

# Thinking Outside the Box:

Using varied data sources to identify current and future trends in injection drug use and acute HCV infections

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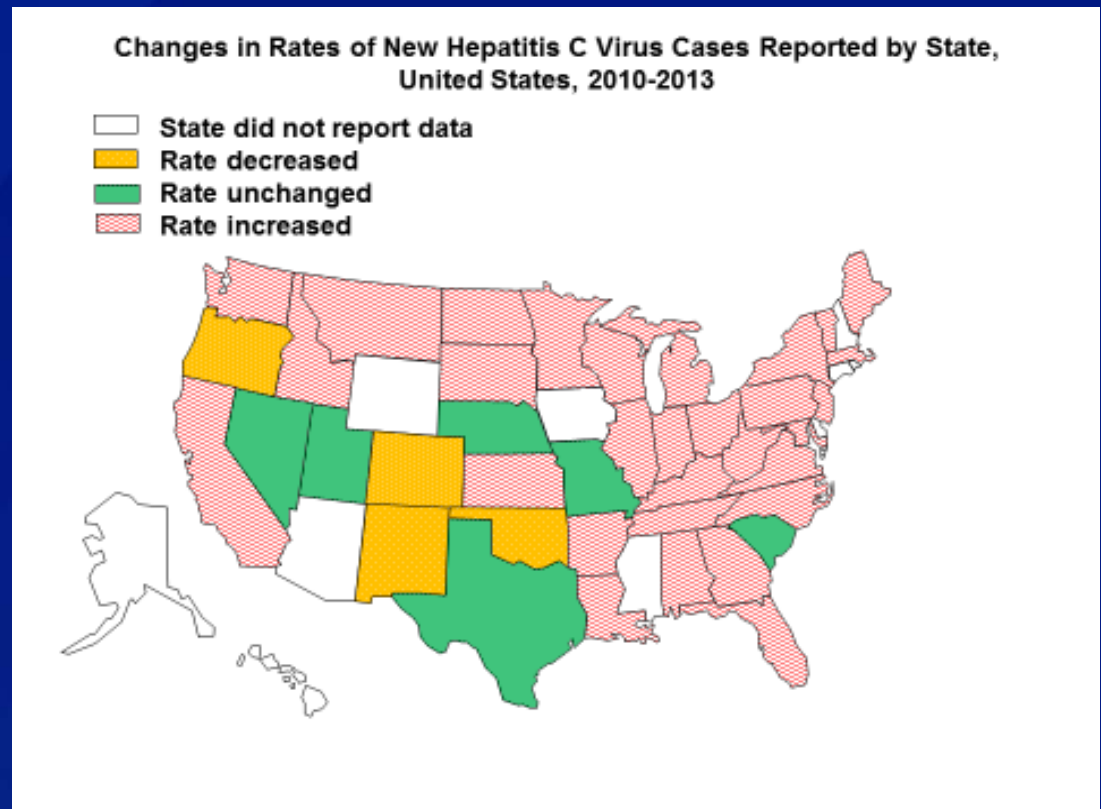
Division of Viral Hepatitis



# 150% increase in HCV Incidence 2010-2013

**Of the 34 states reporting to CDC in both 2009 and 2013:**

- **30 states reported increases**
- **15 states reported >200% increase**
- **50% of cases were younger than 30 years**
- **1:1 male: female**

