



Opioid Overdose: What the Data Tell Us About Who is at Risk

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Exploring Naloxone Uptake and Use
Public Meeting

Christopher M. Jones PharmD, MPH

Senior Advisor

Office of Public Health Strategy and Analysis

Office of the Commissioner

Food and Drug Administration

Overview

- Background
- Patients receiving prescription opioids
- Potential data sources to identify patients for naloxone co-prescription



BACKGROUND

Who Should Receive Naloxone

Patient Characteristics	Naloxone Provision
People with prior history of overdose	✓
People receiving medical care for an opioid overdose	✓
People who inject drugs	✓
People with opioid use disorder	✓
People released from criminal justice system with history of opioid abuse	✓
Patients receiving opioids for pain	✓ / ?

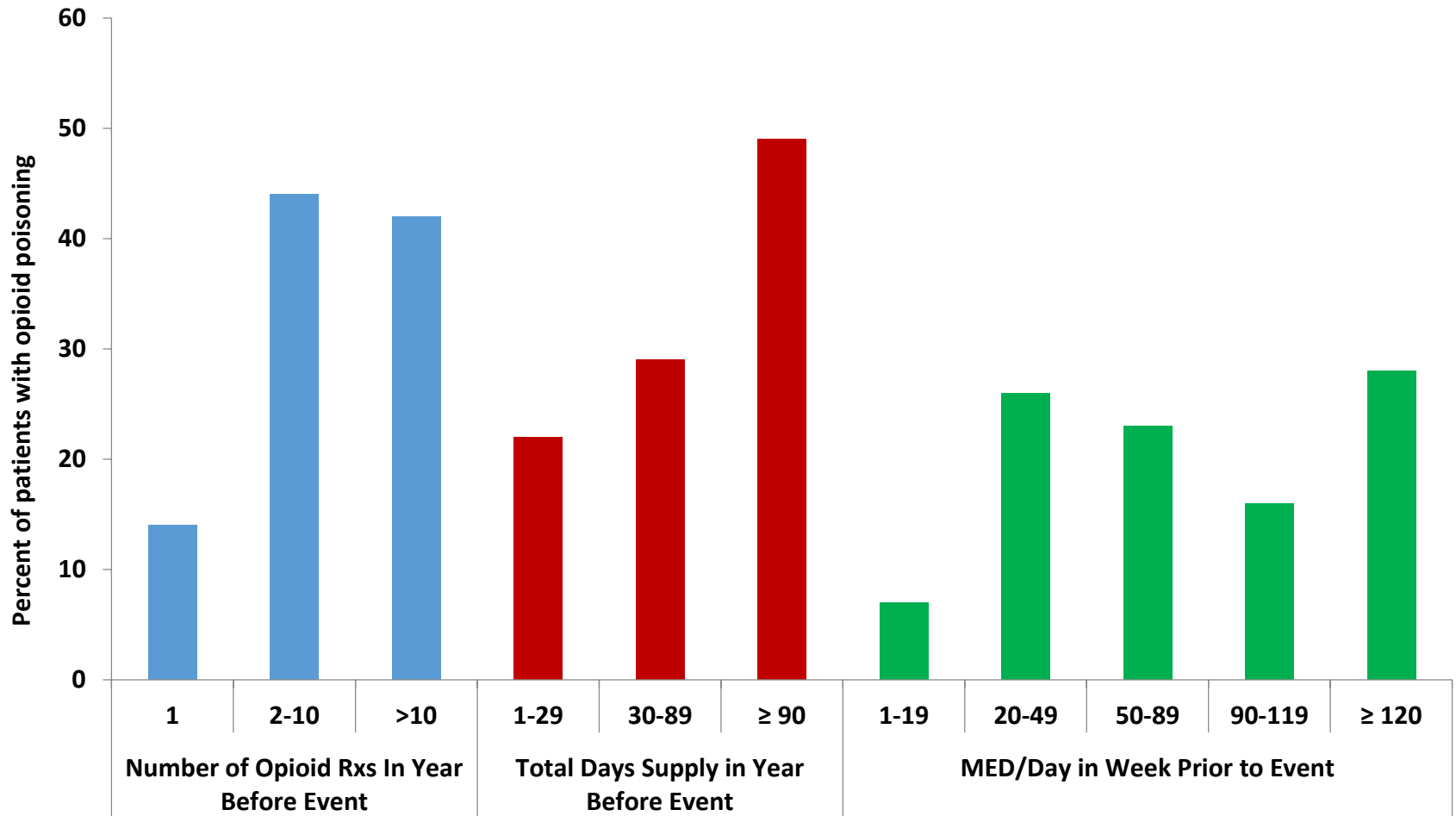


PATIENTS RECEIVING PRESCRIPTION OPIOIDS

Patients Receiving Prescription Opioids

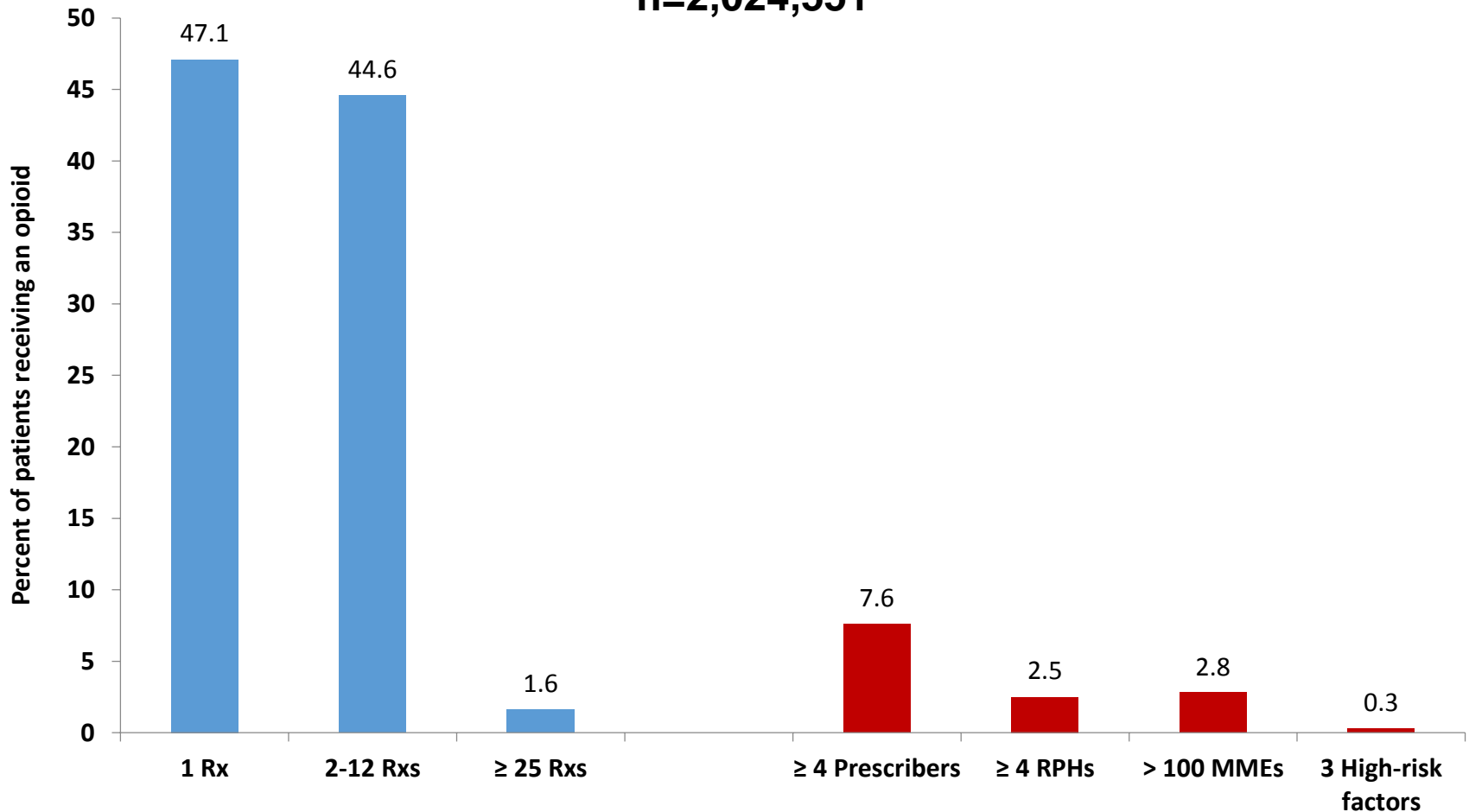
- Should all patients be offered naloxone?
- What do the data tell us about who is at risk for an overdose?

