

RADARS® SYSTEM 10th ANNUAL SCIENTIFIC MEETING



Diverging Perspectives of Prescription Opioid Abuse

May 6, 2016

Welcome and RADARS[®] System 2015 Data Updates

**Richard C. Dart, MD, PhD
Executive Director, RADARS[®] System
Denver Health and Hospital Authority**



RADARS System

10th Annual Scientific Meeting

95 Registrants

– Government	30
– Academic	18
– Industry/Pharma	30
– Other	17

International Pre-Symposium

Prescription Drug Misuse – A Global Crisis?



**Judging by the size and frequency of the droppings,
I'd say we've found the campaign trail.**

Mosaic Surveillance of Prescription Drug Abuse

2015

Acute Health Events

50 Poison centers
48 states
565,284 opioid cases
609,745 opioid mentions

Drug Transactions

Criminal Justice
635 agencies; 50 states
>199,000 cases with
164,451 opioid mentions

Entering Treatment

Opioid Tx Program
114 programs; 37 states
76,770 cases
217,448 Rx opioid mentions

Entering Treatment

SKIP
288 practices, 49 states
18,377 cases
96,898 Rx opioid mentions

New Initiates

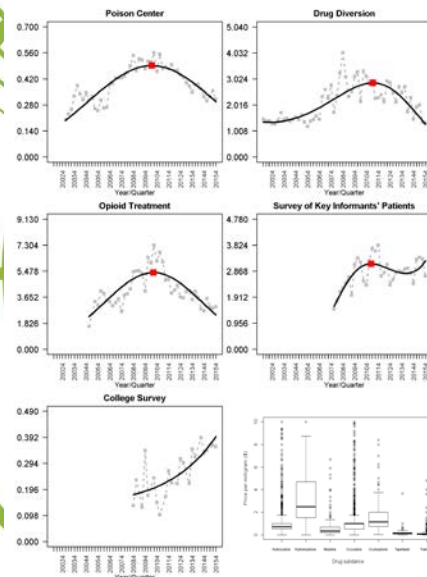
College Survey
50 states
38,865 respondents,
19,284 Rx opioid mentions

Illicit Market Price

StreetRx.com
Users/Buyers, 50 states
56,371 price entries for
an opioid

Web Monitoring

> 150 million sites monitored
> 159,000 posts coded for analysis



RADARS System

Scientific Advisory Board

Principal Investigators

- Theodore J. Cicero, PhD
Washington University in St. Louis



- Richard C. Dart, MD, PhD
Denver Health and Hospital Authority

- Steven P. Kurtz, PhD
Nova Southeastern University



- Mark W. Parrino, MPA
American Association for the Treatment of Opioid Dependence



Law Enforcement

- John J. Burke
Pharmaceutical Diversion Education, Inc.



Substance Abuse Experts

- Herbert D. Kleber, MD
Columbia University



- Sidney Schnoll, MD, PhD
PinneyAssociates



- George E. Woody, MD
University of Pennsylvania



Epidemiology/Biostatistics

- Nabarun Dasgupta, MPH, PhD
Chief Product Officer – Epidemico, Inc.



2015 – 2016 in the Opioid World

- General trends in prescription opioid continue downward
- Increasing deaths from prescription opioids -ish
- Heroin continues to increase
- FDA Advisory Committees
 - Abuse deterrent formulations
 - ER/LA REMS
- Fentanyl bursts on the US scene

General trends in prescription opioid abuse and death continue downward

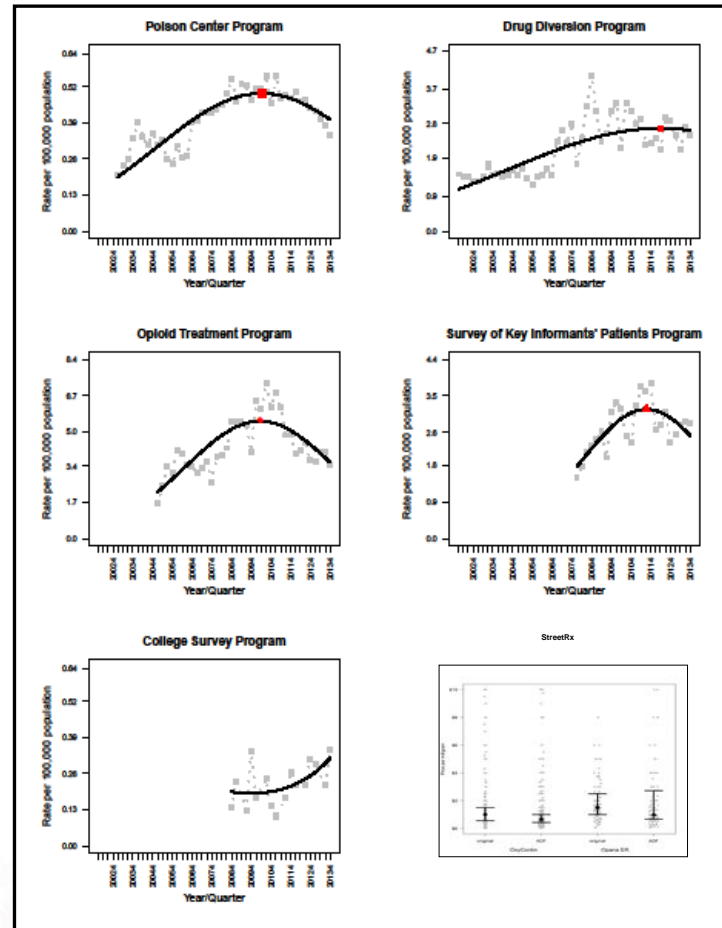
US Prescription Drug Abuse on the Rise

Yahoo News
November 24, 2015



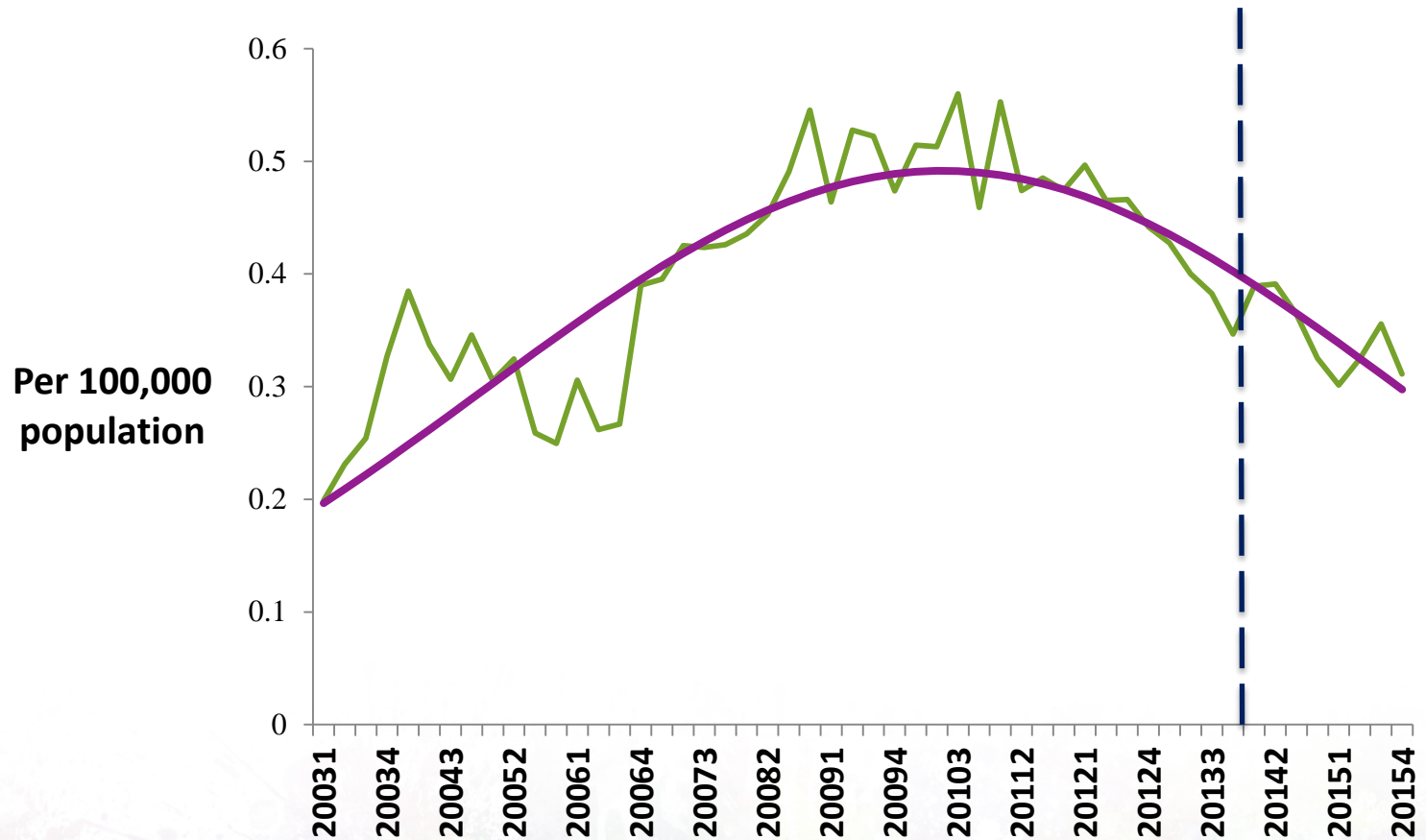
Commuters in front of a neighborhood pharmacy in Brooklyn, New York City. (Yahoo News/Siemond Chan)

