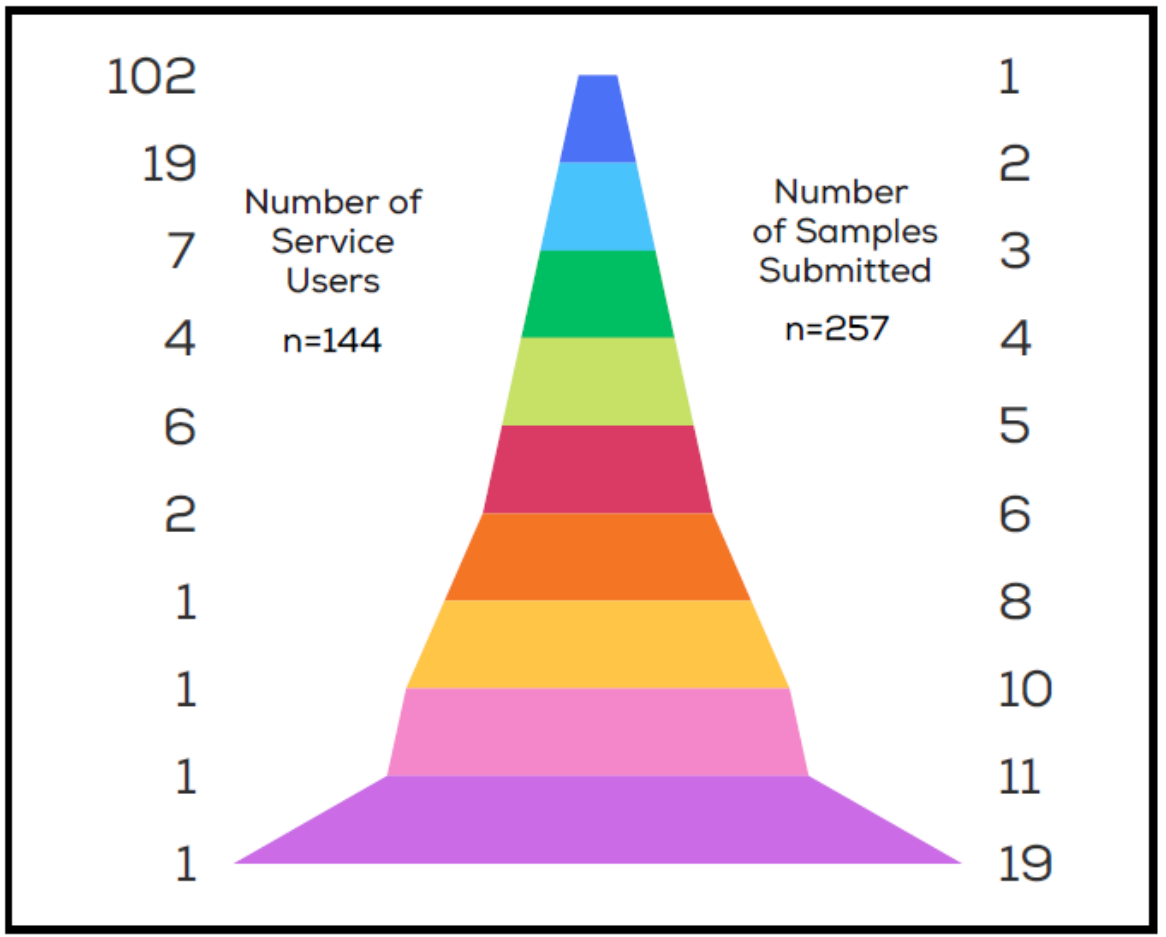


~35% of engaged participants return to submit additional samples.

Distribution of Service Utilization (2024)



Distribution of Service Utilization (Jan-April 2025)



DOPE

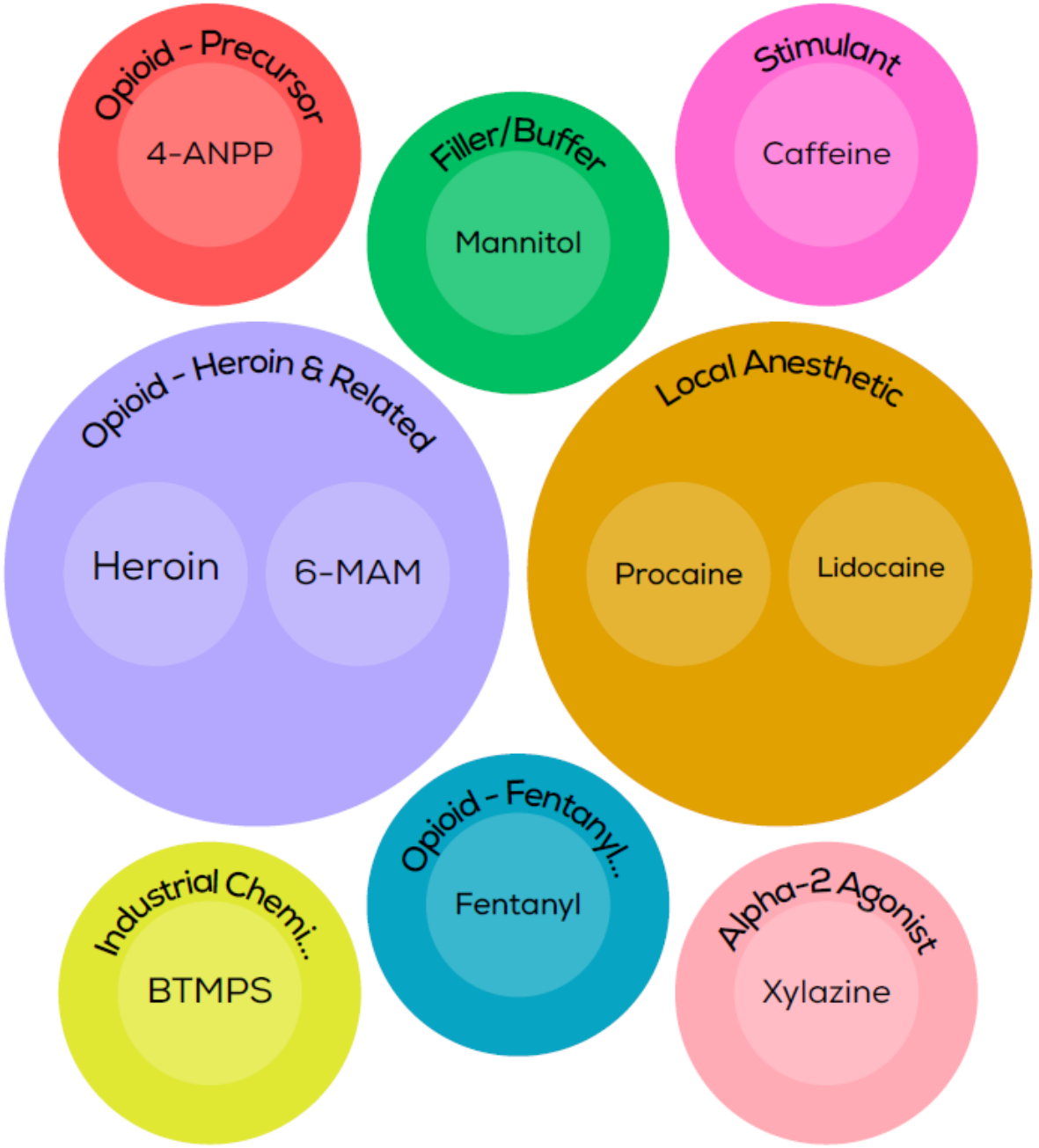
1 OR MORE OPIOIDS + BULKING SUBSTANCE (SUGAR) + ACTIVE/ INACTIVE CUTS + IMPURITIES FROM PRODUCTION

- In Western Massachusetts, "dope" typically refers to a compound powder that contains a bulking substance (usually sugar), one or more opioids (predominantly fentanyl or its analogs), and various other "cuts" or impurities from production.
- The contents can vary significantly between batches, bundles, and even bag-to-bag.

Average Number of Substances Identified in a Dope Sample: 6.2

DOPE COMPOSITION BREAKDOWN

Most Common (top 10) Substances Identified in Expected Opioid Samples (n=133) Submitted January 1 - April 30, 2025



HEROIN IN THE DOPE SUPPLY (2025)

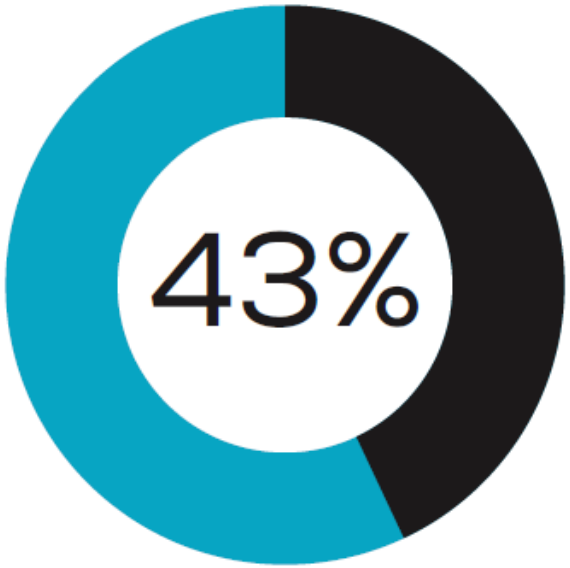
n=134

Heroin was found alongside fentanyl in 72 samples.

Active metabolites of heroin were also identified in the dope samples containing heroin:

- 6-Monoacetylmorphine 38
- Acetylcodeine 29

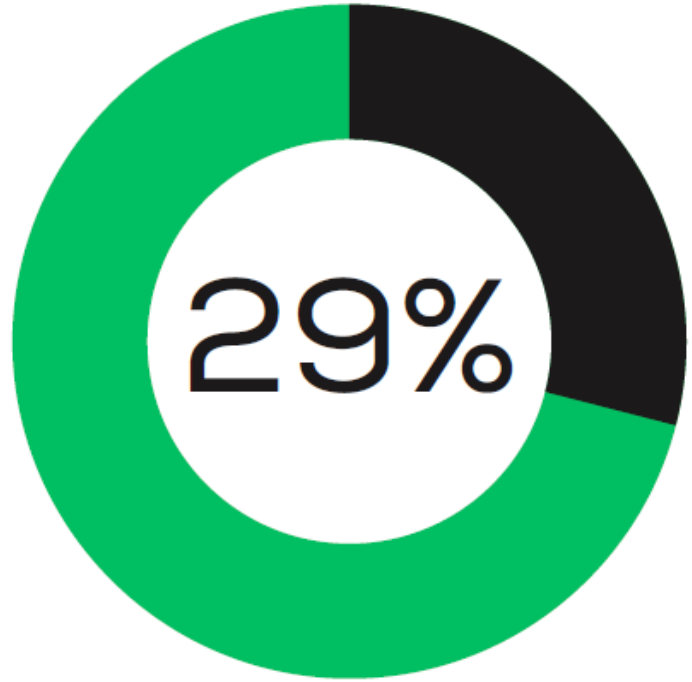
% of dope samples submitted during this time period containing both heroin and fentanyl:



XYLAZINE IN THE DOPE SUPPLY (2025)

n=133

% of dope samples submitted during this time period containing both fentanyl and xylazine:



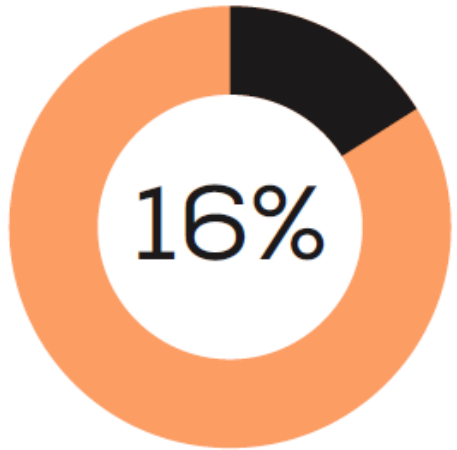
EMERGING SUBSTANCE: MEDETOMIDINE

A sedative from the same class as xylazine and clonidine (α2-adrenergic agonists).

