

# Medication-Assisted Treatment

Introduction and Primary Care Update

UNECOM Alumni CME Program 2014

Joseph Py, D.O.

- Medication-Assisted Treatment (MAT) - any treatment for opioid addiction that includes medication (methadone, buprenorphine, naltrexone), approved by the FDA for treatment of opioid addiction
- Maintenance Treatment - the use of pharmacotherapy plus a comprehensive program of assessment, psychosocial intervention and support services provided for as long as the patient benefits from the treatment

- OTP (Opioid Treatment Program) - any treatment program for opioid addiction certified by the SAMHSA in conformance with 42 CFR Part 8 to provide supervised assessment and MAT for individuals who are opioid-dependent which contain various levels of medical, psychosocial and other care.
- OTPs are regulated by SAMHSA and their authorized certification agencies, FDA, DEA, State Methadone Authority, policies and procedures of the individual treatment facilities.

# A Brief History of Methadone Treatment

- Harrison Narcotic Act - 1914- opioids could be used only by licensed physicians in the course of professional medical practice, provided records of purchase and dispensing were kept and a fee was paid to the Treasury Department
- Treasury interpreted the act as a prohibition on physician's prescribing opioids for the purpose of treating opioid addiction.
- addiction not a disease, therefore addict not a patient

# Brief History

- 1935 - US Public Health Service Narcotics Hospital, Lexington KY
- provided inpatient detoxification, social, medical and psychiatric services to voluntary patients and prison inmates with opioid addiction
- 6 month to 10 year duration
- relapse rates after 1-5 yrs - 93% to 97%

# Brief History

- 1960's, California and New York Civil Commitment Movement
- those in “imminent danger of becoming addicted” after having first committed a crime were committed
- 3 year “committment” if arrested for a misdemeanor as an alternative to incarceration
- programs ended after a few years after evaluations concluded programs were failures

# Brief History

- heroin deaths in NY increased from 7.2/10,000 in 1950 to 35.8 in 1961
- by the late 1960's, opioid-related deaths the leading cause for ages 15-35 in NYC
- jails in NYC became overcrowded with those incarcerated for opioid use and drug-related crimes; no medical care for opioid withdrawal

# Brief History

- 1962 - Vincent P. Dole, MD, appointed chair of the Narcotics Committee of the Health Research Council of NYC; did research into the opioid addiction epidemic
- 1956 - Marie E. Nyswander, MD - The Drug Addict as a Patient; addicts could be treated in general medical practice; abstinence didn't work and many would need opioids for extended periods of time to function normally
- 1964 - Dole, Nyswander and Mary Jeanne Kreek, MD; use of methadone for extended periods for opioid dependence treatment in outpatient settings



# Brief History

- Dole, 1980; 1. patients did not experience euphoric, tranquilizing or analgesics effects from their methadone dose, 2. the appropriate methadone dose reduced or blocked the effects of other illicit opioids, 3. no change in tolerance once on the right dose, 4. effective orally with a T<sub>1/2</sub> of 24-36 hrs (8-96), 5. relieved opioid craving, the major cause of relapse, 6. minimal side effects, safe and non-toxic.

**Why Use Methadone?**

# Dole: Receptor System Dysfunction

- ❏ Endogenous ligand-narcotic receptor system is defective; hence high relapse rate
- ❏ Stabilize blood level at 150-600 ng/mL
- ❏ This normalizes neurological and endocrine functioning
- ❏ This treatment is corrective but not curative
- ❏ Future research: identify the specific defect and repair it

(Dole, JAMA 1988)

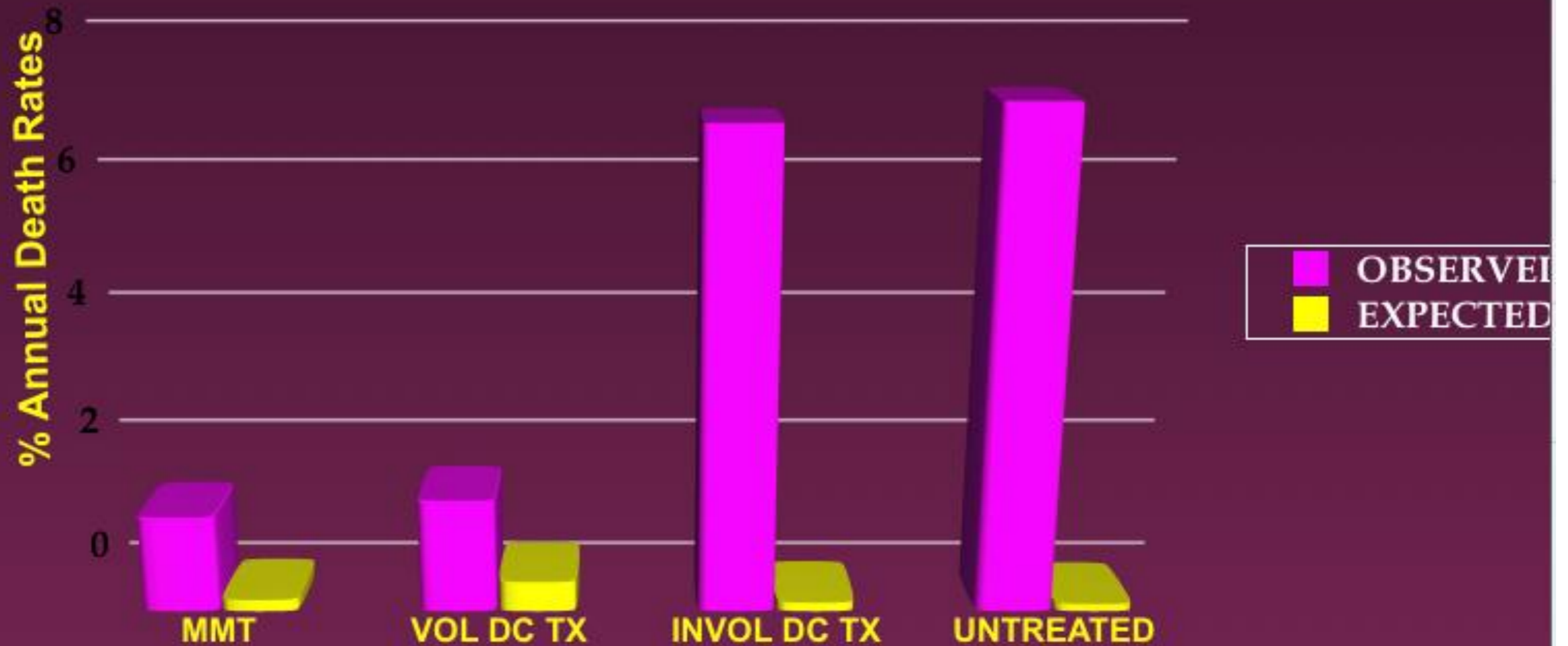


# Methadone vs Heroin (2)

- ☒ Long acting; prevents withdrawal for 24-36 hours (4x-6x as long as heroin), permitting once-a day-dosing
- ☒ At sufficient dosage, blocks euphoric effect of normal street doses of heroin
- ☒ Medically safe when used on long-term basis (10 years or more)