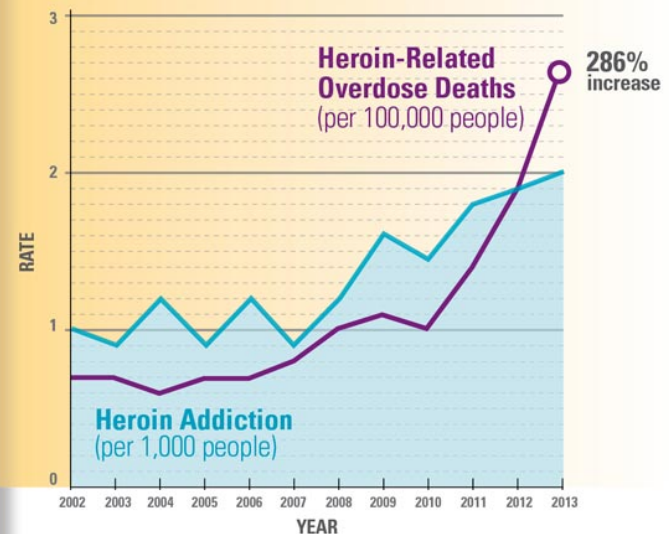


# Increased Heroin Use and Related Overdose Deaths

## Heroin Use Has INCREASED Among Most Demographic Groups

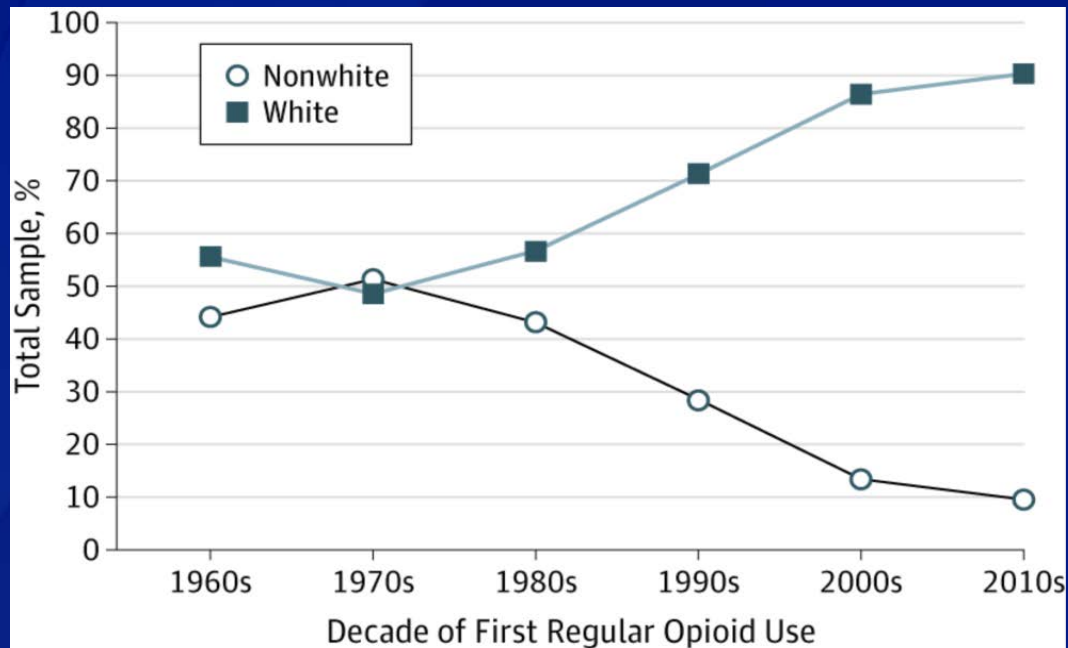
	2002-2004*	2011-2013*	% CHANGE
<b>SEX</b>			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
<b>AGE, YEARS</b>			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
<b>RACE/ETHNICITY</b>			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
<b>ANNUAL HOUSEHOLD INCOME</b>			
Less than \$20,000	3.4	5.5	62%
\$20,000-\$49,999	1.3	2.3	77%
\$50,000 or more	1	1.6	60%
<b>HEALTH INSURANCE COVERAGE</b>			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

## Heroin Addiction and Overdose Deaths are Climbing



SOURCES: National Survey on Drug Use and Health (NSDUH), 2002-2013.  
National Vital Statistics System, 2002-2013.

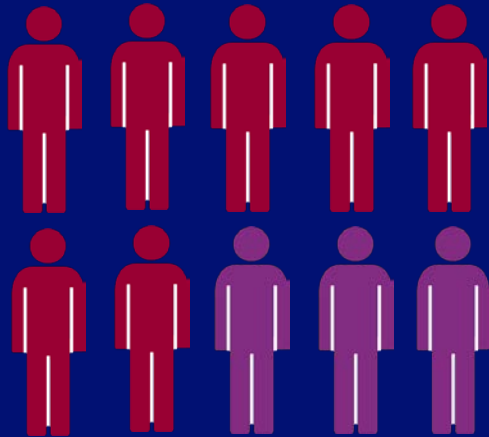
# The Changing Face of Heroin Use in the United States: A Retrospective Analysis of the Past 50 Years



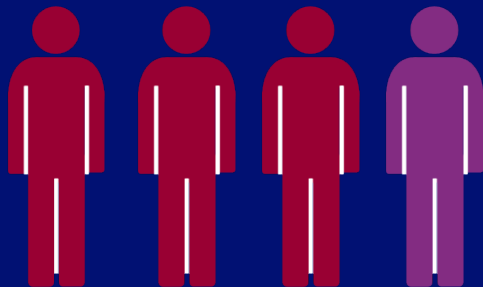
## Figure Legend:

Racial Distribution of Respondents Expressed as Percentage of the Total Sample of Heroin Users. Data are plotted as a function of decade in which respondents initiated their opioid abuse.

