

# Proactive Response to Overdose and Appropriate Connections to Treatment (PROACT)



WAYNE STATE  
School of Social Work  
Center for Behavioral Health and Justice



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We envision communities in which **research, data, and best practices** are used by multiple stakeholders to *enhance the optimal well-being of individuals with mental illness and/or substance use disorders who come in contact with the criminal/legal system.*





# The Overdose Epidemic in Michigan & Existing Response Systems

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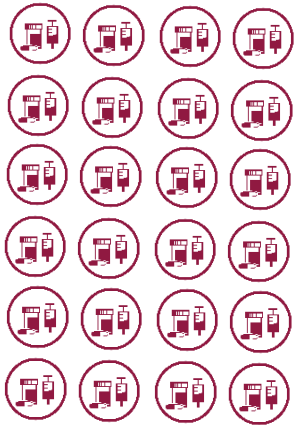
# The Overdose Epidemic in Michigan

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2,559 deaths  
from drug  
overdose

2,036 deaths  
from opioid  
overdose

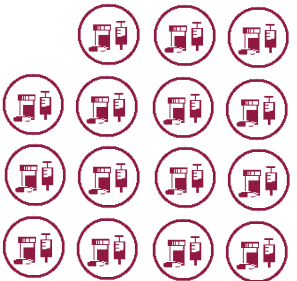
# High Risk of Death Following Initial Overdose



vs. 

## In the year following non-fatal opioid overdose:

- High risk of dying from drug use-associated causes and other medical diseases (e.g. cancer, suicide, circulatory and respiratory diseases)<sup>1</sup>
- Approximately **24 times more likely to die** than the general population



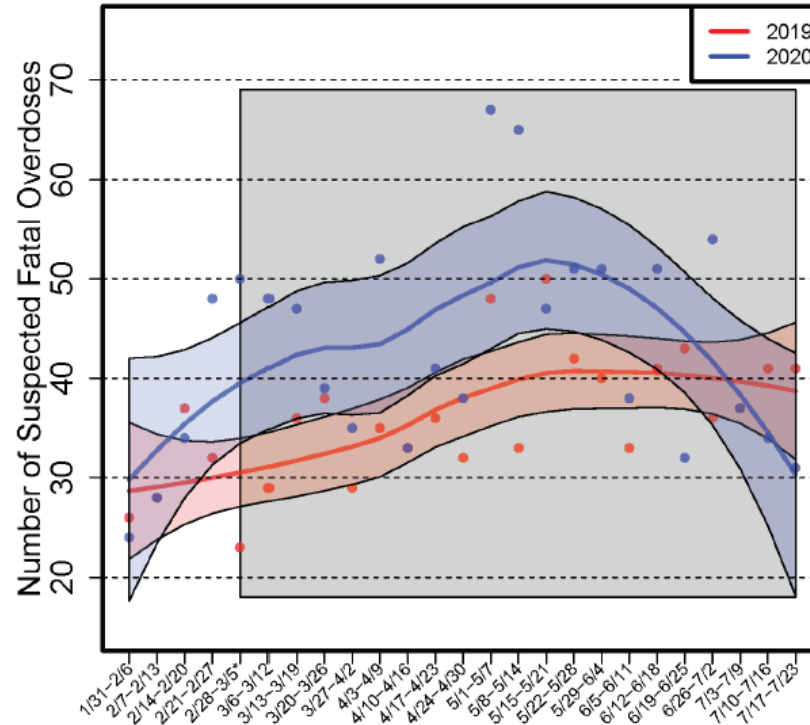
vs. 

- Opioid dependence is associated with an approximate **15-fold increased risk of death**<sup>2</sup>
- People who have repeat nonfatal overdoses have highest hazard of death<sup>3</sup>

## CHANGE IN MICHIGAN OVERDOSES DURING THE COVID-19 PANDEMIC

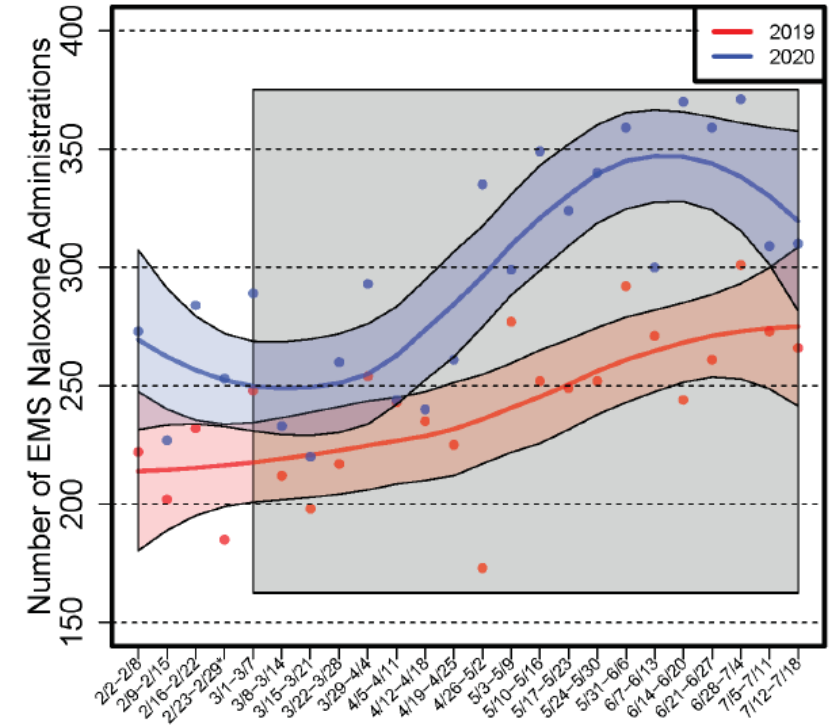
- From counties with available data (Fig. 3), suspected fatal overdoses from 3/1/2007/23/20 were 24.0% higher than the same period in 2019
- Statewide EMS Naloxone administrations from 3/1/20-7/18/20 were 23.7% higher than the same period in 2019
- Changes from 2019 to 2020 in both data sources varied across both time (Figure 1, 2) and space (Figure 3, 4)

FIGURE 1. SUSPECTED FATAL OVERDOSES BY WEEK IN 2019 VS. 2020



Counts of suspected fatal overdoses from counties with available data, by week, with the smoothed trajectory (line) and pointwise 95% confidence interval (shaded region) superimposed  
\*: Date range excludes 2/29 in 2019