(Physician's Guide: Opioid Agonist Medical Maintenance Treatment; CSAT 2000)

# DEATH RATES IN TREATED AND UNTREATED HEROIN ADDICTS



Slide data courtesy of Frank Vocci, MD, NIDA - Reference: Grondbladh, L. et al. ACTA PSCHIATR SCAND, P. 223-227, 1990

What's Happening  
Where We Live?



## Heroin in New England, More Abundant and Deadly



Cheryl Senter for The New York Times

 In Maine, a Growing Heroin Menace: A surge in heroin use in the state is contributing to a rash of fatal overdoses.

By KATHARINE Q. SEELYE

Published: July 18, 2013 |  106 Comments

**PORTLAND, Me.** — Heroin, which has long flourished in the nation's big urban centers, has been making an alarming comeback in the smaller cities and towns of New England.

 FACEBOOK

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## R.I. seminar addresses surge in heroin, opioid drug overdoses

Published: September 04, 2014 11:15 PM

[Comments](#)



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**NEWS**

Posted July 3 | Updated July 3

INCREASE FONT SIZE **PA<sup>+</sup>**

# Maine leads nation in rate of long-term opiate prescriptions, CDC study says

Extended-release prescription usage was more than double the average in 2012, but a state official says much has changed since then.

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BY **RANDY BILLINGS** STAFF WRITER

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**NEWS**

Posted January 15

INCREASE FONT SIZE **PA**<sup>+</sup>

# Fatal overdoses quadruple as heroin tightens grip on Maine

Statistics for 2012 highlight a growing public danger, fueled in part by restrictions on prescription drugs, a cheaper supply and possibly MaineCare cuts.

BY **ERIC RUSSELL AND DAVID HENCH** STAFF WRITERS

# Brunswick not exempt from New England opiate epidemic

A look into heroin and prescription addiction in Brunswick, where 95 percent of local crimes are drug related

**GARRETT CASEY** **SAM MILLER**  
ORIENT STAFF      ORIENT STAFF

April 18, 2014

 Tweet 2

 Recommend 20

# Drug treatment funding in Maine is falling, but demand is greater than ever

The number of people seeking treatment for opiate addiction has increased 15 percent since 2010; funding has decreased by 7 percent during the same period.

BY **ERIC RUSSELL** STAFF WRITER

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Gov. Paul LePage, who joined Morris at a news conference Tuesday in Augusta, said the statewide drops in crime could have been greater. He repeated his criticism of the Democratic-controlled Legislature for not passing his \$3.2 million proposal to hire more drug enforcement agents, assistant district attorneys and judges to combat opioid use that has swept Maine in the last decade.

“We have good news, but quite frankly, it’s not good enough,” LePage said. “We need those judges, we need those DAs and we need those agents on the street. I’m not so concerned right now with those that are addicted.”

- 6/18/14 Portland Press Herald

## New England Governors — Minus LePage — Meet on Opioid Addiction

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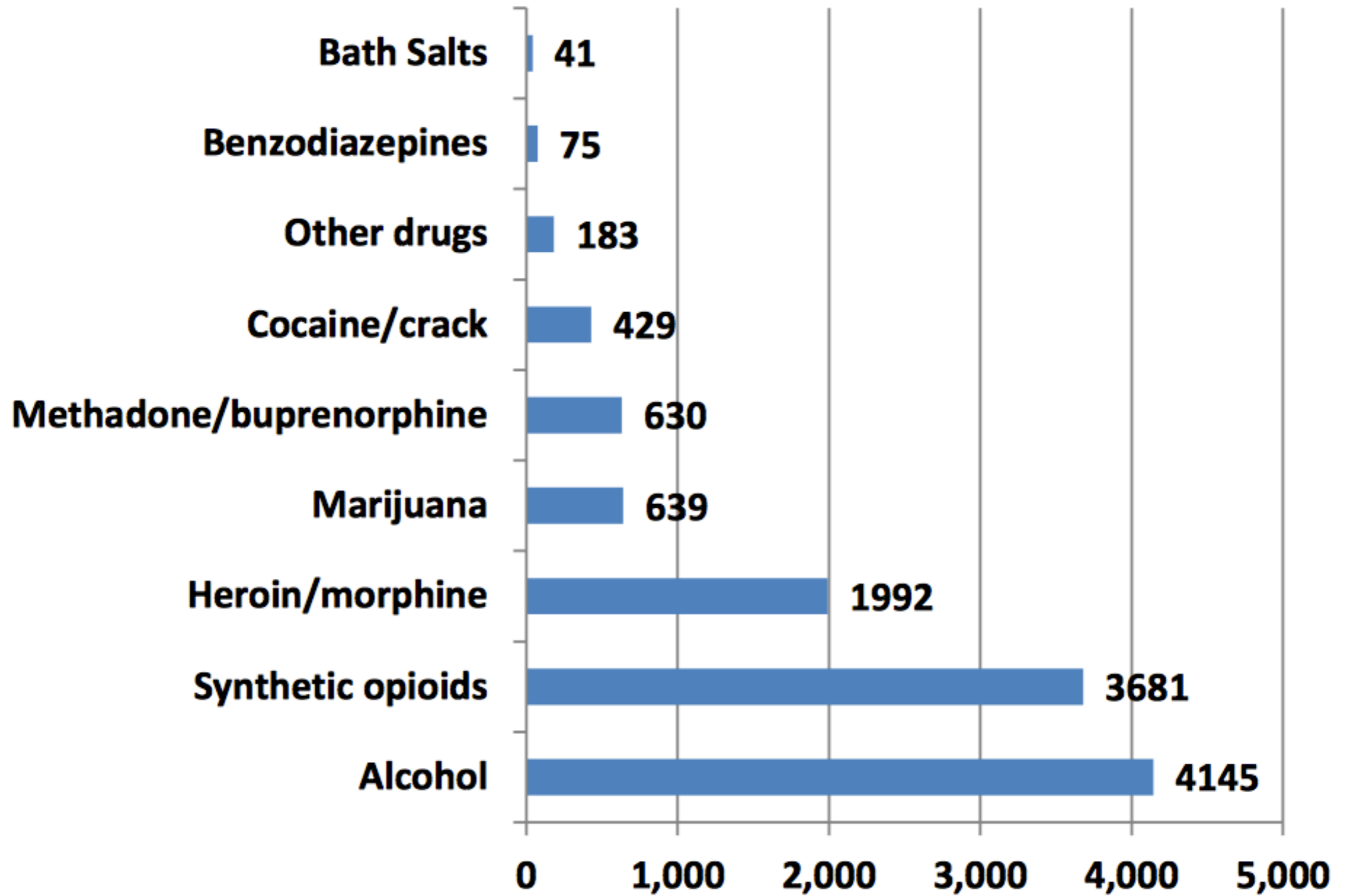
By **DEBORAH BECKER**