Prescription History Among People with Opioid Poisoning



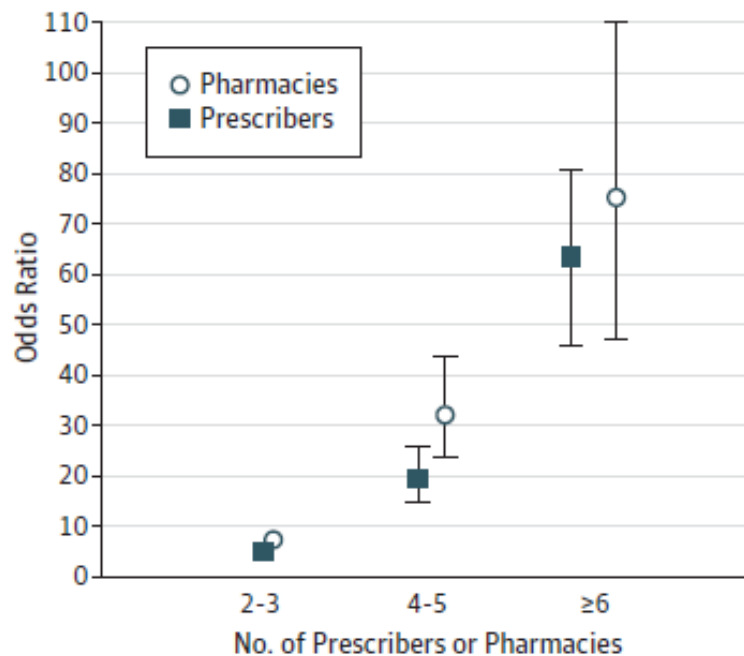
Past Year Prescription Behaviors Among Opioid Overdose Deaths

n=2,024,551



Opioid Overdose Deaths and Relationship with Multiple Prescribers and Pharmacies

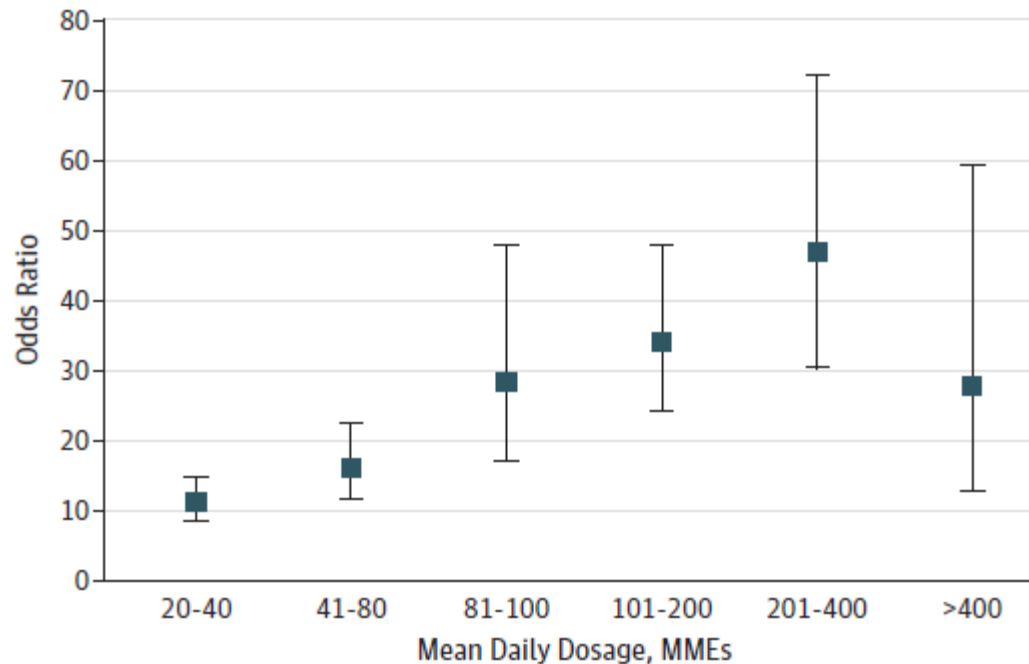
Figure 2. Association of Number of Prescribers and Pharmacies With Risk of Unintentional Opioid Analgesic-Related Overdose Death



Reference was patients receiving opioids from 1 pharmacy or prescriber.
Error bars indicate 95% CIs.