FIGURE 2. STATEWIDE EMS NALOXONE ADMINISTRATIONS BY WEEK IN 2019 VS. 2020

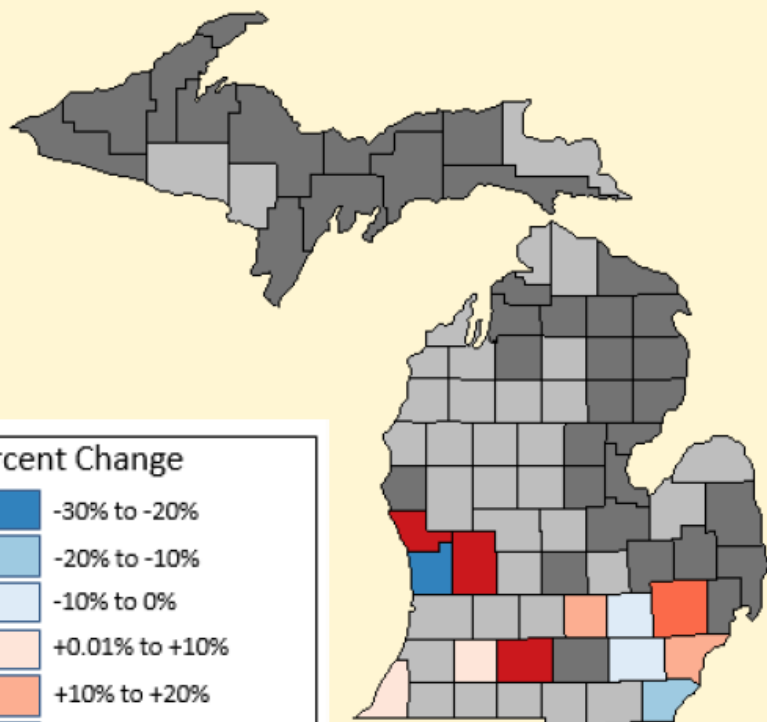


Counts of statewide EMS naloxone administrations, by week, with the smoothed trajectory (line) and pointwise 95% confidence interval (shaded region) superimposed  
\*: Date range excludes 2/29 in 2019

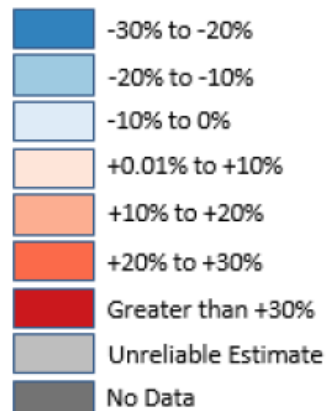
Source: University of Michigan System for Opioid Overdose Surveillance (SOS)  
[injurycenter.umich.edu/opioid-overdose/opioid-surveillance/](http://injurycenter.umich.edu/opioid-overdose/opioid-surveillance/)  
Please email [SOS.reports@umich.edu](mailto:SOS.reports@umich.edu) with any questions.



**FIGURE 3. PERCENT CHANGE IN SUSPECTED FATAL OVERDOSE**

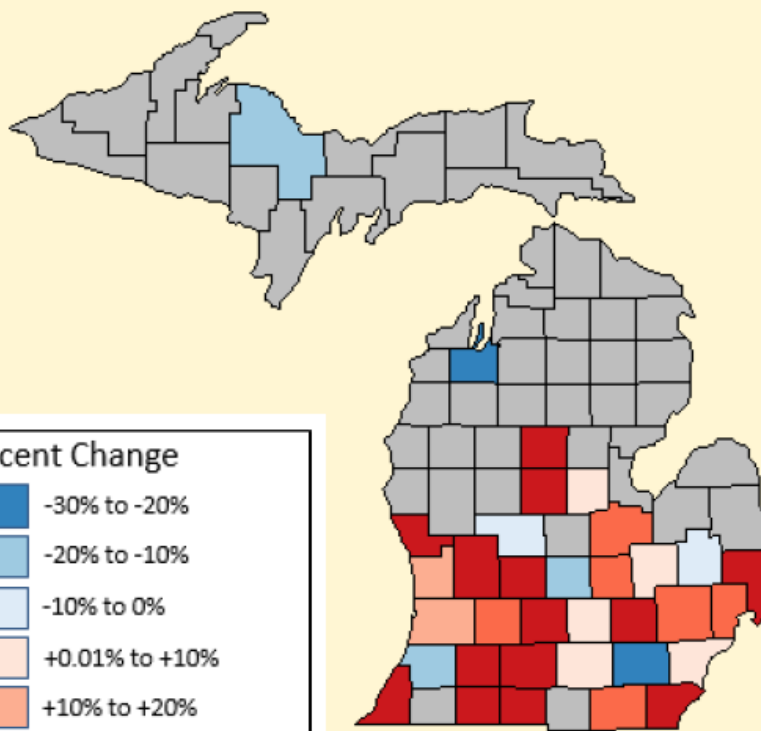


**Percent Change**

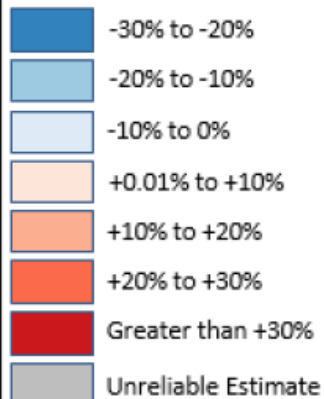


- Medical Examiner percent change occurring March 1- July 23 of 2019 v. 2020
- Unreliable estimates are counts less than 10

**FIGURE 4. PERCENT CHANGE IN EMS NALOXONE ADMINISTRATION**



**Percent Change**



- EMS percent change occurring from March 1- July 18 of 2019 v. 2020
- Unreliable estimates are counts less than 10
- Cases reported to SOS as of 7/28/2020

**TABLE 1. EMS naloxone administrations and suspected fatal overdose incidents in select cities in 2019 vs. 2020**

Suspected Fatal Overdoses			
	March 1- July 23		
City	2019	2020	% change
Detroit	186	229	23.12%
Grand Rapids	13	13	0.00%
Lansing	36	44	22.22%
Ann Arbor	13	17	30.77%
Dearborn	15	19	26.67%
Kalamazoo	31	32	3.23%
Pontiac	26	17	-34.62%
Muskegon	14	23	64.29%
EMS Naloxone Administrations			
	March 1- July 18		
City	2019	2020	% change
Detroit	1085	1047	-3.50%
Grand Rapids	181	254	40.33%
Lansing	162	180	11.11%
Ann Arbor	54	46	-14.81%
Flint	285	314	10.18%
Dearborn	88	70	-20.45%
Kalamazoo	124	160	29.03%
Pontiac	102	128	25.49%
Muskegon	81	122	50.62%