In announcing lower crime rates yesterday, Gov. Paul LePage made it clear the

# Methadone Maintenance in Maine

- approximately 5000 patients
- 11 treatment facilities statewide - Sanford, Portland, South Portland, Rockland, Waterville, Bangor, Calais
- 85 - 90% MaineCare recipients

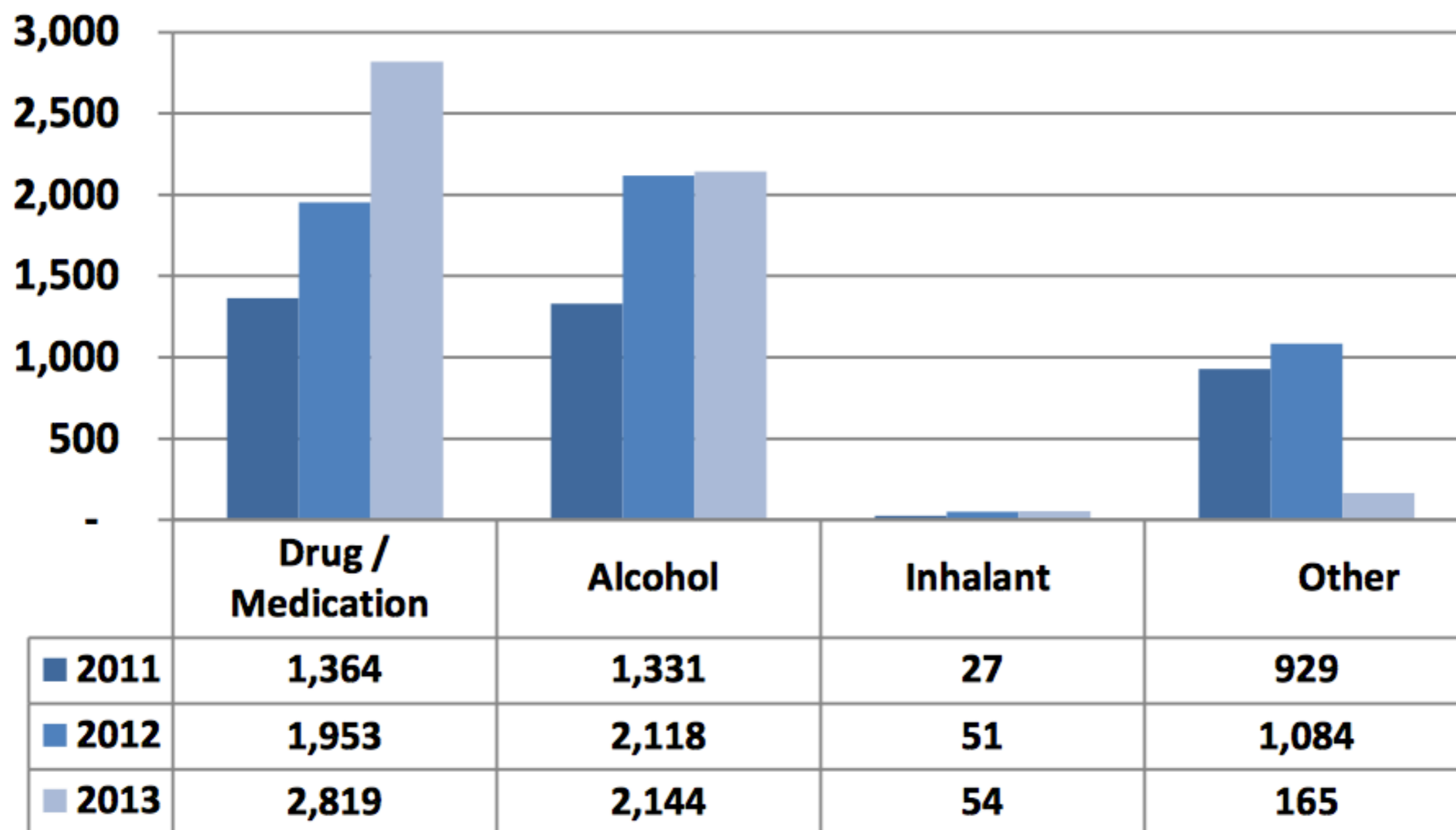
**Figure 73. Primary treatment admissions by substance: 2013**