General trends in prescription opioid abuse and death continue downward

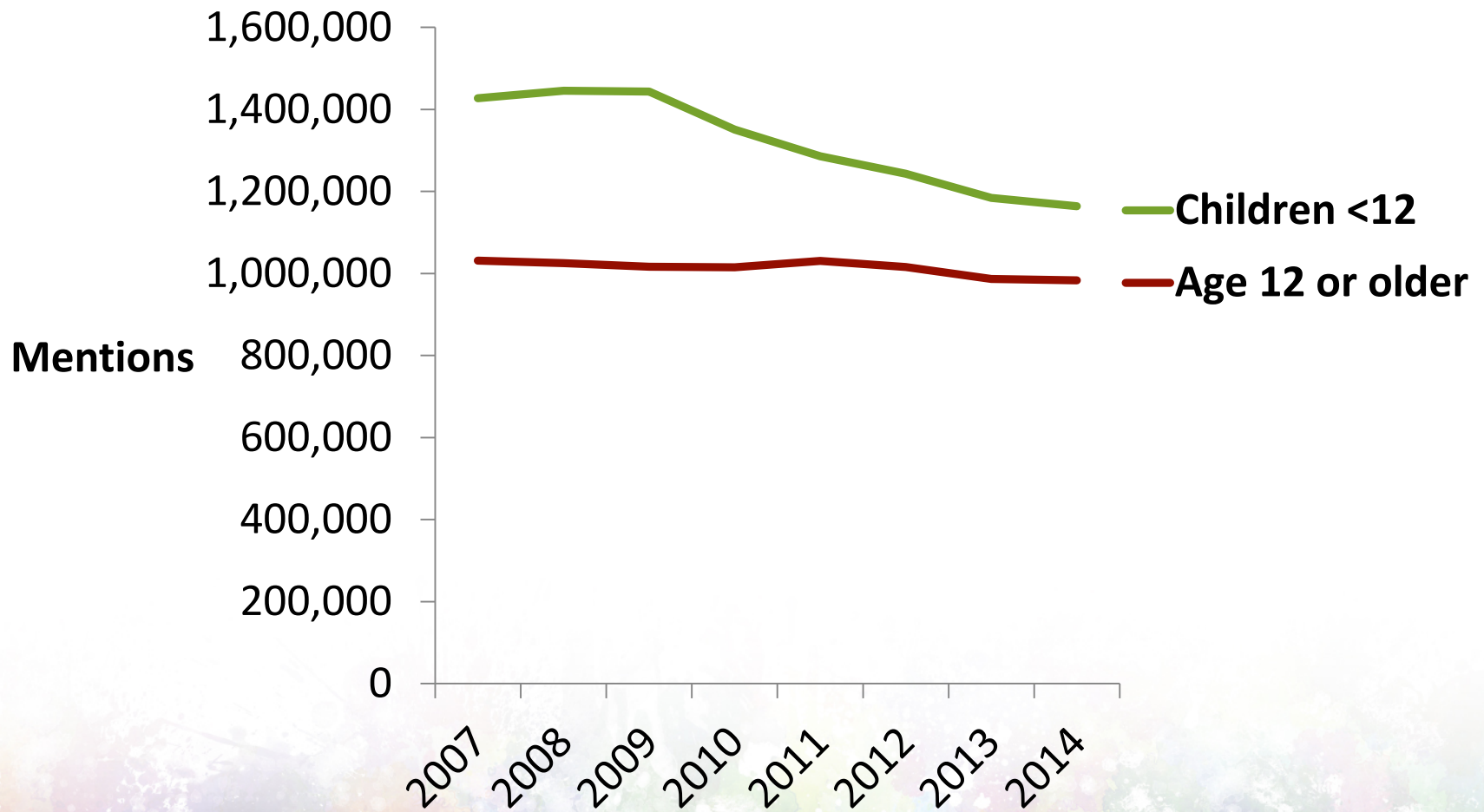


**Trends in Opioid Analgesic Abuse and Mortality in the United States.
N Engl J Med 2015;372:241-8**

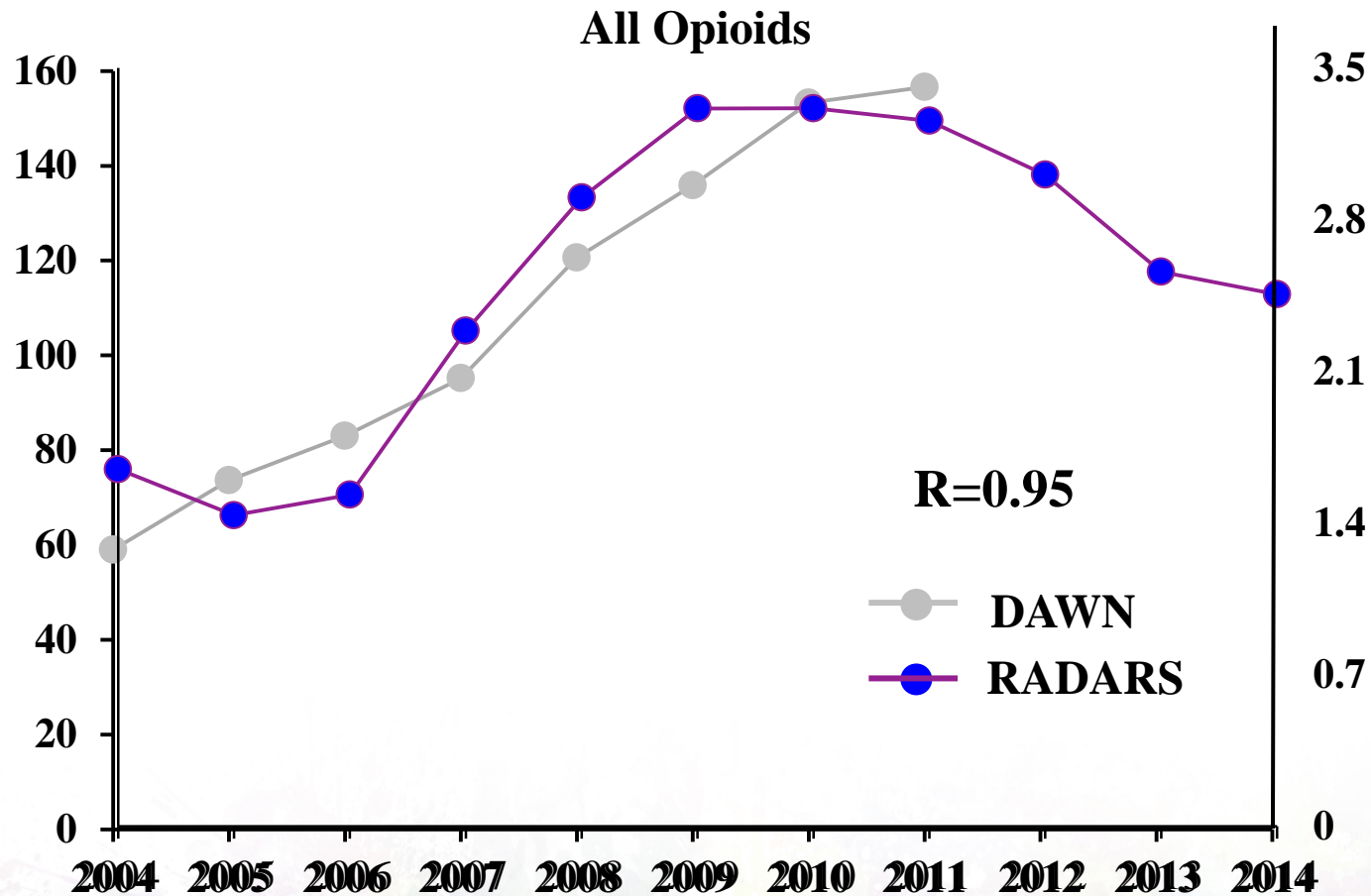