100x more potent than xylazine)

- Emerging presence in unregulated opioid samples across the Northeast and Canada
    - Currently more prevalent in Philadelphia's dope/fentanyl supply than xylazine.
- In WMass, medetomidine is often found in complex mixtures with both opioids (fentanyl, heroin) and other cuts (procaine, lidocaine, caffeine)

Percentage of expected opioid samples submitted between January 1 and April 30, 2025 containing both fentanyl and medetomidine:



n=133

31% of all dope samples submitted for drug checking at Tapestry (Jan 1 - Apr 30, 2025) contained 1 or more non-opioid sedative

- xylazine (24.4%)
- medetomidine (15.4%)
- both (9.0%)

People who used samples with xylazine and/or medetomidine told us they experienced:

- **Overdose** (27.1%)
- **Skin/wound issues** (12.5%)
- **Physical discomfort** (8.3%)
- **Heavy Sedation** (8.3%)
- **Injection pain/burning** (6.2%)

EMERGING SUBSTANCE: MEDETOMIDINE

When medetomidine is consumed– especially alongside fentanyl– symptoms may include:

- Heavy sedation
- Bradycardia (very slow heart rate)
- Respiratory depression (especially in combination with opioids)
- Hypotension (low blood pressure)

Medetomidine use has not been shown to be associated with wounds.

Withdrawal Symptoms - tend to be severe and unresponsive to typical withdrawal medications (sometimes requiring ICU care)

  - Severe hypertension and tachycardia, with dangerous complications
  - Intractable nausea/vomiting
  - High anxiety and agitation
  - Tremor

COMPASSIONATE OPIOID OVERDOSE RESPONSE

- During an opioid overdoses involving sedatives (like medetomidine and xylazine), a person may still appear unresponsive even if the opioid has been reversed.

- **Compassionate Overdose Response:**
  - Check for breathing
  - Check responsiveness
  - Give naloxone
  - Provide rescue breaths
  - Call 911
  - Stay with the person until they become responsive or help arrives

Give only the amount of naloxone needed to restore breathing to help avoid triggering severe withdrawal.

THANK YOU, & PLEASE BE IN TOUCH!

kharrington@tapestryhealth.org

Sequential Intercept Mapping

Thank you to our Executive Committee

Members involved with SIM Process:

Meg, Peter, Kathi, Pedro, Katy, Dave, Kara, Mary, Laurie, Neil, Trevor, and Taylor!

…and our many other community partners involved in the SIM training and work groups!

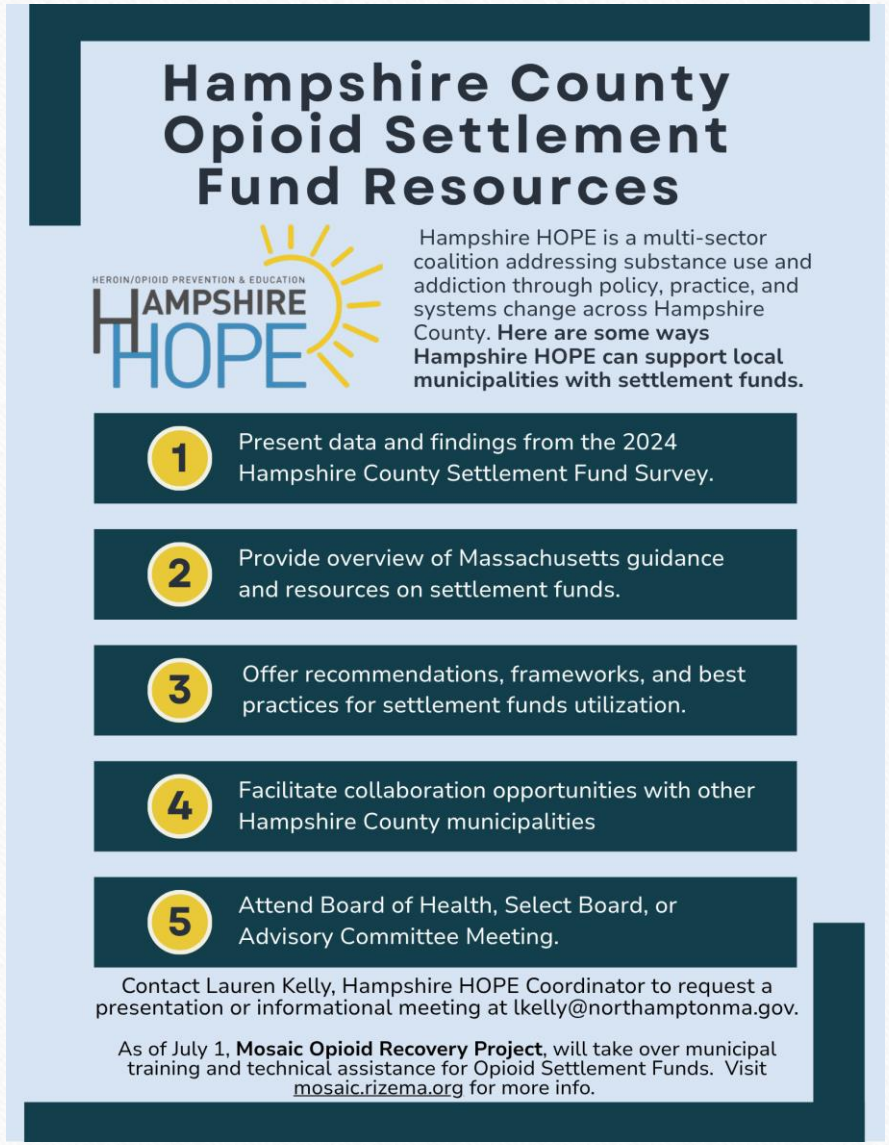
SIM Priorities & Work Groups

- Continuum of Care
- Transportation
- Reentry

Reporting

- Community Impact Measures
- Priorities & Action Plans
- Report, Map, & Recommendations

Next Full SIM Meeting is Monday, June 23 from 2-3:30 PM

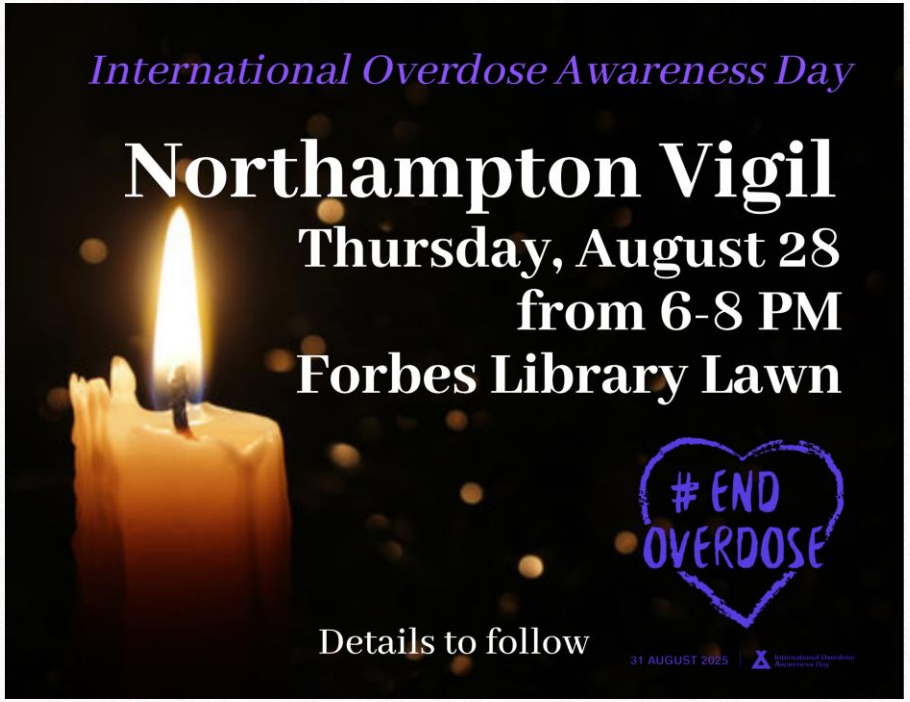


Settlement Funds

- Transition from Care Mass to Mosaic Opioid Recovery Project
- Data sharing of 2024 County Survey results
- Engagement with municipalities across Hampshire County
- PiT Surveys with Tapestry

Next Opioid Settlement Fund Work Group Meeting is Monday, June 30 2-3 PM

International Overdose Awareness Day Vigil(s)



- Thank you EC members helping with Northampton's vigil – *Katy, Kathi, Trevor, Peter, Hannah, Laurie*
- Other IOAD Vigils happening to support and cross-promote
- Other upcoming events
- Looking ahead to Recovery Month

Our Next Northampton IOAD Meeting is Wednesday, June 18 from 12-1 PM

Community Partner Announcements

Share upcoming opportunities, updates, resources, etc. to inform our collective work!

HEROIN/OPIOID PREVENTION & EDUCATION
HAMPSHIRE HOPE

Thank you!