# Increased heroin use correlated with prescription opioid epidemic

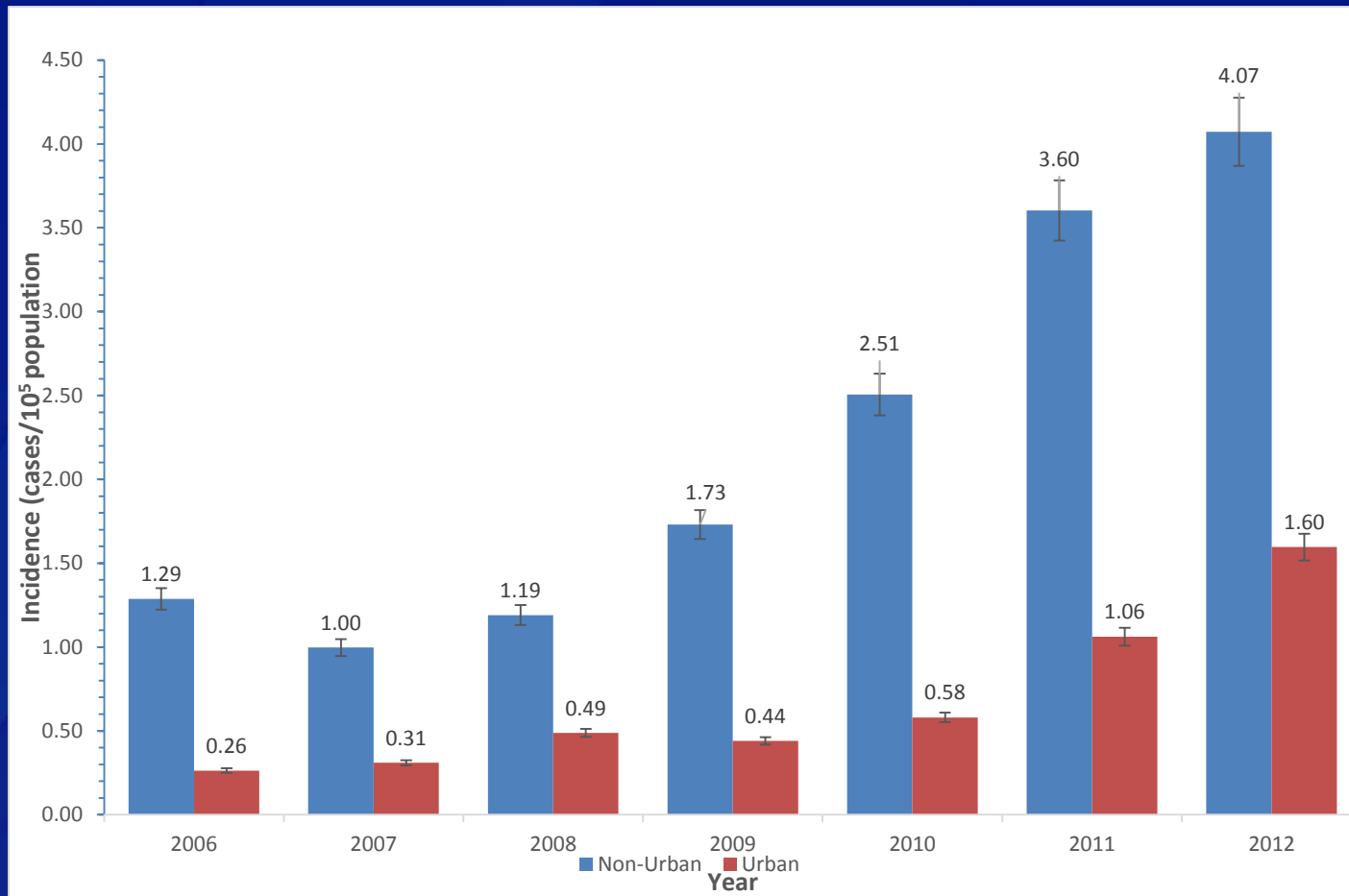


**7 out of 10 people** who used heroin in the past year also misused opioids in the last year.

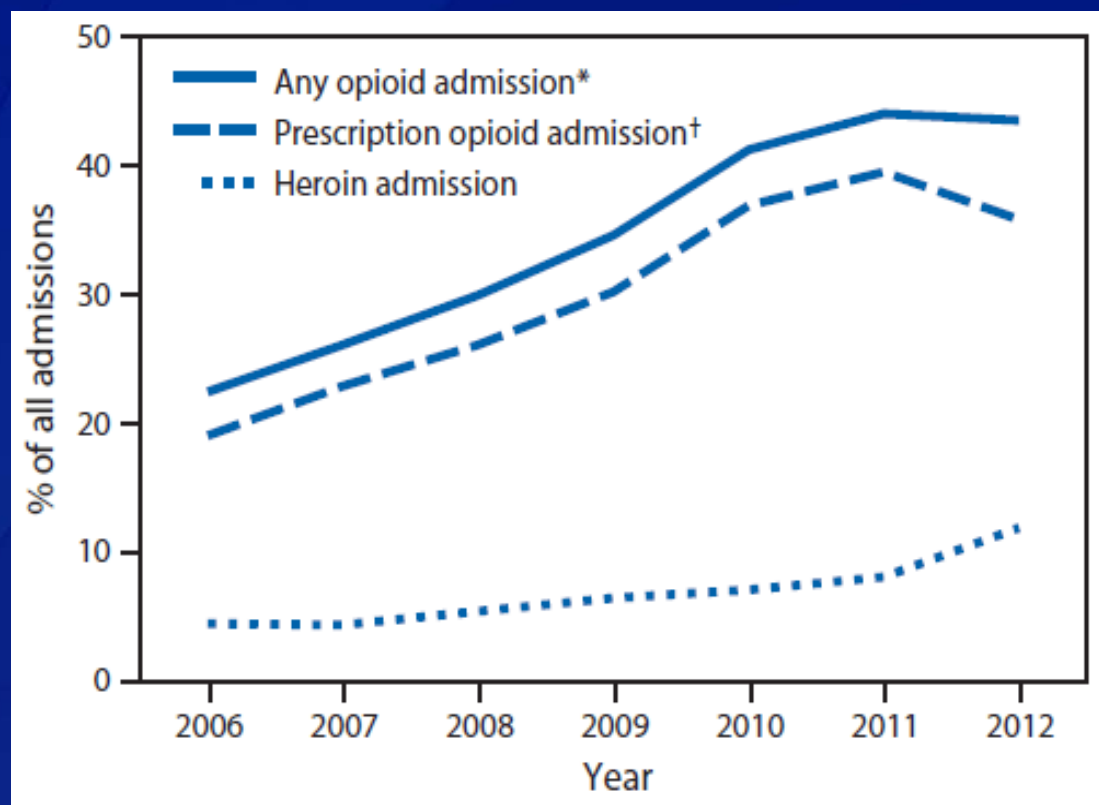


**3 out of 4 people** who used both heroin and opioids in the last year misused opioids first.

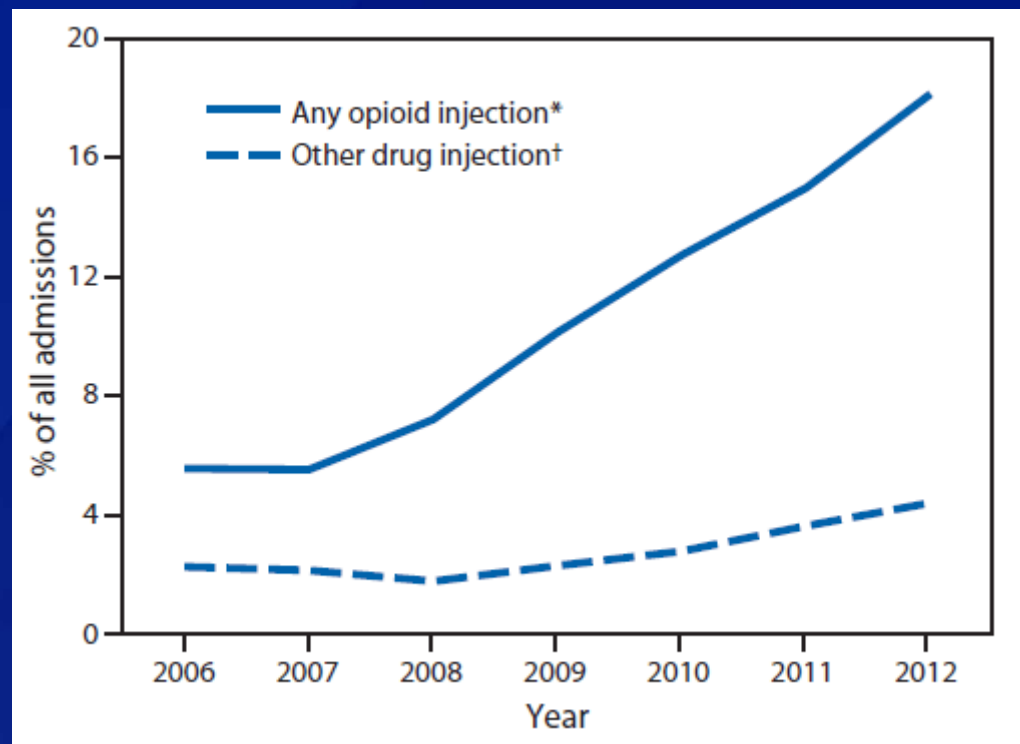
# Incidence of Acute Hepatitis C by Urbanicity and Year among Young Persons: Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012



**Percentage of all admissions to substance abuse treatment centers by persons aged 12–29 years (N = 217,789) attributed to the use of opioids, prescription opioids, and heroin, by year — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012**



**Percentage of all admissions to substance abuse treatment centers by persons aged 12–29 years (N = 217,789) attributed to the injection of opioids and other drugs, by year — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012**

