Data!

Disclaimer

The views and opinions expressed in the presentation are those of the speaker and do not necessarily reflect the official policy or position of MDHHS.

Introduction

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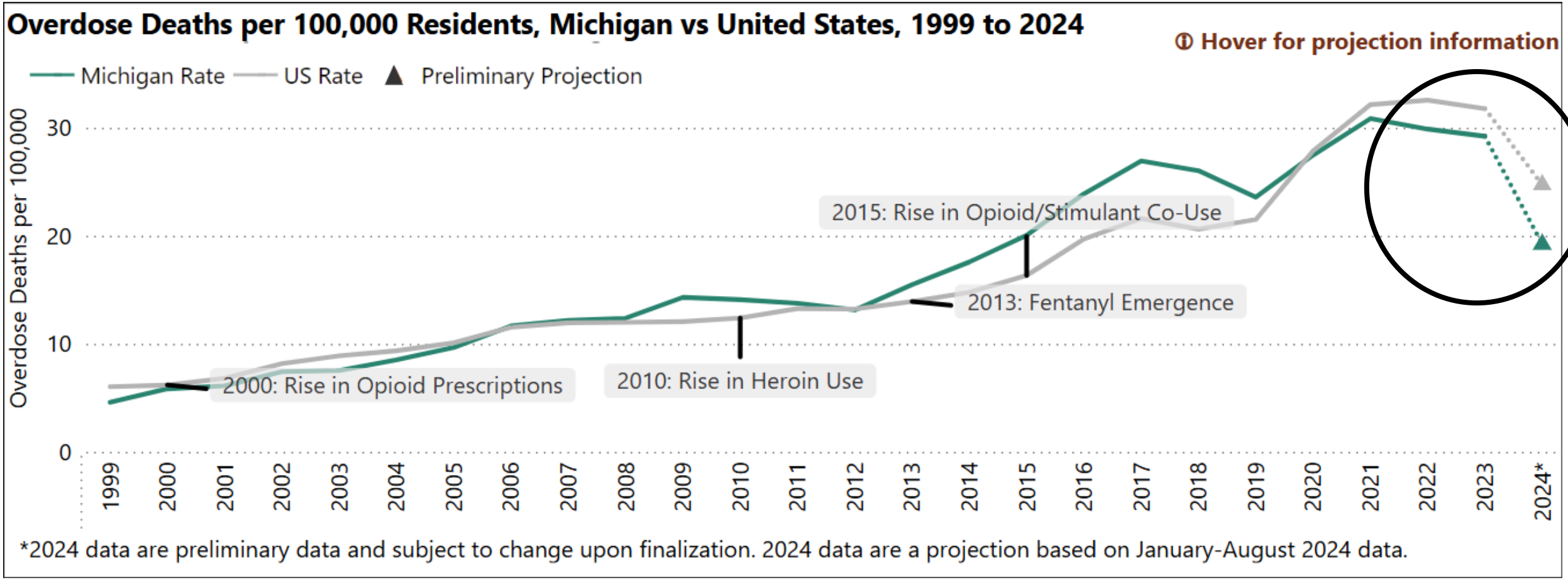
Objectives

- Highlight current overdose trends in Michigan and the United States.
- Explain why data collection is important.
- Understand how data collection is applied to prevention and harm reduction efforts.