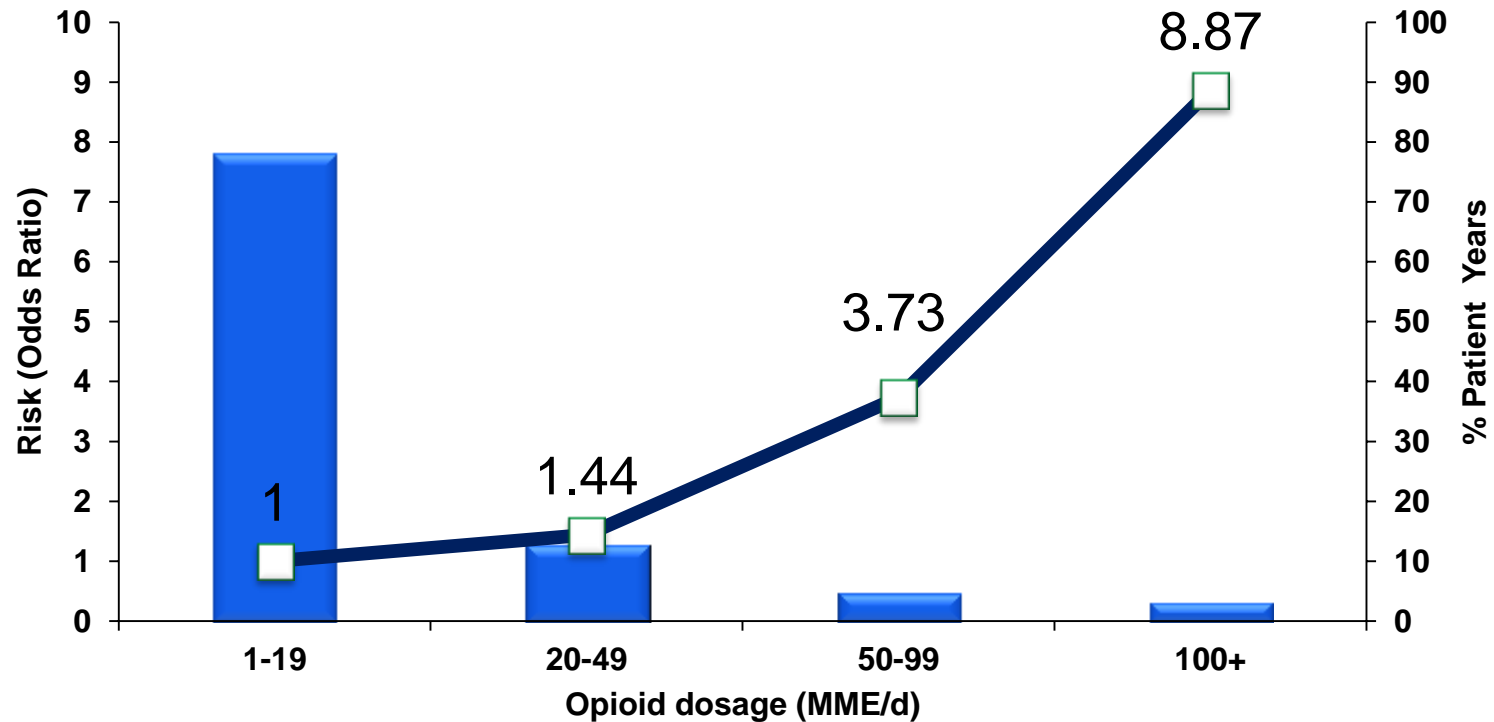
Opioid Overdose and Relationship with Opioid Dose

Figure 3. Association of Mean Daily Dosage of Opioid Analgesics With Risk of Unintentional Opioid-Related Overdose Death

