

Introducing the NDEWS* HotSpot Opportunity for Assessing Opioid Overdose Inequities in Minnesota

2018 National Tribal Public Health Summit
May 24, 2018

Presented by Erin Artigiani, Miigis Gonzalez, Brenna Greenfield, Melissa Walls



Center for Substance Abuse Research (CESAR)
University of Maryland, College Park

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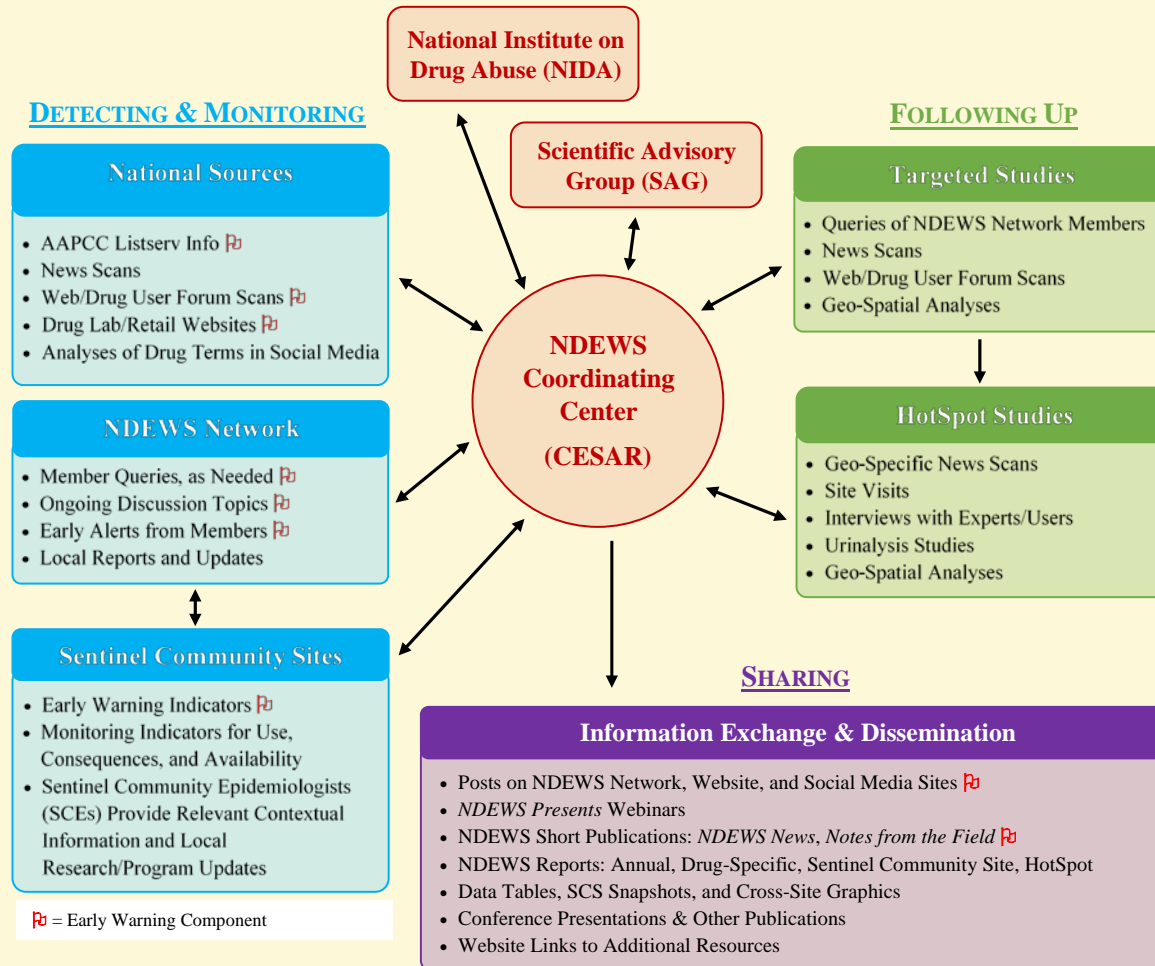
National Drug Early Warning System (NDEWS) Mission

- National early warning system that addresses substance use and misuse topics, with a focus on emerging trends, in the U.S. through a network of experts harnessing the power of evidence to generate educated and practical action
- Generates critically needed information about drugs and their public health consequences
- Leverages resources and collaborations to harmonize approaches to analyzing and presenting data

NDEWS Components

NDEWS National Drug Early Warning System

Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse



NDEWS Network

- The NDEWS Network is a virtual community of 1600+ experts in medicine, toxicology, ethnography, epidemiology, law enforcement, and other fields as well as concerned citizens and others
- Use the NDEWS Network to:
 - Get rapid access to information on emerging drugs and drug trends
 - Join cross-disciplinary discussions
 - Learn about new resources and successful local solutions
 - Ask others about drugs/emerging trends in your area
- <https://network.ndews.org>

13 NDEWS Sentinel Community Sites



Source: NDEWS Coordinating Center, CESAR, University of Maryland, College Park, May 2018. www.ndews.org

NDEWS HotSpot Approach

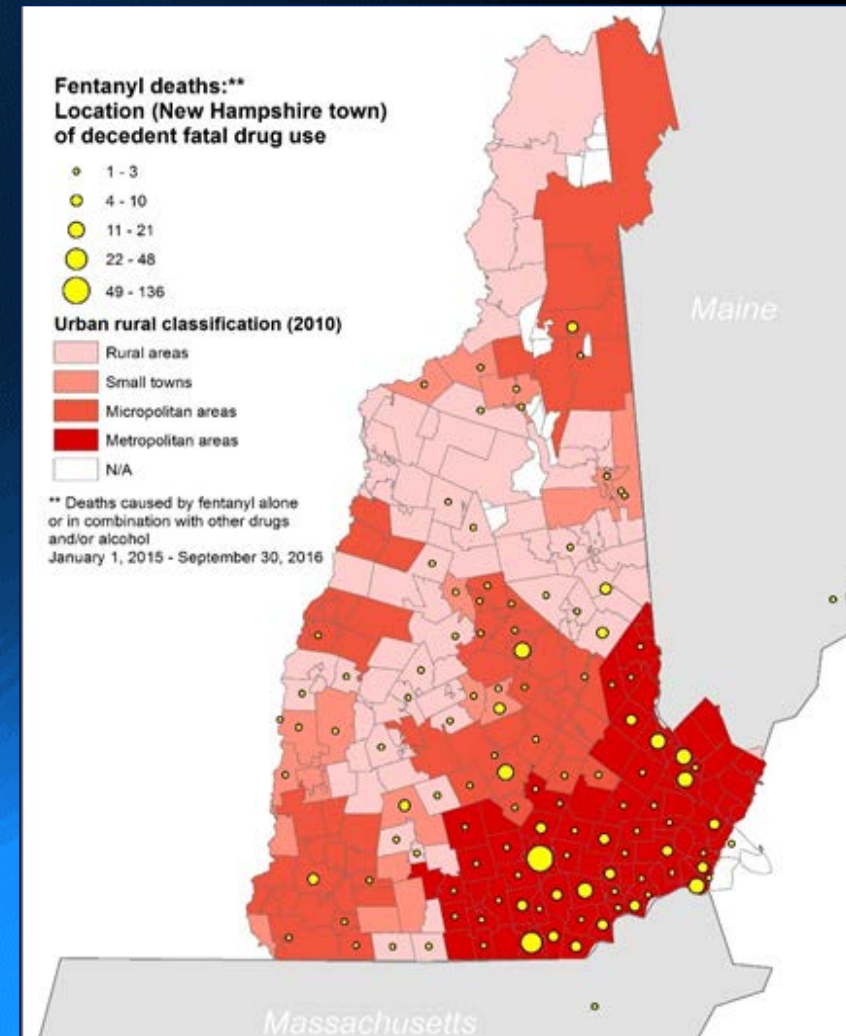
- Detect acute or emerging problem
- Review available data and research
- Community Based Participatory Research: Work closely with local experts and collaborators to identify the research questions and utilize methodologies most important to them
- Conduct focused research designed to:
 - Expand/Improve understanding of regional/local drug trends
 - Lead to an intervention to improve public health