Current overdose trends

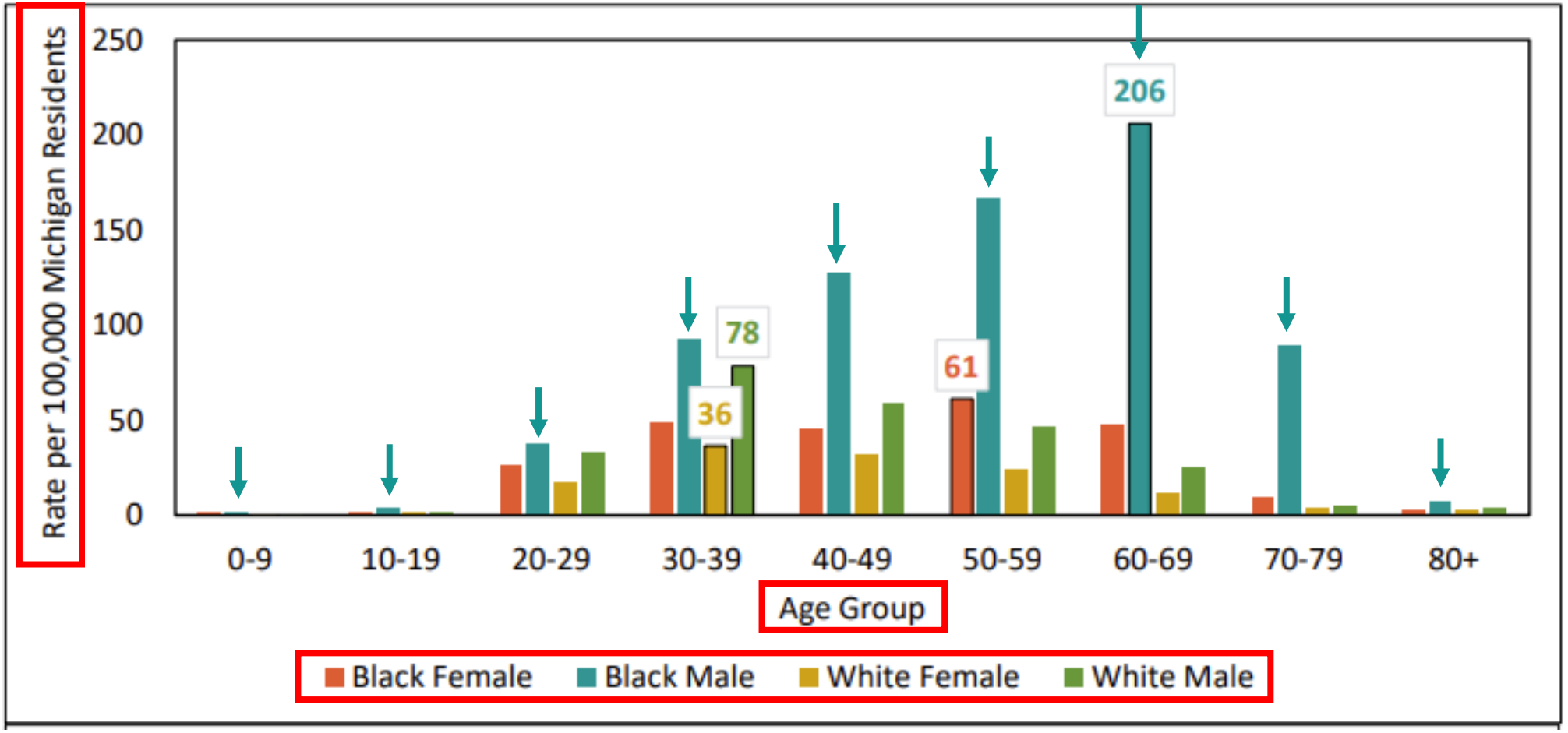
Overdose deaths are decreasing…



Screenshot from the MODA dashboard: https://www.michigan.gov/opioids/category-data

…but not for all Michiganders...