RADARS Poison Center Program All Opioids, Intentional Abuse



National Poison Data System (NPDS) Exposures (2007-2014)

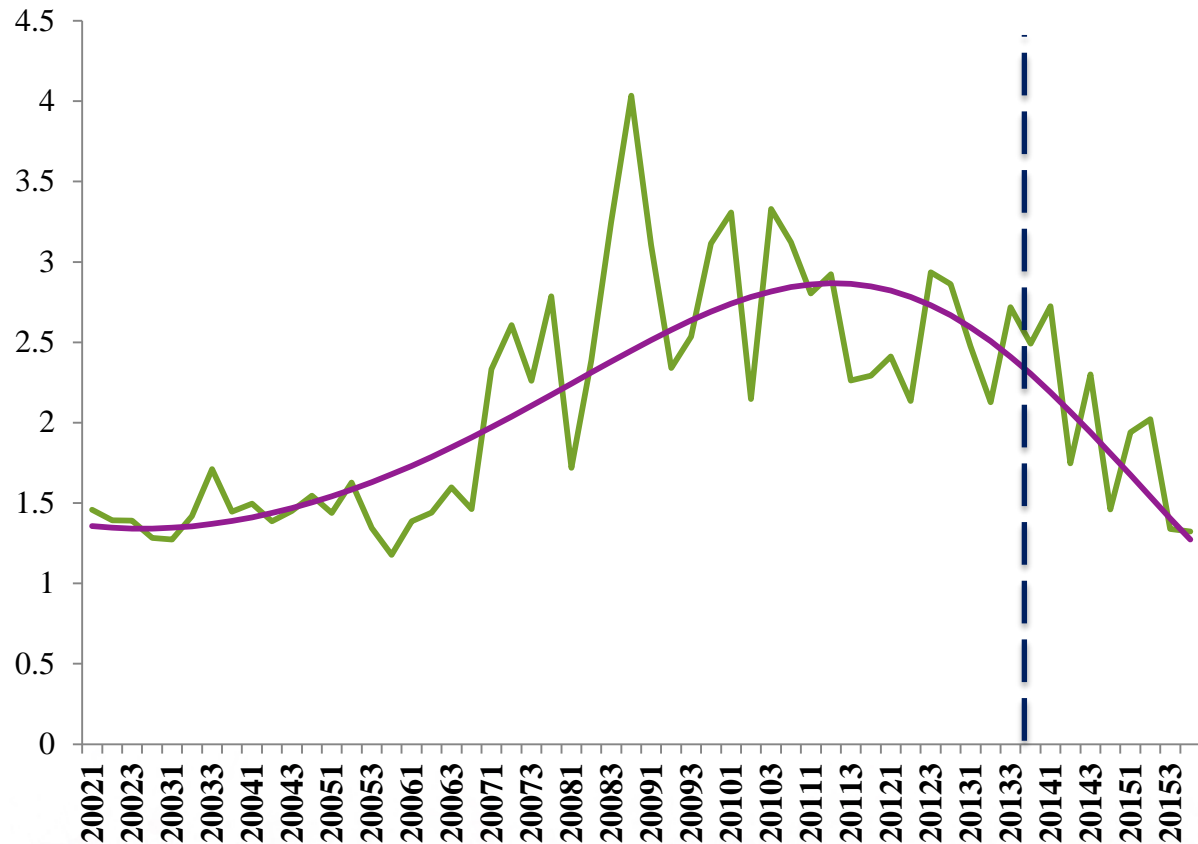


Strong Correlation of Prescription Opioid Abuse: Poison Centers and Drug Abuse Warning Network (DAWN)