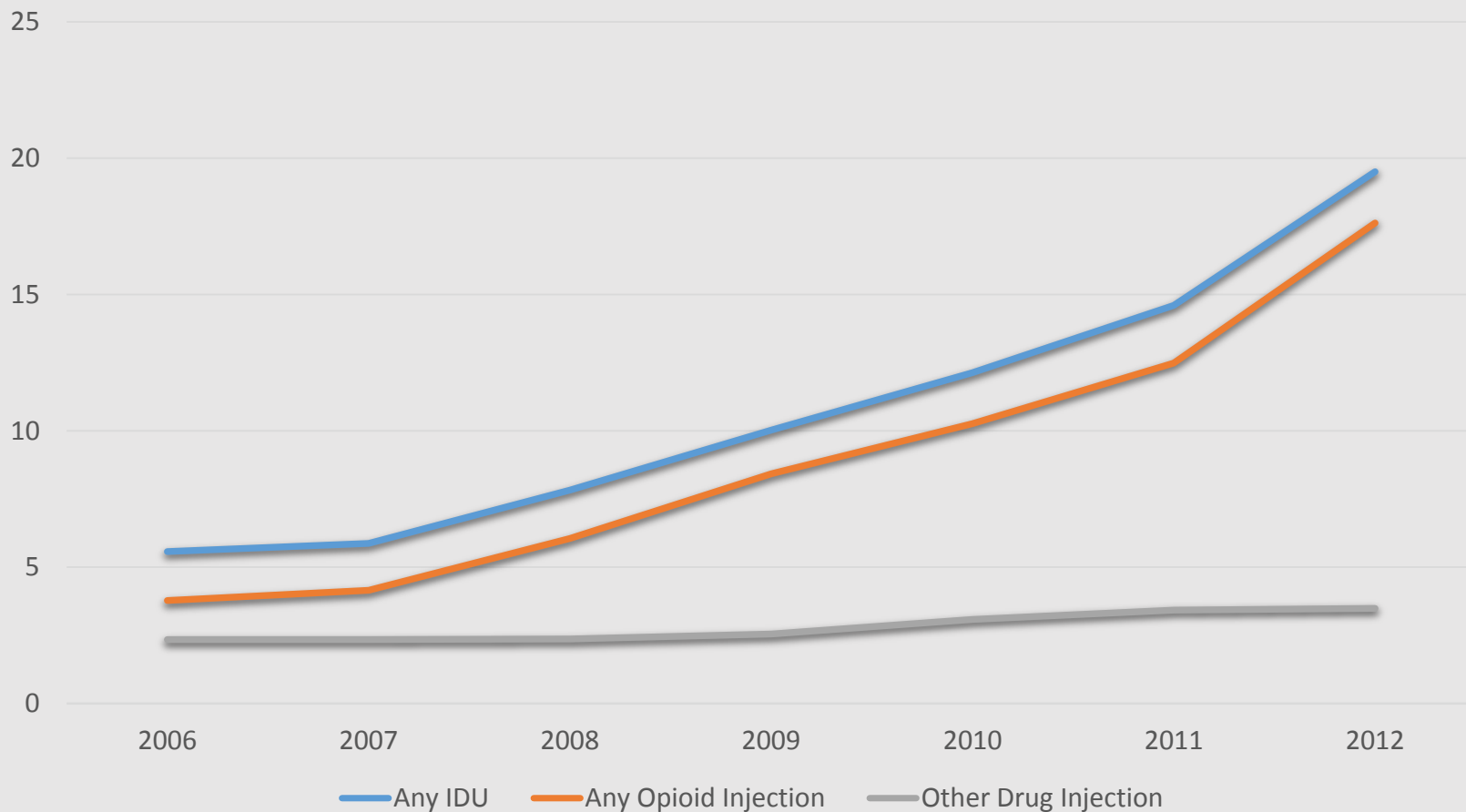




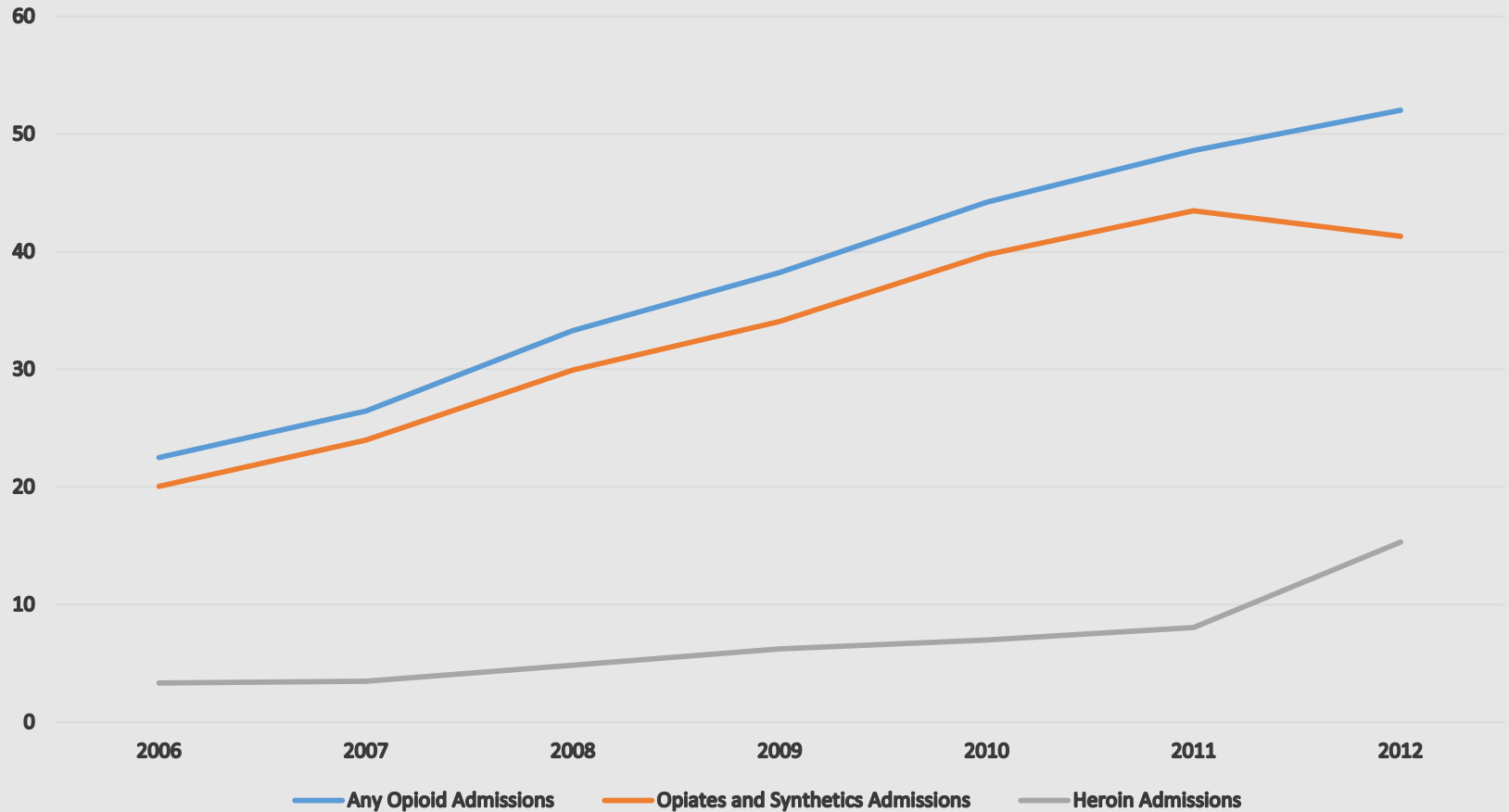
## **Increases in acute HCV infections correlated with increases in opioid dependency and IDU**

- ❑ In 2013, 12 of 41 reporting states – California, Florida, Indiana, Kentucky, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Tennessee – accounted for 68.6% of acute cases reported