# What Happens During The First Response?



Dispatch triggers an emergency response



Police, fire, EMS typically respond



First arriving agency differs by region<sup>4</sup>



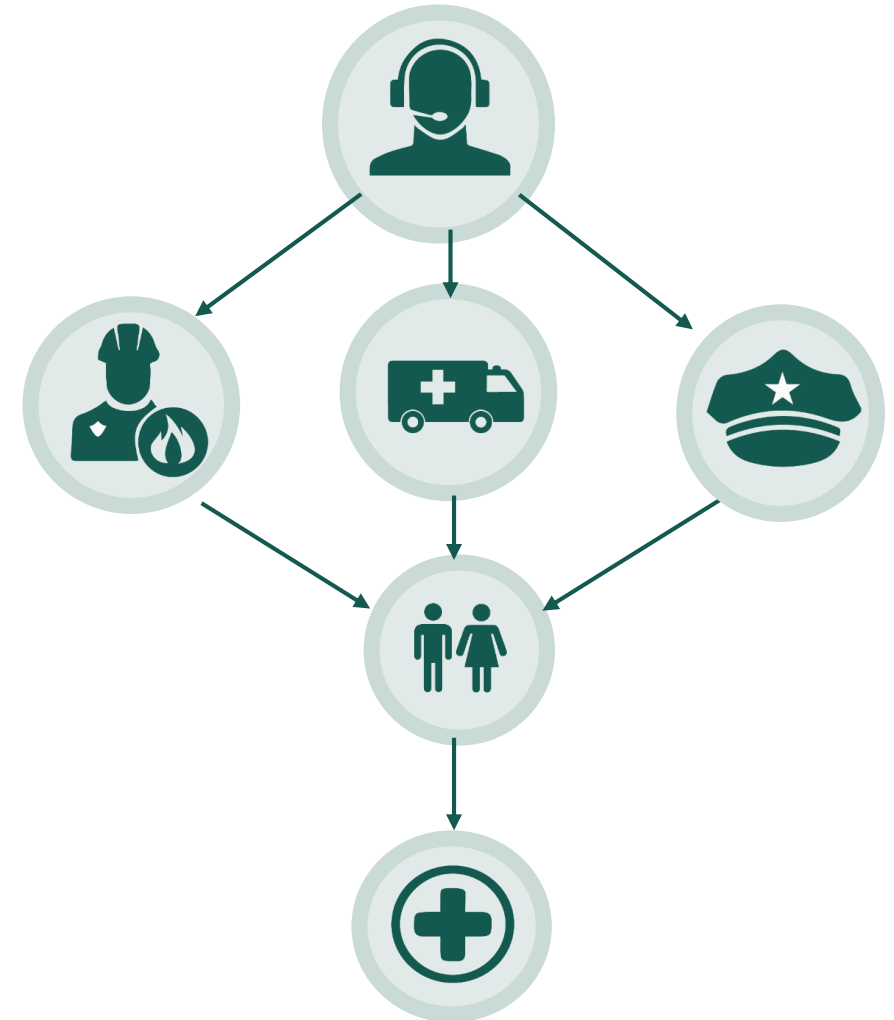
Metro areas: EMS likely to arrive first

Rural areas: police likely to arrive first



Not all police, fire departments carry Naloxone (Narcan<sup>®</sup>)<sup>5</sup>

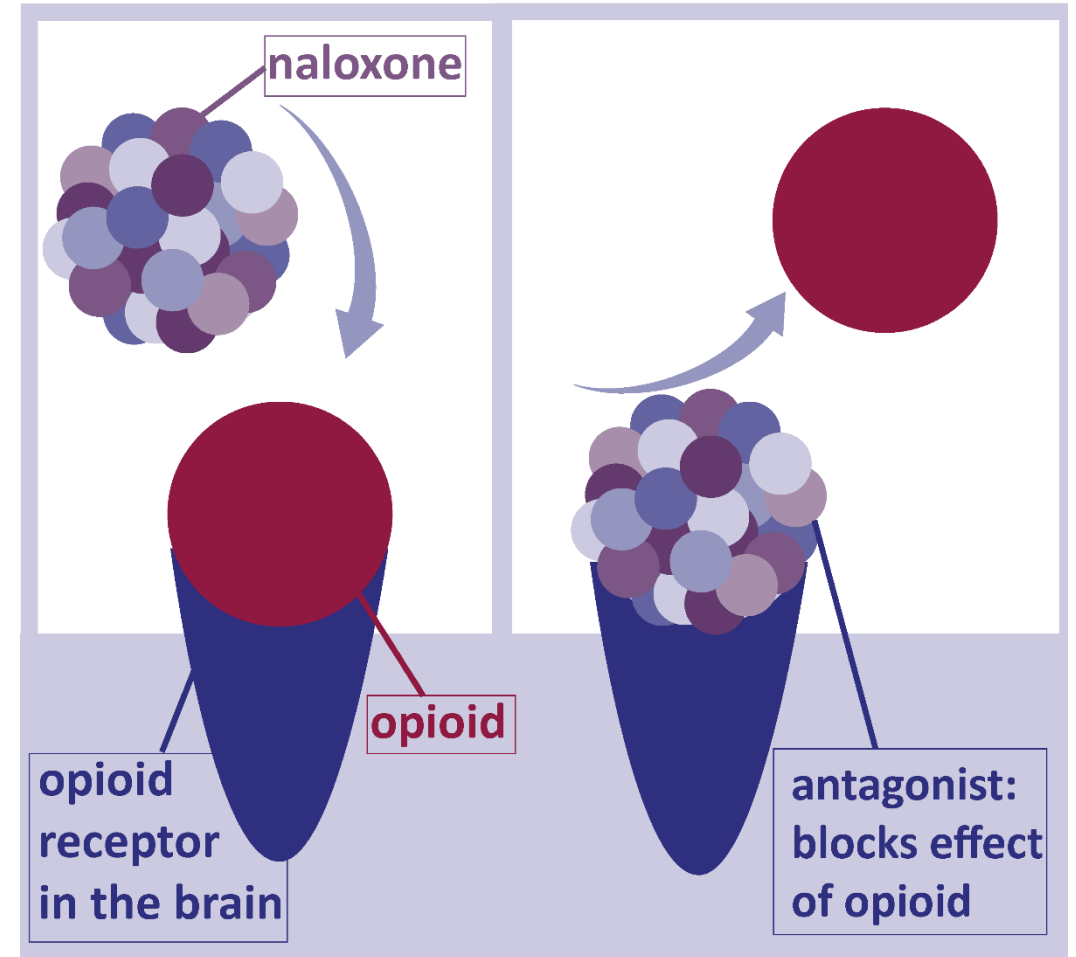
Roughly 10% of Naloxone patients refuse transport to ED<sup>6</sup>