Next Hampshire HOPE Executive Committee Meeting is

Monday, September 15 at 1 PM

HEROIN/OPIOID PREVENTION & EDUCATION
HAMPSHIRE HOPE

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Overdoses Involving Medetomidine Mixed with Opioids — Chicago, Illinois, May 2024

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Abstract

Medetomidine, a nonopioid sedative not approved for use in humans, has periodically been detected in illegally manufactured opioids across North America since 2022. On May 11, 2024, the Chicago Department of Public Health (CDPH) and the Illinois Department of Public Health were alerted by hospitals and the Illinois Poison Center to an increase in emergency medical services responses for suspected opioid-involved overdoses with atypical symptoms, mostly clustered on Chicago's West Side. CDPH and CDC investigated and identified 12 confirmed, 26 probable, and 140 suspected overdoses involving medetomidine mixed with opioids among patients treated at three hospitals in Chicago's West Side during May 11–17, 2024. Medetomidine had not been previously identified in Chicago's illegal drug supply. Fentanyl was identified in all drug samples and blood specimens containing medetomidine. Most patients were male, non-Hispanic Black or African American, and aged 45–64 years; most patients with confirmed cases experienced bradycardia and had no or only a partial response to naloxone. This cluster is the largest reported for confirmed medetomidine-involved overdoses. Multisector surveillance, including by health care providers, toxicology laboratories, and public health personnel, was essential for quickly identifying and responding to new adulterants in the illegal drug supply. Because all specimens and samples in this investigation that contained medetomidine also contained natural or synthetic opioids, administering naloxone for all suspected opioid-involved overdoses remains crucial.

[*] These authors contributed equally to this report.

Introduction

On May 11, 2024, the Chicago Department of Public Health (CDPH) and the Illinois Department of Public Health (IDPH) were alerted by the Overdose Detection Mapping Application Program[†] that 50 emergency medical services (EMS) responses for suspected opioid-involved overdoses occurred that day, a number more than two standard deviations above the 2023 daily average (27.4) in Chicago. Events were mostly clustered on Chicago's West Side. Area hospitals and the Illinois Poison Center (IPC) also notified CDPH of several patients observed with bradycardia and suspected opioid-involved overdose symptoms not fully reversed by naloxone during the weekend of May 11.

[†] The program, developed by the Office of National Drug Control Policy, links first responders and records management systems to a mapping tool to track overdoses and stimulate real-time response and strategic analysis across jurisdictions. ODMAP

INSIDE

Continuing Education examination available at https://www.cdc.gov/mmwr/mmwr_continuingEducation.html

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

Methods

Initial toxicologic tests from samples of bagged powders in the possession of five patients in the emergency department (ED) detected medetomidine mixed with fentanyl, in varying concentrations and ratios. Medetomidine, a central nervous system depressant not approved for use in humans and potentially more potent than xylazine (*1*), had recently appeared as an adulterant in the national illegal drug supply (*2*); this medetomidine detection represented the first detection in Chicago.

On May 17, CDPH requested CDC assistance to investigate the suspected opioid-involved overdose cluster. The investigation used four data sources for analysis: 1) blood specimen and drug sample results sent by hospitals on the advice of IPC to the Drug Enforcement Administration's Toxicology Testing Program's (DEA TOX) contract laboratory at University of California, San Francisco, and the Center for Forensic Science Research and Education with the assistance of the Chicago Recovery Alliance, 2) mortality data from the Cook County medical examiner's office, 3) EMS records from the Chicago Fire Department, and 4) medical records from three EDs on Chicago's West Side that received the most patients from suspected opioid-involved overdose EMS responses during May 11–17, 2024.

Using these data sources, a case identification algorithm was developed defining patients as having a confirmed, probable, or suspected overdose involving medetomidine mixed with opioids. A confirmed case was defined as a case in a patient treated for suspected opioid-involved overdose[§] whose blood specimen tested positive for medetomidine. A probable case was defined as a case in a patient who 1) possessed a drug sample containing medetomidine or 2) experienced bradycardia (heart rate less than 60 beats per minute) with symptoms not fully reversed by naloxone (defined as persistent altered mental status after naloxone administration) during the EMS response or upon ED arrival. Suspected cases were all other suspected opioid-involved overdoses among patients who were admitted to one of the three hospital EDs, even without clinical or testing evidence for medetomidine, because the patients were admitted during a time of medetomidine infiltration of the drug supply. A patient was considered to not have a case of overdose involving medetomidine mixed with opioids if their blood specimen tested negative for medetomidine.

Demographic characteristics, clinical signs and symptoms, and clinical course were abstracted from medical charts for confirmed and probable cases. Partial chart abstractions[¶] were completed for suspected cases. Descriptive data were managed and analyzed using SAS software (version 9.4; SAS Institute). This activity was

[§] *International Classification of Diseases, Tenth Revision* codes and chief complaints for suspected opioid-involved overdoses were identified on the basis of the CDC definition for ED visits. CDC All Opioid Overdose v4 Parsed

[¶] Partial chart abstractions included demographic information, naloxone doses received, response to naloxone, patient symptoms and vital signs, and hospital admission and disposition. Full chart abstractions included the partial chart data as well as substance use history, underlying health conditions and medications, overdose event details, hospital treatments, complications, and linkage to care. Not all data obtained are included in this report.

The *MMWR* series of publications is published by the Office of Science, U.S. Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30329-4027.

Suggested citation: [Author names; first three, then et al., if more than six.] [Report title]. MMWR Morb Mortal Wkly Rep 2025;74:[inclusive page numbers].

reviewed by CDC, deemed not research, and was conducted consistent with applicable federal law and CDC policy.**

Results

Among 181 patients treated for suspected opioid-involved overdose at the three EDs during May 11–17, CDPH identified 12 confirmed, 26 probable, and 140 suspected cases; three patients were determined to not have experienced a medetomidine-involved overdose (Figure 1) (Figure 2).

Confirmed and probable cases were identified using results from 15 blood specimens from unique patients and 10 drug samples from unique patients sent for testing; three patients had both blood specimens and drug samples sent for testing (Figure 1). Among the 15 blood specimens, 12 tested positive for medetomidine in combination with the following substances: diphenhydramine (12 patients), fentanyl (12), quinine (11), benzoylecgonine (10),†† morphine (six),§§ xylazine (six),¶¶ and bromazolam (six).*** Among the 10 drug samples, five tested positive for medetomidine and fentanyl,††† and among these five, medetomidine was also present in corresponding blood specimens for three. Thus, drug sample testing identified two additional probable cases; the remaining 24 probable cases were identified using clinical data.

The 38 confirmed and probable cases were among mostly male persons (84%), non-Hispanic Black or African American persons (87%), and persons aged 45–64 years (63%) (Table). Among all 38 confirmed and probable cases, 18 (47%) patients reported heroin as the intended drug of use at the time of overdose. Snorting was the most common route of administration, reported by eight (21%) patients. However, the drugs that patients intended to use and route of administration were unknown for most patients. The most common clinical signs and symptoms were hypertension (36; 95%), bradycardia (33; 87%), altered mental status (32; 84%), pinpoint pupils (32; 84%), and hypoxemia with blood oxygen saturation <90% (18; 47%). Five persons required treatment with atropine, a first-line medication for the treatment of bradycardia. Elevated systolic blood pressure ≥180 mm Hg was observed in 16 (42%) patients. Among 12 confirmed cases, 11 (92%) patients experienced partial or no improvement of symptoms after naloxone administration. One patient had full reversal of symptoms; this patient also had the lowest serum concentration of medetomidine among those with blood specimen results. Blood medetomidine concentrations ranged from 0.7 ng/mL to 63.7 ng/mL.

Among the 38 patients with confirmed and probable cases, 16 were admitted to the hospital, nine required admission to an intensive care unit, 16 received respiratory support, and five required intubation. One death in a patient with a suspected opioid overdose was classified as a suspected medetomidine-affected overdose case; however, in the absence of toxicologic confirmation, the death was not definitively linked to medetomidine.

Public Health Response

On May 14, CDPH released a health alert§§§ describing the increase in EMS responses for suspected opioid-involved overdoses during the weekend of May 11. After medetomidine was detected in multiple drug samples, CDPH released a second health alert¶¶¶ on May 20. Medical and public health personnel were advised to inform IPC of suspected opioid-involved overdoses that appeared atypical, report overdose clusters at a single facility to CDPH, and pursue toxicology testing through programs such as DEA TOX,**** which tests biologic specimens from patients who experience drug overdoses for new psychoactive substances. On May 21, IDPH expanded the health alert statewide.

CDPH collaborated with partners to promote community-based point-of-care drug checking†††† and monthly reporting in areas with the highest number of EMS transports for suspected opioid-involved overdoses. CDPH also advised EDs that treat the highest numbers of suspected opioid-involved overdoses on recommended protocols and practices for predischarge administration of medications for opioid use disorder and linking patients to care.

Discussion

Although medetomidine has periodically been detected in multiple states and in Canada since 2022, this report is the first to characterize demographic and clinical characteristics of a cluster of overdoses involving medetomidine mixed with opioids (*2*–*4*). Efficient collaboration across sectors, including health care, toxicology laboratories, and public health, was essential in identifying and swiftly responding to the emergence of medetomidine in Chicago's illegal drug supply.

** 45 C.F.R. part 46.102(l)(2), 21 C.F.R. part 56; 42 U.S.C. Sect. 241(d); 5 U.S.C. Sect. 552a; 44 U.S.C. Sect. 3501 et seq.

†† Benzoylecgonine is a cocaine metabolite.

§§ Morphine is an opioid agonist and also a metabolite of heroin and codeine.

¶¶ Xylazine is a nonscheduled, nonopioid sedative not approved for human use and has been increasingly detected in illegal opioids.

*** Bromazolam is a benzodiazepine.

††† Three of the five drug samples had a similar composition of medetomidine in the highest concentration, followed by diphenhydramine, heroin, and trace amounts of fentanyl. Xylazine was detected in two of the five samples, having higher concentrations of xylazine than medetomidine. One of the five contained trace amounts of nitazenes (metonitazene and *N*-pyrrolidinometonitazene), synthetic opioids more potent than fentanyl.