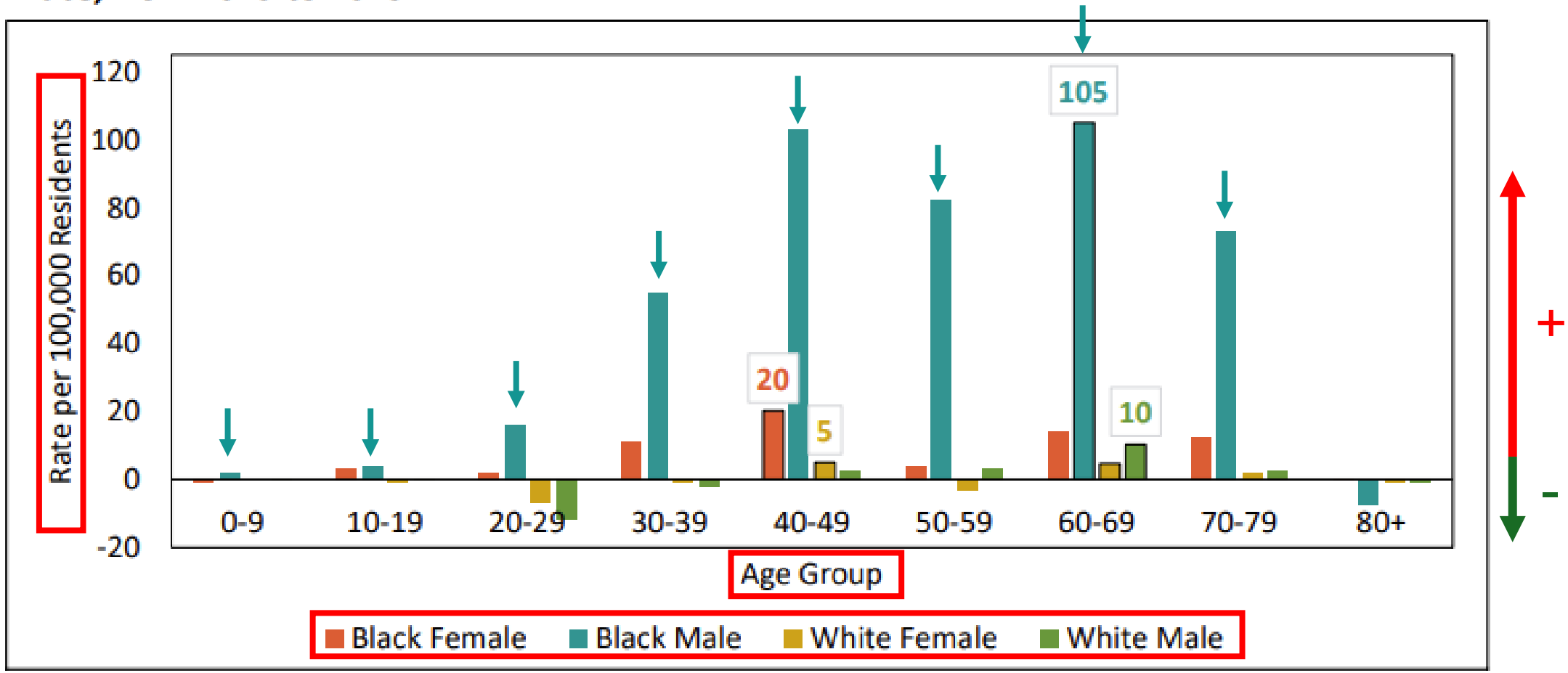
Figure 3. Five-Year Average Overdose Death Rate per 100,000 Michigan Residents, by Age Groups and Race, 2019 to 2023.



Screenshot from the data brief Escalating Disparity: Drug Overdoses Disproportionately Impact Black Men in Michigan: https://www.michigan.gov/opioids/-/media/Project/Websites/opioids/documents/Data-Brief-3--Escalating-Disparity-Drug-Overdoses-Disproportionately-Impact-Black-Men-in-Michigan.pdf?rev=47f75075786242d1bbbbc8f3d021afac

…and the rates are increasing for some demographic groups.

Figure 4. Rate Change in Fatal Overdoses per 100,000 Michigan Residents, by Age Groups and Race, from 2019 to 2023.



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Substance use rates are the same between white and Black individuals.

- Illicit Drug Use in the Past Year among People 12 or Older:
  - 2015-2019:
    - Black/African American individuals: **20.8%**
    - White individuals: **19.6%**
- A national drug use survey measuring SUD diagnosis prevalence:
  - 2015-2019:
    - Black individuals with SUD: **7.6%**
    - White individuals with SUD: **8.2%**
  - 2022:
    - Black individuals with SUD: **17.2%**
    - White individuals with SUD: **17.0%**

