

UNDERSTANDING THE INCREASE IN OPIOID OVERDOSES IN NEW HAMPSHIRE: A RAPID EPIDEMIOLOGIC ASSESSMENT OF PEOPLE WHO USE OPIOIDS AND EMERGENCY PERSONNEL



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🛕 PUBLIC HEALTH ALERT

The US is in the midst of an opioid overdose epidemic. If you or someone you know needs help, effective treatment is available and can save lives.

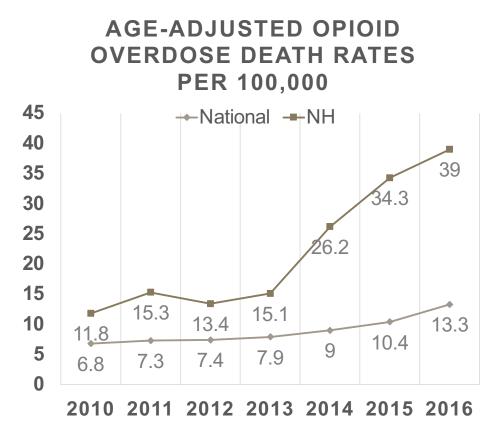


www.hhs.gov/opioids

THE OPIOID CRISIS

- 2016: Drug overdose deaths in the United States (US) surpass deaths from motor vehicle accidents
- To inform public health initiatives, knowledge about the experiences and perspectives of those involved in opioid overdose is necessary

OVERDOSE IN NEW HAMPSHIRE



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Systematically evaluate factors contributing to the opioid-related overdose deaths in NH



Examine experiences with overdose among people who use opioids and emergency responders



Obtain perspectives on policy-level responses to the opioid crisis in New Hampshire

STUDY OBJECTIVES

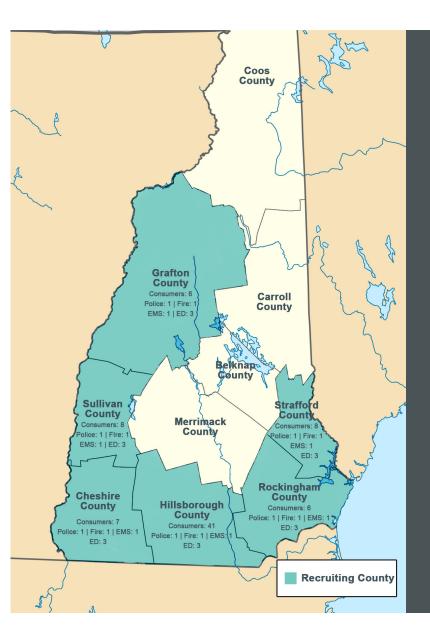


METHODS: STUDY DESIGN



Mixed-methods study

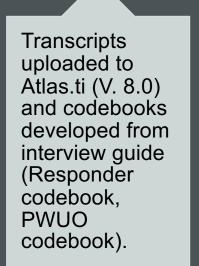
- During a 60-90 minute interview, participants completed:
 - Brief demographic survey
 - Substance use or professional history survey
 - Semi-structured interview
- Study methods approved by the Dartmouth College Committee for the Protection of Human Subjects



PARTICIPANTS AND RECRUITMENT

- Purposive sampling from 6 NH counties
- Final sample recruited October 2016-March 2017:
 - People who use opioids (PWUO; n=76)
 - Emergency personnel (n=36), including:
 - Emergency department (ED) providers (n=18)
 - Emergency medical services (EMS) providers (n=6)
 - Firefighters (n=6)
 - Police officers (n=6)

QUALITATIVE CONTENT ANALYSIS



Five research team members collectively coded two responder and five PWUO transcripts. New codes inductively identified, discussed by research team, added to codebook. First-cycle coding completed on remaining transcripts. Team members met weekly to discuss discrepancies and refine the code list as needed. Subtheme analysis conducted using constant comparison method; Discrepancies resolved by discussion with the research team.