RADARS Drug Diversion Program All Opioids, Intentional Abuse

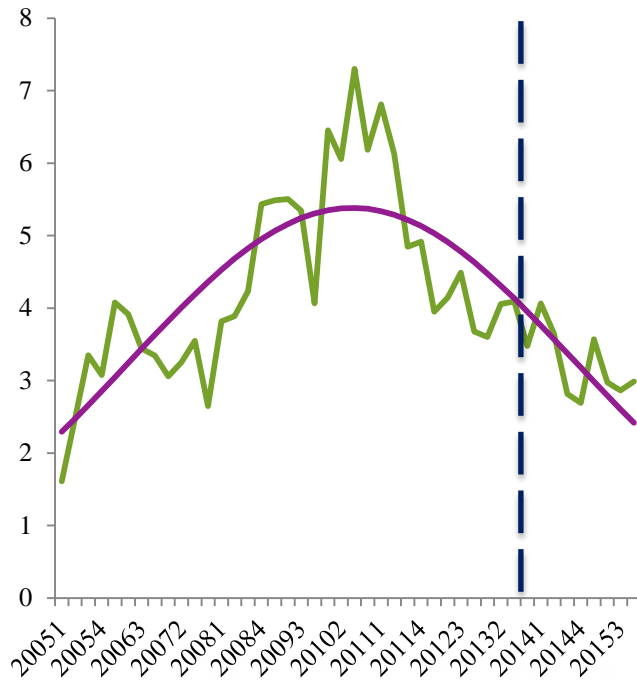
Per 100,000
population



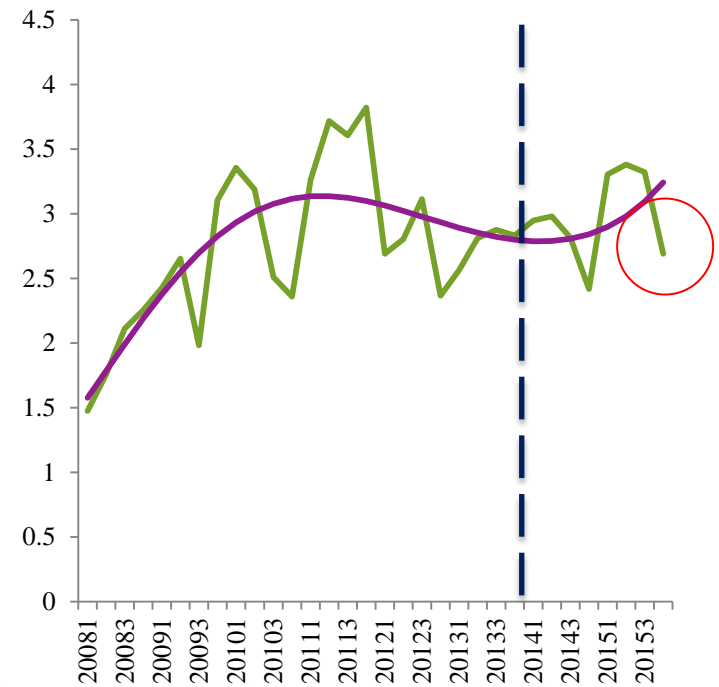
RADARS Treatment Programs

All Opioids, Intentional Abuse

Opioid Treatment Program

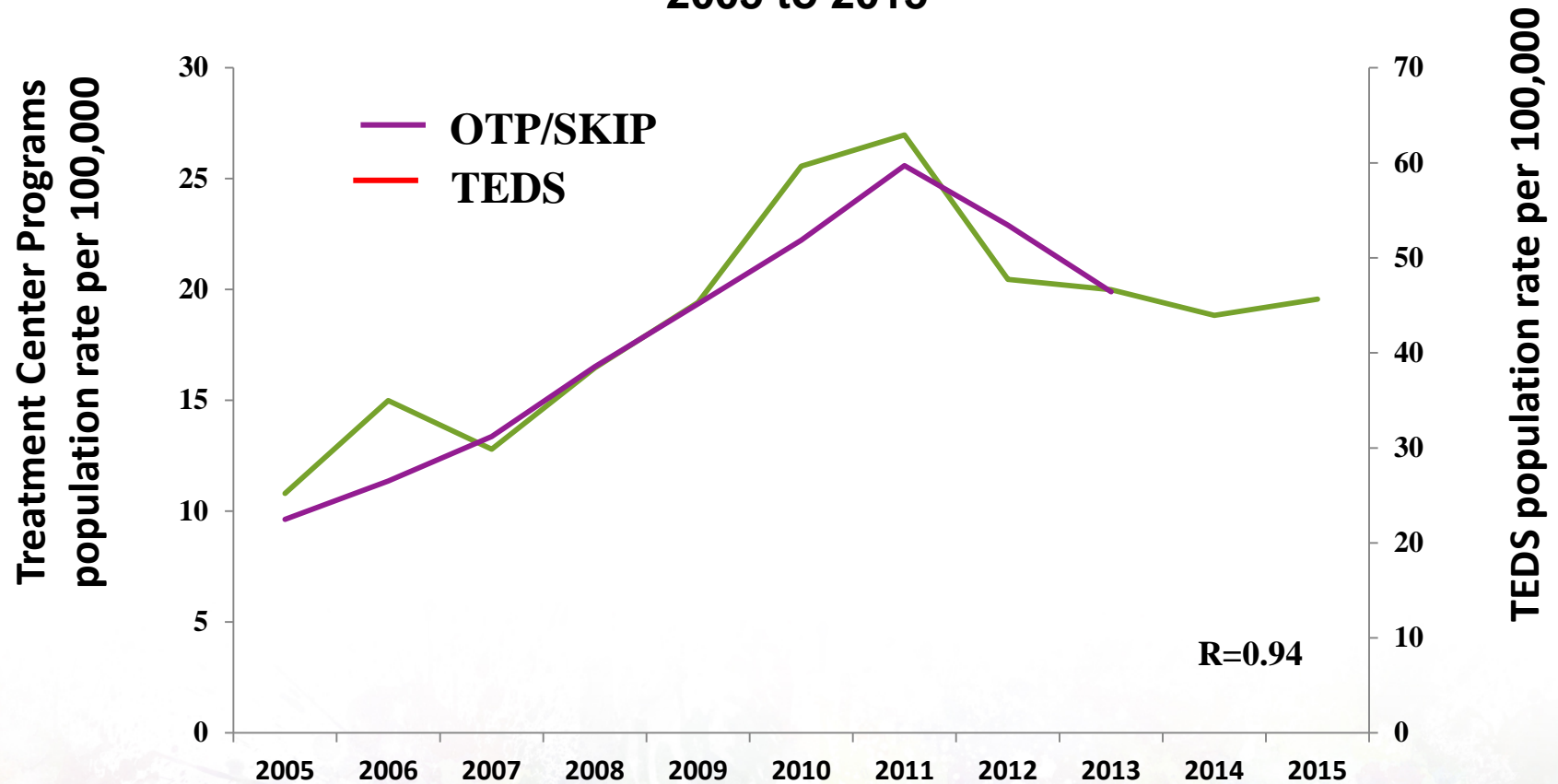


Survey of Key Informant Patients



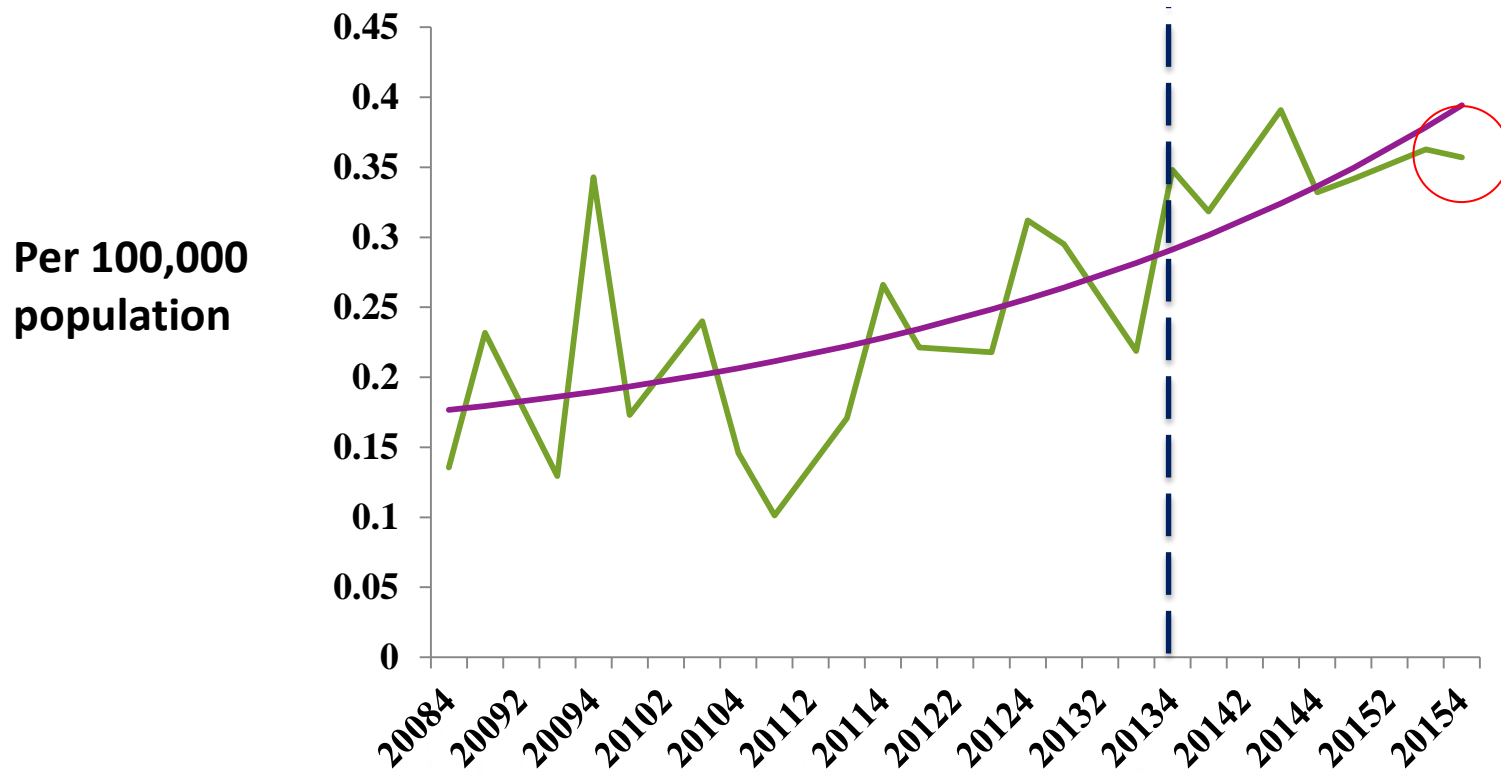
Treatment Episode Data Set (TEDS) shows decrease abuse beginning in 2011