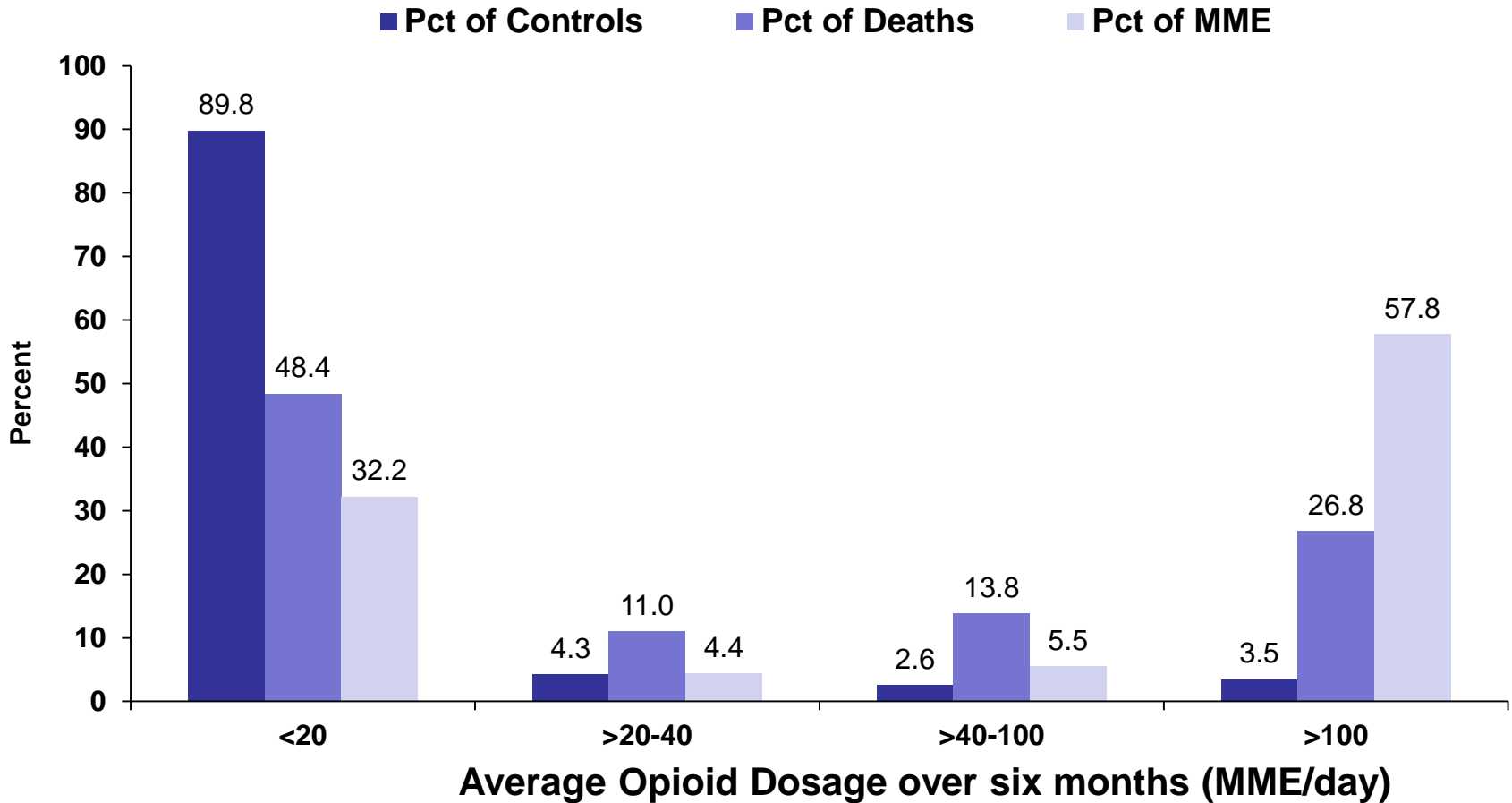


Reference was patients receiving a mean of less than 20 morphine milligram equivalents (MMEs) per year. Error bars indicate 95% CIs.