SUD = substance use disorder

Why data collection is important

Reasons for data collection

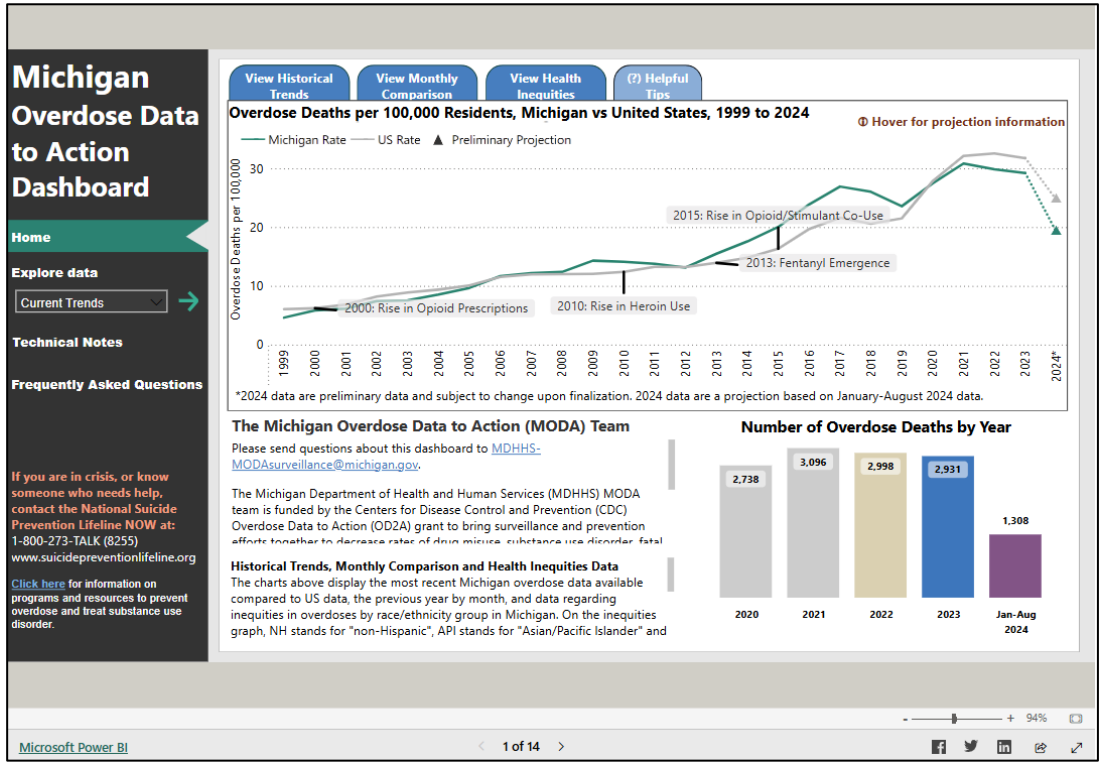
- Learn who is most at risk for overdose
- Learn what programs work
- Learn why programs work
- Learn who programs work for
- Data creates action
- To fix a problem, we have to learn why it is happening

How is data collected

What is the data process?

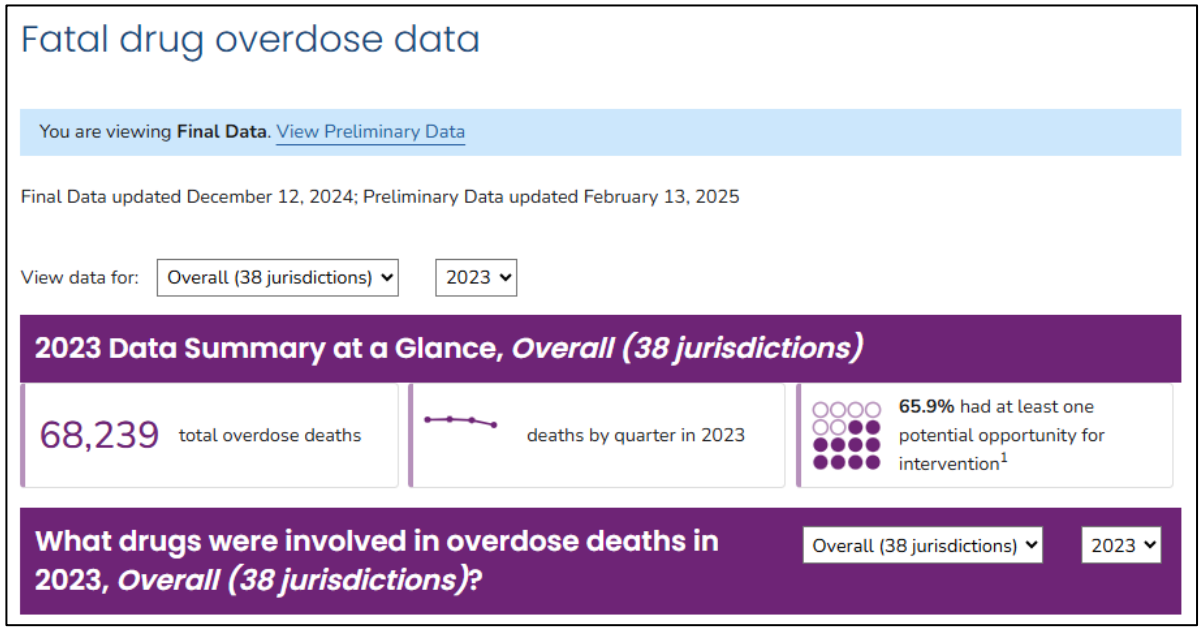
Information from various organizations → Data teams obtain data → Analyze and disseminate data