Individuals Entering Treatment for Prescription opioids 2005 to 2015



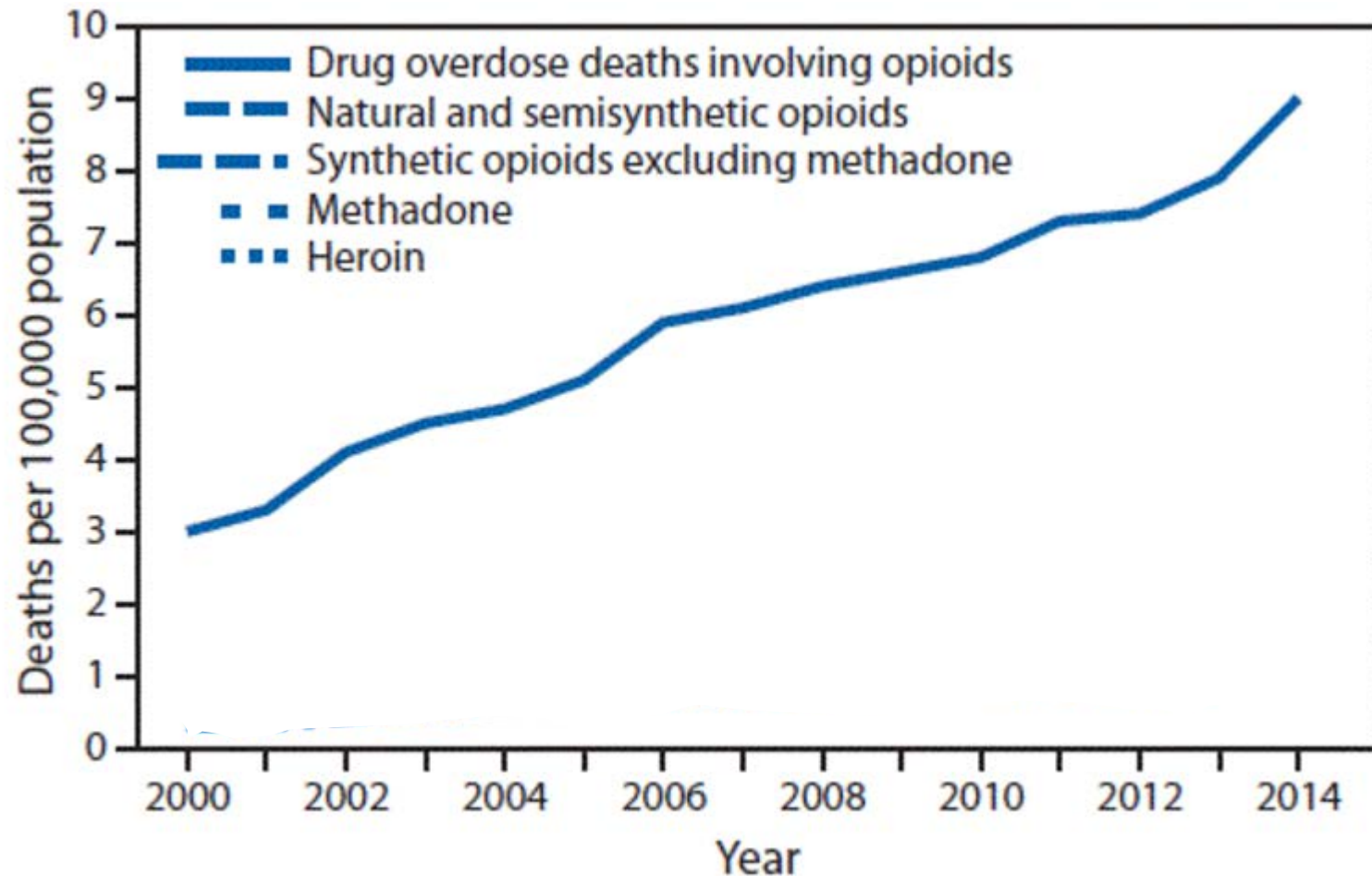
RADARS College Survey

All Opioids, Nonmedical Use



Increasing deaths from prescription opioids - ish

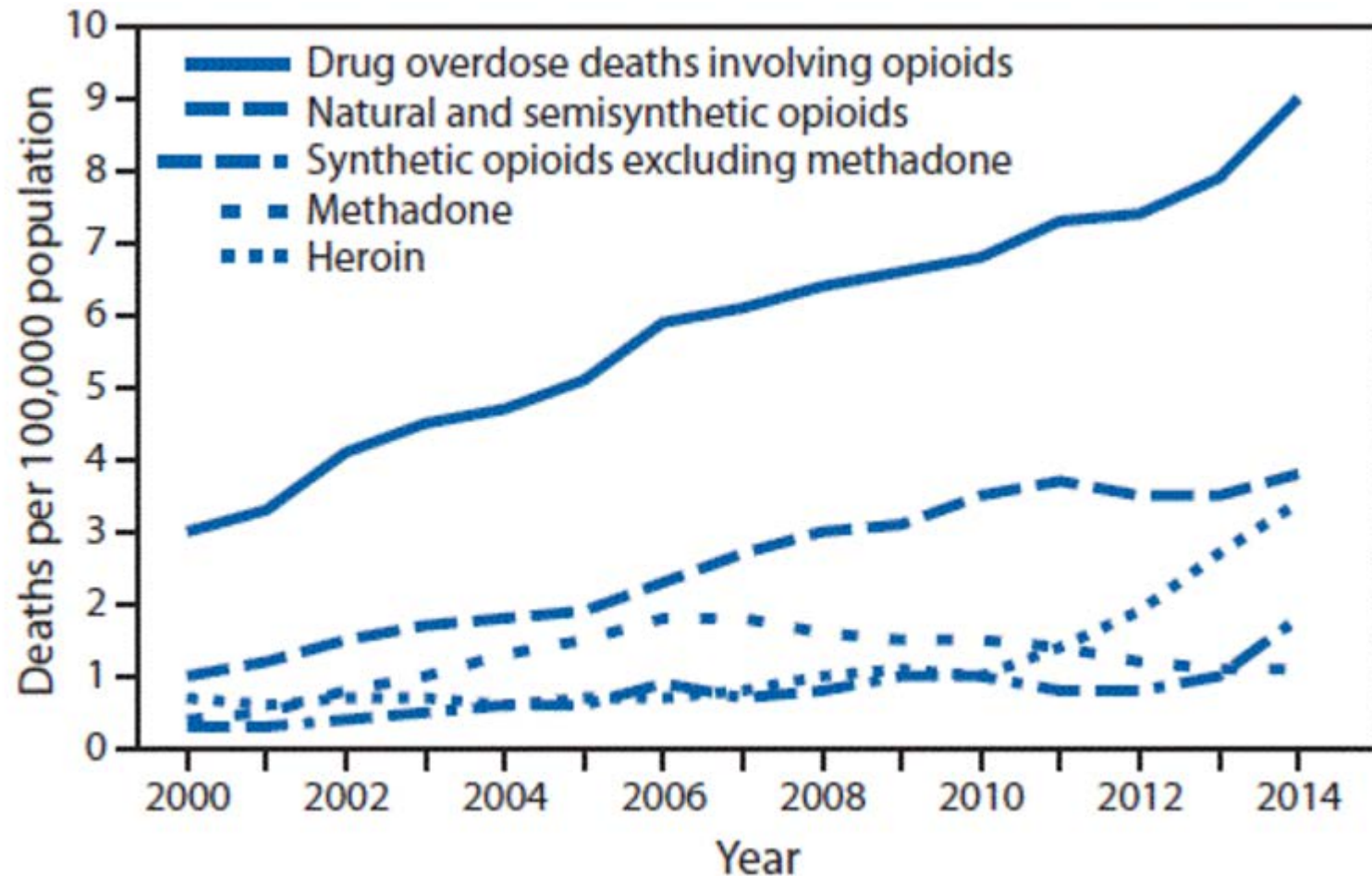
Drug overdose deaths involving opioids, by type of opioid - US, 2000–2014