NDEWS New Hampshire HotSpot Study

1. Collect and review available data and information (May-June 2016)
2. Identify core contacts – e.g. local experts in public health, law enforcement, research, policy (May 2016)
3. Convene Planning Committee (May 27, 2016)
4. Conduct site visit (June 29 – July 1, 2016)
5. Conduct 2 additional rapid studies to develop a more comprehensive understanding of current user of fentanyl and the people who have died from fentanyl-related overdoses

Key Findings

1. Many types of fentanyl mixtures of varying potency
2. Most fatal overdose victims were White, male, 20-39, and alone when they took their fatal dose
3. Fatal overdose victims who were 40 or older, living alone, opiate naïve, or living in non-urban townships were less likely to have access to emergency services care, naloxone, or transport to hospital
4. Some users actively sought fentanyl or products known to cause overdose
5. Toxicology tests showed decedents were positive for multiple drugs



2 Types of Reports

NDEWS New Hampshire HotSpot Report

The Increase in Fentanyl Overdoses

NDEWS Coordinating Center
October 14, 2016

Center for Technology and Behavioral Health
Dartmouth College
46 Centerra Parkway, Suite 315
Lebanon, NH 03756
Tel (603) 646-7000
Fax (603) 646-7068
www.ctbh.org



NDEWS HOTSPOT REPORT

UNDERSTANDING OPIOID OVERDOSES IN NEW HAMPSHIRE

Phase II of a National Drug Early Warning System (NDEWS) HotSpot Rapid
Epidemiological Study

Andrea Meier, MS, LADC, LCMHC, Sarah K. Moore, PhD, Elizabeth C. Saunders, MS,
Stephen A. Metcalf, MPhil, Bethany McLeman, BA, Samantha Auty, BS, and Lisa A. Marsch, PhD

DRAFT 8/28/17

NDEWS National Drug Early Warning System

Highlights from the NDEWS New Hampshire HotSpot Study

Summary

The Phase 1 HotSpot study of available data, including a 3 day site visit with experts and practitioners in New Hampshire was conducted in June 2016. Remaining questions prompted expanded Phase 2 sub-studies of persons who died from fentanyl-related overdoses and of users and responders.

What was Learned

- Many types of fentanyl mixtures of varying potency are available in the local drug market.
- A majority of fatal overdose victims were white, male, aged 20-39, and alone when they took their fatal dose.
- Toxicology tests showed decedents tested positive for multiple drugs.
- Some users:
 - actively sought fentanyl or products known to cause overdose;
 - believed that obtaining treatment was difficult; and,
 - reported a lack of knowledge about naloxone and a fear of physical side effects.
- Fatal overdose victims who were 40 or above, living alone, opiate naive, or living in non-urban townships were less likely to have access to EMS care, naloxone administration, or transport to hospital
- First responders and users reported the need for additional resources such as needle exchange, medication assisted treatment/detox and other treatment services.

Implications for Public Health

- 1) Based on interviews and medical examiner case reviews, fentanyl appears to be the primary cause of increased overdose in New Hampshire, possibly due to fentanyl's potency and inconsistency in fentanyl/heroin mixes.
- 2) Providers and responders must eliminate barriers to naloxone use and increase availability of treatment.
- 3) Although users expressed a fear of physical side effects from naloxone, neither users nor responders had observed any common side effects from naloxone administration other than precipitated withdrawal.
- 4) Providers must diagnose and treat multiple drug use disorders in fentanyl users and provide comprehensive treatment

Overview

An NDEWS HotSpot study (Phase 1) was launched in 2016 in response to the sharp increase in illicit fentanyl-related overdose deaths in New Hampshire. These deaths climbed from 145 in 2014 to 362 in 2016 and constituted a public health emergency.

NDEWS researchers reviewed available data and met with local scientists and practitioners in New Hampshire during a 3 day site visit. This HotSpot study underscored the scope and severity of the fentanyl problem but raised a number of questions about the outbreak.

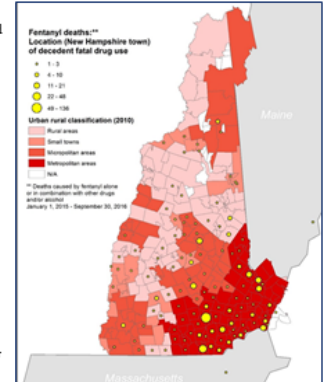
To address these questions and with additional support from NIDA, NDEWS launched an expanded Phase 2 HotSpot study. Two local scientists conducted rapid sub-studies into why and how

people use fentanyl and the nature of local responses to address the outbreak. One sub-study examined medical records and medical examiner investigations for persons who died from fentanyl-related overdoses. The second sub-study conducted systematic interviews of first responders, emergency department personnel, active fentanyl users, and individuals new to treatment.

These HotSpot studies were intended to provide information useful to New Hampshire and to other states dealing with similar outbreaks.

This report presents highlights from the standard HotSpot study and the two sub-studies.