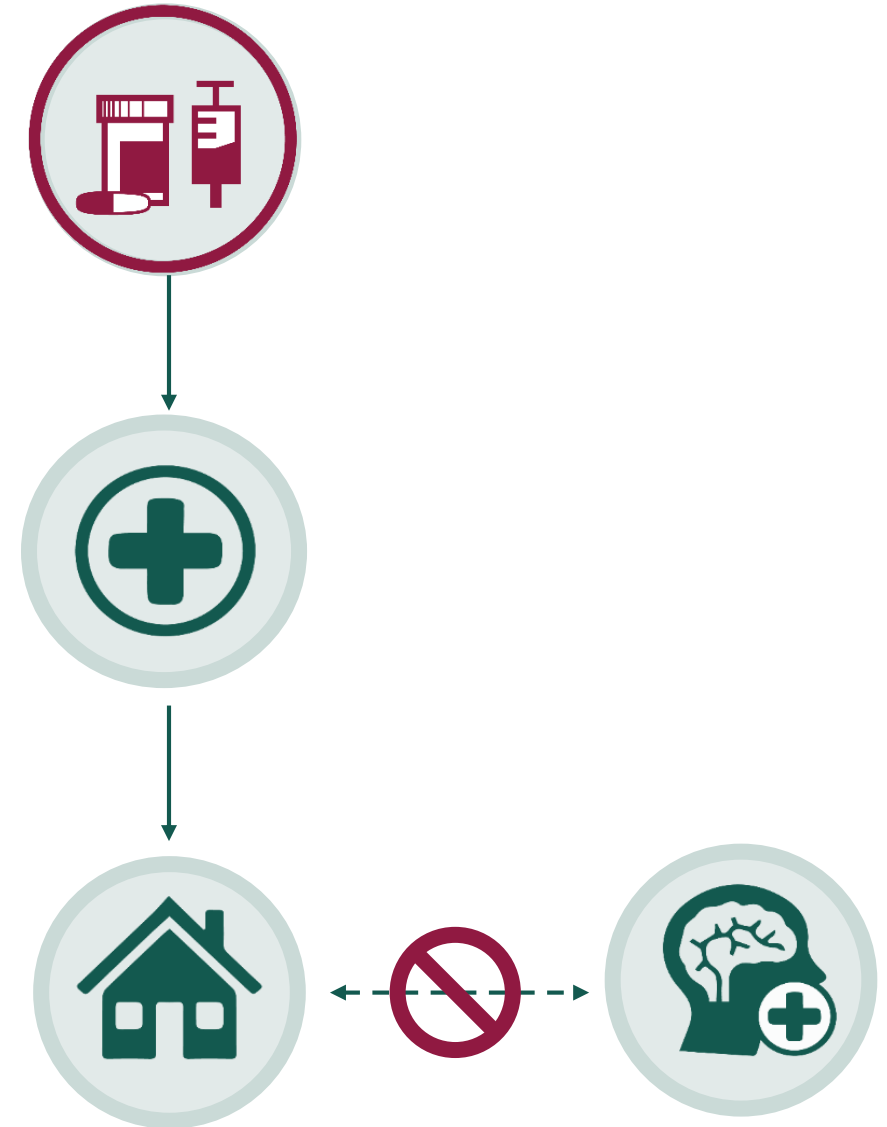
# Opioid Overdose and Naloxone (Narcan®)

- An overdose prevents the central nervous system from controlling basic life functions, like breathing, body temperature, and consciousness<sup>7, 8</sup>
- Naloxone works as an opioid ‘antagonist’ by blocking the receptors that opioids use to connect to the brain, relieving the drug’s toxic effects, and allowing the brain’s breathing control center to start working again<sup>9</sup>
- Naloxone must be introduced to the body quickly, as death from an overdose may occur within one to three hours of opioid use<sup>9</sup>
- If opioids are not present, Naloxone has no effect<sup>7</sup>



# What Happens After The First Response?

- Individuals who overdose on opioids, heroin in particular, become a high risk for a repeated fatal or non-fatal overdose<sup>11, 12</sup>
- Hospitals, EDs can provide resources, but few engage with post-overdose substance use treatment<sup>13</sup>





# Development of a Post-Overdose Response Model

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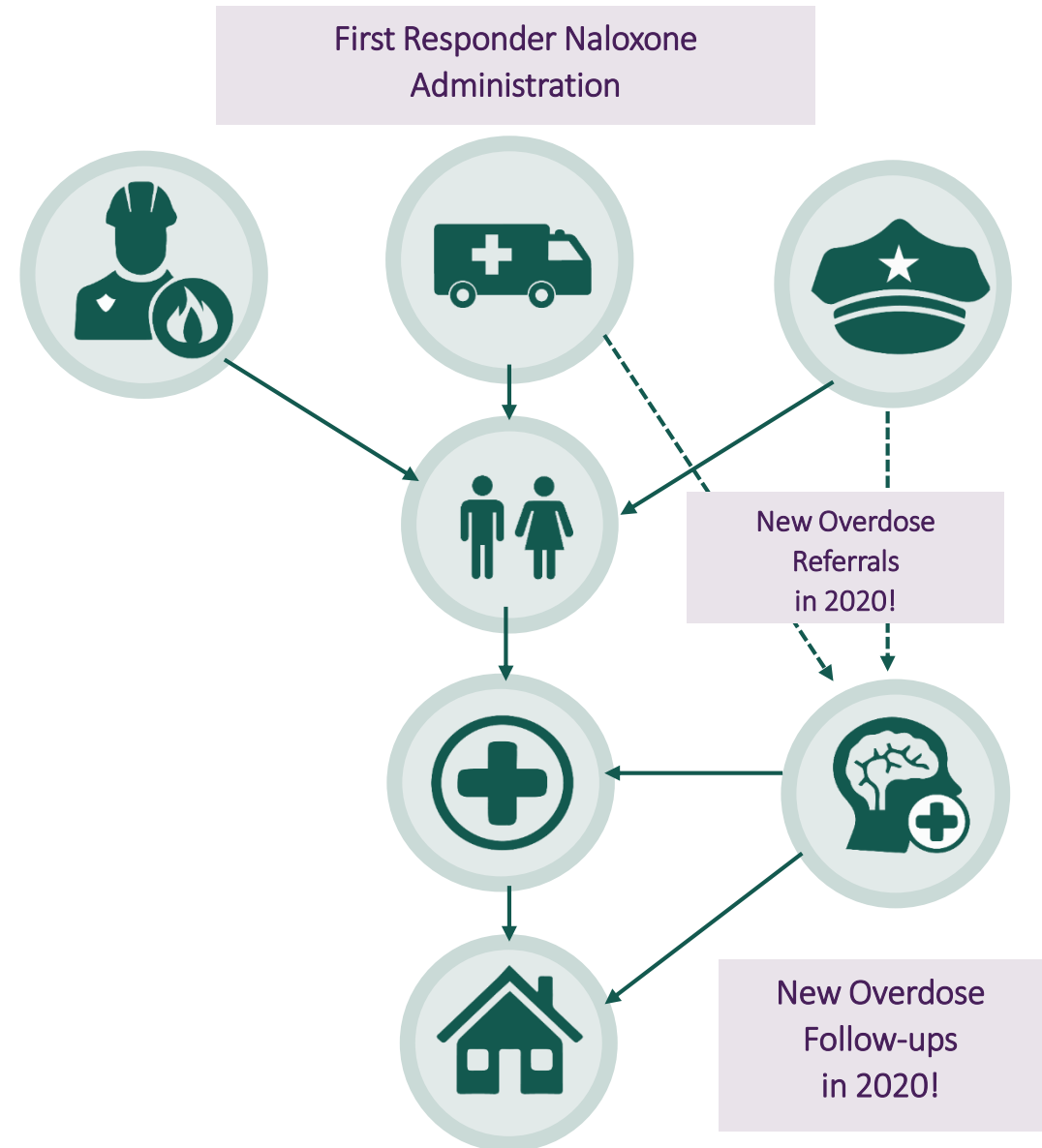
# Opportunity to Improve Treatment Connections