Source: National Vital Statistics System, Mortality file.

Increasing deaths from prescription opioids - ish

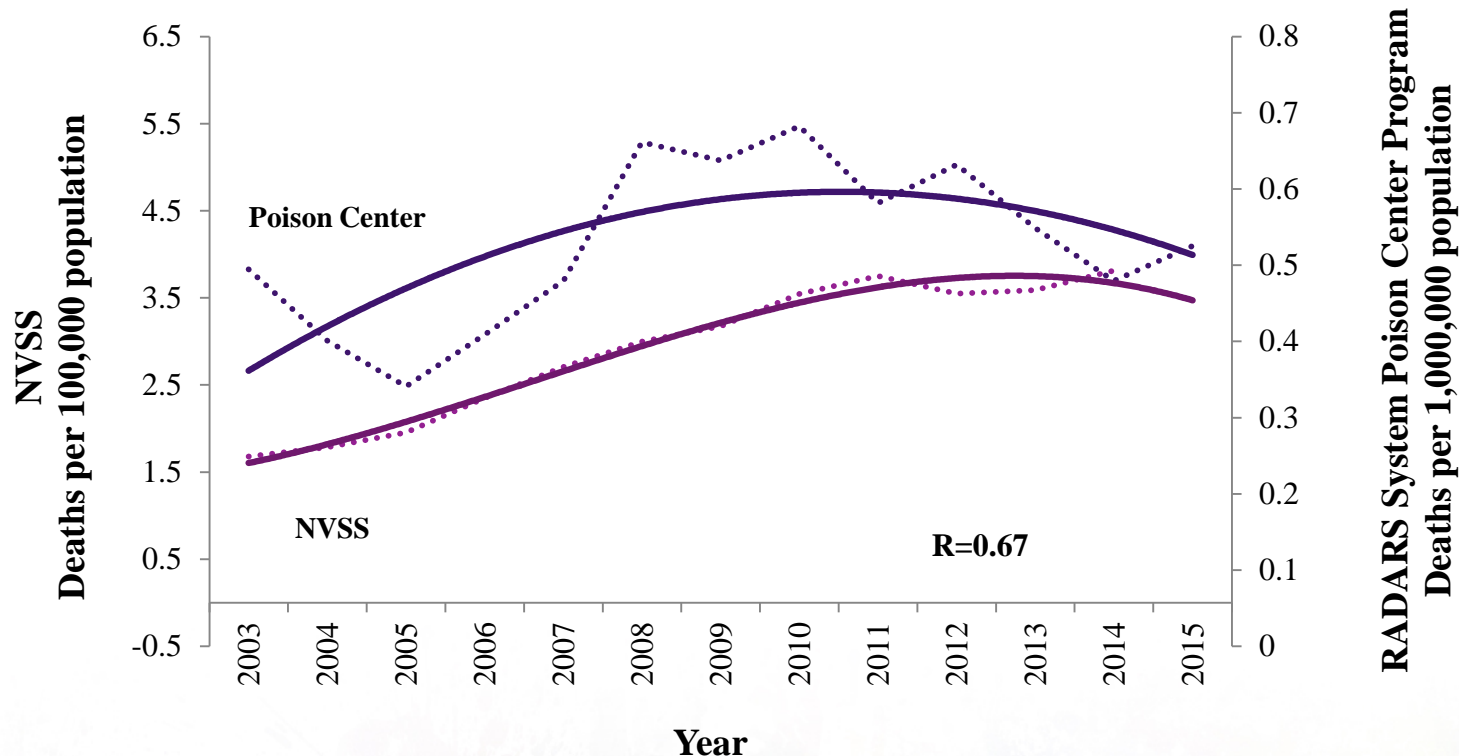
Drug overdose deaths involving opioids, by type of opioid - US, 2000–2014



Source: National Vital Statistics System, Mortality file.

Deaths from Opioid Analgesics are Decreasing

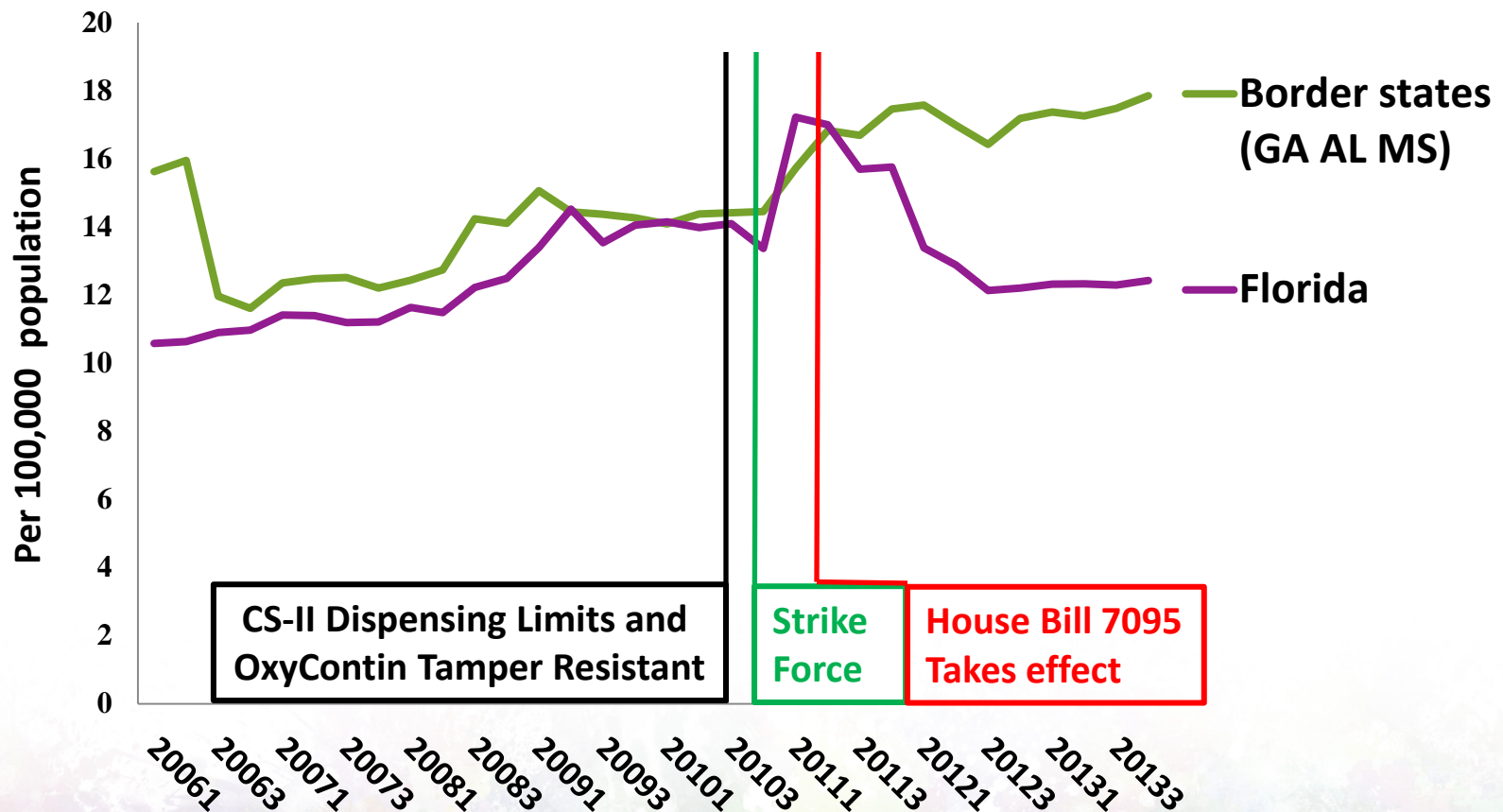
Natural & Semisynthetic Opioids, 2003 to 2015