Figure 1: Most Fentanyl-related Overdoses Occurred in Metro Areas



August 2017

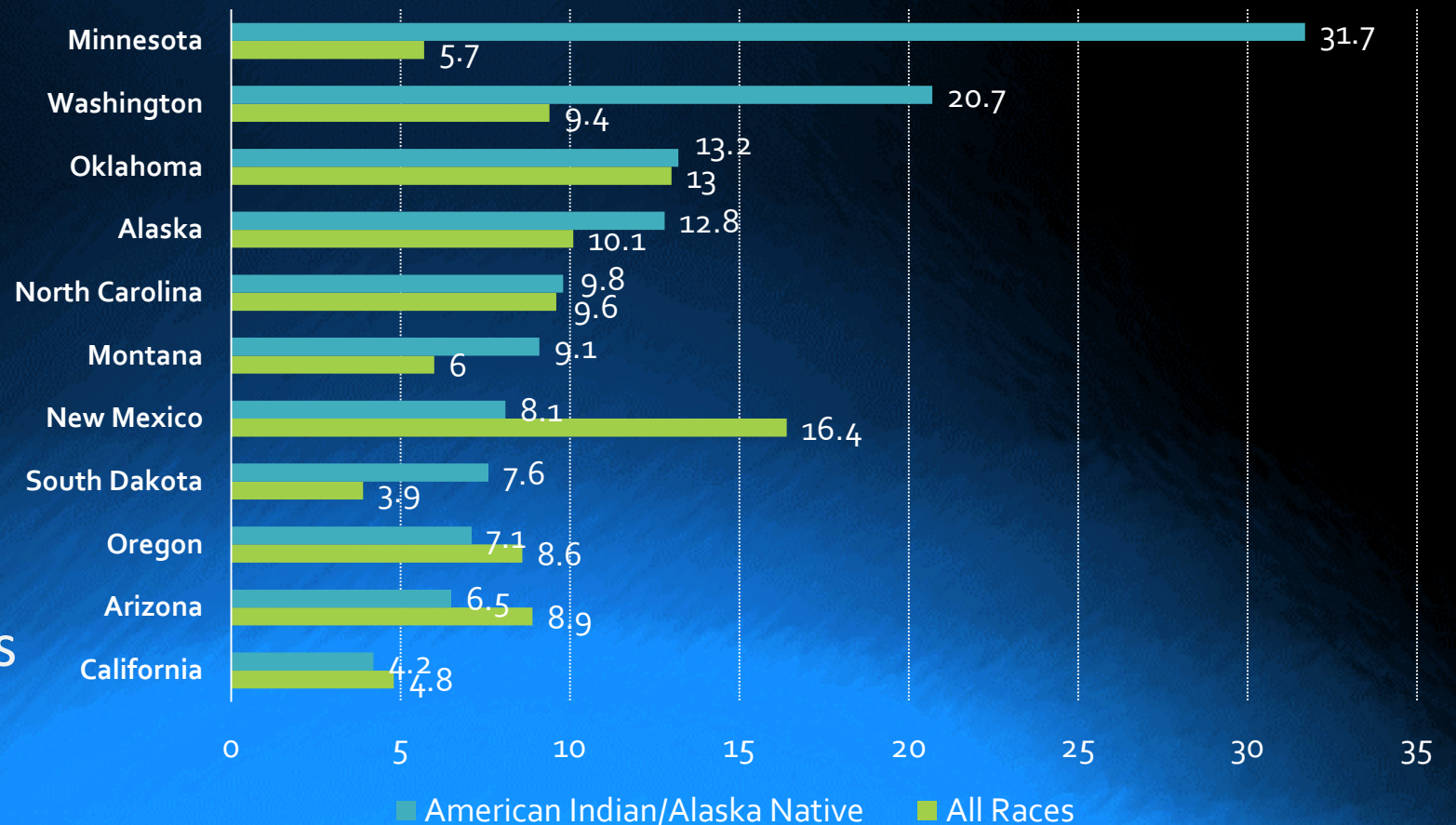
www.NDEWS.org

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Why Minnesota?

- Clear evidence of an a growing problem with opioid-related overdoses and of a racial disparity
- Local collaborators
- Commitment to learning more about their situation
- Available data (in process of identifying local goals)
- Willingness to work with us to develop a study to address local priorities

Rate of Drug Poisoning Deaths Involving Opioids, By Race and State, 2011-2015



Source: NDEWS Coordinating Center, CESAR, June 2017.
University of Maryland College Park. www.ndews.org

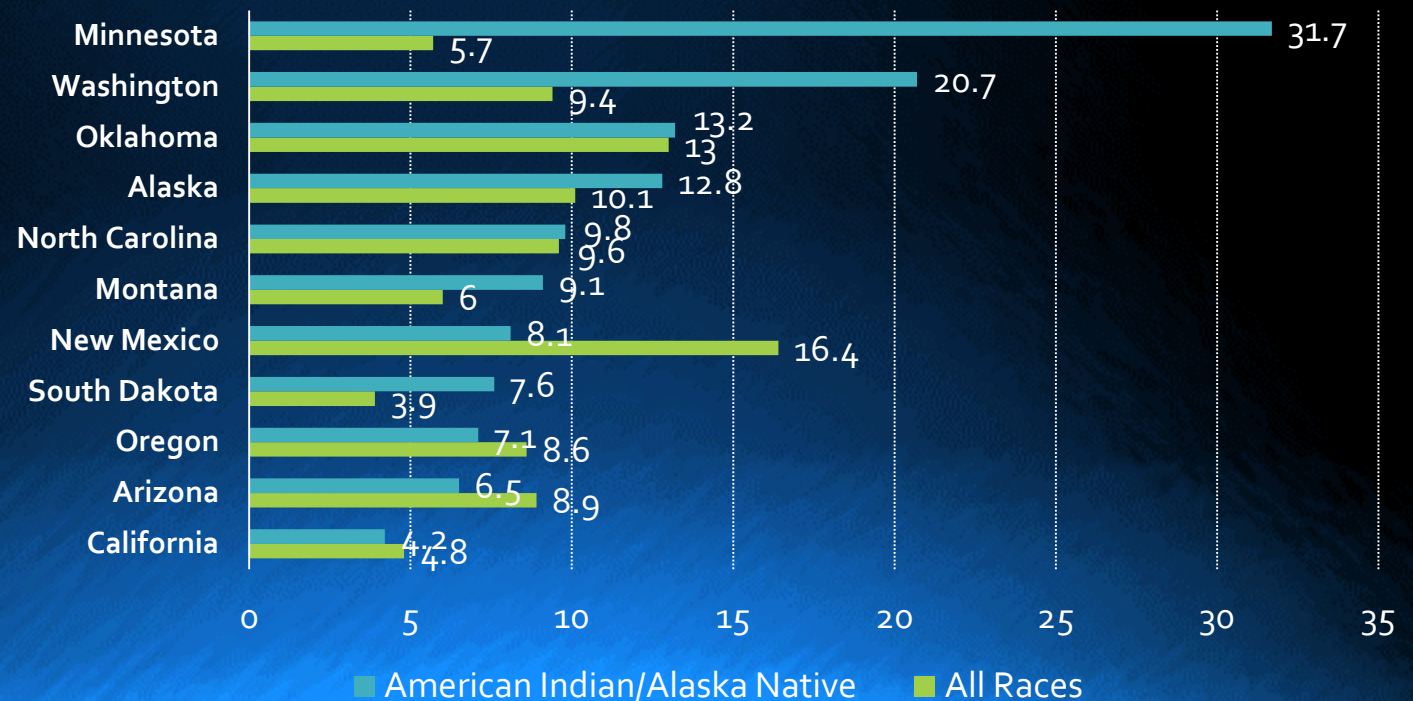
Rate per 100,000
Source: CDC/NCHS National Vital Statistics System, Mortality

Exercise 1: 25 to 5 (*Crowd Sourcing*)

Instructions:

- Write idea
- Write clearly!