- Overdose survivors are more likely to engage in treatment following OD if they speak with someone about drug treatment<sup>14</sup>
- Direct connections to treatment are more effective than just providing information about how to access treatment<sup>15</sup>
- Treatment connections lacking in Michigan, opportunity to improve
- Goal to **facilitate direct referral partnerships between first responders and community providers** to improve access to treatment in Kent & Monroe Counties

# What Should Happen After The First Response?

- Treatment/Harm Reduction team receives quick referrals from first responders<sup>16</sup>
- Where feasible, team uses contacts to verify victim's presence at ED
- Team follows up with individual, family, or friends at associated residence or incident address, offering Naloxone kits and training, syringe exchange, and treatment services depending on stage of change





# PROACT

Proactive Response to Overdose and  
Appropriate Connections to Treatment



# Implementation Barriers



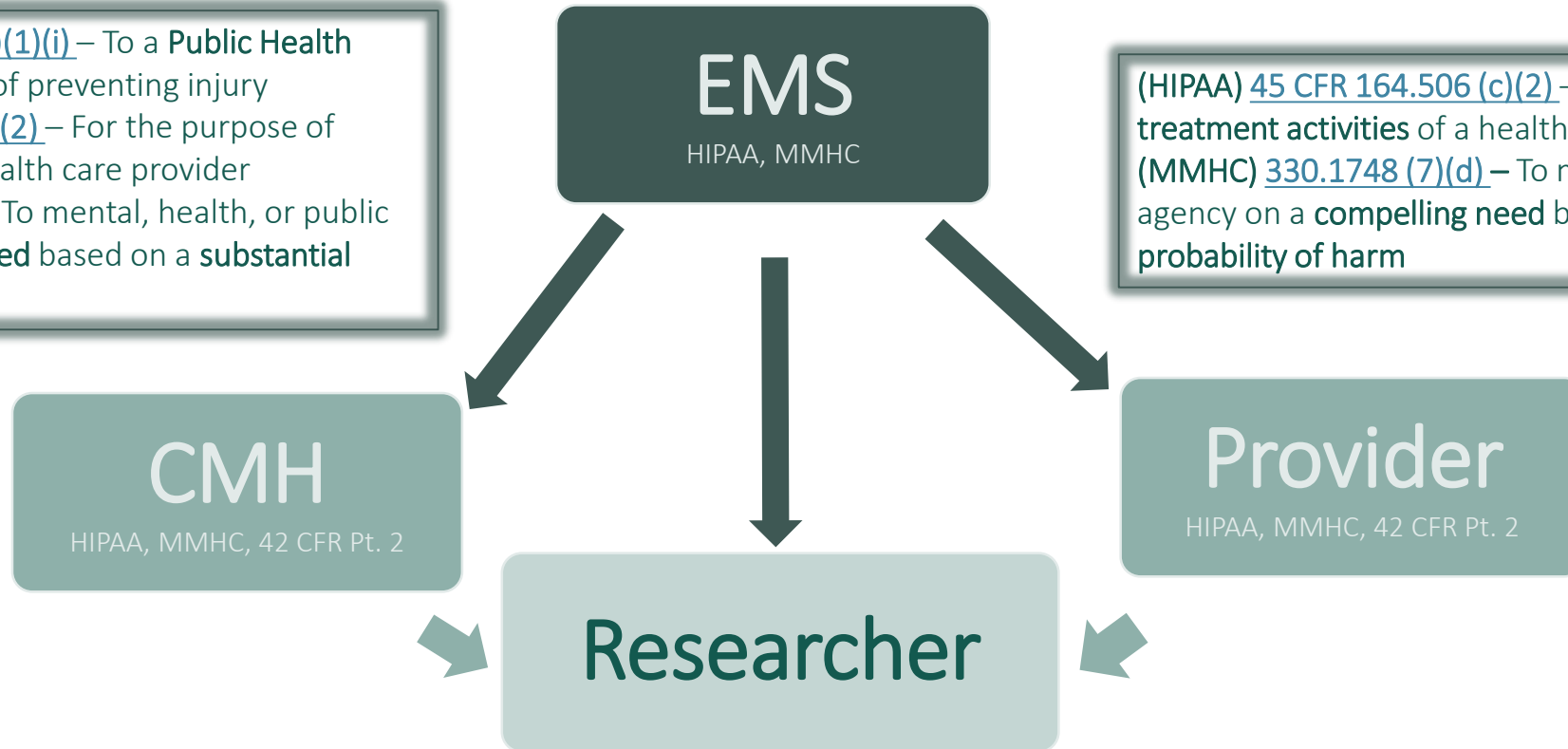
- Multiple first responder agencies (law enforcement, fire, EMS) administer Naloxone in a county
- Complex data sharing/privacy laws: HIPAA, 42 CFR Part 2, Michigan Mental Health Code
- Data sharing restrictions not well understood among treatment partners; many err on the side of caution and overly restrict access<sup>17</sup>
- Legal misunderstandings limit case coordination

# Data Sharing Laws and PROACT Referrals

*Who can receive protected health information after an EMS Naloxone administration **without consent**?*