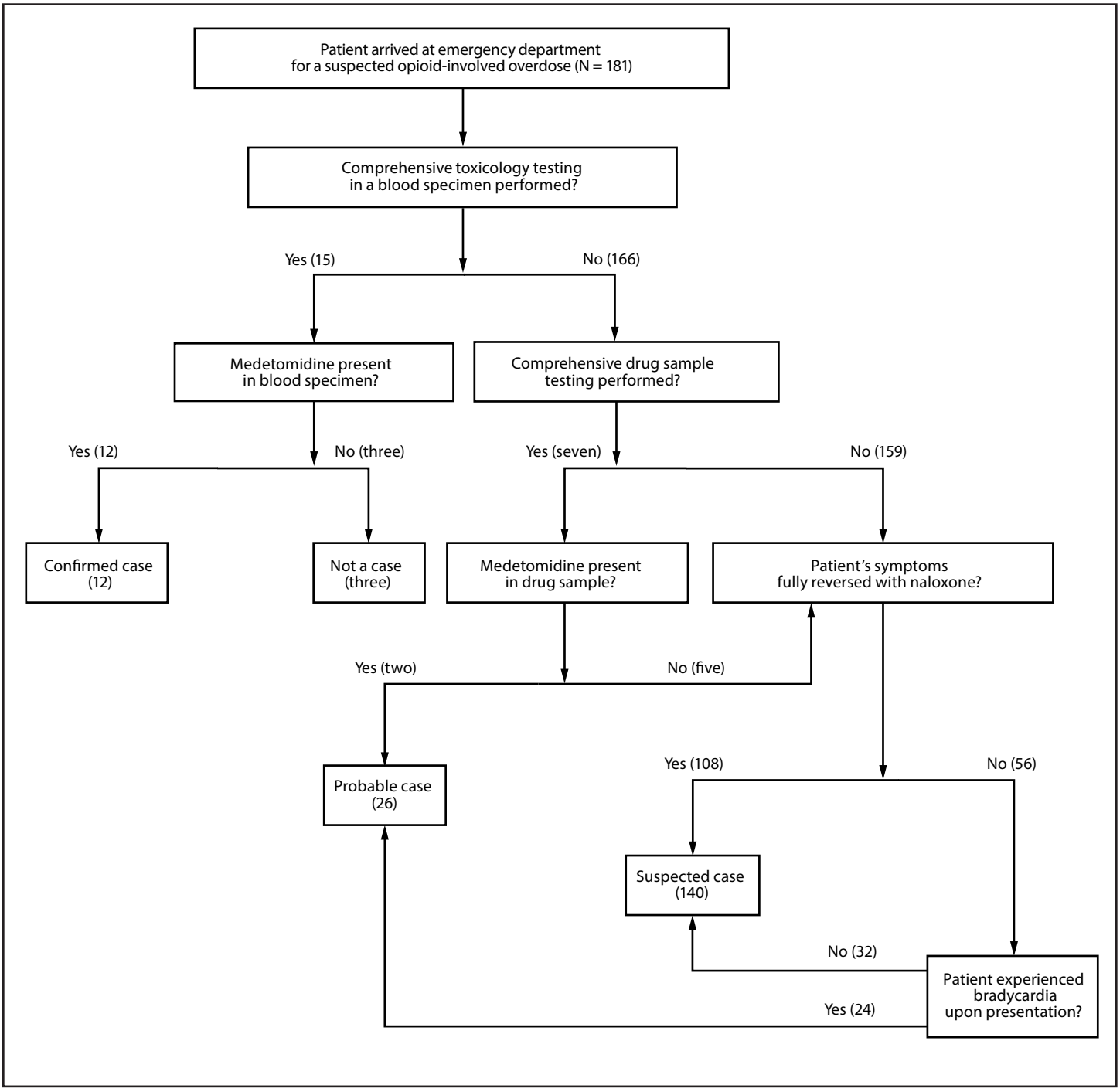
§§§ Increase in Opioid Overdoses May 14, 2024

¶¶¶ Medetomidine in Chicago's Drug Supply May 20, 2024

**** DEA TOX Toxicology Testing Program

†††† Drug Checking Programs in the United States and Internationally: Environmental Scan Summary

FIGURE 1. Case identification algorithm used for patients admitted to three emergency departments for overdoses involving medetomidine mixed with opioids — Chicago, Illinois, May 11–17, 2024[*,†,§,¶,**,††]



* Three patients for whom comprehensive toxicology testing of blood specimens was performed also had drug sample testing; medetomidine was present in the blood specimens and drug samples from all three patients.

† For the patient blood specimens in which medetomidine was detected, diphenhydramine (12 patients), fentanyl (12), quinine (11), benzoylecgonine (a cocaine metabolite) (10), bromazolam (a benzodiazepine) (six), morphine (six), and xylazine (six) were also detected.

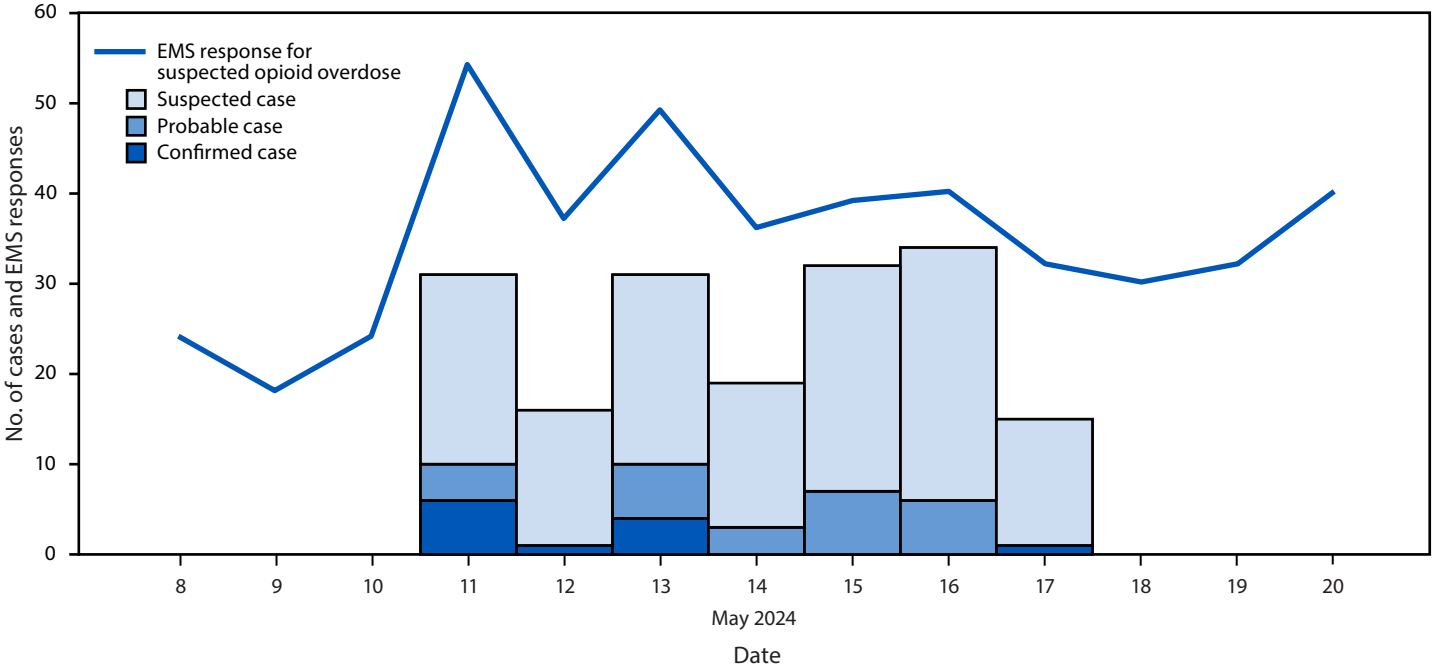
§ For the patients for whom medetomidine was present in drug samples, the drug samples were bagged powders that were in the patients' possession at the initial health care contact.

¶ A patient was classified as not having symptoms fully reversed with naloxone if the patient experienced persistent altered mental status after naloxone administration.

** Suspected cases were defined as other suspected opioid-involved overdoses in patients who were admitted to the emergency departments of the three hospitals even without clinical or testing evidence for medetomidine because the patients were admitted during a time of medetomidine infiltration of the drug supply.

†† Bradycardia was defined as heart rate less than 60 beats per minute.

FIGURE 2. Overdose cases involving medetomidine mixed with opioids and emergency medical services responses* for suspected opioid-involved overdose cases per day† — Chicago, Illinois, May 8–20, 2024§



Abbreviation: EMS = emergency medical services.

* EMS responses data are from the Chicago Fire Department. Numbers might differ from near real-time EMS response data from the Office of National Drug Control Policy's Overdose Detection Mapping Application Program, which links first responders and records management systems to a mapping tool to track overdoses. The finalized Chicago Fire Department data indicated that there were 54 opioid-related EMS responses on May 11, 2024.

† Twelve confirmed, 26 probable, and 140 suspected medetomidine-involved overdose cases were identified.

§ During May 11–17, total EMS responses for suspected opioid-involved overdoses included confirmed, probable, and suspected cases of medetomidine-involved overdose. Suspected cases were defined as suspected opioid-involved overdoses in patients who were admitted to the emergency departments of the three hospitals even without clinical or testing evidence for medetomidine because the patients were admitted during a time of medetomidine infiltration of the drug supply.

Comprehensive toxicology testing initiated by hospitals, their reports to IPC, and timely coordination and testing of drug samples and blood specimens identified medetomidine as the contributing factor of the overdose cluster.

Since 2023, CDC has supported toxicologic testing of illegal drug paraphernalia or samples in 18 local jurisdictions (including Chicago) (*5*). Additional analyses of data collected can provide states and local jurisdictions with critical information to lessen the public health risks caused by changes in the illegal drug market, including introduction of new drugs or adulterants like medetomidine, that can increase the risk for overdose or other negative outcomes.

The emergence of medetomidine in the illegal drug supply can complicate responses to suspected opioid-involved overdoses and necessitates educating persons who use drugs, clinicians, and public health personnel about the adverse effects of medetomidine. Bradycardia, a side effect typically more intense with medetomidine than with opioids, was observed frequently in this investigation and might help to clinically distinguish overdoses involving medetomidine mixed with opioids from those involving only opioids. Hypertensive urgency was also observed. Cardiovascular and respiratory support are crucial to the management of medetomidine toxicity (*6*). Although peripheral vasoconstriction caused by medetomidine has been described in animals, whether medetomidine exacerbates skin and soft tissue damage that is associated with xylazine in humans remains unclear (*7*).

Clinicians who observe an atypical toxidrome associated with a suspected opioid-involved overdose should administer naloxone and provide supportive care and should have a low threshold for contacting their local health department, especially regarding clusters of overdoses with atypical, similar toxidromes. Poison centers can provide clinical guidance on patient care and assist with coordination of toxicology testing.

