



# **RX FOR AN EPIDEMIC**

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## **PRESCRIPTION DRUG ABUSE IN AMERICA**

*"I think the public doesn't fully appreciate yet the scope of the problem..."*

*President Obama*

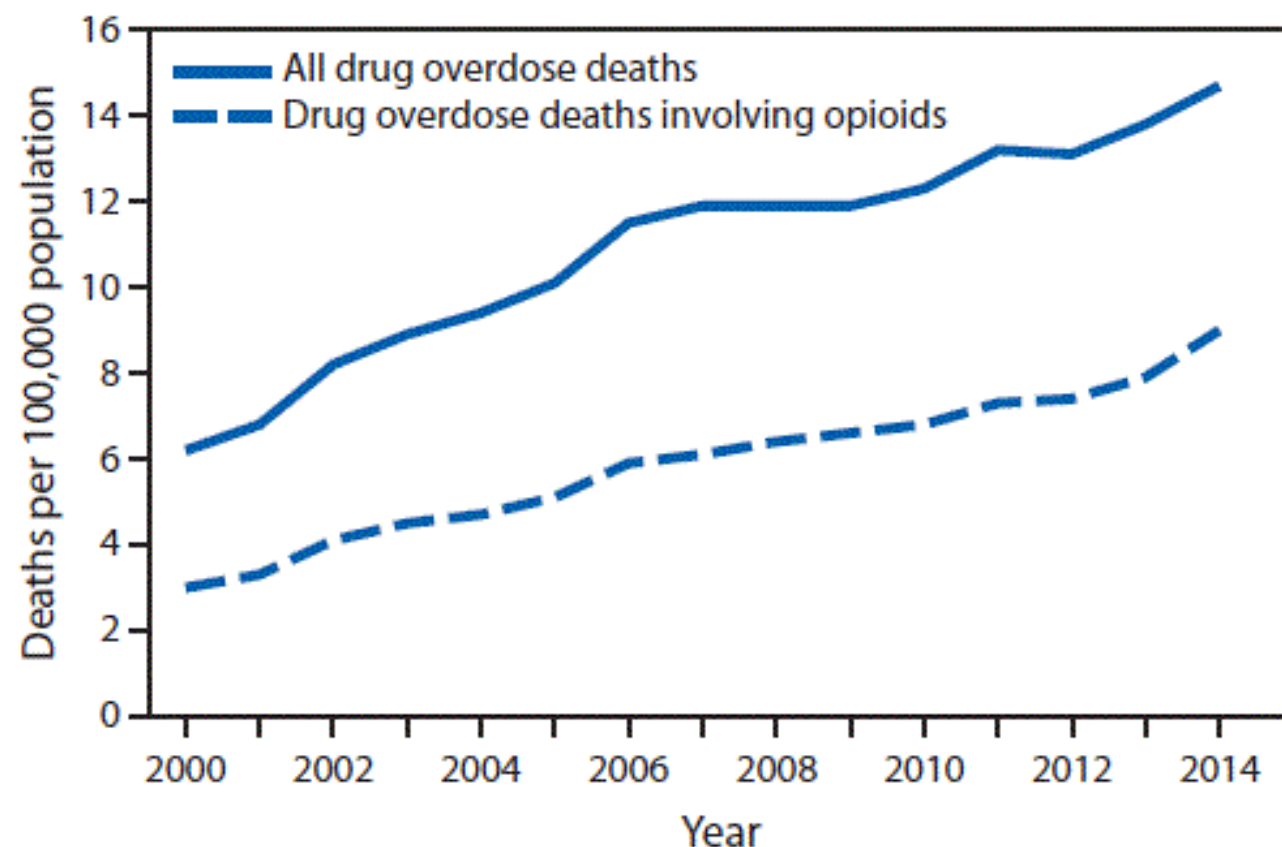
*29 March 2016*

*National Rx Summit on Drug Abuse & Heroin*

# The Sobering Truth

*In **2014** more Americans died (**47,055**) from drug overdoses than any year on record.*