Rate of Drug Poisoning Deaths Involving Opioids,
By Race and State, 2011-2015



This might be happening because _____

Exercise 1: 25 to 5 (*Crowd Sourcing*)

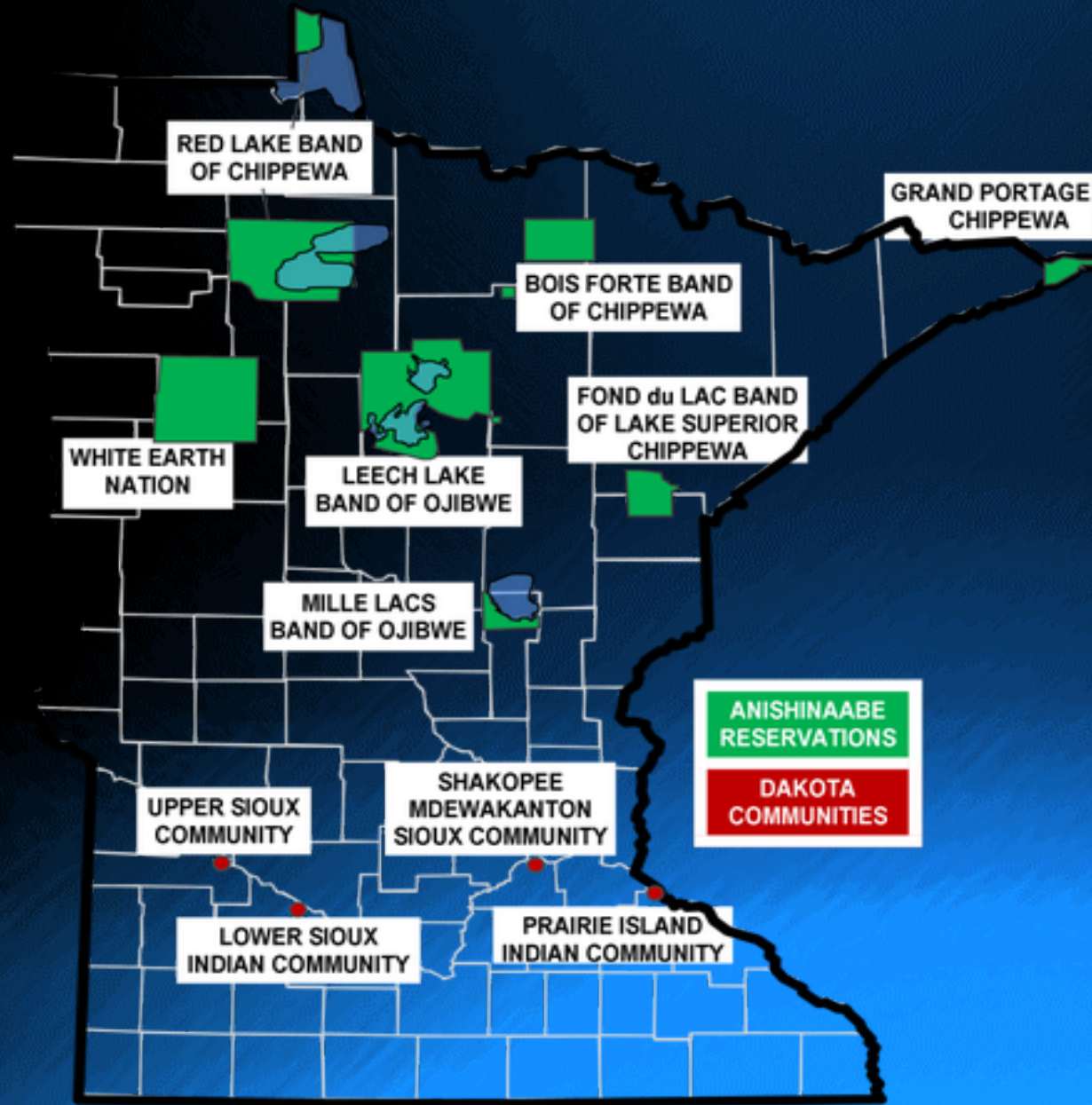
This might be happening because...

Instructions:

- Pass card to someone, pass again...
- Pair up
- Read the idea to your partner
- Rate the idea *on the back of the card* on a scale of 1-5: '5' being very strong impact, '1' being low impact
- Repeat!

Minnesota-specific information

MN Tribal Communities



Map Image Source:

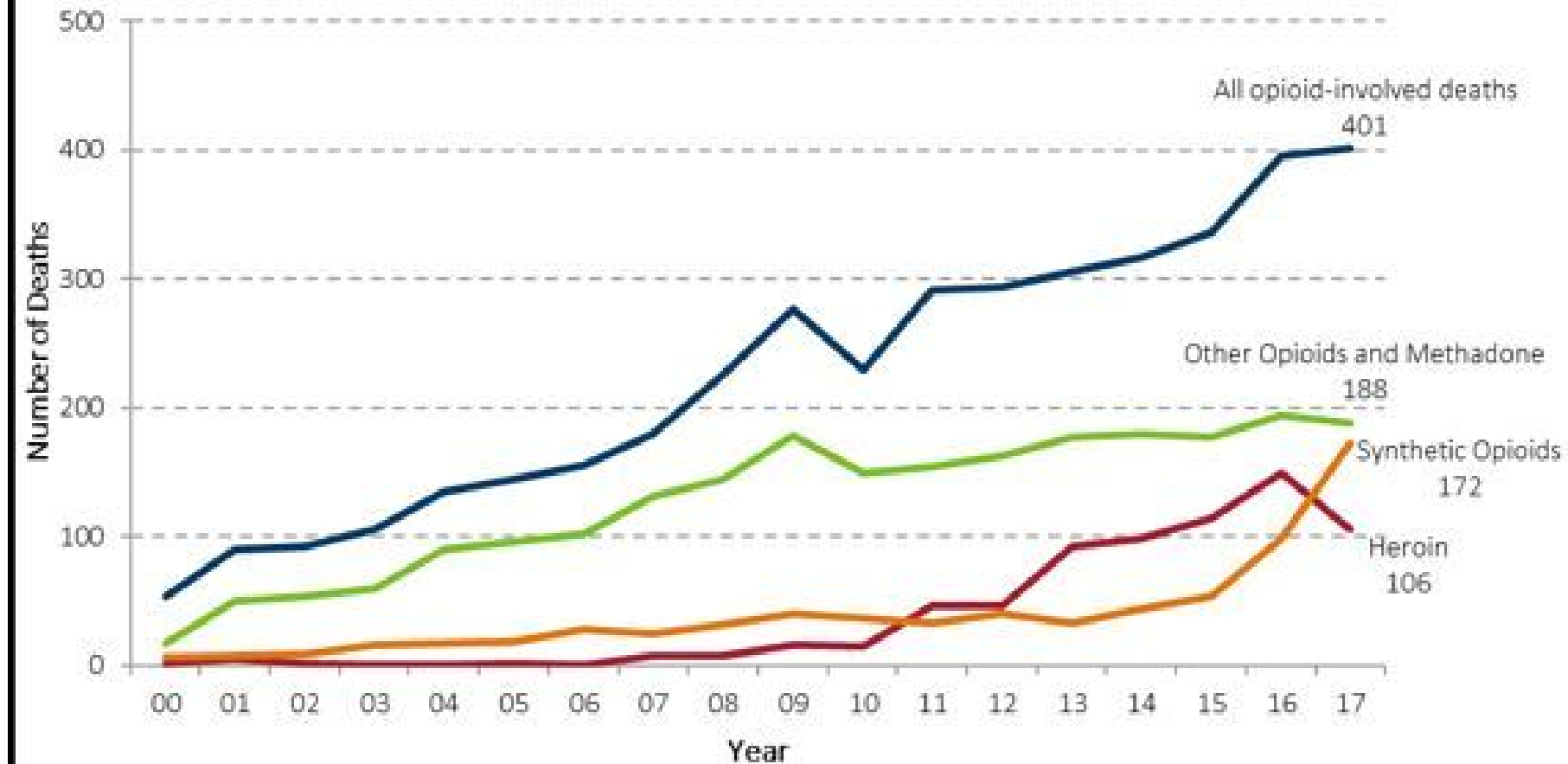
<http://www.health.state.mn.us/divs/opi/gov/chsadmin/governance/tribal.html>