**T40.2 Natural and semisynthetic opioids: oxycodone, morphine, hydromorphone, oxymorphone, others

**RADARS System opioids: oxycodone, hydrocodone, morphine, hydromorphone, and oxymorphone.
Deaths include cases followed to a known medical outcome whose death was related to the reported

Florida Interventions Detected by RADARS Poison Center Program, 2006-2013



Heroin Abuse Continues to Increase

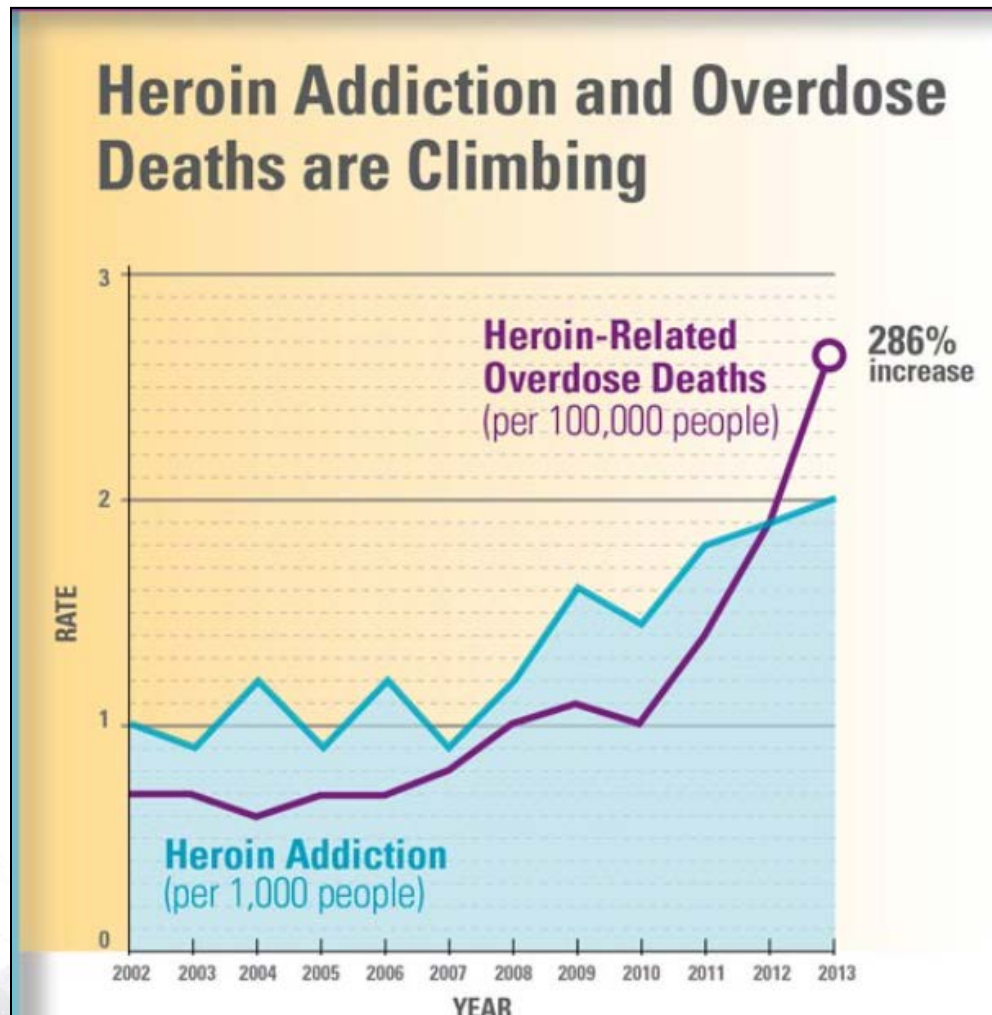
DRUGS

Steph Curry becomes face of new brand: Philadelphia heroin

Published April 30, 2016 · FoxNews.com

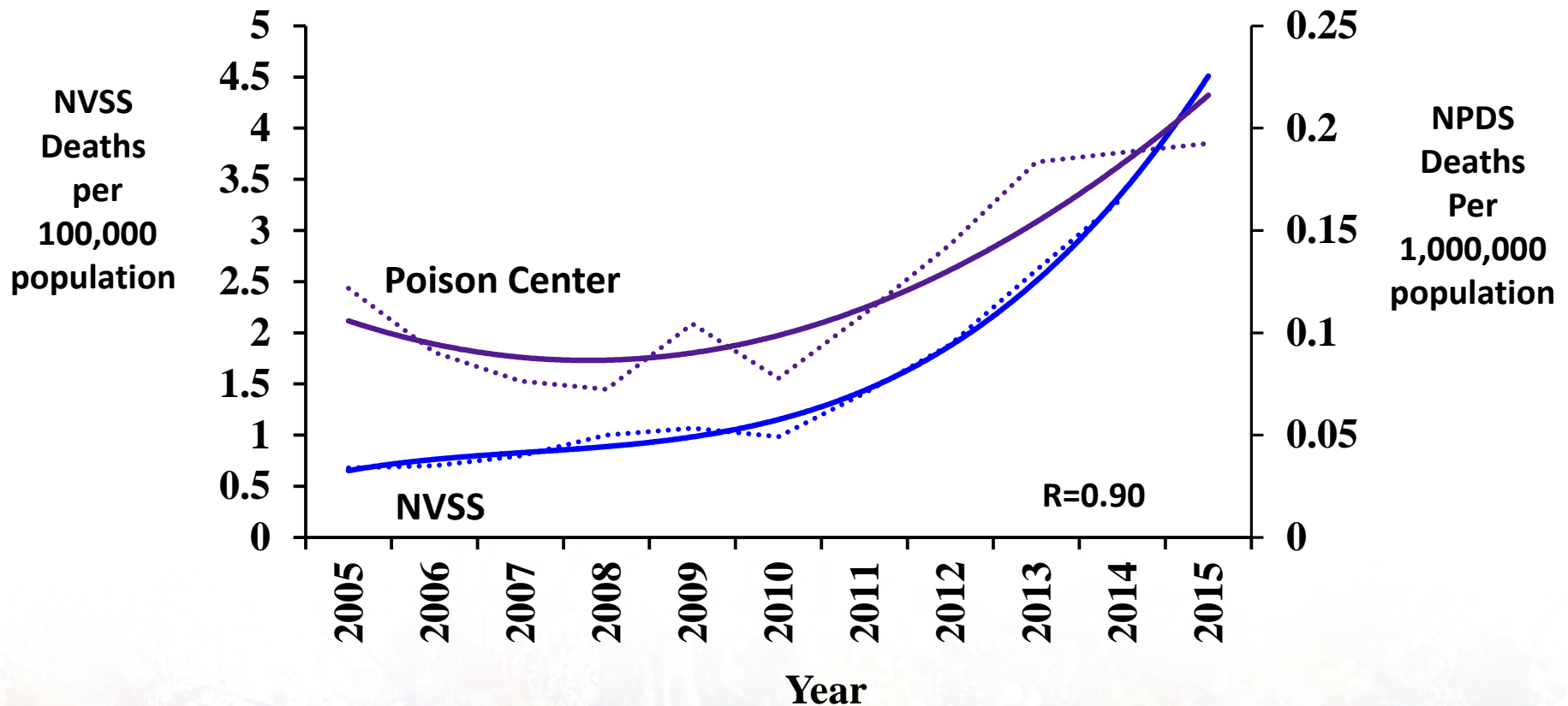


Heroin Mortality



Heroin Mortality: Correlation of Poison Centers and National Vital Statistics System is Strong

Heroin Deaths, 2005 to 2015



*T40.1 (heroin) was the multiple cause-of-death code that was used.

Fentanyl bursts on the US scene

SECTIONS

HOME SEARCH

The New York Times

1 of 10 articles read

SUBSCRIBE NOW

LOG IN



U.S.

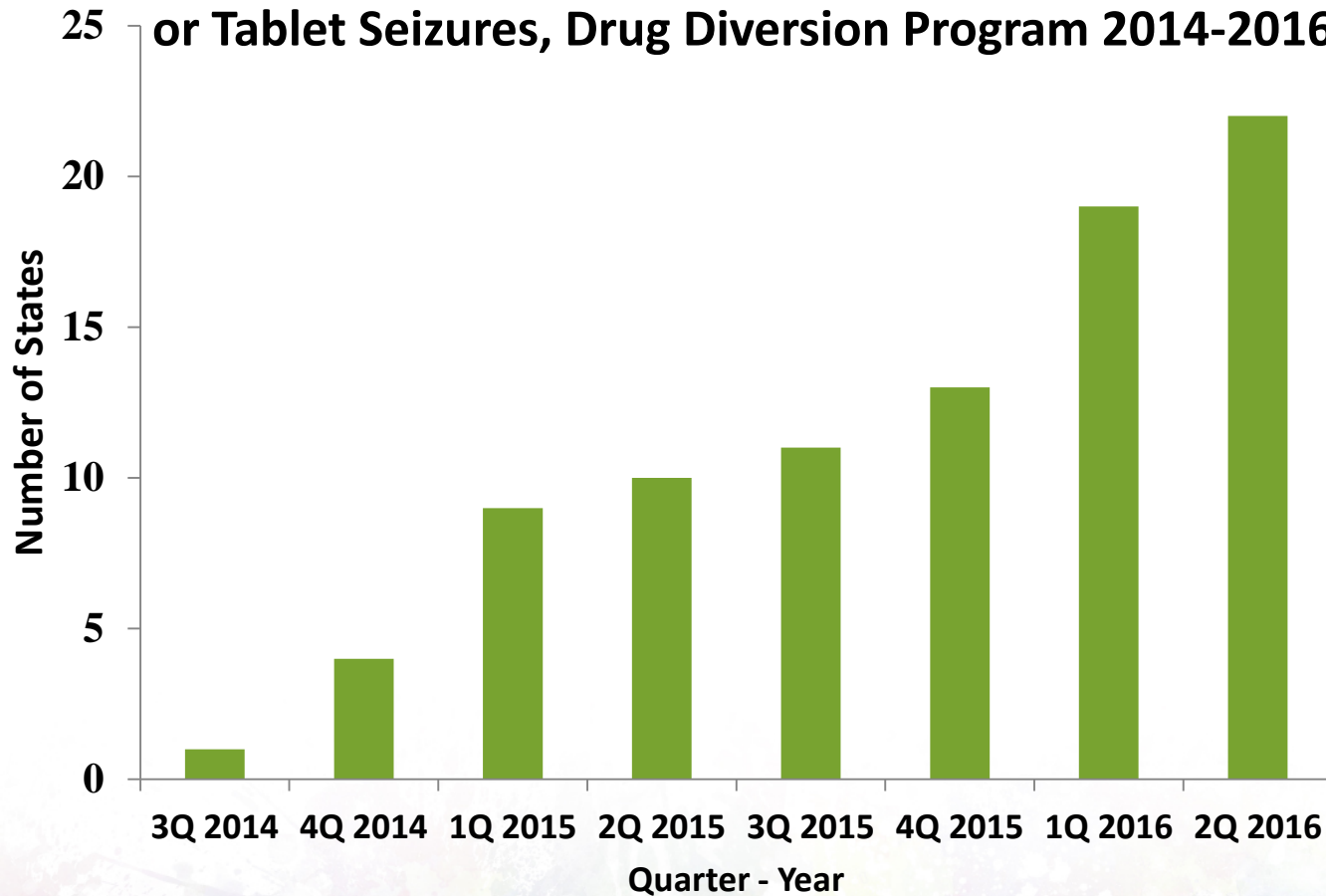
Heroin Epidemic Is Yielding to a Deadlier Cousin: Fentanyl

By KATHARINE Q. SEELYE MARCH 25, 2016



Fentanyl bursts on the US scene

Number of States Spontaneously Reporting Fentanyl in Heroin or Tablet Seizures, Drug Diversion Program 2014-2016



2016 Program

- **Prescription Opioid and Heroin Abuse in the United States**
 - Christopher M. Jones, PharmD, MPH
 - Director, Division of Science Policy
 - Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services