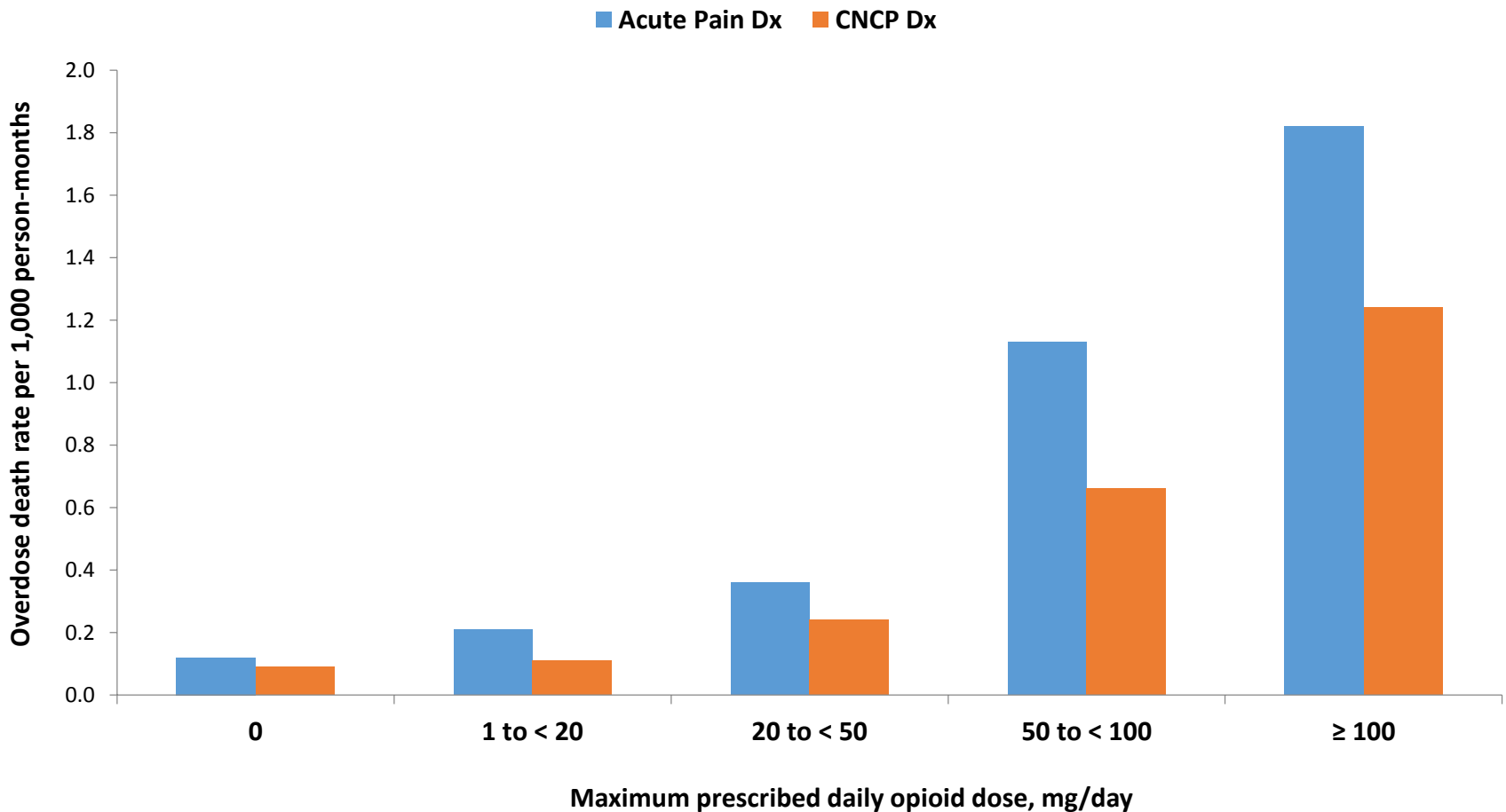
Opioid Overdose and Relationship with Opioid Dose