*Source: TDS, 2013*

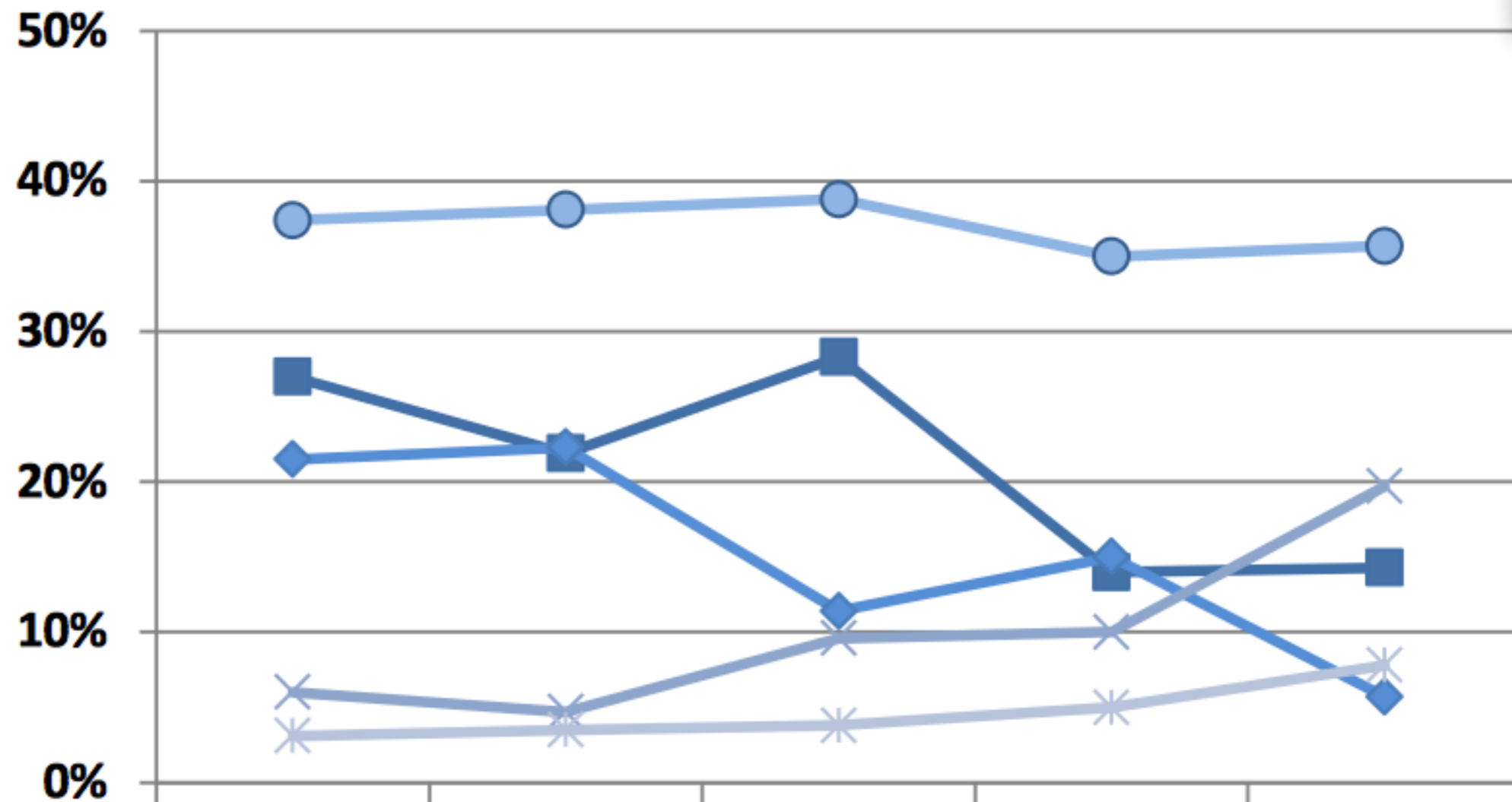


**Figure 36. Number of overdoses, by type: 2011-2013**



*Emergency Medical Services, 2011-2013*

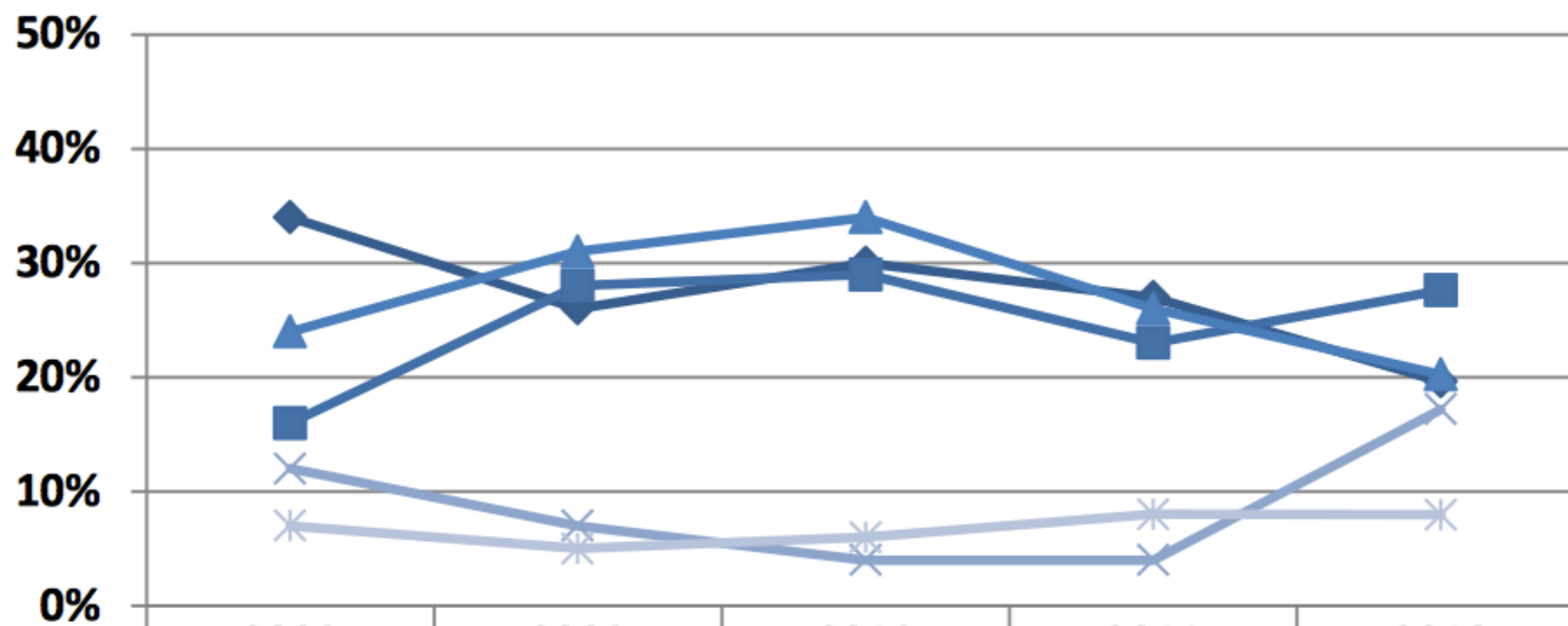
**Figure 27. Drug offense arrests in Maine, by drug type:  
2009-2013**