Dashboards



https://www.michigan.gov/opioids/category-data

Google: MODA dashboard



https://www.cdc.gov/overdose-prevention/data-research/facts-stats/sudors-dashboard-fatal-overdose-data.html

Google: SUDORS dashboard

Let’s talk about harm reduction

What is harm reduction?

- Accepts that substance use WILL happen.
- There are a lot of factors for why someone starts uses substances.
- Quality of life is more important than cessation of all drug use.
- Creating a connection with a trusted person can lead to conversations on decreasing substance use.
- Not meant to minimize or ignore the harm associated with substance use.

What is an SSP/HRA?

- SSP = Syringe Service Program
- HRA = Harm Reduction Agency
- 30 years of research shows that SSPs are safe, effective, and cost-saving:
  - help prevent overdoses;
  - provide naloxone;
  - help prevent transmission of blood-borne infections;
  - links to substance use disorder treatment;
  - access to and disposal of sterile syringes and injection equipment;
  - vaccinations;
  - other safe use supplies;
  - drug checking;
  - testing strips; and,
  - links to care and treatment for infectious diseases.

How have SSPs/HRAs improved the lives of people who use substances?

- New SSP users are **five times** more likely to enter drug treatment.
- They are also **three times** more likely to stop using drugs than those who don't use the program.
- SSPs are associated with an estimated **50% reduction** in HIV and HCV incidence.
- Provide a community for people and connections to peer recovery coaches.

What data is collected
&
how is it used to prevent future deaths?

Set up for the remaining slides:

- Data collection – what is collected?
- Data analysis – what does current data show?
- Data implementation – how is the data used?

Data collection, analysis, implementation.

Body positioning
COMPLETE SECTION 1 OR 2

<u>Section 1. If decedent is in the same position when they were first found unresponsive:</u>
Photograph:
- ❑ Before decedent is moved, photograph body from multiple angles with attention to airways and body position.
- ❑ Once decedent is moved, place where decedent was first found.

Narrative:
- ❑ Livor mortis and compression of nose and mouth.
- ❑ Interview first responders about potential airway compromise.

<u>Section 2. If decedent is *not* in the same position when they were first found unresponsive:</u>
Photograph:
- ❑ Location decedent was first found.

Narrative:
- ❑ Livor mortis and compression of nose and mouth.
- ❑ Interview individual(s) who found decedent about the positioning of their head and neck.
- ❑ Interview first responders about potential airway compromise.

Opioid death is more commonly associated with positional asphyxia (p=0.0021).

https://www.researchgate.net/publication/343405082_Positional_Asphyxia_in_Opioid-Related_Deaths_Is_It_Being_Overlooked_Positional_Asphyxia_in_Opioid-Related_Deaths