All blood specimens and drug samples in this investigation that contained medetomidine also contained natural or synthetic opioids, the effects of which are reversible with naloxone. Despite the emergence of new adulterants, administering naloxone for all suspected opioid-involved overdoses remains important, including for those overdoses involving medetomidine mixed with opioids. The effects of medetomidine cannot be reversed with naloxone. In addition, the antidote for medetomidine

TABLE. Demographic and clinical characteristics of patients with confirmed, probable, and suspected cases of overdose involving medetomidine mixed with opioids — Chicago, Illinois, May 11–17, 2024

Characteristic	No. (%)			
	Confirmed (n = 12)	Probable (n = 26)	Suspected* (n = 140)	Total (N = 178)
Median age, yrs (range)	59.8 (38.2–69.6)	59.1 (32.5–86.5)	54.9 (22.1–78.7)	**55.8 (22.1–86.5)**
Age group, yrs				
<34	0	1 (3.8)	19 (13.6)	**20 (11.2)**
35–44	2 (16.7)	2 (7.7)	20 (14.3)	**24 (13.5)**
45–64	7 (58.3)	17 (65.4)	80 (57.1)	**104 (58.4)**
≥65	3 (25.0)	6 (23.1)	21 (15.0)	**30 (16.9)**
Sex				
Female	2 (16.7)	4 (15.4)	29 (20.7)	**35 (19.7)**
Male	10 (83.3)	22 (84.6)	111 (79.3)	**143 (80.3)**
Race and ethnicity†				
Black or African American	10 (83.3)	23 (88.5)	97 (69.3)	**130 (73.0)**
White	2 (16.7)	0	15 (10.7)	**17 (9.6)**
Hispanic or Latino	0	1 (3.8)	8 (5.7)	**9 (5.1)**
Other	0	1 (3.8)	11 (7.9)	**12 (6.7)**
Unknown	0	1 (3.8)	9 (6.4)	**10 (5.6)**
History of substance use				
Yes	10 (83.3)	16 (61.5)	—	**26 (68.4)**
No	0	2 (7.7)	—	**2 (5.3)**
Unknown	2 (16.7)	8 (30.8)	—	**10 (26.3)**
Reported drug used immediately before overdose event§				
Heroin	5 (41.7)	13 (50.0)	—	**18 (47.4)**
Other opiate	1 (8.3)	2 (7.7)	—	**3 (7.9)**
Unknown	6 (50.0)	11 (42.3)	—	**17 (44.7)**
Route of drug used before overdose event				
Snorting	4 (33.3)	4 (15.4)	—	**8 (21.1)**
Unknown	8 (66.7)	22 (84.6)	—	**30 (78.9)**
Response to naloxone¶				
Full reversal of symptoms	1 (8.3)	0	108 (77.1)	**109 (61.2)**
Partial improvement of symptoms**	7 (58.3)	19 (73.1)	19 (13.6)	**45 (25.3)**
No improvement of symptoms	4 (33.3)	6 (23.1)	5 (3.6)	**15 (8.4)**
Naloxone given but response not documented	0	0	1 (0.7)	**1 (0.6)**
Naloxone not given	0	1 (3.8)	6 (4.3)	**7 (3.9)**
Sign or symptom§,††,§§				
Hypertension	12 (100)	24 (92.3)	100 (71.4)	**136 (76.4)**
Bradycardia	9 (75.0)	24 (92.3)	23 (16.4)	**56 (31.5)**
Pinpoint pupils	10 (83.3)	22 (84.6)	86 (61.4)	**118 (66.3)**
Altered mental status	12 (100)	20 (76.9)	82 (58.6)	**114 (64.0)**
Hypoxemia	7 (58.3)	11 (42.3)	27 (19.3)	**45 (25.3)**
Systolic blood pressure ≥180 mm Hg	8 (66.7)	8 (30.8)	35 (25.0)	**51 (28.7)**
Bradypnea	2 (16.7)	6 (23.1)	20 (14.3)	**28 (15.7)**
Downward gaze	3 (25.0)	0	0	**3 (1.7)**
Twitching	1 (8.3)	0	1 (0.7)	**2 (1.1)**
Apnea	0	5 (19.2)	4 (2.9)	**9 (5.1)**
Hypotension	0	3 (11.5)	3 (2.1)	**6 (3.4)**
Dilated pupils	0	0	1 (0.7)	**1 (0.6)**
Hypothermia	0	0	1 (0.7)	**1 (0.6)**
Admitted to hospital				
Yes	8 (66.7)	8 (30.8)	26 (18.6)	**42 (23.6)**
Yes, to intensive care unit¶¶	5 (62.5)	4 (50.0)	9 (34.6)	**18 (42.9)**
Length of inpatient stay, median days (range)	3.5 (0.4–5.8)	2.0 (0.5–2.7)	1.2 (0.1–5.0)	**1.9 (0.1–5.8)**
No	4 (33.3)	18 (69.2)	113 (80.7)	**135 (75.8)**
Received medications for opioid use disorder				
Yes	9 (75.0)	6 (23.1)	—	**17 (44.7)**
No	3 (25.0)	20 (76.9)	—	**24 (63.2)**
Received atropine				
Yes	3 (25.0)	2 (7.7)	—	**5 (13.2)**

See table footnotes on the next page.

TABLE. (*Continued*) Demographic and clinical characteristics of patients with confirmed, probable, and suspected cases of overdose involving medetomidine mixed with opioids — Chicago, Illinois, May 11–17, 2024

Characteristic	No. (%)			
	Confirmed (n = 12)	Probable (n = 26)	Suspected* (n = 140)	Total (N = 178)
No	9 (75.0)	24 (92.3)	—	**33 (86.8)**
Received respiratory support				
Yes§	7 (58.3)	9 (34.6)	—	**16 (42.1)**
Supplemental oxygen***	6 (85.7)	6 (66.7)	—	**12 (75)**
Continuous positive airway pressure***	0	1 (11.1)	—	**1 (6.25)**
Intubation***	3 (42.9)	2 (22.2)	—	**5 (31.3)**
No	5 (41.7)	17 (65.4)	—	**22 (57.9)**
Disposition after discharge				
Home	8 (66.7)	25 (96.2)	120 (85.7)	**153 (86.0)**
Left against medical advice	3 (25.0)	0	18 (12.9)	**21 (11.8)**
Referral to other health care facility	1 (8.3)	1 (3.8)	0	**2 (1.1)**
Deceased	0	0	1 (0.7)	**1 (0.6)**
Unknown	0	0	1 (0.7)	**1 (0.6)**
Linkage to care and harm reduction resources§				
Provided patient naloxone	5 (41.7)	12 (46.2)	—	**17 (44.7)**
Provided patient informational resources	1 (8.3)	2 (7.7)	—	**3 (7.9)**
Referral to behavioral health treatment for substance use disorder	8 (66.7)	11 (42.3)	—	**19 (50.0)**
Prescribed medications for opioid use disorder	3 (25.0)	1 (3.8)	—	**4 (10.5)**
Referral to treatment for other comorbidities	0	1 (3.8)	—	**1 (2.6)**
None	0	3 (11.5)	—	**3 (7.9)**
Unknown	0	1 (3.8)	—	**1 (2.6)**

* Time and resource constraints resulted in the completion of only partial chart abstractions for suspected cases, and data were not collected for all variables; data not collected are indicated with a dash.
† Persons of Hispanic or Latino (Hispanic) origin might be of any race but are categorized as Hispanic; all racial groups are non-Hispanic.
§ Not mutually exclusive.
¶ Differences in response to naloxone are partially attributable to case definitions of probable and suspected cases.
** Partial response to naloxone is defined as a patient having some remaining opioid-involved overdose symptoms (i.e., prolonged altered mental status) after naloxone administration.
†† Ordered by descending frequency of symptoms among confirmed and probable cases combined; if frequency was equal among confirmed and probable cases, confirmed ranked above probable.
§§ Signs and symptoms were based on emergency medical services or vital signs data collected on arrival at the hospital or if noted in the medical record. Criteria were 1) systolic blood pressure ≥140 mm Hg for hypertension; 2) heart rate less than 60 beats per minute or demonstration on electrocardiogram for bradycardia (differences in bradycardia are partially attributable to the case definitions of probable and suspected cases); 3) respiratory rate less than 12 breaths per minute for bradypnea; 4) systolic blood pressure ≥180 mm Hg for hypertensive urgency; 5) oxygen saturation level <90% for hypoxemia; and 6) systolic blood pressure <90 mm Hg for hypotension.
¶¶ Among patients who were hospitalized.
*** Among patients who received respiratory support.

and dexmedetomidine, atipamezole, is not approved for use in humans (*8*). Clinicians should continue to provide medications for opioid use disorder, linkage to care, and harm reduction services for persons experiencing opioid use disorder (*9*).

Limitations

The findings in this report are subject to at least four limitations. First, suspected cases might have been overestimated because no clear toxidrome for medetomidine-involved overdoses exists, a result of minimal published data on its effects in humans. For the purposes of the investigation, sensitivity was prioritized over specificity for suspected cases during this period so as to not miss any potential cases in patients with increased risk for medetomidine exposure. Second, most patients had no toxicology testing, which might have contributed to an underestimation of confirmed cases. Because medetomidine is an emerging adulterant, it is not part of standard urine drug screening. Testing for medetomidine requires sending specimens and samples to a specialized toxicology laboratory, increasing the barrier for identifying cases. Third, time and resource constraints limited the investigation to three hospitals; local hospitals not included in the study might have received patients with overdoses involving medetomidine. Therefore, these findings might not be generalizable. Finally, the investigation was conducted during May 11–17, 2024, and additional cases might have occurred outside of this time frame. No additional clusters attributable to medetomidine have since been identified in Chicago; however, additional

Summary

What is already known about this topic?

Medetomidine, a nonopioid sedative not approved for use in humans, has been detected in illegally manufactured opioids across North America since 2022.

What is added by this report?

Twelve confirmed and 26 probable cases of medetomidine-involved overdose occurred in Chicago, Illinois, during May 11–17, 2024, mostly among non-Hispanic Black or African American men aged 45–64 years. Bradycardia and lack of response to naloxone were defining clinical features. Fentanyl was present in all blood specimens and drug samples that tested positive for medetomidine.

What are the implications for public health practice?

Multisector surveillance is needed to quickly identify and respond to new adulterants introduced into the illegal drug supply. Clinicians who observe atypical toxidromes associated with suspected opioid-involved overdoses should contact their local health department and continue to provide naloxone and linkage to evidence-based treatment.

drug samples obtained since that time have tested positive for medetomidine.[§§§§]

Implications for Public Health Practice

This cluster of confirmed medetomidine-involved overdoses is the largest yet reported, and the landscape of adulterants in the illegal drug supply is ever-changing and expanding. The recent addition of xylazine has led to a concerning trend in deaths potentially resulting from adulteration in the fentanyl supply (*10*), and the emergence of medetomidine further complicates the opioid overdose crisis. Clinicians and persons who use illegal drugs should be aware that medetomidine can be present in the drug supply. Although medetomidine effects cannot be reversed with naloxone, if a person might be overdosing, the use of naloxone or any other opioid overdose reversal medication is recommended. In addition, connecting persons at risk for overdose to evidence-based treatment, services, and support can save lives.

[§§§§] Overdose Cluster Associated with Nitazenes and the Novel Adulterant BTMPS November 8, 2024

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Notes from the Field

Suspected Medetomidine Withdrawal Syndrome Among Fentanyl-Exposed Patients — Philadelphia, Pennsylvania, September 2024–January 2025

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Medetomidine, a synthetic alpha-2 adrenoreceptor agonist, is a new drug adulterant that was detected in 72% of illegal opioid samples tested in Philadelphia, Pennsylvania, during the last 4 months of 2024. During the same period, detection of xylazine (previously the most common adulterant) decreased from 98% to 31% of samples (*1*), and health care providers at hospitals in Philadelphia noticed an increasing number of hospitalized patients with a severe drug withdrawal syndrome distinct from fentanyl and xylazine withdrawal, characterized by profound autonomic dysfunction, such as severe hypertension and tachycardia. This report aims to increase awareness of the presence of medetomidine in the illegal opioid supply, characterize the emerging medetomidine withdrawal syndrome, and describe measures to provide effective patient care for this life-threatening syndrome.