	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Pharm-narcotic</b>	<b>37%</b>	<b>38%</b>	<b>39%</b>	<b>35%</b>	<b>36%</b>
<b>Cocaine/crack</b>	<b>27%</b>	<b>22%</b>	<b>28%</b>	<b>14%</b>	<b>14%</b>
<b>Marijuana</b>	<b>22%</b>	<b>22%</b>	<b>11%</b>	<b>15%</b>	<b>6%</b>
<b>Heroin</b>	<b>6%</b>	<b>5%</b>	<b>10%</b>	<b>10%</b>	<b>20%</b>
<b>Methamphetamine</b>	<b>3%</b>	<b>4%</b>	<b>4%</b>	<b>5%</b>	<b>8%</b>

Source: MDEA, 2009-2013

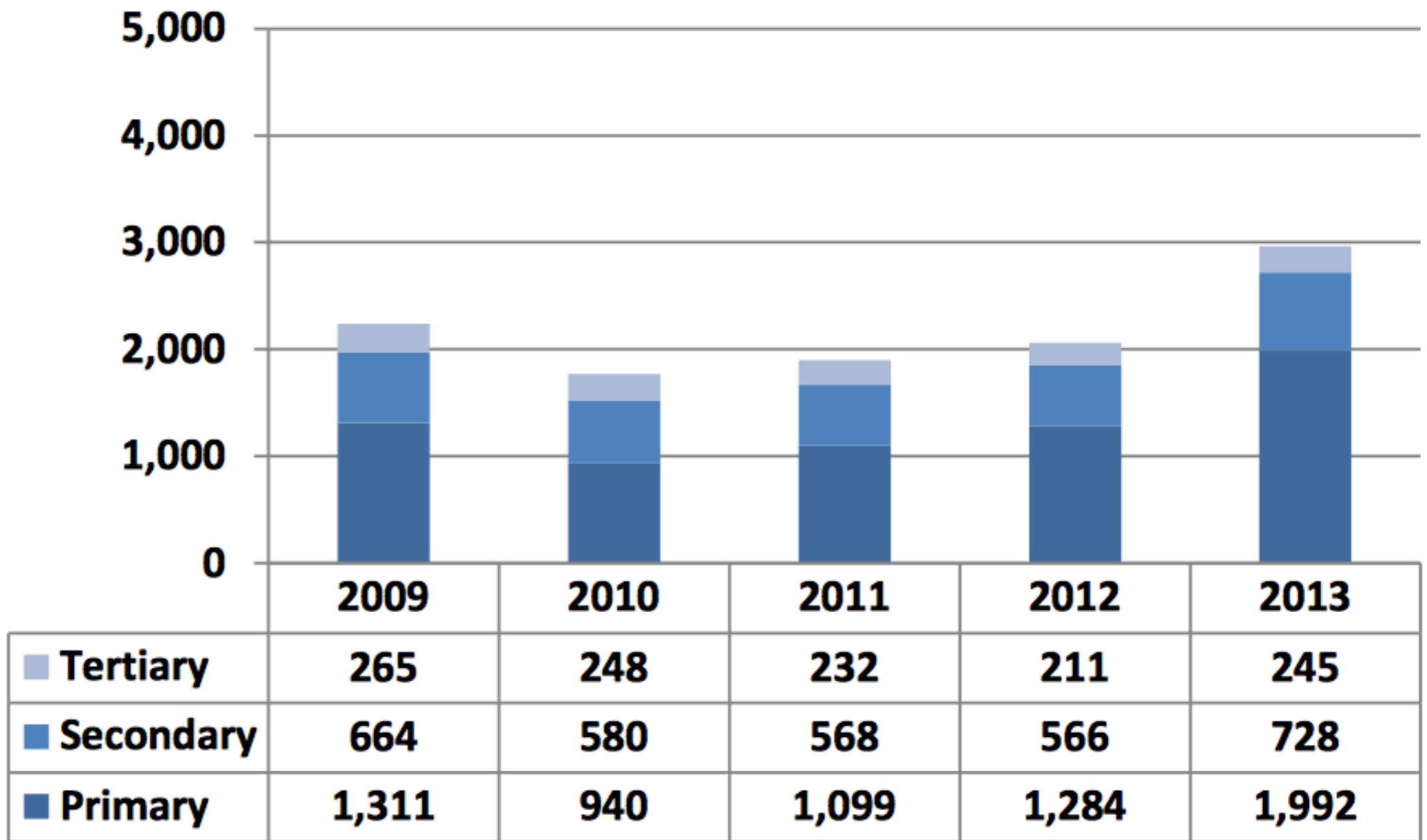
**Figure 39. Percent of drug deaths involving specific drug types: 2008-2012\***



	2008	2009	2010	2011	2012
◆ Methadone	34%	26%	30%	27%	20%
■ Oxycodone	16%	28%	29%	23%	28%
▲ Benzodiazepines	24%	31%	34%	26%	20%
✕ Heroin/morphine**	12%	7%	4%	4%	17%
* Cocaine	7%	5%	6%	8%	8%