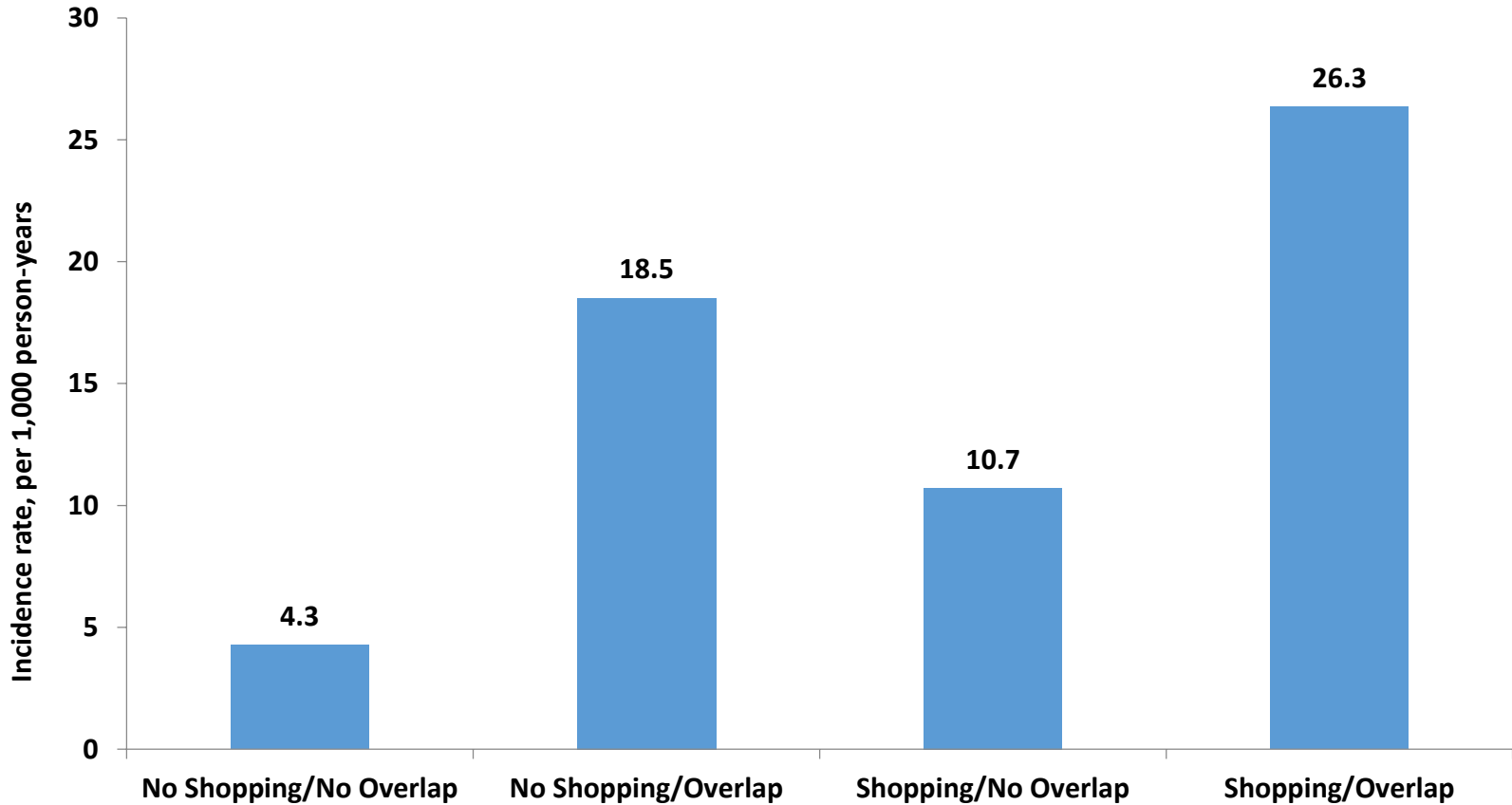
Opioid Overdose and Relationship with Opioid Dose