MEI checklist

Decedent name: _____ **Case number:** _____

Antemortem Events			
1. Resuscitative efforts *(bystander, family, EMS, etc.)*:	**CPR** By whom?_____ **Naloxone** By whom?_____	**No resus. efforts**	
2. Was substance use/overdose witnessed *(friend, son, etc.)* **?**	**Witnessed** By whom? _____ Any minors (include age)? _____	**Unwitnessed**	
Scene evidence			
3. Observe what is found on scene:			
Substance description *(texture, color)*:		**None**	
Paraphernalia present & condition *(burned pipes, etc.)*:		**None**	
Was naloxone present?	**Yes**	**No**	**Unknown**
If **medication** was present, was it prescribed to decedent?	**Yes**	**No**	**Unknown**
If **no**, who were they prescribed to *(family, friends, etc.)?*			
Social history			
4. Has decedent ever been incarcerated?	**Yes**	**No**	**Unknown**
	Name of most recent institution: _____		**Unknown**
	Most recent release date: _____		**Unknown**
	Reason for incarceration:_____		**Unknown**
	Any treatment given at institution (methadone, etc.): _____		**Unknown**
5. Employment status:	Employed · Self-employed · Unemployed · Retired · Disability · Student		**Unknown**
If recently **unemployed**, were they:	Laid-off · Furloughed · Fired · Quit		**Unknown**
Current/most recent occupation/source of income:			**Unknown**
6. Relationship status at time of death:	Married · Separated · Divorced · Widowed · Engaged · Dating	**No**	**Unknown**
Past relationship(s):	Married · Separated · Divorced · Widowed · Engaged		**Unknown**
7. Did decedent have children?	**Yes**	**No**	**Unknown**
Did decedent have minor children?	**Yes**	**No**	**Unknown**
Medical/Substance Use History			
8. Medical conditions *(including acute/chronic pain, mental health, recent surgeries, etc.):*		**None**	**Unknown**
9. Was decedent known to use substances?	**Yes**, *continue below*	**No,** *end interview*	
Substance(s) of choice:	Illicit opioids/Heroin · Methamphetamine · Cocaine · Marijuana · Alcohol Medications/pills:_____ Cigarettes · Other:_____		**Unknown**
Typical route(s) for substance administration:	Snort · Smoke · Oral · IV · Other: _____		**Unknown**
Length of time using substances:	_____months _____years		**Unknown**
Was the decedent substance free for at least one week?	**Yes** Suspected reason for return to use: _____	**No**	**Unknown**
How did substance use start?	Medication · Traumatic accident · Other:_____ What medication, what accident, etc.? _____		**Unknown**
Have they or were they currently receiving treatment(s)?	**Yes** Methadone · Suboxone · Vivitrol · Inpatient/outpatient treatment · NA/AA Peer recovery coach/peer support · Other: _____	**No**	**Unknown**
Has decedent had previous overdoses?	**Yes**	**No**	**Unknown**
	How many? _____ Any recent ODs? _____		

Let's break it down!

Data collection: Antemortem events

Antemortem Events		
1. Resuscitative efforts *(bystander, family, EMS, etc.)* **:**	**CPR** By whom?_____ **Naloxone** By whom?_____	**No resus efforts**
2. Was substance use/overdose witnessed?	**Witnessed** By whom? _____ Any minors (include age)? _____	**Unwitnessed**

Data analysis: Antemortem events

- Among those who fatally overdosed,
  - Half did not have a **pulse** at first responder arrival;
  - One in five had **naloxone** administered;
  - Less than one in ten had their substance use **witnessed**; and,
  - One in five had a potential **bystander present.**
    - Four in five bystanders did not provide response (Narcan, CPR, etc.).

Data analysis: Antemortem events, cont.

- Fatal overdose is most likely when substance use:
  - is unwitnessed;
  - naloxone and CPR are not administered; and,
  - a call to 911 is delayed.

Data implementation: Antemortem events

- Increase knowledge of overdose symptoms.
  - Pinpoint pupils, unresponsive, foam cone, snoring and depressed breathing.
- Increase Naloxone saturation in communities.
- Increase awareness that CPR is just as helpful as Naloxone.
- Market hotlines such as Never Use Alone.

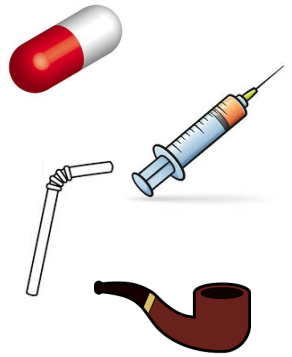
Data collection: Scene evidence

Scene evidence				
3. Observe what is found on scene:				
Substance description *(texture, color*):			**None**	
Paraphernalia present & condition *(burned pipes, etc.):*			**None**	
Was naloxone present?		**Yes**	**No**	**Unknown**
If **medication** was present, was it prescribed to decedent?		**Yes**	**No**	**Unknown**
If **no**, who were they prescribed to *(family, friends, etc.):*				

Data analysis: Scene evidence

- About one in ten death scenes had evidence of prescription drug use.