- **Setting the Stage: Are Abuse Deterrent Formulations Ready for Prime Time?**
 - Lewis S. Nelson, MD
 - Professor, Ronald O. Perelman Department of Emergency Medicine, New York University School of Medicine
 - Director, Fellowship in Medical Toxicology, New York City Poison Control Center

2016 Program

- **NSDUH Trends in Nonmedical Use of Prescription Opioids**
 - **Scott P. Novak, PhD**
 - Senior Developmental Epidemiologist, RTI International
- **Understanding Drug Overdose Mortality using the National Vital Statistics Program**
 - **Margaret Warner, PhD**
 - Health Scientist, National Center for Health Statistics (CDC)
- **The Political Factors Affecting the Abuse Deterrent Formulations**
 - **Dan Cohen, MALS**
 - Chair, Abuse Deterrent Coalition

2016 Program

- **Impact of Abuse Deterrent Opioids on:**
- **Drug Diversion Investigators**
 - John J. Burke
 - President/Commander, Pharmaceutical Diversion Education Inc.
- **Street Prices**
 - Nabarun Dasgupta, MPH, PhD
 - Chief Science Officer, Epidemico
- **Patients Entering Substance Abuse Treatment**
 - Theodore J. Cicero, PhD
 - Professor of Psychiatry, Anatomy and Neurobiology
 - Vice Chairman for Research, Department of Psychiatry, Washington University in St. Louis

2016 Program

- **Abuse Deterrent Opioids: Lessons for the “Downward Spiral”**
 - Richard C. Dart, MD, PhD
 - Executive Director, RADARS[®] System – Denver Health and Hospital Authority
- **Panel Discussion**

End