Opioid Overdose and Relationship with Opioid Dose



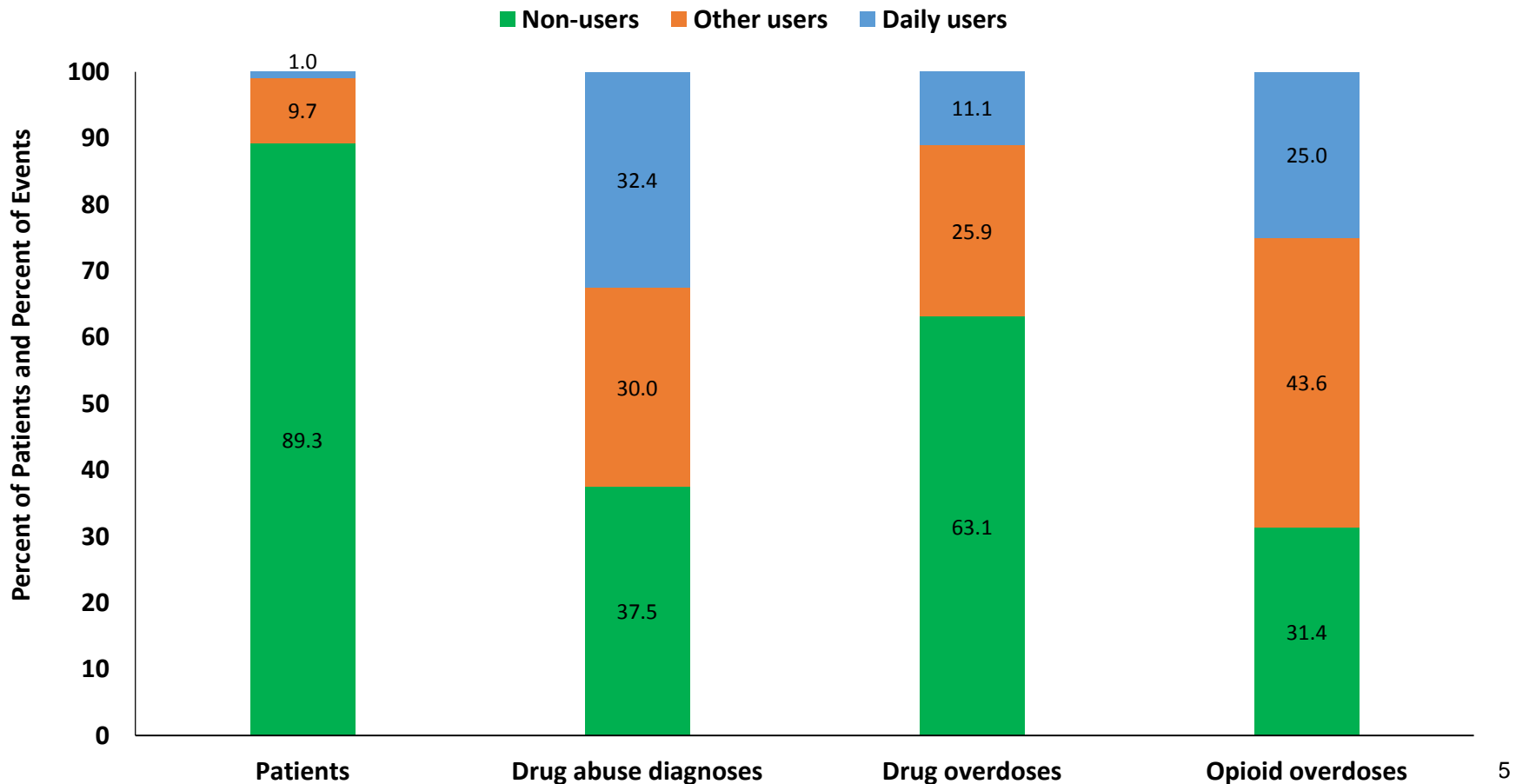
Opioid Overdose Incidence Rate by Prescription History



-Overlapping prescriptions defined as 2 prescriptions of the same drug type that overlapped by 25% of the days prescribed, with the initial dispensed prescription having a supply time of 5 days or longer.

-Pharmacy shopping defined as ≥ 4 pharmacies in a 90 day setting.

Small Percentage of Patients Account for Greatest Risk



Additional Considerations for People Receiving Prescription Opioids

- Concurrent benzodiazepine or other sedative/hypnotic prescription
- History of non-opioid substance use disorder
- History of mental health disorder
- Underlying respiratory conditions
- Family member/co-habitant at-risk for opioid overdose



POTENTIAL DATA SOURCES TO IDENTIFY PATIENTS FOR NALOXONE CO-PRESCRIPTION

Data sources

- PDMPs
- Insurer/PBM claims data
- EHR systems
- ED data systems

Conclusions

- There is not yet consensus on which patients receiving prescription opioids should be offered naloxone
- The available data provide a foundation for developing a risk-based approach to naloxone co-prescription
 - Common factors among overdose decedents include:
 - High opioid dose, longer duration of treatment, and large supply; concomitant benzodiazepine Rx, multiple providers/pharmacies, history of SUD/MH, underlying respiratory conditions
- Some advocate a strategy of offering naloxone to all patients receiving prescription opioids
- Additional research is needed to identify most effective strategy for naloxone co-prescription



Questions?

Christopher.M.Jones@fda.hhs.gov

The findings in this presentation do not represent the official position of the US Food and Drug Administration, the Department of Health and Human Services, or the U.S. Government