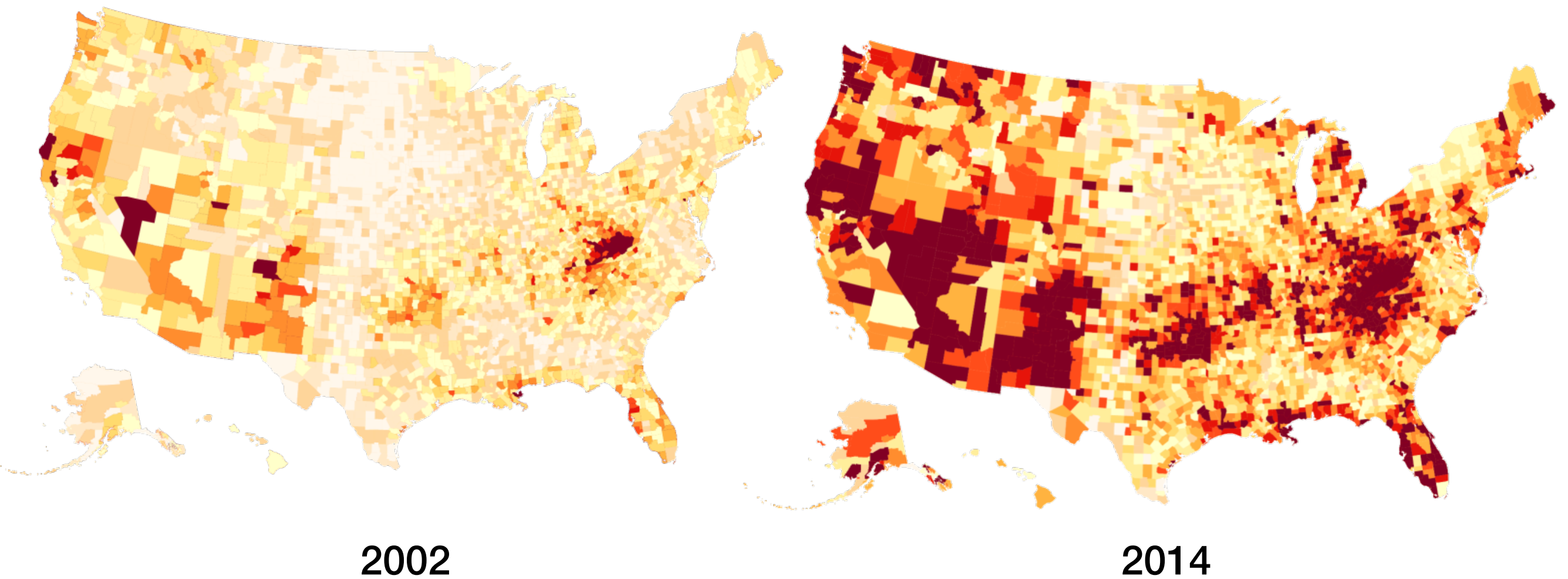
***Over 61%** of overdose deaths involved some sort of opioid, prescription pain killer, or heroin.*



Source: [Centers for Disease Control and Prevention, National Vital Statistics System](#)

\* Drug overdose deaths are identified using International Classification of Diseases, Tenth Revision underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14.

# U.S. Drug Deaths by County



Interactive D3.js visualization available at <http://jasonsyp.github.io>

# Profile of Addiction

## Analysis of the 2013-2014 National Survey on Drug Use and Health (NSDUH)

Q: “Have you ever used prescription drug non-medically?”

NO: 68,519

YES: 14,106

Who are the Yes respondents?

# Profile of Addiction

*Applied **tree-based ensemble methods** to extract **feature importance***

Feature	Expected Value
<b>Age:</b>	19
<b>Gender:</b>	M
<b>Race:</b>	White
<b>Education:</b>	Some College
<b>Income:</b>	\$20,000 - \$49,999
<b>General Health Status:</b>	Very Good
<b>Religion Important:</b>	Agree   Strongly Agree
<b>County:</b>	Large Metro Area

*Data from the 2013 and 2014 National Survey on Drug Use and Health*

# Profile of Addiction

Source of Prescription Drugs	
1	Got from friend/relative for free
2	Got from one doctor
3	Bought from friend/relative
4	Took from friend/relative without asking
5	Bought from drug dealer

*Data from the 2013 and 2014 National Survey on Drug Use and Health*

# More Needs to Be Done

**Policy | Guidelines | Monitoring** are all steps in the right direction

Enable collaboration through **Open | Current Data**

Emphasis on **Prevention | Treatment**

## Resources:

Substance Abuse and Mental Health Services Administration:

<http://www.samhsa.gov/>

CDC Opioid Overdose Information:

<http://www.cdc.gov/drugoverdose/>

The Medicine Abuse Project:

<http://medicineabuseproject.org/>



Thank  
You

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