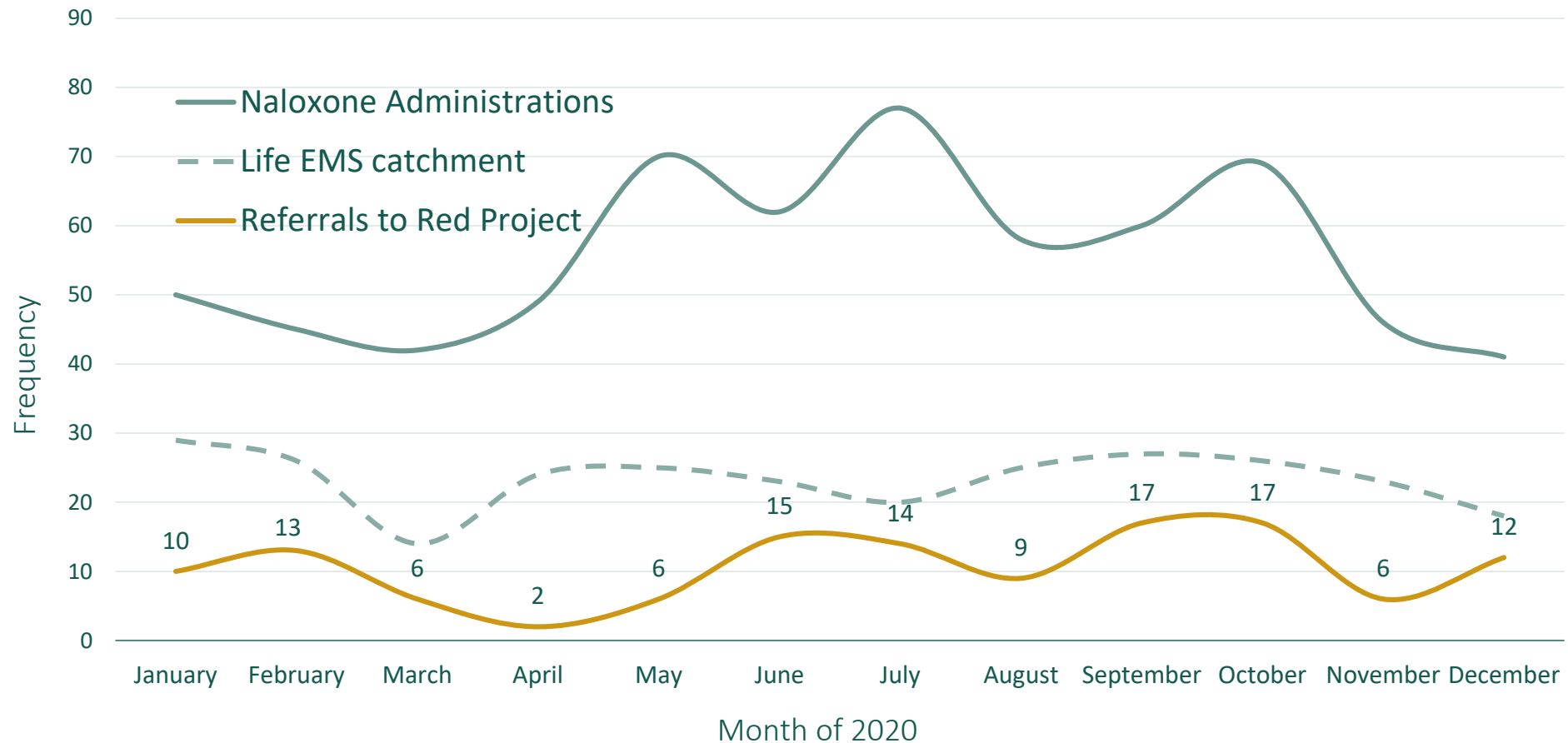
(HIPAA) [45 CFR 164.512 \(b\)\(1\)\(i\)](#) – To a Public Health Authority for the purpose of preventing injury  
(HIPAA) [45 CFR 164.506 \(c\)\(2\)](#) – For the purpose of treatment activities of a health care provider  
(MMHC) [330.1748 \(7\)\(d\)](#) – To mental, health, or public agency on a **compelling need** based on a **substantial probability of harm**

(HIPAA) [45 CFR 164.506 \(c\)\(2\)](#) – For the purpose of treatment activities of a health care provider  
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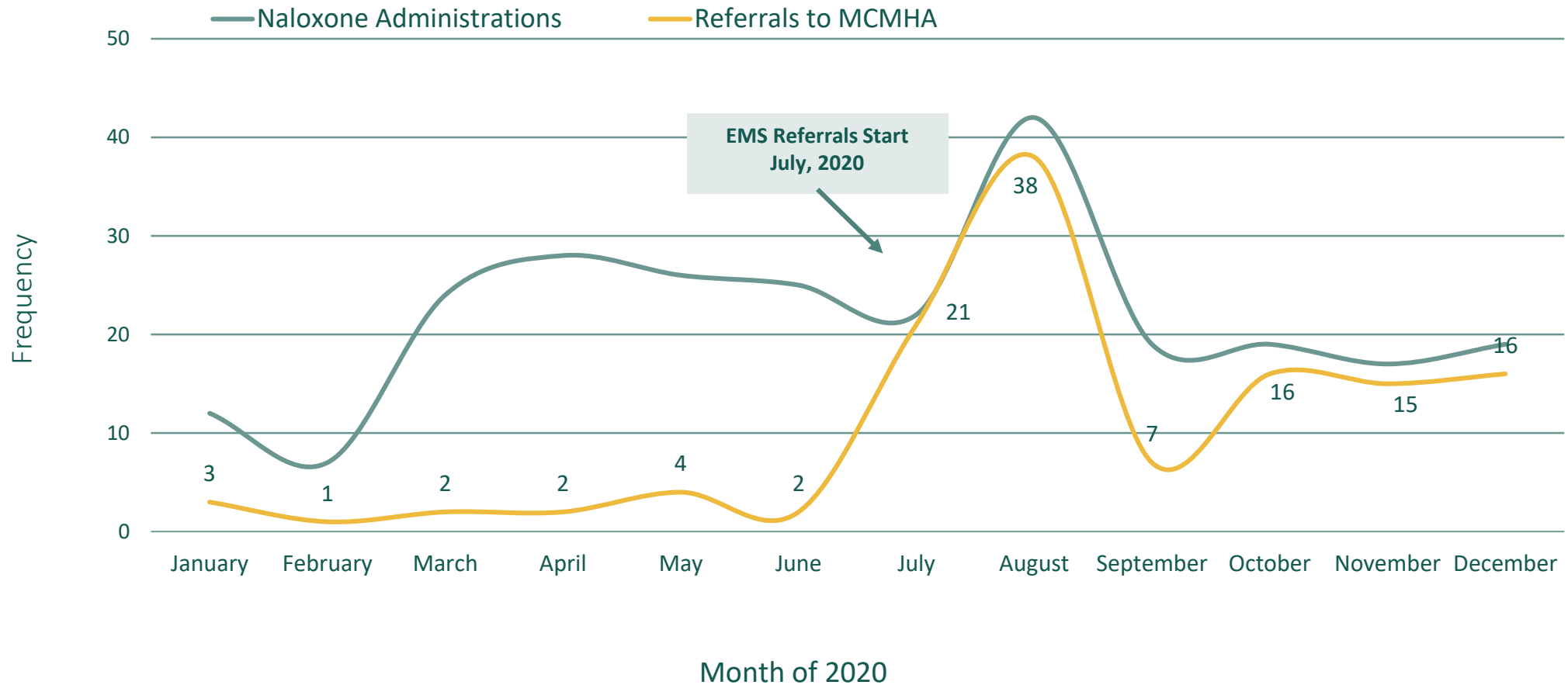