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PARTICIPANT CHARACTERISTICS: PEOPLE WHO USE OPIOIDS (PWUO) (N=76)

	PWUO
	(n=76)
Age years m (sd)	34.1 (8.3)
Gender n (%)	
Male	37 (48.7%)
Female	39 (51.3%)
Race and Ethnicity n (%)	
White	69 (90.8%)
Not Hispanic or Latino	72 (94.7%)
Lifetime opioid use <i>n</i> (%)	
Opioid pain relievers	75 (98.7%)
Heroin	70 (92.1%)
Fentanyl	64 (84.2%)
Lifetime treatment for opioid use <i>n</i> (%)	69 (90.8%)
Number of opioid treatment episodes <i>m</i> (sd)	6.1 (7.7)

	Emergency department (n=18)	Police (n=6)	Fire (n=6)	EMS (n=6)
Age years m (sd)	42.0 (10.1)	41.8 (7.0)	42.2 (11.2)	44.8 (10.8)
Gender <i>n (%)</i> Male Female	12 (66.7%) 6 (33.3%)	5 (83.3%) 1 (16.7%)	6 (100%) 0 (0%)	6 (100%) 0 (0%)
Race and Ethnicity n (%) White Not Hispanic or Latino	16 (88.9%) 16 (88.9%)	6 (100%) 6 (100%)	6 (100%) 6 (100%)	6 (100%) 6 (100%)
Years employed m (sd)	7.9 (5.6)	17.2 (7.3)	18.4 (10.9)	18.3 (9.1)

PARTICIPANT CHARACTERISTICS: EMERGENCY PERSONNEL



- Consensus that illicitly-manufactured fentanyl (IMF) driver of increased overdose rates
 - Also, lack of resources for treatment and harm reduction
- IMF fentanyl described as being:
- "So much stronger" (more potent)
- "Hits you a lot quicker" (faster onset of high)
- "Doesn't last as long" (shorter duration of high)
- "Dirt cheap" (cheaper than heroin)
- "Pretty much what's available right now" (easier to access than heroin)
- PWUO reported challenges determining safe dose

"You don't know what you're getting and it's scary. It scares me." - PWUO "It's [increase in overdose rates] because of the fentanyl that's in the dope. It's just too powerful. You think you're buying heroin, but it's really fentanyl and that stuff is way stronger than heroin." *-PWUO*

CONTRIBUTORS TO OVERDOSE RATES: PEOPLE WHO USE OPIOIDS

"It's changed because you talk about it generically as heroin, but it's all fentanyl. That's what's killing people. Heroin isn't killing people." - Fire





"The police department used to test the fingers. They will test in five different spots and get five different concentrations. You and I may use and be fine, but our friend may use from the same batch and overdose and die because it's a higher concentration." - EMS

CONTRIBUTORS TO OVERDOSE RATES: EMERGENCY PERSONNEL



- 53 (69.7%) of PWUO reported experiencing an overdose when using opioids
 - Of those, 62% (33) had received naloxone
 - Overdoses not limited to an injection route of administration
- PWUO largely agreed that "it's not so much scary that you OD. It's more scary to see somebody else OD."
- The experience of receiving naloxone was perceived to be more aversive than the experience of overdosing

"I went out and usually when you go out, it's nothing. You just kind of go black, it's like a real warm comfortable bath and you just black out and that's it." - PWUO "Bang, here's some Narcan. We're going to kick all the dope off your receptors instantly instead of gradually letting them fall off. Like being in your mother's womb and being ripped out of it, and thrown on the table... That's how bad it hurts." *-PWUO*

EXPERIENCES WITH OVERDOSE: PEOPLE WHO USE OPIOIDS



- Emergency personnel expressed confidence in their ability to treat opioid overdoses
- Emergency personnel described the emotional toll of responding to increased overdose calls:
 - "We all get a little burned out from it" (Burnout)
 - "You feel very helpless" (Helplessness)
 - "My kids aren't safe anymore" (Heightened worry and fear about own family/self)
 - "Sometimes you can't forget. You can't unsee what you see each day" (Intrusive recollections)
- Barriers to treatment referral frustrating
 - Also frustration around patients' unwillingness to engage post-overdose

"We do it so often and we do it so well. We're extremely good at doing CPR. We're extremely good at managing overdoses. It's almost sadly routine, but it is completely routine. - Fire



"I responded to a residence where a 13year-old girl had found both her parents. She walks out into the living room to ask her mother a question and they're both unresponsive. To find two in the same house and the circumstances in how it was found, that's probably going to stick with me for the rest of my life." - EMS

EXPERIENCES WITH OVERDOSE: EMERGENCY PERSONNEL



- Consensus on importance of:
 - Increasing access to treatment
 - Providing prevention programs for youth
 - Encouraging prudent prescribing of opioids
 - Improving patient education about opioids
 - Dismantling stigma

"When you know someone who's willing and able and ready and physically standing there in the halls of a treatment program, and you say 'Come back in 8 weeks', that's crazy. You could be dead tonight. Eight weeks is a fucking long time in the trenches." - PWUO





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 - Providing prevention programs for youth
 - Encouraging prudent prescribing of opioids
 - Improving patient education about opioids
 - Dismantling stigma

"We just need resources. If I have someone who's willing to seek help, I would move the earth and the moon. Then, oh well, there's no beds available for three days and they don't have a primary care doctor who can get medical clearance done."