Investigation and Outcomes

During fall 2024, in response to emerging awareness of a newly recognized medetomidine withdrawal syndrome, addiction medicine and medical toxicology faculty members at three Philadelphia health systems (health systems A, B, and C) began maintaining a list of patients identified with the syndrome, including those they had helped care for or provided consultation for, as well as patients referred by other health care providers. The faculty members reviewed electronic health records of patients who were admitted to the three health systems during September 1, 2024–January 31, 2025, and whose withdrawal syndrome was characterized by severe signs and symptoms that were not resolved by established treatment protocols for fentanyl and xylazine withdrawal. Overall, 165 patients were identified who demonstrated one or more signs or symptoms such as agitation, anxiety, severe hypertension, tachycardia, tremor without clonus or hyperreflexivity, and vomiting, resistant to increasing doses of opioids (e.g., fentanyl, hydromorphone, methadone, or oxycodone), sedatives (e.g., diazepam, droperidol, haloperidol, lorazepam, midazolam, phenobarbital, or propofol), and adjunctive opioid and xylazine withdrawal medications (clonidine, ketamine, olanzapine, ondansetron, or tizanidine) (*2*). Median age was 38 years (IQR = 33–43 years). This evaluation was reviewed and approved by the institutional review boards of health systems A, B, and C.

Among the 165 patients, 150 (91%) required intensive care unit (ICU) care, including 39 (24%) who received endotracheal intubation (Table). A total of 137 (83%) patients were treated with and responded to dexmedetomidine* infusion, a drug eventually recognized as potentially effective; medetomidine is an enantiomer† of dexmedetomidine, and prolonged dexmedetomidine exposure can induce a withdrawal syndrome manageable with controlled weaning from the drug. Traditional dosages of dexmedetomidine (0.2–1.5 μg/kg/hr) (*3*) were used and titrated to control symptoms or sedate patients with intubation. In a majority of patients requiring dexmedetomidine, the drug was titrated to a maximum dosage of 1.5 μg/kg/hr. Duration of infusion varied, depending on the patient. Use of oral alpha-2 agonists, such as clonidine, was limited because of vomiting. Patients were also treated with antihypertensive medications titrated to blood pressure levels ≤180/120 mm Hg. Complications secondary to severe hypertension or tachycardia included altered mental status with computed tomography (CT)- or magnetic resonance imaging (MRI)-documented posterior reversible encephalopathy syndrome§ in three patients, and non-ST elevation myocardial infarction (NSTEMI) secondary to demand ischemia (insufficient blood supply to meet the heart's oxygen demand) with positive high-sensitivity troponin, indicating potential damage to the heart muscle in a substantial number of patients¶. Findings of severe withdrawal syndromes typically associated with other sedatives (alcohol, barbiturate, or benzodiazepine), such as seizures or hallucinations, were infrequent. Routine testing of specimens from all 165 patients by hospital laboratories confirmed universal fentanyl exposure. Testing for medetomidine or its metabolites using liquid phase chromatography with mass spectrometry was available at health system A; all 55 patients treated at health system A received a positive test result for 3-hydroxy medetomidine.

* Dexmedetomidine is an alpha-2 agonist medication that is used for sedation in an ICU and operating room.

† Enantiomer molecules are mirror images of each other and are not superimposable (e.g., right and left hands).

§ Posterior reversible encephalopathy syndrome is a neurologic disorder characterized by brain swelling that can arise when blood pressure is severely increased. The syndrome is diagnosed by cross-sectional brain imaging such as CT or MRI scan.

¶ Only health system C collected these data, although the patient population at health systems A and B were similar to that of health system C. NSTEMI was defined as a positive high-sensitivity troponin. Of health system C's 62 patients, 39 patients had an NSTEMI, and 13 had a normal or negative high-sensitivity troponin test result. Ten patients were not tested for high-sensitivity troponin.

TABLE. Characteristics of patients hospitalized with combined opioid and suspected medetomidine withdrawal syndrome — three health systems, Philadelphia, Pennsylvania, September 2024–January 2025

Characteristic	No. (%)			
	Health system A (n = 55)	Health system B (n = 48)	Health system C (n = 62)	Total (N = 165)
Age, yrs, median (IQR)	37 (33–45)	38 (35–41)	38 (32–45)	**38 (33–43)**
Sex				
Female	12 (22)	20 (42)	17 (27)	**49 (30)**
Male	43 (78)	28 (58)	45 (73)	**116 (70)**
Race and ethnicity*				
Black or African American, non-Hispanic	6 (11)	6 (13)	15 (24)	**27 (16)**
White, non-Hispanic	44 (80)	34 (71)	25 (40)	**103 (62)**
Hispanic or Latino	5 (9)	0 (—)	18 (29)	**23 (14)**
Other	0 (—)	8 (17)	4 (7)	**12 (7)**
Clinical findings and hospital course				
Maximum heart rate (beats per minute), median (IQR)	144 (125–155)	136 (118–156)	148 (140–157)	**145 (132–156)**
Maximum systolic blood pressure (mm Hg), median (IQR)	191 (172–211)	196 (171–224)	200 (185–215)	**195 (175–215)**
Maximum diastolic blood pressure (mm Hg), median (IQR)	111 (103–123)	127 (109–137)	131 (119–143)	**122 (109–136)**
Treated with dexmedetomidine	51 (93)	35 (73)	51 (82)	**137 (83)**
Intubation/Mechanical ventilation	12 (22)	11 (23)	16 (26)	**39 (24)**
Admitted to intensive care unit	49 (89)	44 (92)	57 (92)	**150 (91)**
Disposition				
Home	15 (27)	28 (58)	32 (52)	**75 (45)**
Patient-directed discharge	14 (26)	13 (27)	25 (40)	**52 (32)**
Residential drug treatment	14 (26)	7 (15)	0 (—)	**21 (13)**
Law enforcement custody	12 (22)	0 (—)	5 (8)	**17 (10)**

* Persons of Hispanic or Latino (Hispanic) origin might be of any race but are categorized as Hispanic; all racial groups are non-Hispanic.

Preliminary Conclusions and Actions

The syndrome described in this report is similar to that described among ICU patients with days-long exposure to dexmedetomidine, an enantiomer of medetomidine, who experience an autonomic withdrawal syndrome with vomiting and agitation when dexmedetomidine is discontinued (*4*,*5*). In the patients described in this report, these signs and symptoms were not resolved by increasing doses of medications previously effective in managing fentanyl and xylazine withdrawal; however, they were responsive to dexmedetomidine, as described in the management of dexmedetomidine withdrawal (*4*,*5*). Health care providers and public health agencies need to be aware of this life-threatening withdrawal syndrome because it can require substantial escalations in care compared with the typical opioid and xylazine withdrawal syndromes. Public health agencies should consider testing for medetomidine in their regional drug supplies.

Summary

What is already known about this topic?

Medetomidine, a nonopioid sedative not approved for use in humans, replaced xylazine as the most common drug adulterant in the Philadelphia, Pennsylvania, illegal opioid supply during the last 4 months of 2024.

What is added by this report?

During September 2024–January 2025, 165 patients at three Philadelphia health systems were hospitalized for fentanyl withdrawal complicated by profound autonomic dysfunction, including severe hypertension and tachycardia. This syndrome was resistant to medications that had previously been effective in managing fentanyl and xylazine withdrawal but was responsive to dexmedetomidine.

What are the implications for public health practice?

Health care providers and public health agencies should be aware of shifts in the drug supply over time that might change patient signs and symptoms. The findings in this report indicate that medetomidine withdrawal syndrome is life-threatening and can require a substantial escalation in care compared with the typical opioid and xylazine withdrawal syndromes. Public health agencies should consider testing for medetomidine in their regional drug supplies.

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Notes from the Field

Severe Medetomidine Withdrawal Syndrome in Patients Using Illegally Manufactured Opioids — Pittsburgh, Pennsylvania, October 2024–March 2025

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Various adulterants within the illegally manufactured opioid supply have emerged in the United States during the last several years (*1*–*3*). Medetomidine, an alpha-2 adrenoreceptor agonist that is not approved for human use in the United States, became increasingly detected in the drug supply in 2024. Medetomidine is a racemic mixture of levomedetomidine and dexmedetomidine, an intravenous sedative used in the critical care setting. A clinical syndrome of autonomic hyperactivity (i.e., hypertension, tachycardia, and agitation) has been observed after abrupt discontinuation of dexmedetomidine (*4*).

Investigation and Outcomes

During October 2024–March 2025, the University of Pittsburgh medical toxicology service evaluated 23 patients at two Pittsburgh, Pennsylvania hospitals who experienced severe autonomic hyperactivity after abrupt cessation of illegally manufactured opioid use. Among the 23 patients, 20 (87%) underwent comprehensive urine drug screening (liquid chromatography-quadrupole time of flight-mass spectrometry testing) during their hospitalization. Medetomidine parent compound was detected in two patients; the test was technically unable to detect medetomidine metabolites. As concern grew about an emerging outbreak of a novel withdrawal syndrome, retrospective analysis of this comprehensive drug screening data was performed for 10 patients after they had been discharged; medetomidine metabolites were detected in all 10 samples* (*5*). These 10 patients with detectable medetomidine metabolites, which included the two with detectable parent medetomidine, were included in the current analysis. A retrospective analysis using a University of Pittsburgh institutional review board–approved single-center toxicology registry was performed.† This approval allows collection and publication of deidentified registry data.