- ❑ Based on analysis of TEDS-A data, all twelve states had steady increases in the number of opioid dependent persons in substance abuse treatment and the number who reported injecting during the preceding six years (2006-2012).

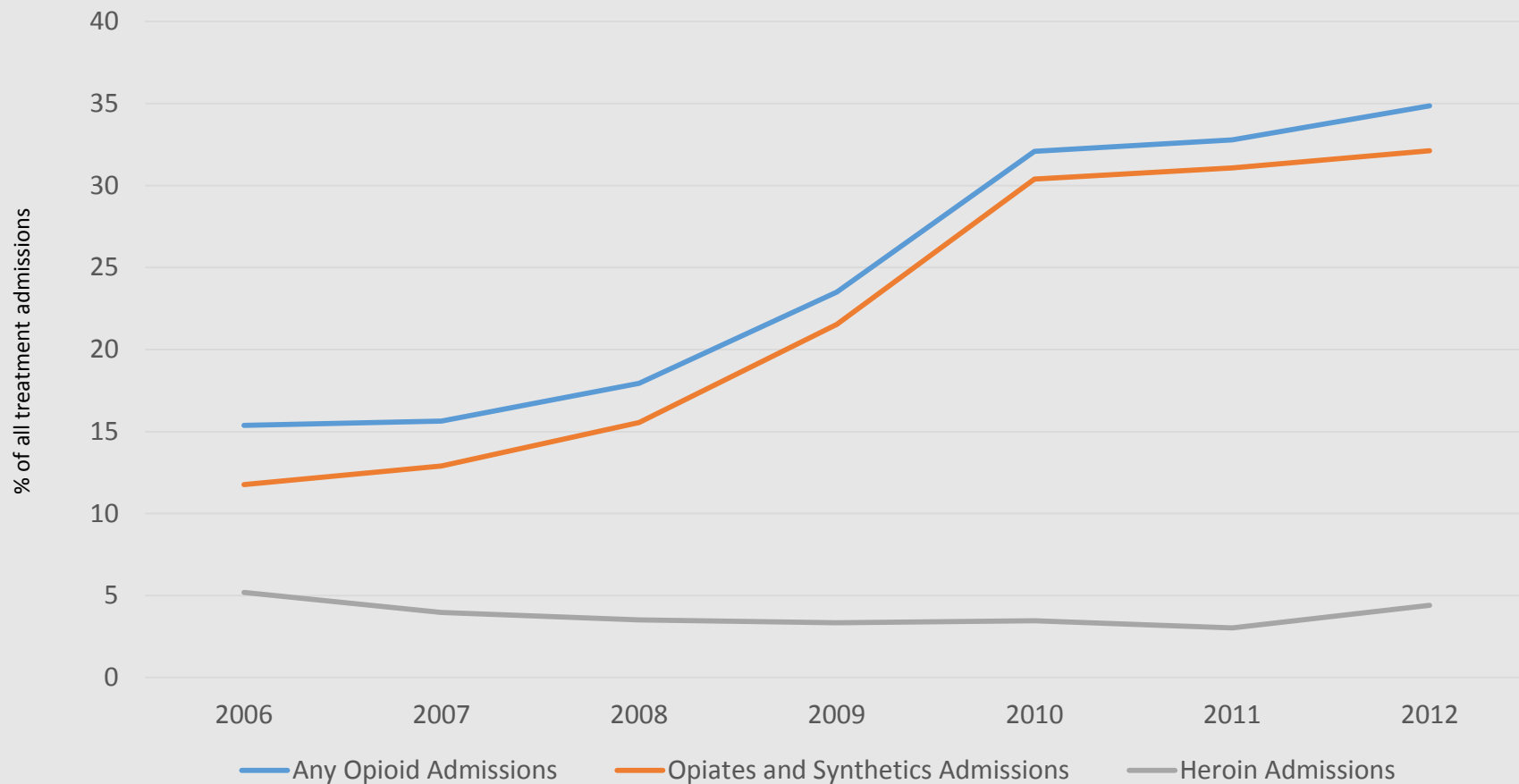
## Trends in Drug Injection among Persons Admitted to Substance Abuse Treatment, Kentucky, 2006-2012