- ED provider

PERSPECTIVES ON POLICY-RELATED RESPONSES

- Divergence between PWUO and emergency personnel on views toward expanding access to:
 - Medication for opioid use disorder (MOUD)
 - Naloxone for laypersons
 - Syringe services programs (SSPs)

"There is a side of me that wonders if we've become permissive. So Joe knows, 'Okay, I have [naloxone] here, so I really don't have to be as safe as I used to be."

- EMS

"I personally don't agree with [MOUD]. I guess I'm old school."

- Police

"I feel like it's a doubleedged sword. You don't want people using dirty needles and contracting anything, but you are also making it easier for people to use." - ED

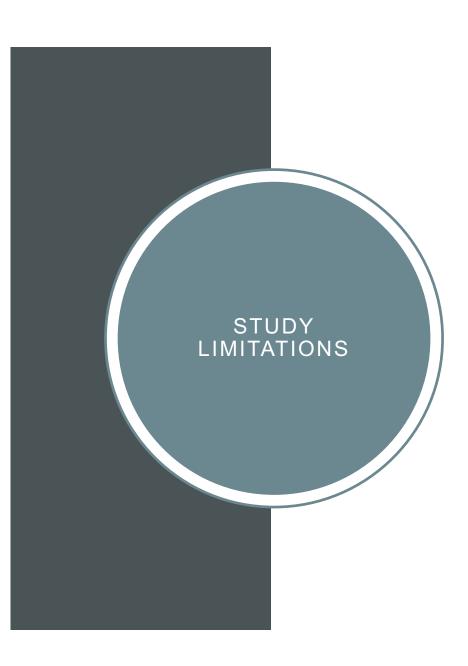
SSP, MOUD, AND NALOXONE ACCESS: EMERGENCY PERSONNEL

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"People are going to shoot up. When you make things less available, now you're just forcing people to share needles, now you're just forcing people to be dirty about it." - PWUO "[MOUD] is a life saver. It saved my life. I just wish more people could do it. *-PWUO*

"There should definitely be more and more easy access to [naloxone]." -PWUO

SSP, MOUD, AND NALOXONE ACCESS: PEOPLE WHO USE OPIOIDS



- Participants all recruited from single state
- Self-selected, volunteer sample
- Unable to validate self-reported data on participant demographics or experiences

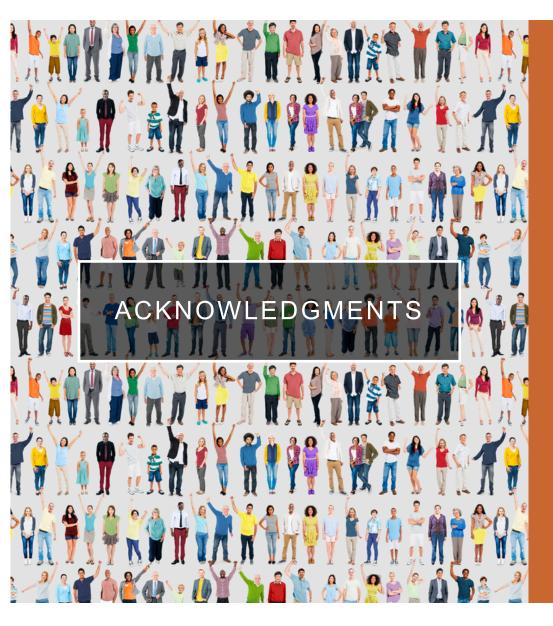


- Consensus regarding role of illicitly manufactured fentanyl on rates of overdose
- Window of opportunity to offer resources post-overdose
 - Exploring experiences can inform development of acceptable interventions and treatment linkage programs
- Providing tailored resources to emergency personnel who respond to and treat overdoses critical

CONCLUSIONS

- Policies targeting innovative prevention, harm reduction, and treatment interventions needed to more effectively address opioid overdose
- Since completion of the study, New Hampshire has:
 - Launched the Doorway Program (2019)
 - Opened >5 syringe services programs
 - Bolstered naloxone distribution efforts





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