Of the 10 patients, two arrived at an emergency department (ED) with nausea, vomiting, tremulousness, and autonomic hyperactivity; the other eight experienced similar symptoms several hours after arrival at an ED. All required hospitalization. Nine patients who were admitted to an intensive care unit (ICU) received dexmedetomidine to treat autonomic hyperactivity, and the tenth patient was treated with oral and transdermal clonidine and guanfacine in addition to phenobarbital with sufficient relief to avoid ICU admission (Table). The rationale for using dexmedetomidine included minimal response to other agents including opioids and sedatives, knowledge that medetomidine was an emerging adulterant in the illegal drug supply, and suspicion that medetomidine's withdrawal state would be effectively treated with dexmedetomidine given the agents' shared pharmacologic properties. Four patients received treatment for concomitant withdrawal syndromes (e.g., from alcohol or benzodiazepine). None had alternative causes identified to better explain their symptoms. The following two cases are representative of the entire 23-patient cohort and are part of the 10 patients with confirmed medetomidine exposure:

Patient A was a man aged 39 years with opioid use disorder treated with daily methadone. He was seen in an ED for nausea and vomiting, and he had bradycardia (heart rate = 54 beats per minute [bpm]) in triage. Over the next 5 hours, he developed tremulousness, agitation, and severe autonomic hyperactivity: tachycardia (103–170 bpm) and diaphoresis. Treatment with methadone, clonidine, tizanidine, benzodiazepines, and phenobarbital did not result in substantial improvement. Tachycardia improved within 3 hours after dexmedetomidine initiation and admission to an ICU. He was discharged on hospital day 5. Results of enzyme immunoassay urine drug screening collected in an ED after treatment initiation were positive for fentanyl, barbiturates, and benzodiazepines. Comprehensive urine drug screening, collected in the ED with results available on day 3, demonstrated fentanyl and fentanyl analogs, methadone, and medetomidine.

Patient B was a man aged 36 years with opioid use disorder who sought treatment in an ED for opioid withdrawal. During 3 hours in the ED, he developed progressive tachycardia up to 163 bpm, hypertension up to 156/134 mmHg, agitation, encephalopathy, severe metabolic acidosis (venous blood pH <6.8), hypokalemia (2.5 mmol/L [reference value = 3.4-5 mmol/L]), and prolongation of the corrected QT interval (QTc = 526 ms). He underwent rapid sequence endotracheal intubation using rocuronium and etomidate, which was complicated by cardiac arrest requiring

* Mass spectrometry datasets were accessible for retrospective analysis for medetomidine metabolites.

† All chart review was done by two authors who are emergency physicians and medical toxicology fellows using a standardized data abstraction form in REDCap. Source information included toxicology and intensive care unit clinical notes, vital signs, laboratory data, and medication administration records.

TABLE. Clinical characteristics of 10 patients who used illegally manufactured opioids and were treated for medetomidine withdrawal — Pittsburgh, Pennsylvania, October 2024–March 2025

Characteristic	No. (%)
Mean age (range)	**34.2 (22–54)**
Male sex	**6 (60)**
Race and ethnicity	
Black or African American, Hispanic or Latino	1 (10)
Black or African American, non-Hispanic	1 (10)
White, non-Hispanic	8 (80)
Rapid clinical deterioration during ED stay*	**8 (80)**
Concomitant GABAergic withdrawal requiring treatment	**4 (40)**
ICU admission	**9 (90)**
Total hospital length of stay, hrs (median)†	**93.3**
Intubation/Mechanical ventilation	**1 (10)**
Vital signs	
Peak temperature (°C), median (range)	37.6 (36.9–38.6)
Peak heart rate (beats per minute), median (range)	165 (133–178)
Peak systolic blood pressure (mm Hg), median (range)	200 (146–236)
Peak diastolic blood pressure (mm Hg), median (range)	114 (91–140)
Alpha-2 agonist therapy	
Dexmedetomidine infusion	9 (90)
Clonidine (cumulative dose),§ mg, median	0.7
Tizanidine (cumulative dose),§ mg, median	8
Guanfacine (cumulative dose),§ mg, median	3
Cumulative benzodiazepine dose,§,¶ mg, median	**10**
Cumulative phenobarbital dose,§ mg, median	**520**
Clinical outcome	
Cardiac arrest or ventricular dysrhythmia	1 (10)
Metabolic acidosis	7 (70)
Acute kidney injury	3 (30)
Rhabdomyolysis	1 (10)
Myocardial injury	3 (30)
Compounds detected in urine**	
Fentanyl parent, metabolite, or analog	10 (100)
Xylazine	6 (60)
Cocaine parent or metabolite	4 (40)
Lorazepam, temazepam, or diazepam metabolite	6 (60)
Medetomidine parent††	2 (20)
Medetomidine metabolite††	10 (100)

Abbreviations: ED = emergency department; ICU = intensive care unit.
* Patient's condition in an ED initially assessed as mild, but quickly deteriorated requiring rapidly escalating interventions and an ICU.
† Total hospital length of stay = time (in hours) from initial ED presentation to discharge.
§ Cumulative dose is the sum of doses within the first 48 hours of hospital stay beginning from arrival at an ED.
¶ Reported in lorazepam equivalents: 1 mg lorazepam = approximately 2 mg midazolam = approximately 5 mg diazepam.
** Urine drug testing conducted using liquid chromatography quadrupole time of flight mass spectrometry.
†† One patient had received pharmaceutical dexmedetomidine before collection of urine drug sample.

defibrillation, cardiopulmonary resuscitation, and epinephrine. He was admitted to an ICU and received multiple sedating infusions, including dexmedetomidine, ketamine, propofol, midazolam, and fentanyl. He was extubated several days later without apparent neurologic deficits. Comprehensive urine drug screening, collected in the ED and available on hospital day 3, detected fentanyl and fentanyl analogs, cocaine, ketamine, and sulfamethoxazole-trimethoprim but no parent medetomidine was detected. He was discharged home on hospital day 8. Post-discharge analysis of his urine drug specimen detected medetomidine metabolites.

Preliminary Conclusions and Actions

The 10 patients who used illegally manufactured opioids with confirmed medetomidine exposure based on retrospective identification of medetomidine metabolites exhibited a withdrawal syndrome characterized by severe autonomic hyperactivity with rapid symptom onset often requiring dexmedetomidine and ICU admission. The emergence of this syndrome temporally correlated with an increased medetomidine prevalence in the regional illegally manufacture opioid supply. On December 18, 2024, the Pennsylvania Department of Health issued a health advisory describing severe withdrawal observed in patients who use drugs in the Philadelphia area associated with medetomidine exposure.§ Although only two patients had detectable parent medetomidine on comprehensive urine drug screening, all 10 patients had samples with detectable medetomidine metabolites identified retrospectively. Although a rapid clinical test for medetomidine is not available, providers should maintain awareness of this emerging medetomidine withdrawal syndrome when treating persons who use illegally manufactured opioids.

§ Hospitals and Behavioral Health Providers are Reporting Severe and Worsening Presentations of Withdrawal among People who Use Drugs (PWUD) in Philadelphia

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Summary

What is already known about this topic?

Medetomidine is an increasingly common adulterant of illegally manufactured opioids.

What is added by this report?

During October 2024–March 2025, a total of 23 adult patients who used illegally manufactured opioids sought treatment within a health care system in Pittsburgh, Pennsylvania. All exhibited severe autonomic hyperactivity, and most required dexmedetomidine infusion and intensive care unit–level management. Medetomidine metabolites were detected in all 10 patients for whom retrospective analysis was performed, despite only two having detectable parent compound (medetomidine) on comprehensive urine drug screening.

What are the implications for public health practice?

Health care providers in regions where medetomidine has been detected in the drug supply should be prepared to manage a severe withdrawal syndrome among patients who use illegally manufactured opioids, even if drug testing for medetomidine is negative.

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H.5143

December 2024

Understanding the Massachusetts Substance Use Law

This law was created to:

- Help people who use drugs stay safer.
- Reduce overdose deaths and harm from drug use.
- Support families and individuals dealing with substance use.
- Improve access to life-saving tools and recovery support.

Drug Checking Legal Protections

What It Does:

Harm reduction programs can legally provide drug checking services to help people test samples of their drugs.

Who is Protected:

- Staff and volunteers at harm reduction programs.
- Participants who use these services.

Legal Protections Include:

- No one can be arrested for having drug-checking tools (like fentanyl test strips).
- Participants won't face charges for personal possession when using drug checking services.

Opioid Antagonist Access

What It Does:

Makes life-saving medications like naloxone (Narcan) easier to access.

Key Points:

- Insurance must cover naloxone without needing approval from a doctor
- Pharmacies in high-risk areas must always have naloxone in stock.

Pharmacy and Prescriber Rules

What It Does:

Adds new rules for healthcare professionals to ensure more access to harm reduction tools and safer prescribing.

Key Points for Pharmacies:

- Must stock naloxone in areas with high overdose rates.
- Must provide education about safer drug use.

Key Points for Prescribers:

- Must educate patients on overdose prevention and non-opioid pain management.

Plans of Safe Care for Mothers and Infants

What It Does:

Requires health care providers to create Plans of Safe Care for infants born with prenatal substance exposure.

What's in a Plan of Safe Care?

Helps families access the resources they need, such as support services for the baby and family, (like housing, healthcare, and substance use treatment).

Key Points:

- Prenatal substance exposure alone is NOT considered child abuse or neglect.
- Focuses on keeping families together rather than child removal.

Recovery Coach Licensure

What It Does:

Establishes formal licensing for recovery coaches, who use their lived experience to support people in recovery.

Key Points:

- Recovery coaches must meet education, training, and ethical standards.
- Insurance will cover recovery coaching services.

Non-Opioid Pain Management

What It Does:

Requires insurance companies to cover treatments that don't involve opioids, like:

- Acupuncture
- Massage therapy
- Physical therapy

Key Points:

- No prior approval is needed for non-opioid pain management.

Scan the QR code to learn more!

H.5143

Diciembre 2024

Comprensión de la ley sobre consumo de sustancias de Massachusetts

Esta ley fue creada para:

- Ayuda a las personas que consumen drogas a mantenerse más seguras.
- Reducir las muertes por sobredosis y los daños causados por el consumo de drogas.
- Apoyar a familias e individuos que enfrentan el consumo de sustancias.
- Mejorar el acceso a herramientas que salvan vidas y al apoyo para la recuperación.

Protecciones legales de análisis de drogas

Qué hace:

Los programas de reducción de daños pueden proporcionar legalmente servicios de análisis de drogas para ayudar a las personas a analizar muestras de sus drogas.

¿Quién está protegido?

- Personal y voluntarios en programas de reducción de daños.
- Participantes que utilizan estos servicios.

Las protecciones legales incluyen:

- Nadie puede ser arrestado por poseer herramientas para controlar drogas (como tiras de prueba de fentanilo).
- Los participantes no enfrentarán cargos por posesión personal cuando utilicen servicios de análisis de drogas.

Acceso a antagonistas opioides

Qué hace:

Mejora el acceso a medicamentos que salvan vidas, como la naloxona (Narcan).

Puntos clave:

- El seguro debe cubrir la naloxona sin necesidad de aprobación médica
- Las farmacias en zonas de alto riesgo deben tener siempre naloxona en stock.

Normas de farmacia y prescriptores

Qué hace:

Agrega nuevas reglas para los profesionales de la salud para garantizar un mayor acceso a herramientas de reducción de daños y una prescripción más segura.

Puntos clave para las farmacias:

- Es necesario almacenar naloxona en zonas con altas tasas de sobredosis.
- Debe proporcionar educación sobre el uso seguro de drogas.