Little Earth of United Tribes



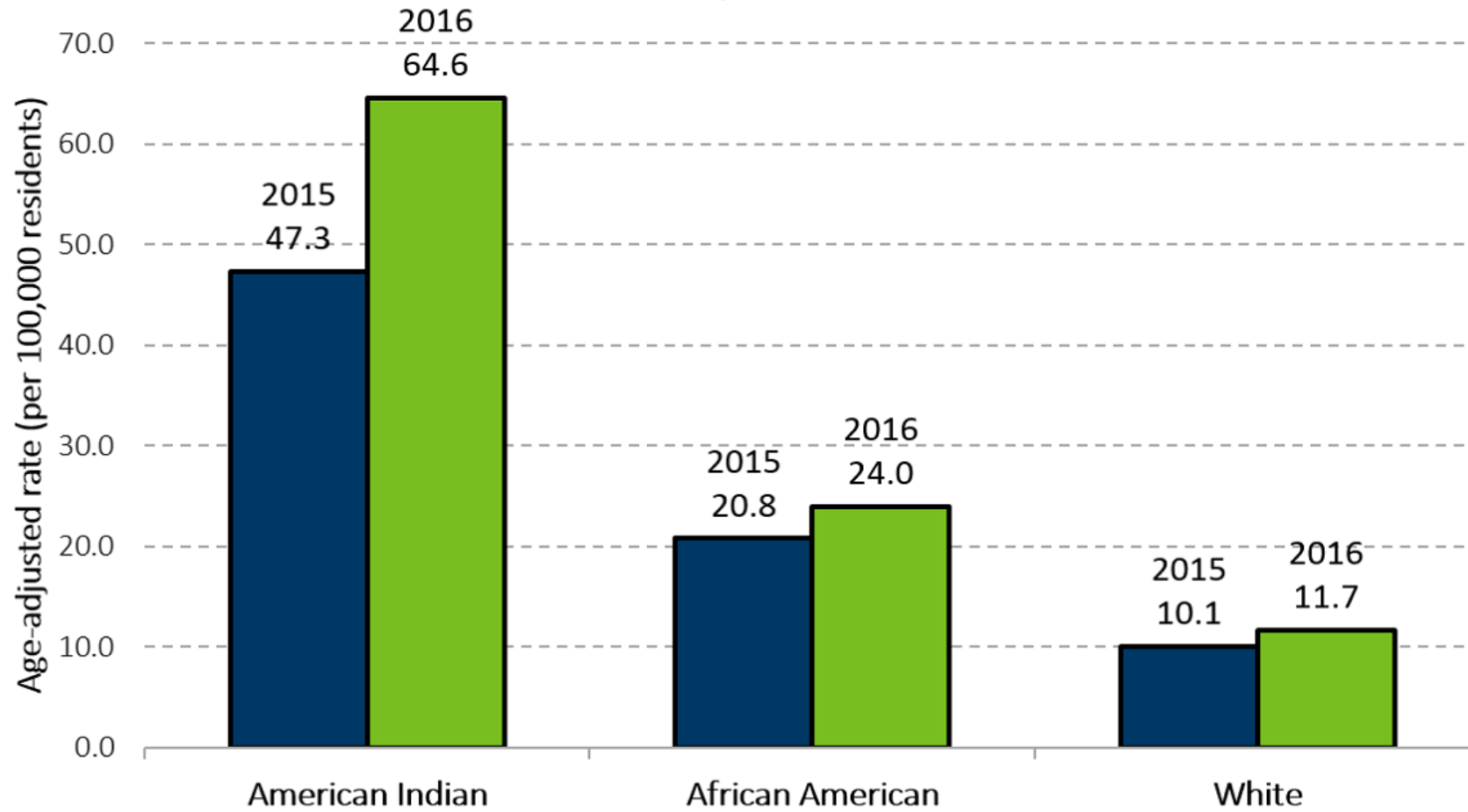
- 9.4-acre, 212-unit HUD-subsidized housing complex in the urban industrial core of Minneapolis, Minnesota.
- Nearly 1,000 residents, 500 of whom are under the age of 21.
- Founded in 1973, Little Earth is the only American Indian preference project-based Section 8 rental assistance community in the United States.

Opioid-involved drug overdose deaths by non-exclusive drug category, MN residents, 2000-2017