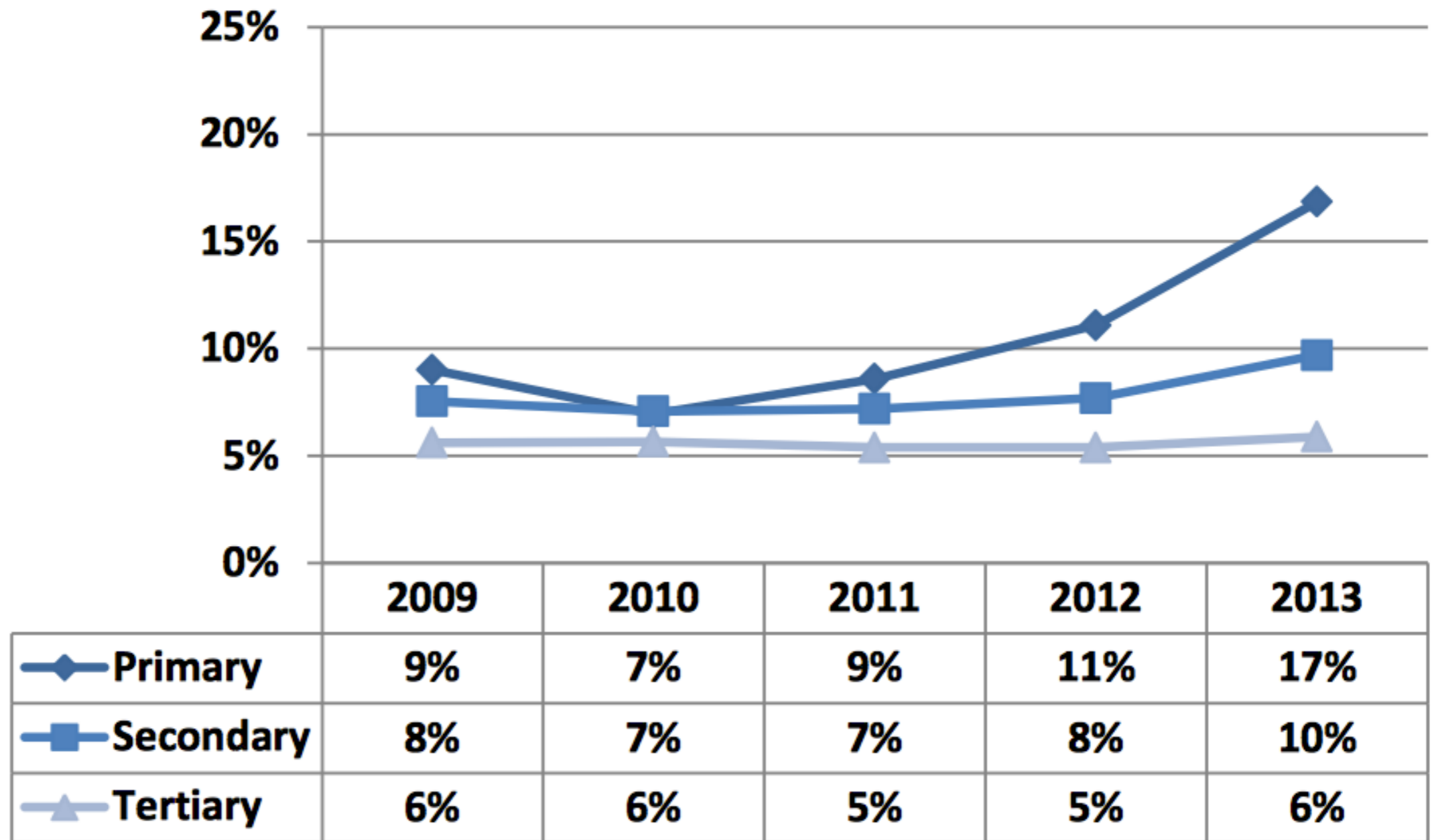
Source: Office of the Chief Medical Examiner, 2008-2012

**Figure 81. Number of treatment admissions where heroin or morphine were the primary, secondary, or tertiary substance: 2009-2013**



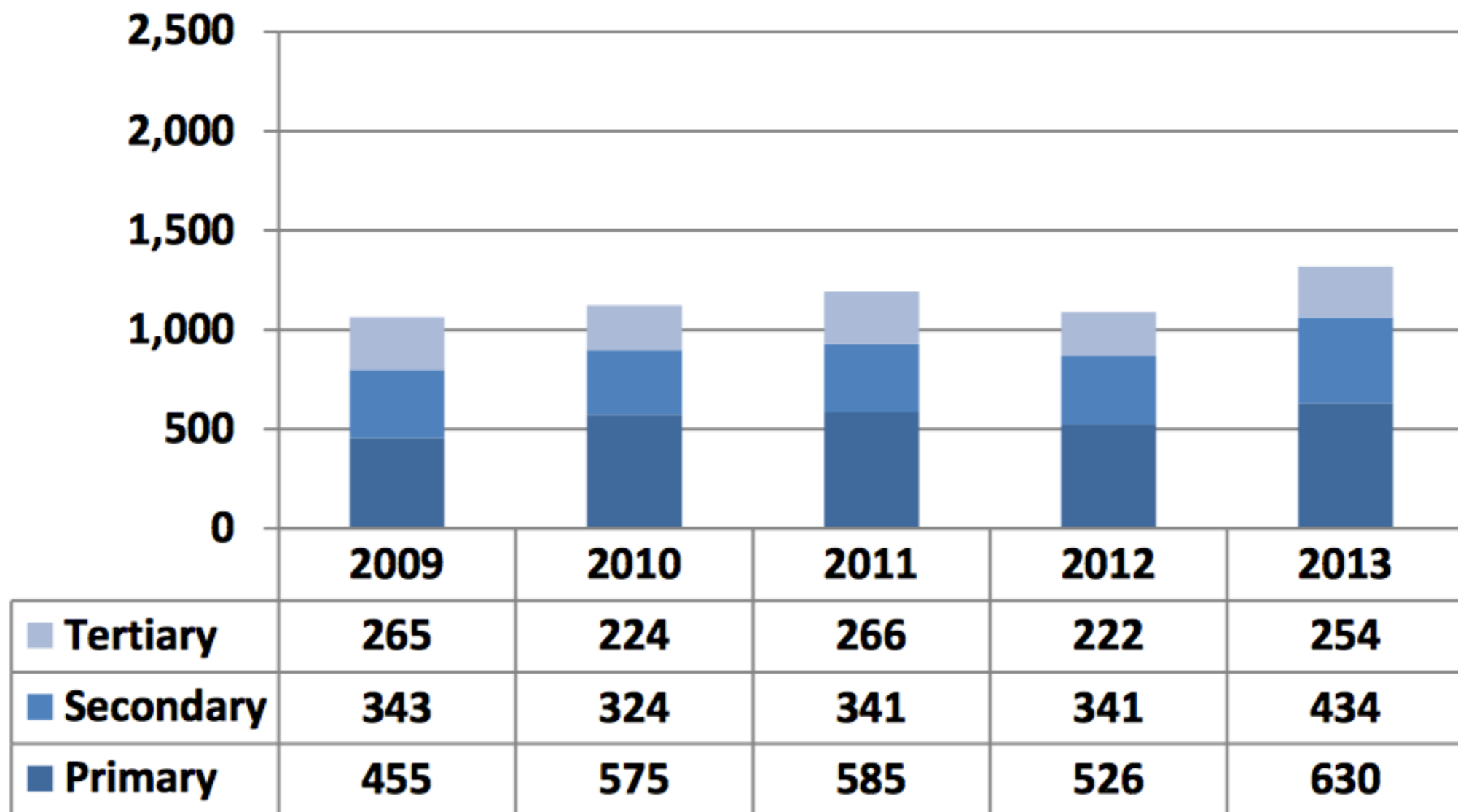
Source: TDS, 2009-2013

**Figure 82. Percent of total treatment admissions where heroin/morphine was the primary, secondary, or tertiary substance: 2009-2013**