(HIPAA) [45 CFR 164.512\(i\)\(1\)](#); (Part 2) [42 CFR 2.52](#); (MMHC) [330.1263](#) : For research, audit, or evaluation purposes

# Naloxone Administrations by First Responders & Subsequent Treatment Services in Kent County

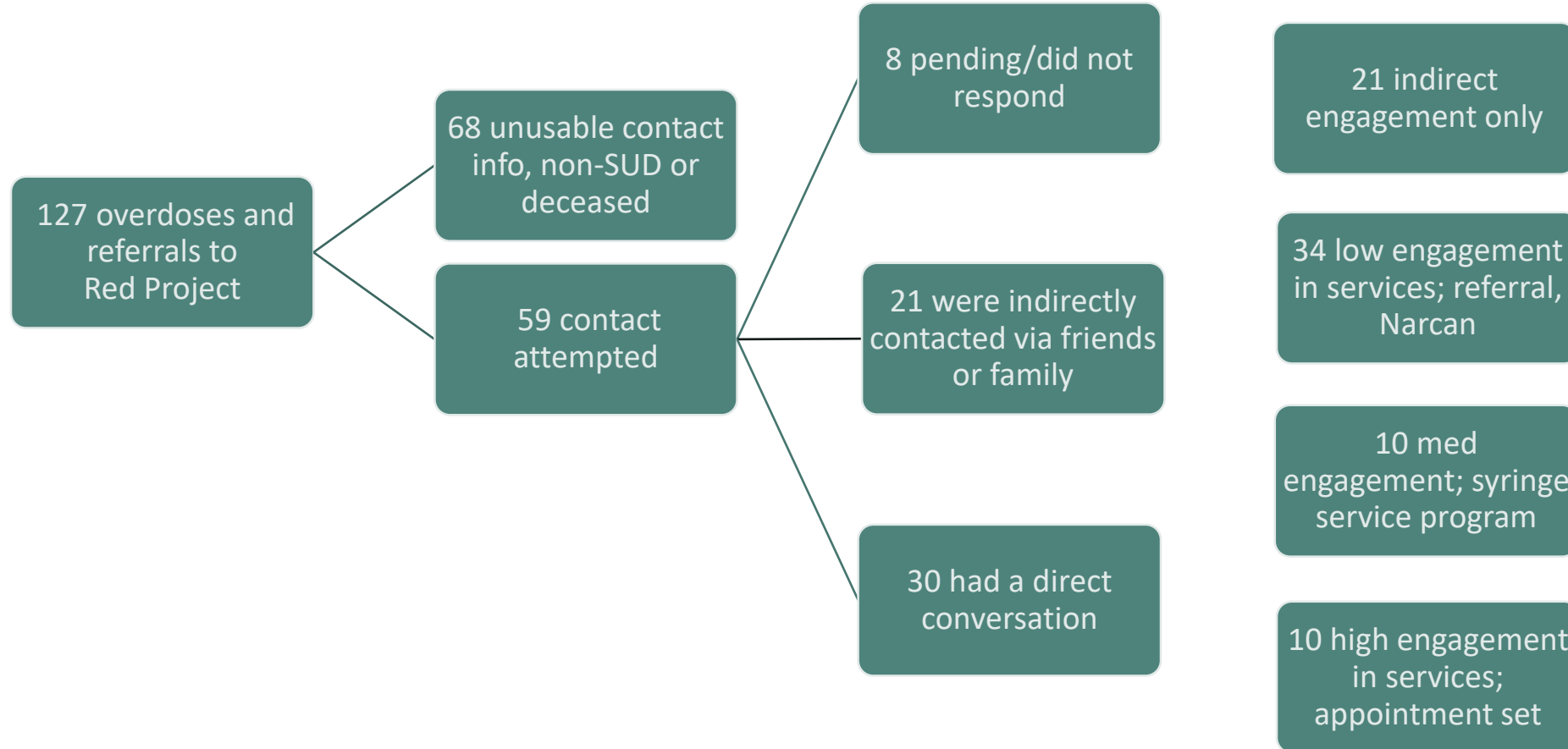


# Naloxone Administrations by First Responders & Subsequent Treatment Services in Monroe County



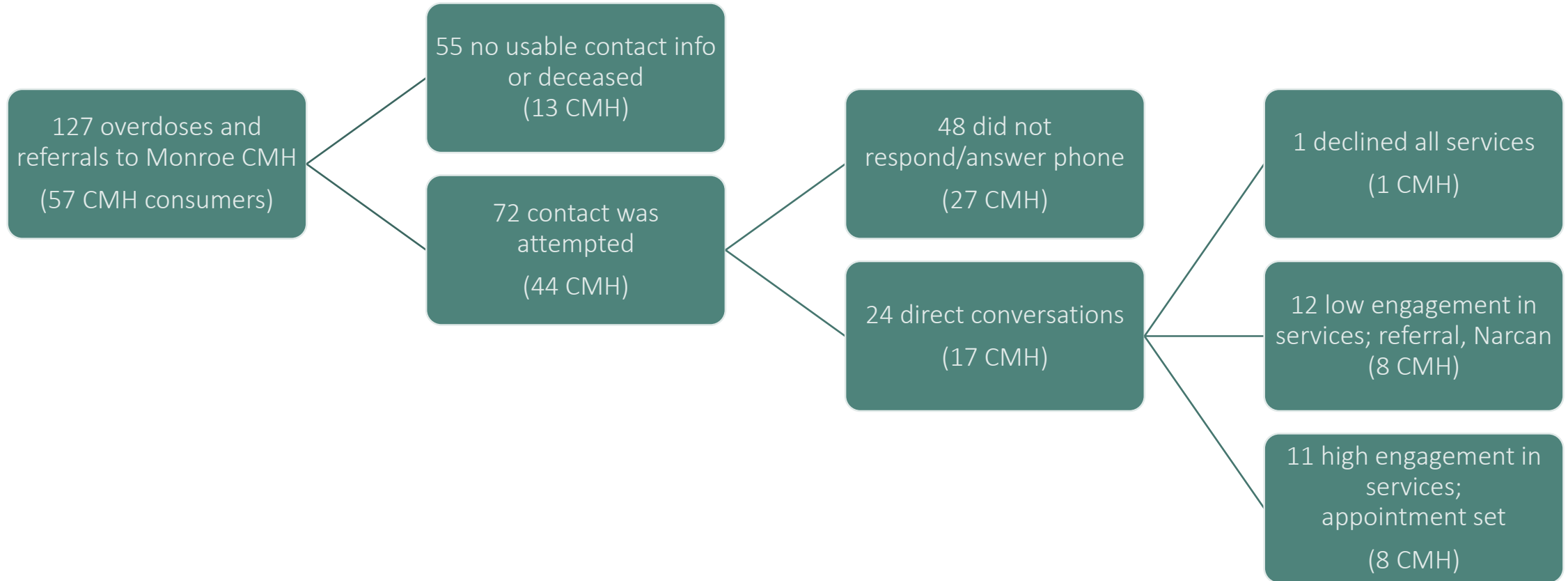
# Post-Referral PROACT Engagement in Kent County