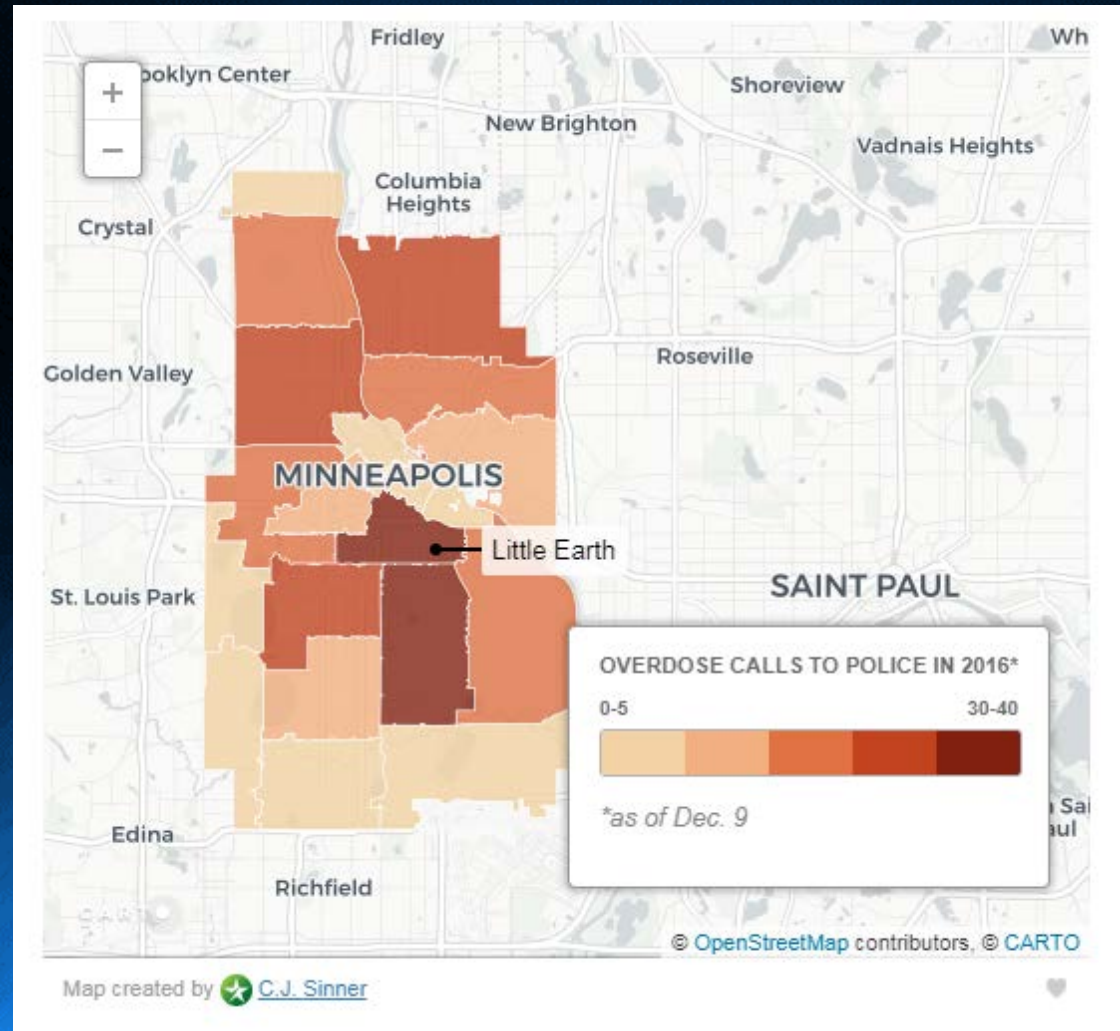


NOTE: Data are preliminary and likely to change when finalized. Also the category other opioids and Methadone includes prescription opioids.