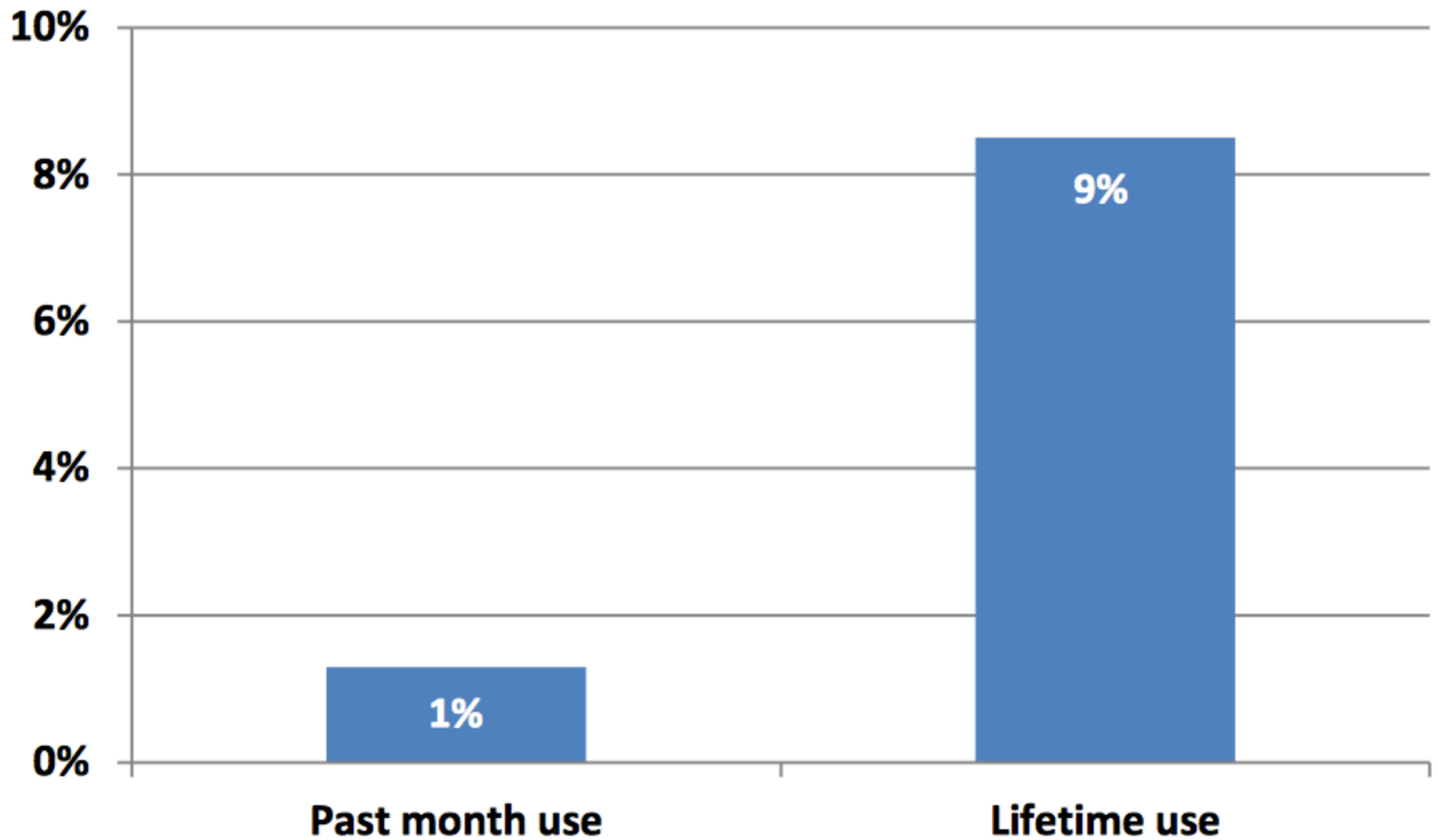
Source: TDS, 2009-2013

**Figure 85. Number of treatment admissions where methadone was the primary, secondary, or tertiary substance: 2009-2013**



