

## Prescription Drug Misuse

## Michigan Statistics

In 2012, MI ranked 10<sup>th</sup> in the nation in the number of opioid pain relievers prescribed per 100 people and ranked 18<sup>th</sup> in the nation for overdose deaths.<sup>4</sup>



From 1999 to 2013, the number of deaths in MI caused by unintentional prescription opioid overdose increased by more than tenfold, from 31 to 384 deaths.<sup>5</sup>



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### Data Sources:

- Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.
- Chang H, Daubresse M, Kruszewski SP, Alexander GC. Prevalence and treatment of pain in EDs in the United States, 2000 to 2010. *Am J Emerg Med.* 2014;32(5):421-431.
- Daubresse M, Chang HY, Yu Y, et al. Ambulatory diagnosis and treatment of nonmalignant pain in the United States, 2000-2010. *Med Care.* 2013;51(10):870-878.
- Paulozzi LJ, Mack KA, Hockenberry JM. Vital signs: Variation among states in prescribing of opioid pain relievers and benzodiazepines—United States, 2012. *MMWR Morb Mortal Wkly Rep.* 2014;63(26):563-568.
- Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER.

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## Overdose Education & Distribution of Nasal Naloxone

### What Is the Problem?

United States statistics:

- Every day, 44 people die from overdose of prescription opioids.<sup>1</sup>
- Since 1999, prescription opioid sales have grown by 300%, yet there has been no change in the amount of pain Americans report.<sup>2,3</sup>

### What Is One Solution?

Overdose education and nasal naloxone distribution (OEND) programs are developed to educate people at risk for overdose (i.e., report active use or are in treatment or recovery) and bystanders (e.g., social service providers, and family and friends of opioid users), how to prevent an overdose, recognize the signs, and respond if an overdose occurs.<sup>a</sup>

### Program Components

Created by the Harm Reduction Coalition and the Chicago Recovery Alliance and adapted for nasal naloxone, the curriculum includes the following three key elements:<sup>a</sup>

- Prevent:** minimize risk of overdose by reducing polysubstance misuse, account for reduced tolerance after abstinence and not using alone.
- Recognize:** check level of responsiveness and for decreased respirations.
- Respond:** seek help, provide rescue breathing, deliver nasal naloxone, and stay with person until additional medical help arrives.

### Evaluation

(The 19 MA communities had at least five fatal opioid overdoses each year, from 2004-06.)

An interrupted time series analysis was conducted to evaluate the annual impact of OEND programs on death rates from opioid-related overdose and use of acute care hospitals. The study compared 19 Massachusetts communities from 2002 to 2009 to understand how the degree of OEND implementation was related to overdose and hospitalization by community.<sup>a</sup>

### Evidence of Effectiveness

- Between 2006 and 2009, Massachusetts OEND programs trained 2,912 potential bystanders resulting in 327 reported rescues.<sup>a</sup>
- Communities with low and high rates of OEND implementation, compared with no implementation, were associated with lower rates of opioid-related overdose deaths.<sup>a</sup>
- No significant differences found in rates of opioid-related emergency department visits or hospital admissions among communities with low or high OEND implementation.<sup>a</sup>
  - \* The interplay of OEND program's ability to reduce overdoses and bystanders increased use of emergency medical system may be why no association was found.

### References

- Walley AY, Xuan Z, Hackman HH, et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: Interrupted time series analysis. *BMJ.* 2013;346:f174.