Drug overdose mortality rates by race,
MN Residents, 2015 and 2016

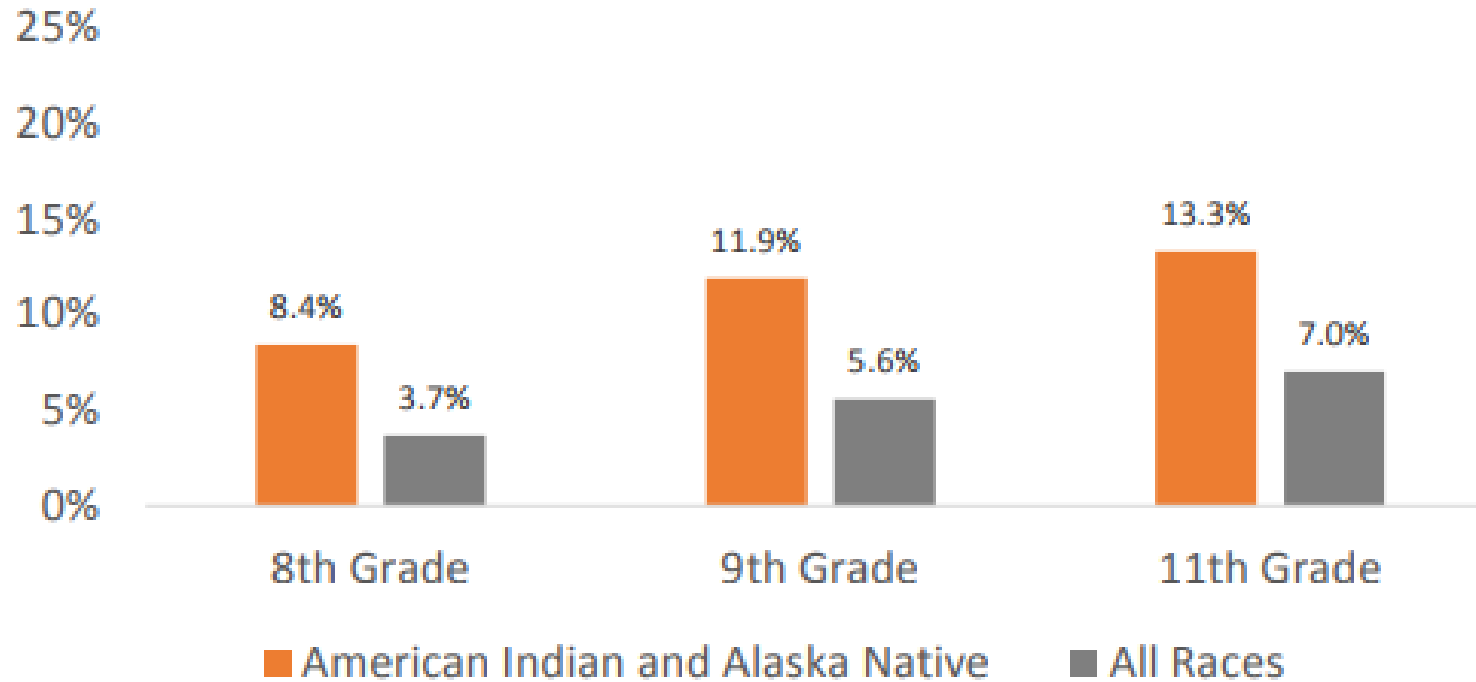


Location of 911 overdose calls, 2016

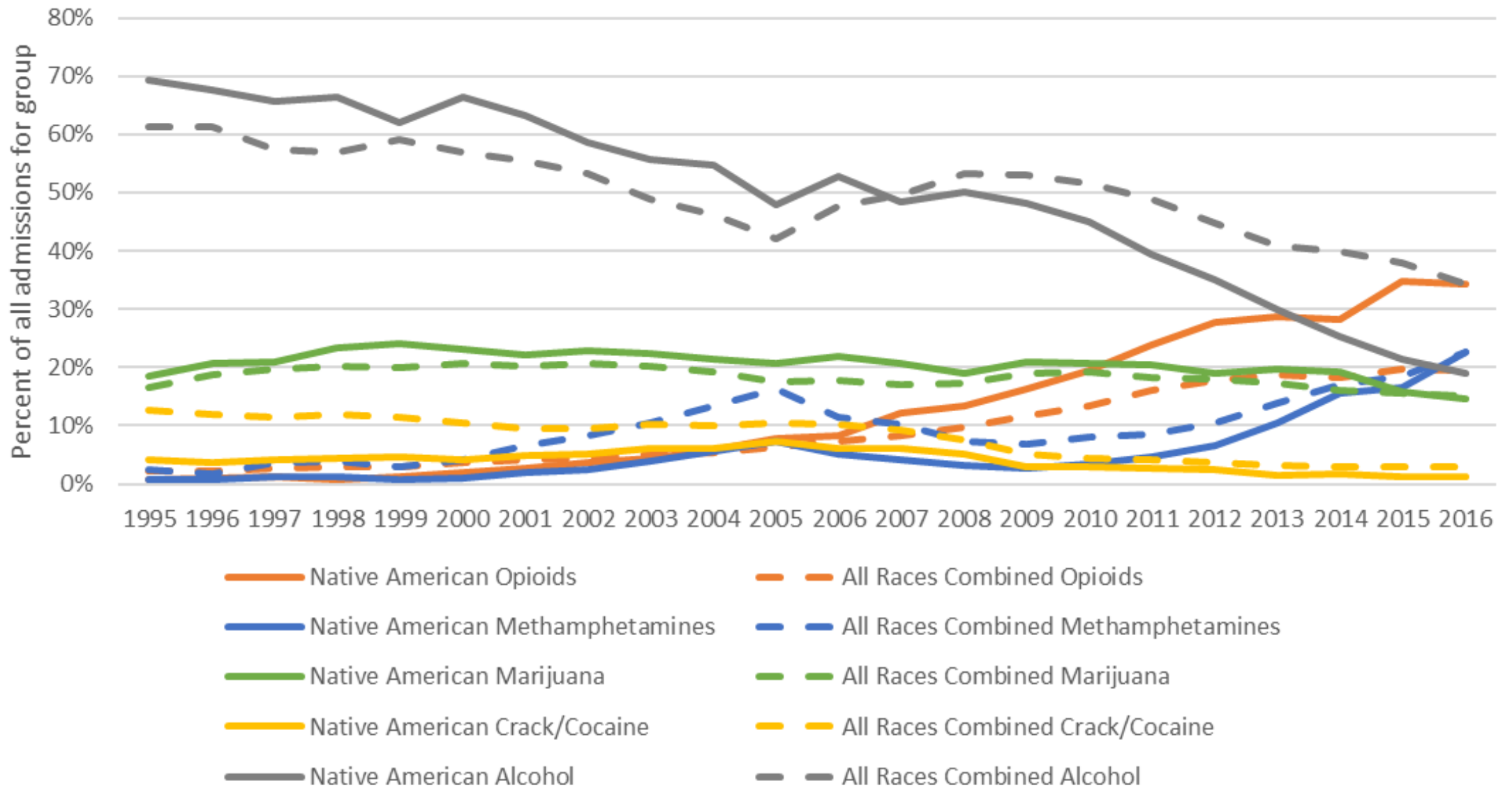


Source: <http://www.startribune.com/heroin-overdoses-surge-at-little-earth/409029315/>

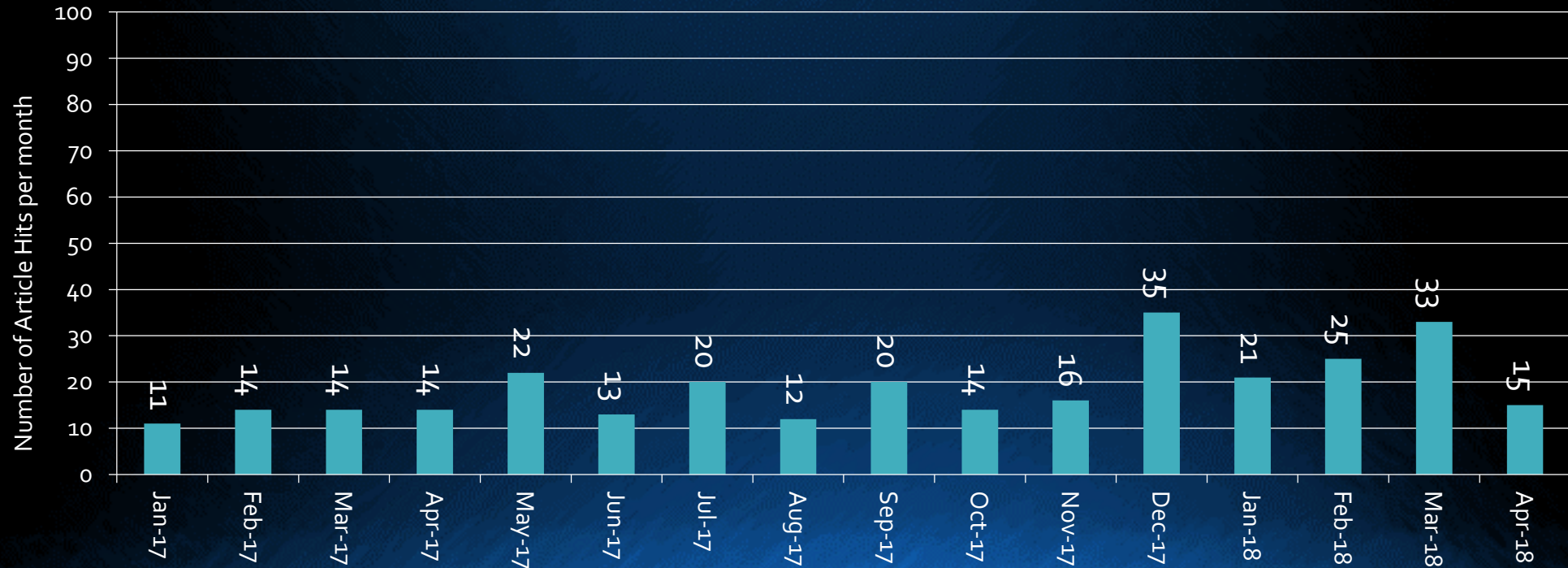
Students Reporting Any Past 30 Day Misuse of Prescription Drugs, 2013 MSS



Primary substance at treatment admission in MN, 1995-2016



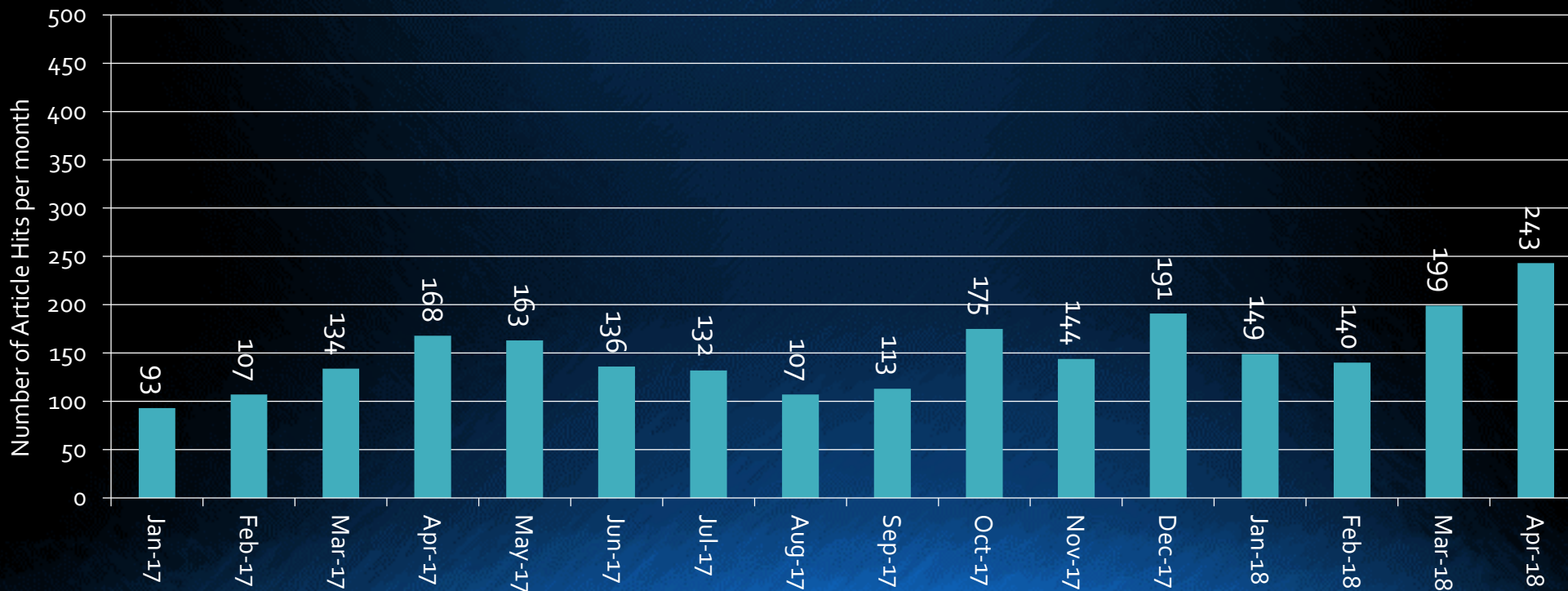
NDEWS News Scan of Reports About Opioids in MN 1st Nations, Jan. 2017 - Mar. 2018