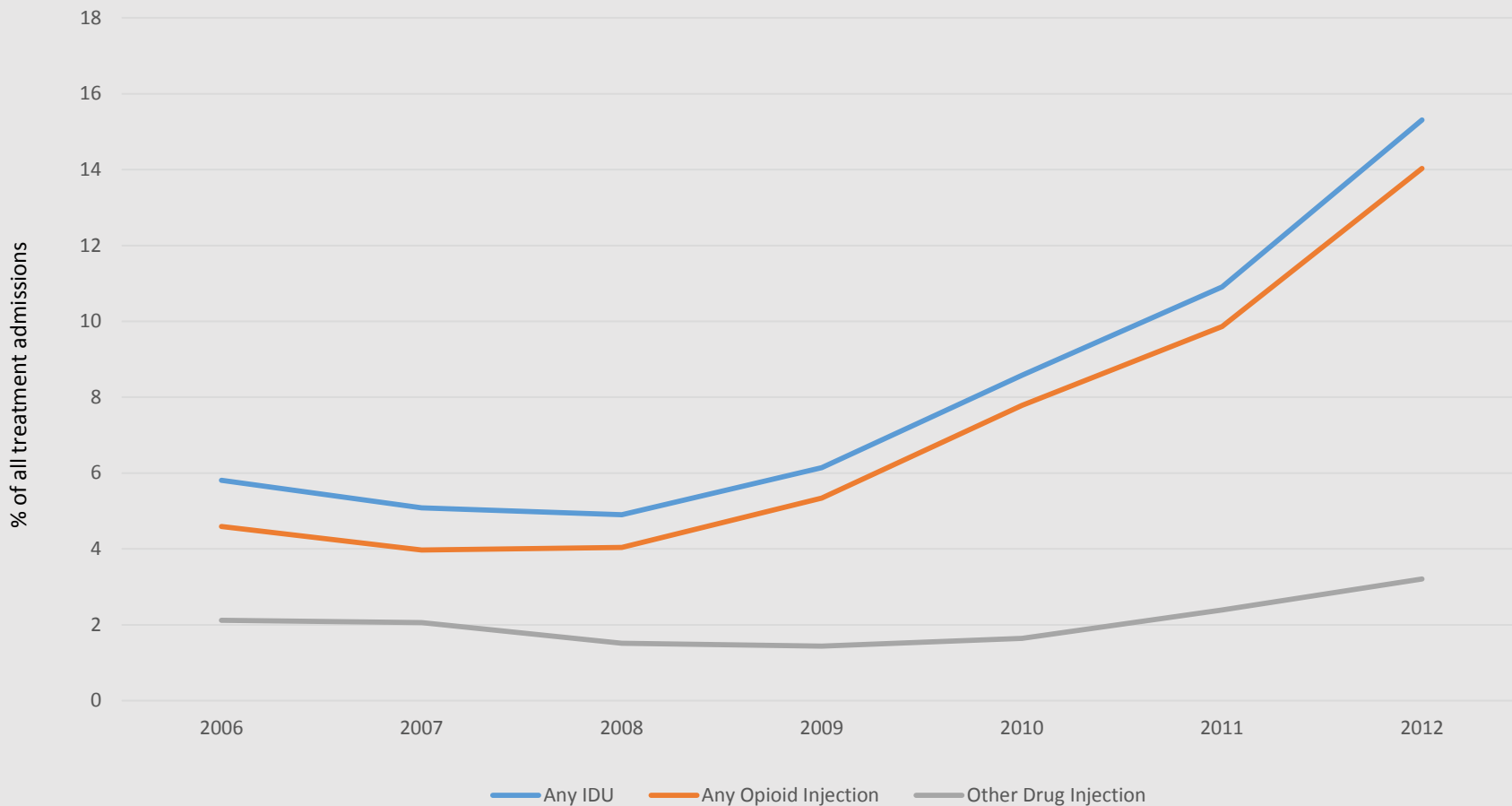
# Trends in Opioid Dependency among Persons in Substance Abuse Treatment Programs, Kentucky, 2006-2012