2020



# Post-Referral PROACT Engagement in Monroe County

2020



*\*Due to the COVID-19 pandemic in this time period, the vast majority of contacts were attempted via phone*





## *Individuals experiencing more than one non fatal overdose*

Out of 123 individuals referred in Monroe during 2020

- 1 experienced 3 non fatal overdoses
- 7 experienced 2 non fatal overdoses each

# Michigan First Responder Takeaways

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- Police and EMS agencies can refer to treatment partners!
- Local EMS agencies own critical naloxone administration data
- EMS agencies may not be familiar with non-hospital behavioral health systems (re: CMH, PIHP), need navigational help
- EMS agencies may not be comfortable with HIPAA/CFR 42 Part 2 data sharing

WSU CBHJ can facilitate  
crucial systemic changes



# PROACT in Monroe County, MI

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MONROE  
COMMUNITY  
MENTAL  
HEALTH  
AUTHORITY

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# Crisis Response in Monroe County



Mental health crisis response from Law Enforcement since 2018



Recovery coaching, naloxone training, harm reduction resources, access center linkage, and more



Beginning December 2019, EMS referrals created a **new pathway to care**



## NARCAN DISTRIBUTION LOG

**INSTRUCTIONS:** This form is designed to track the distribution of Narcan and to facilitate follow up. Please complete the form as accurately as possible and email to \_\_\_\_\_.

	<input type="checkbox"/> FIRE		<input type="checkbox"/> EMS		<input type="checkbox"/> POLICE	
<b>AGENCY NAME:</b>			<b>OFFICER NAME:</b>			
<b>DATE/TIME:</b>			<b>NUMBER OF DOSES USED:</b>			
<b>LOCATION:</b>						
<b>SUBJECT NAME:</b>			<b>RACE:</b>			
<b>DOB:</b>			<b>PHONE NO:</b>			
<b>HOME ADDRESS:</b>						
<b>SUBJECT DISPOSITION:</b>	<input type="checkbox"/>	<b>ARRESTED</b>	<input type="checkbox"/>	<b>HOSPITALIZED</b>	<input type="checkbox"/>	<b>LEFT AT SCENE</b>
	<input type="checkbox"/>	<b>TRANSPORTED HOME</b>				

# How does Monroe CMH respond following an overdose?

- Monroe CMH receives referrals from EMS or Sheriff's Office
- Follow-up phone call to assess interest in treatment services, provide resources
- Plan to follow-up in person on scene of OD, at emergency department, or at patient's home once COVID-19 restrictions are lifted







# Barriers to Implementation in Monroe County

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- Covid-19 (working from home)
- Phone calls only
- Inconsistency of referrals from EMS on a regular basis
- No phone contact included in referrals
- Lengthy MOU process
- Limited face to face contact with the public (Covid-19)
  - inability to respond to hospitals
  - overdose scenes
  - Community outreach upon receipt of referral



# What Were People Connected To?

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- Access Center
- Detox
- Outpatient Treatment/Therapy
- Medication Assisted Treatment Program
- Connections with existing recovery coach/case manager
- Naloxone kit/training
- Medical or Mental Health Connections
- Basic needs (insurance, food, employment, housing)



*Thank you*

Michigan Health Endowment Fund  
William Fales MD, Homer Stryker MD School of Medicine, Western Michigan University  
Amanda Kogowski, University of Michigan System for Opioid Surveillance  
Kent County Medical Control Authority  
Life EMS, AMR, Rockford Ambulance  
Monroe Community Ambulance  
The Grand Rapids Red Project  
Network 180  
Monroe County Sheriff's Office  
Monroe Community Mental Health Authority  
WSU CBHJ Team

# Sources

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<sup>1</sup>Olfson M, Crystal S, Wall M, et al. Causes of death after nonfatal opioid overdose. JAMA Psychiatry. 2018 June 20.

<sup>2</sup>Degenhardt L, Bucello C, Mathers B, et al. Mortality among regular or dependent users of heroin and other opioids: a systematic review and meta-analysis of cohort studies. Addiction. 2014;109:90-99.

<sup>3</sup>Ray, B, Lowder, E, Kivisto, A, et al. EMS naloxone administration as non-fatal overdose surveillance: 6-year outcomes in Marion County, Indiana. Society for the Study of Addiction. 2018; 113: 2271-2279.

<sup>4</sup>Wittkowski, J., Woodwyk, T., Buitendorp, R. (2019, September 13). Personal interview.

<sup>5</sup>Alsum, S., Rocha-Adams, M. (2019, 2020). Personal interview.

<sup>6</sup>Fales, W. (2019, 2020). Personal interview.

<sup>7</sup>Harm Reduction Coalition. (n.d.). Understanding Naloxone. Retrieved March 3, 2020, from <https://harmreduction.org/issues/overdose-prevention/overview/overdose-basics/understanding-naloxone/>

<sup>8</sup>National Institute on Drug Abuse. (2020, February 20). Opioid Overdose Reversal with Naloxone (Narcan, Evzio). Retrieved March 3, 2020, from <https://www.drugabuse.gov/related-topics/opioid-overdose-reversal-naloxone-narcan-evzio>

<sup>9</sup>Shatterproof. (n.d.). All about naloxone. Retrieved March 3, 2020, from <https://www.shatterproof.org/naloxone>

<sup>10</sup>Pew Charitable Trusts. (2016). Medication assisted treatment improves outcomes for patients with opioid use disorder. Retrieved from <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2016/11/medication-assisted-treatment-improves-outcomes-for-patients-with-opioid-use-disorder>

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- <sup>12</sup>Ray, B. R., Lowder, E. M., Kivisto, A. J., Phalen, P., & Gil, H. (2018). EMS naloxone administration as non-fatal opioid overdose surveillance: 6-year outcomes in Marion County, Indiana. *Addiction*, 113(12), 2271–2279. doi: 10.1111/add.14426
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- <sup>16</sup>Goodnough, T., Clark, A., Anastasoff, A. (2019, 2020). Personal interview.
- <sup>17</sup>Andraka-Christou B, Rising S, Huynh P. 2020. A pilot survey of 42 CFR part 2 knowledge and attitudes among healthcare providers. Under review in *Journal of Behavioral Health Services & Research*.