Source: NDEWS analysis of searches of the LexisNexis Academic ALLNEWS database for the terms "(opioid OR opiate OR opium OR narcotics OR naloxone OR naltrexone OR Analgesic OR Vivitrol) AND (((native w/1 american) OR (american w/1 indian) OR (first w/1 nation) OR Anishinaabe OR Chippewa OR Ojibwe OR Ojibway OR Sioux OR (Red w/1 Lake) OR (White w/1 Earth) OR (Little w/1 Earth) OR (Bois w/1 Forte) OR (Fond w/2 Lac) OR (Grand w/1 Portage) OR (Leech w/1 Lake) OR (Mille w/1 Lacs) OR (Prairie w/1 Island) OR Shakopee) AND (MN OR minnesota))." The ALLNEWS database contains articles from more than 2,400 English-language newspapers and web news sources. Duplicates were removed with the "moderate similarity" filter in LexisNexis.

Note: Outbreaks of drug problems often come to public attention first via media reports. NDEWS conducts periodic reviews of published news articles and special scans for specific drugs. This graph represents a rough estimate of the number of news articles reporting on a drug or drug use issue. Not all newspapers and web news sources are catalogued in LexisNexis, and the sources may change at any time. Although a duplicate filter was used in the original LexisNexis search, duplicate articles may remain in the results. In addition, this is a count of articles not incidents, as many articles may report on the same incident.

NDEWS News Scan of Reports About Opioids in Minnesota, Jan. 2017 - Apr. 2018



Source:

NDEWS analysis of searches of the LexisNexis Academic ALLNEWS database for the terms "(opioid OR opiate OR opium OR narcotics OR naloxone OR naltrexone OR Analgesic OR Vivitrol) AND (MN OR minnesota)." The ALLNEWS database contains articles from more than 2,400 English-language newspapers and web news sources. Duplicates were removed with the "moderate similarity" filter in LexisNexis.

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Source: CESAR, University of Maryland College Park,
May 2018. www.ndews.org

MN tribal response to opioid crisis

- Tribal-state opioid summits held in 2016 and 2017
- Individual tribes in the region have declared state of emergency
 - E.g., Midwest Alliance of Sovereign Tribes: 3/27/18 Resolution, State of Emergency due to the Opioid Epidemic
- Lawsuits against pharmaceutical companies
- Natives against Heroin

Exercise 2: Speed networking

Instructions:

- Write idea
- Pair up with someone you don't know
- Repeat!

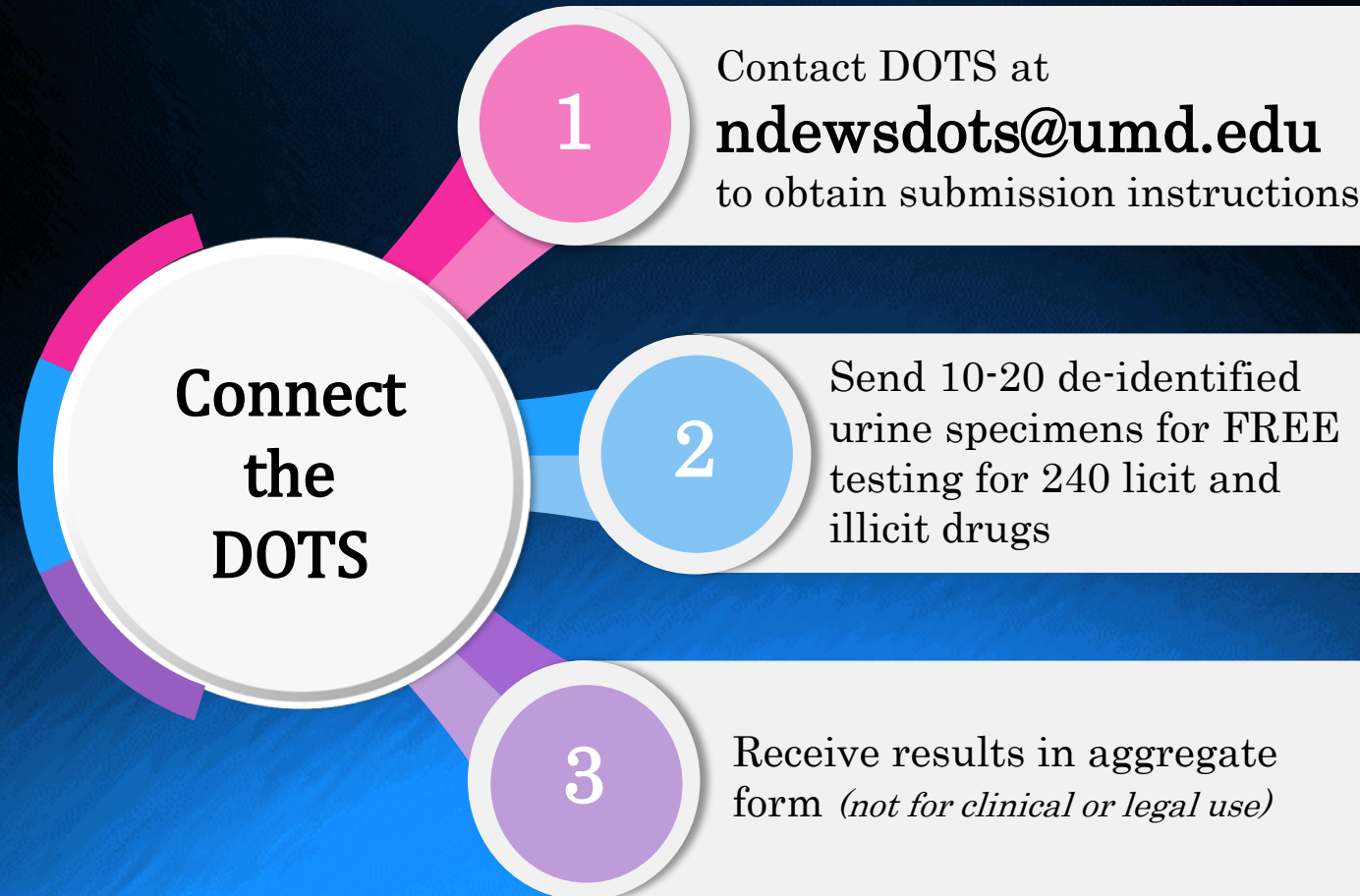
What additional information do you need to best address the opioid crisis in your community?

Where do we go from here?

- 6 months
- Limited resources
- What do you think is the most important thing to do to address/understand the disparity and build local capacity?
- Possibilities:
 - Fatality review
 - ??
- Next Steps: review ideas and recommendations received during summit, planning committee

Pilot Study: Drug Outbreak Testing Service (DOTS)

*Offers FREE state-of-the-art urine drug testing to identify the drug(s) behind your local outbreak
(Supported by an NIH/NIDA grant to the University of Maryland)*



For More Information

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Miigwech!/Thank you!

- Giveaway