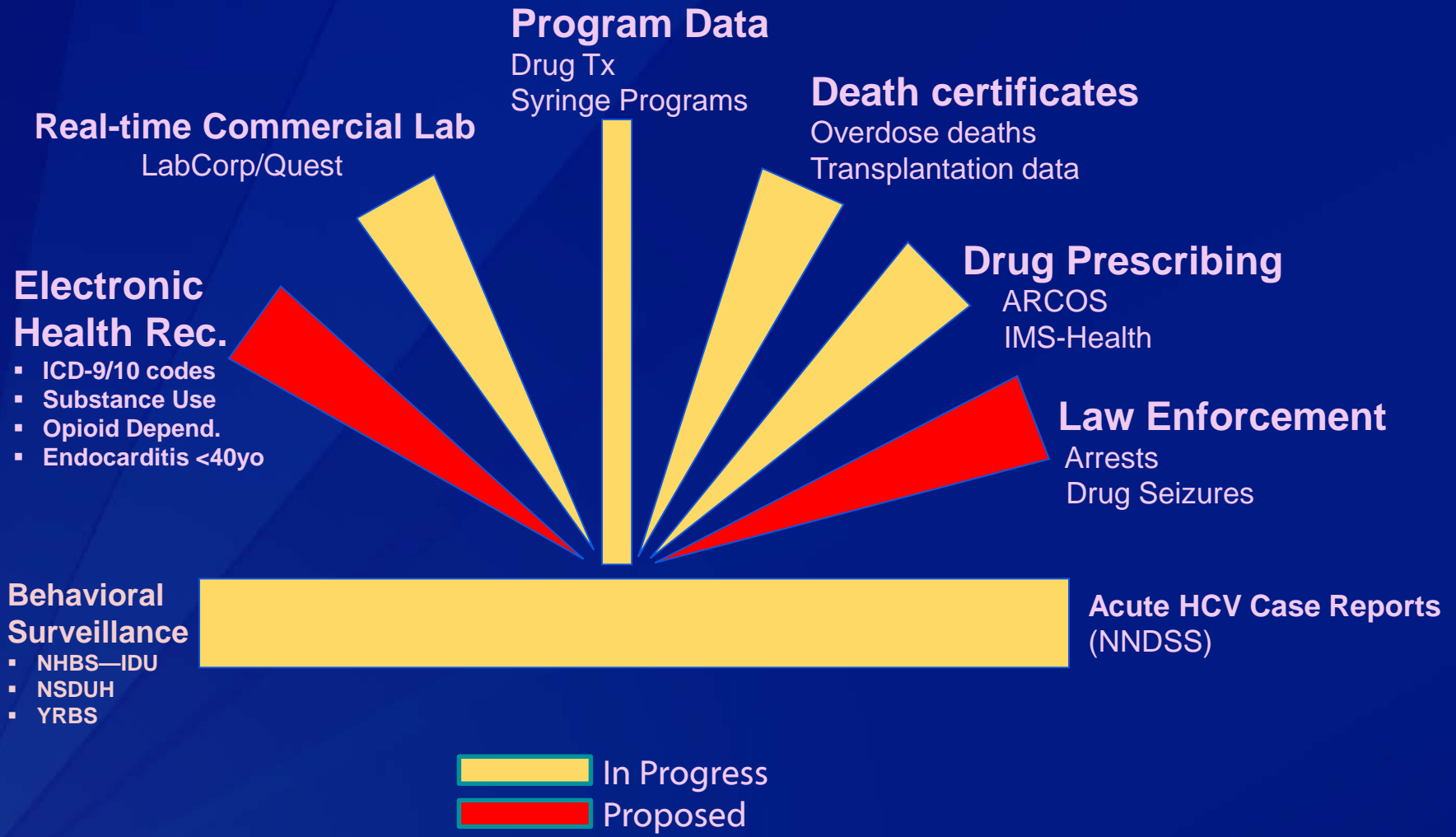
# Opioid-related admissions among persons in substance abuse treatment programs, Florida, 2006-2012



# Trends in Drug Injection among Persons in Substance Abuse Treatment Programs, Florida, 2006-2012



# Employing Multiple Data Sources to Detect HCV Transmission and Related Risks



# Special Thanks:

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