- About one in three death scenes had evidence of substance use:
  - 5% evidence of ingestion;
  - 12% evidence of injection;
  - 14% evidence of snorting;
  - 18% evidence of smoking.



Data implementation: Scene evidence

- Education on routes of administration supported with death data.
- Talk about testing strips (fentanyl and xylazine).
  - Suspect heroin but it’s fentanyl.
  - Linked skin wounds to xylazine use.
- Informed death certificates.
- Compare substance appearances with toxicology findings.

Data collection: Social history

Social history			
	Yes	**No**	**Unknown**
4. Has decedent ever been incarcerated?	Name of most recent institution: _____		**Unknown**
	Most recent release date: _____		**Unknown**
	Reason for incarceration:_____		**Unknown**
	Any treatment given at institution (methadone, etc.): _____		**Unknown**
5. Employment status:	Employed · Self-employed · Unemployed · Retired · Disability · Student		**Unknown**
If recently **unemployed**, were they:	Laid-off · Furloughed · Fired · Quit		**Unknown**
Current/most recent occupation/source of income:			**Unknown**
6. Relationship status at time of death:	Married · Separated · Divorced · Widowed · Engaged · Dating	**No**	**Unknown**
Past relationship(s):	Married · Separated · Divorced · Widowed · Engaged		**Unknown**
7. Did decedent have children?	**Yes**	**No**	**Unknown**
Did decedent have minor children?	**Yes**	**No**	**Unknown**

Data analysis: Social history

- Overall, decedents who overdosed are more likely to be unemployed and/or unmarried.
- About 33% of female decedents who died from overdose had at least one minor child and about 25% of male decedents had at least one minor child.
  - Almost 17,000 children were minors when their parent or parents died due to drug poisoning from 2000-2022.

Data analysis: Social history, cont.

- Black individuals are 2 to 7 times more likely to have a drug-related offense or be arrested for drug-related charges compared to white individuals.
  - Substance use rates are the same between races.
- Following carceral release, individuals are more likely to be
  - unhoused;
  - unemployed; and,
  - put back into the substance use environment.

increasing the risk for overdose by nearly 13 times

Data implementation: Social history

- Screen for substance use disorders and offer medication for opioid use disorder.
- Employment and marriage/companionship offer stability and support.
  - Schedule
  - Income
- Services for children whose parents died due to drug poisoning.

Data collection:
Medical and substance use history

Medical/Substance Use History			
8. Medical conditions *(including acute/chronic pain, mental health, recent surgeries, etc.):*		**None**	**Unknown**
9. Was decedent known to use substances?	**Yes**, *continue below*	**No,** *end interview*	
Substance(s) of choice:	Illicit opioids/Heroin · Methamphetamine · Cocaine · Marijuana · Alcohol Medications/pills:_____ Cigarettes · Other:_____		**Unknown**
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Has decedent had previous overdoses?	**Yes** How many? _____ Any recent ODs? _____	**No**	**Unknown**

Data analysis: Medical and substance use history

- Untreated mental health increases risk for substance use.
  - About 25% of people with a mental illness also have an SUD.
- Chronic pain is the most common “physical ailment” among those who fatally overdosed.
- Period of being substance free increases risk for overdose.
- Using old syringes increases risk for HIV, HVC & cellulitis.

SUD = substance use disorder

Data implementation: Medical and substance use history

- Screen for mental health and substance use disorders.
- Provide pain management remedies equitably.
- Provide medication for opioid use disorder equitably.
- Provide new syringes to prevent blood-borne disease.

Closing thoughts

- Data collection
  1. informs new overdose prevention and response efforts;
  2. provides strong arguments for policy and program changes; and,
  3. provides data for grants.
- We must understand *why* something happened to *prevent* it in the future.

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Thank you for your time!

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