Puntos clave para los prescriptores:

- Debe educar a los pacientes sobre la prevención de sobredosis y el manejo del dolor sin opioides.

Planes de atención segura para madres y bebés

Qué hace:

Requiere que los proveedores de atención médica creen Planes de Atención Segura para los bebés nacidos con exposición prenatal a sustancias.

¿Qué incluye un plan de atención segura?

Ayuda a las familias a acceder a los recursos que necesitan, como servicios de apoyo para el bebé y la familia (como vivienda, atención médica y tratamiento por uso de sustancias).

Puntos clave:

- La exposición prenatal a sustancias por sí sola NO se considera abuso o negligencia infantil.
- Se centra en mantener unidas a las familias en lugar de separar a los niños.

Entranador de Recuperación

Qué hace:

Establece una licencia formal para los entrenadores de recuperación, quienes utilizan su experiencia vivida para apoyar a las personas en recuperación.

Puntos clave:

- Los entrenadores de recuperación deben cumplir con estándares de educación, capacitación y ética.
- El seguro cubrirá los servicios de asesoramiento para la recuperación.

Tratamiento del dolor sin opioides

Qué hace:

Requiere que las compañías de seguros cubran tratamientos que no involucren opioides, como:

- Acupuntura
- Terapia de masaje
- Fisioterapia

Puntos clave:

- No se necesita aprobación previa para el tratamiento del dolor sin opioides.

Para obtener más información:

Mead, Talerman & Costa, LLC
Attorneys at Law

227 Union Street
Suite 606
New Bedford, MA 02740

www.mtclawyers.com

TO: **SHARON HART, HEALTH AGENT**
LISA WONG, TOWN ADMINISTRATOR

FROM: **LISA MEAD AND KAYLA VENCKAUSKAS**

RE: **REGULATIONS OF ENERGY-PRODUCING FACILITIES**

DATE: **JUNE 13, 2025**

Reference is made to the above captioned matter. In that connection, South Hadley's current regulations surrounding energy-producing facilities are no longer compliant with the statutory scheme which grants the state significant authority, including the right to override local approvals, in granting permits for the siting and construction of such facilities.

I. State Authority over Energy-Producing Facilities

In Massachusetts, the development of energy-producing facilities is primarily governed by state law.

A. Energy Facilities Siting Board ("EFSB")

EFSB has jurisdiction over the siting and construction of certain energy infrastructure projects, including large electric generating plants, electric transmission lines, intrastate natural gas and oil pipelines, facilities for the manufacture or storage of natural gas, and very large oil storage facilities. M.G.L. c. 164, §§69G-69H. ESFB is charged with granting permits after conducting a comprehensive review of the environmental impacts, need for the facility, cost-effectiveness, and alternatives. ESFB decisions can preempt local approvals, meaning a municipality cannot block a project that has received ESFB approval and EFSB may override local requirements. See Brockton Power Co. LLC v. Energy Facilities Siting Bd., 469 Mass. 215, 229 (2014). However, municipalities are typically consulted and may intervene to raise local concerns in the process. M.G.L. c. 164, §§69H & 69K; 980 CMR 1.05.

B. Massachusetts Department of Environmental Protection ("MassDEP")

In general, MassDEP oversees environmental permitting, including air emissions, water discharge, wetlands protection, and solid waste. This oversight authority is derived from a series of state statutes and regulations, including the Massachusetts Clean Air Act, Massachusetts Surface Water Quality Standards, Massachusetts Wetlands Protection Act, Massachusetts Hazardous Waste Management Act, and the Massachusetts Environmental

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Policy Act ("MEPA")—which imposes certain obligations on all state permitting agencies. This oversight is in coordination with the EFSB process.

II. Local Authority to Regulate Energy-Producing Facilities

While state law plays a dominant role in permitting major energy infrastructure, towns retain important regulatory powers in certain areas, like zoning and permitting.

A. Zoning Authority

Towns have authority under M.G.L. c. 40A to regulate land use, including:

- Where certain types of energy-producing facilities may be located (e.g., industrial zones)
- Dimensional requirements like height and setbacks
- Use-specific standards (e.g., noise, glare, buffers, screening)
- Requiring special permits or site plan review for certain uses

However, zoning cannot completely prohibit land uses that are not specifically exempted unless there is a strong local interest and it passes judicial scrutiny. Notably, solar energy facilities have partial protection under M.G.L. c. 40A, §3, which prohibits towns from unreasonably regulating or prohibiting solar energy facilities unless necessary to protect public health, safety, or welfare.

South Hadley has adopted a comprehensive zoning bylaw, laid out in Chapter 255.

- Article IV establishes specific zoning districts, including which districts may permit certain industrial uses.
- Article V, and related attachments regulate permissible uses and the type or approval required for use in each zoning district. Specifically, South Hadley permits gas-to-energy facilities in certain agricultural and industrial zones with approval by special permit, renewable/alternative energy facilities in certain industrial zones with site plan review, and solar installation in all districts subject to either site plan review or a special permit depending on the scale and location.
- Article VI, and related attachments set out the specific dimensional regulations for each zoning district.
- Article VII sets out additional regulations, including §255-28, which requires a special permit for certain noxious or dangerous uses, which are only permitted in the Industrial B district, and §255-48 related to solar installations.
- Article VIII sets out the general provisions of the zoning bylaws, for instance earth removal, solar access, and wind energy conversion systems.
- The processes for obtaining special permits and site plan review are laid out in Article IX and XII respectively.

B. Conservation Commission and Board of Health

Town conservations commissions typically retain specific authority under the Massachusetts Wetlands Protection Act through local bylaws to regulate in protected areas, which may be more

restrictive than the Act. South Hadley has enacted regulations which grants the Conversation Commission enforcement authority to regulate conservation land. See Chapters 240 and 305.

A local Board of Health may also adopt regulations which may be applicable to energy-producing facilities but such regulation, in addition to local zoning and conservation bylaws, may be duplicative or create impermissibly burdensome compliance requirements—EFSB has override authority where the locality has imposed a burdensome condition or limitation on local approval. M.G.L. c. 164, §69K. South Hadley currently regulates energy-producing facilities through Board of Health regulations in Chapter 300, Article I. The regulations require Board of Health approval prior to constructing and operating such a facility, but in their current form, the grant of authority to the Board of Health to assign locations, issue permits, approve plans, and revoke permits exceeds that which may be regulated when considering EFSB's statutory authority. §200-190(C) also authorizes the Board of Health to assign site locations for those trades which may be considered "noisome", such approval impedes on the authority of EFSB to regulate site assignments for this trade and should not be applied to energy-producing facilities. As these regulations are significantly outdated and preempted by state law, as well as duplicative of local approvals laid out in zoning and conservation bylaws, it is recommended that they be repealed in favor of a more streamlined process, options for which are detailed below.

III. Options for Municipal Involvement and Regulation

There are several options South Hadley may consider to assert influence over the siting and construction of energy-producing facilities within the town's borders.

1. Zoning Amendments
    - Define districts where energy-producing facilities are allowed by-right, special permit, subject to site plan review, or prohibited (within reasonable limits).
    - Establish use-specific standards, such as buffer zones, screening, noise
    - Adopt general bylaws regulating noise, construction hours, and decommissioning of these facilities.
    - Keep in mind if a use is exempt under M.G.L. c. 40A §3, such as solar facilities, then regardless of the zoning prohibitions or other requirement, a town may only apply reasonable regulations to regulate those exempt uses.
2. Participation in EFSB, MassDEP, and MEPA Processes
    - Intervene or comment during state permitting reviews.
    - Provide evidence of local concerns (e.g., traffic, habitat, water supply).
3. Host Community Agreements
    - For larger projects, towns may negotiate voluntary agreements which set specific terms between the town and the facility that could include mitigation payments, road repairs, or community benefits.

I hope the foregoing is helpful to you. Please contact us with any further questions we may answer regarding this matter.

Georgina Maende <gmaende@southhadleyma.gov>

Fwd: BOH Meeting

Sharon Hart <shart@southhadleyma.gov> Thu, Jul 3, 2025 at 8:57 AM
To: Georgina Maende <gmaende@southhadleyma.gov>

Sharon D. Hart,
Emergency Management Director,
Director of Public Health
116 Main Street, M2
South Hadley, MA 01075
cell (413) 315-7307
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shart@southhadleyma.gov

---------- Forwarded message ---------
From: **Rebekah Cornell** <rcornell@southhadleyma.gov>
Date: Mon, Jun 9, 2025 at 9:58 AM
Subject: Re: BOH Meeting
To: Sharon Hart <shart@southhadleyma.gov>
Cc: Anne Capra <acapra@southhadleyma.gov>

Hi Sharon,

Thanks for talking to me this morning about the agenda item. I understand Mr Franz has some thoughts about chemical use that is not specific to the fields McCray manages. It brought me concern because most of the 8 farm fields owned by the town are under jurisdiction of the Conservation Commission. If any regulation limiting herbicide use is proposed by the BOH I think it would be helpful to get together beforehand to discuss the impacts of that across town land, including the farm fields. Let me know if there is anything I can do to help after tomorrow's meeting. Glad I don't need to be there!

I've attached a few documents. Feel free to share with your Board.
1. Herbicide Treatment - 240 Ferry St - McCray. These are the safety data sheets on the herbicides used at 240 Ferry St.
2. American Farmland Trust - McCray treatment plan outline for CC 2025. AFT worked with McCray to put together a treatment plan for the Commission to review because they had concerns about why herbicide needed to be used and how it would be applied.
3. Evaluation and Management Solutions for South Hadley Land. This was put together by a weed specialist from UMass for McCray on 240 Ferry St.
4. 2025 Farm License Agreement Map. Showing the eight (8) farm fields owned by the town and leased out to McCray & Barstow for use.

Thank you,

Rebekah L. Cornell
Conservation Administrator/Planner
Tree Warden
Town of South Hadley
116 Main Street | South Hadley, MA 01075
(413) 538-5030 x6129
rcornell@southhadleyma.gov

On Fri, Jun 6, 2025 at 4:29 PM Rebekah Cornell <rcornell@southhadleyma.gov> wrote:

Hi Sharon,

I just spoke to Steve McCray about agenda item 7(b) attached. He plans to attend the meeting and I will be there as well to answer any questions. Do you need any material before the meeting? I'm happy to bring any print outs your board might like to review. I've been working very, very closely with McCray through this treatment process. I open the door to any conversation or communication that needs to occur.

Thank you,

Rebekah L. Cornell
Conservation Administrator/Planner
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4 attachments

Herbicide Treatment - 240 Ferry St - McCray.pdf
154K

American Farmland Trust - McCray treatment plan outline for CC March 2025.pdf
103K

Evaluation and Manage Suggestions for South Hadley Land Parcel farmed by Steve McCray.pdf
3995K

2025 Farm License Agreement Map.pdf
6920K