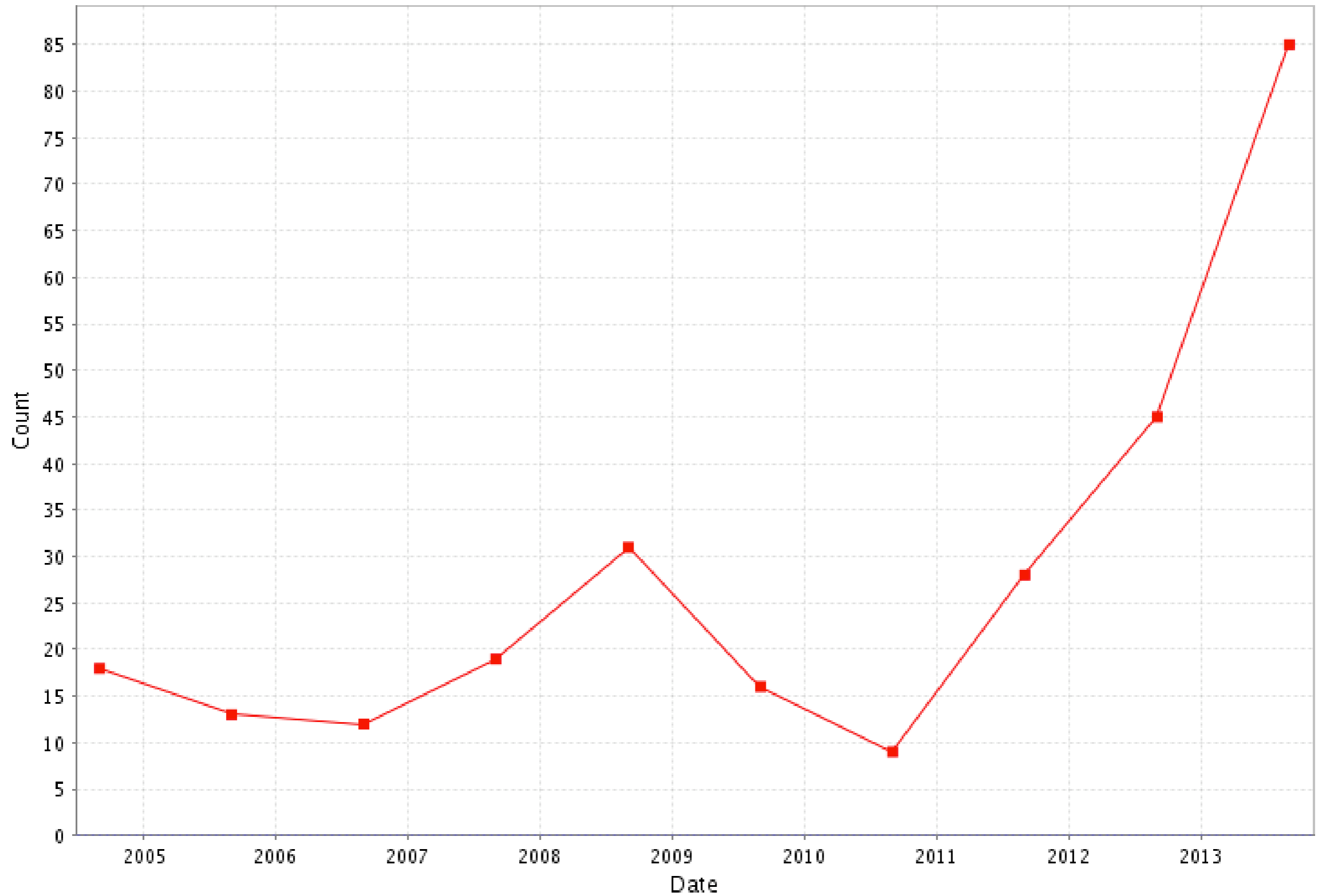
Source: TDS, 2009-2013

**Figure 18. Percent of homeless youth reporting lifetime and current heroin use: 2012**



*aine Homeless Youth Survey, 2012*

- of **female** gender
- only clients with reported place of residence in **YORK** county
- primary service of **46,40,**
- primary drug used inappropriately - **0400 Heroin/Morphine**

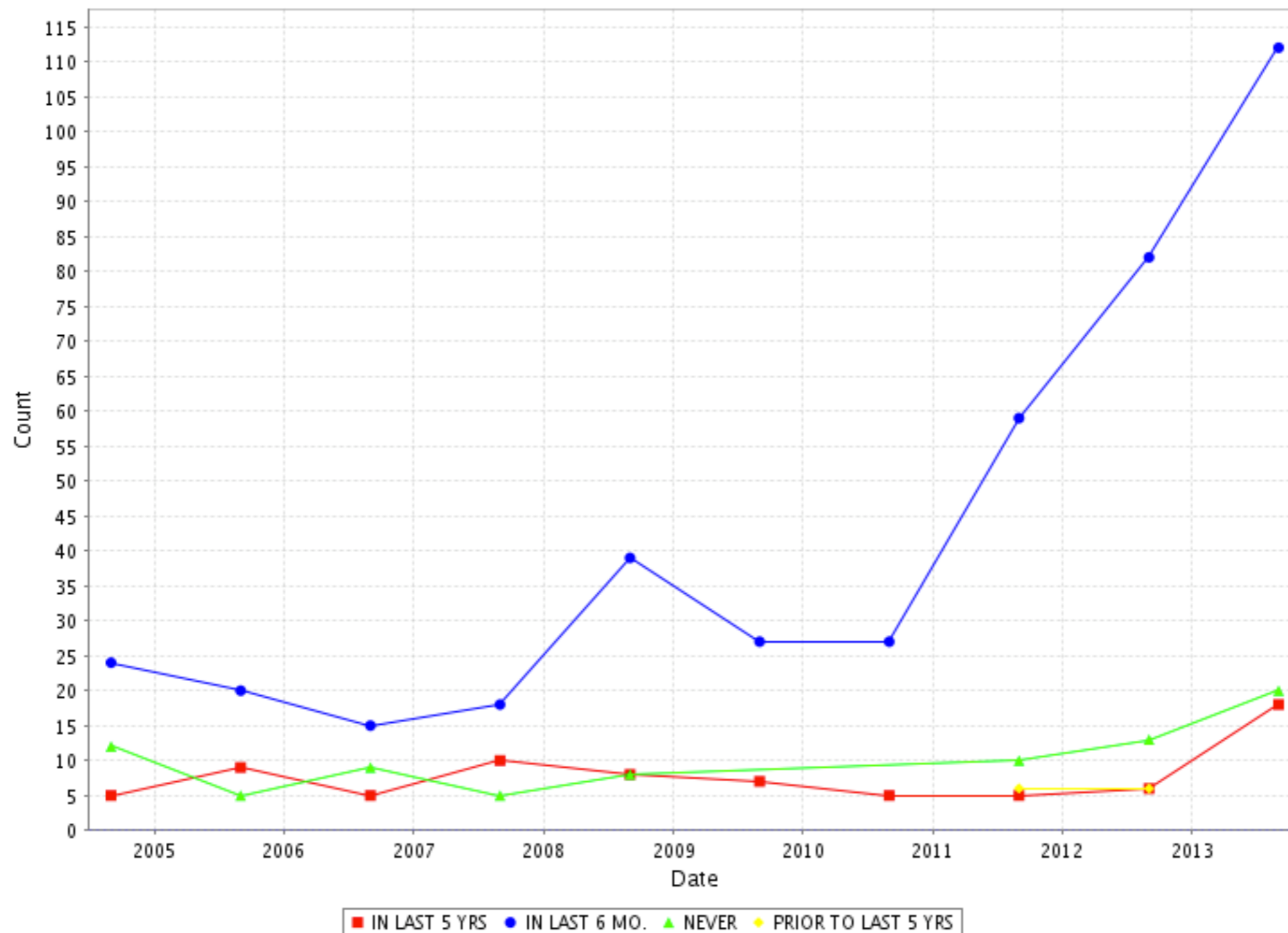




## Trend Report : Injection Drug Use (2004-9-13 to 2014-9-13)

Summary of "Injection Drug Use" question results:

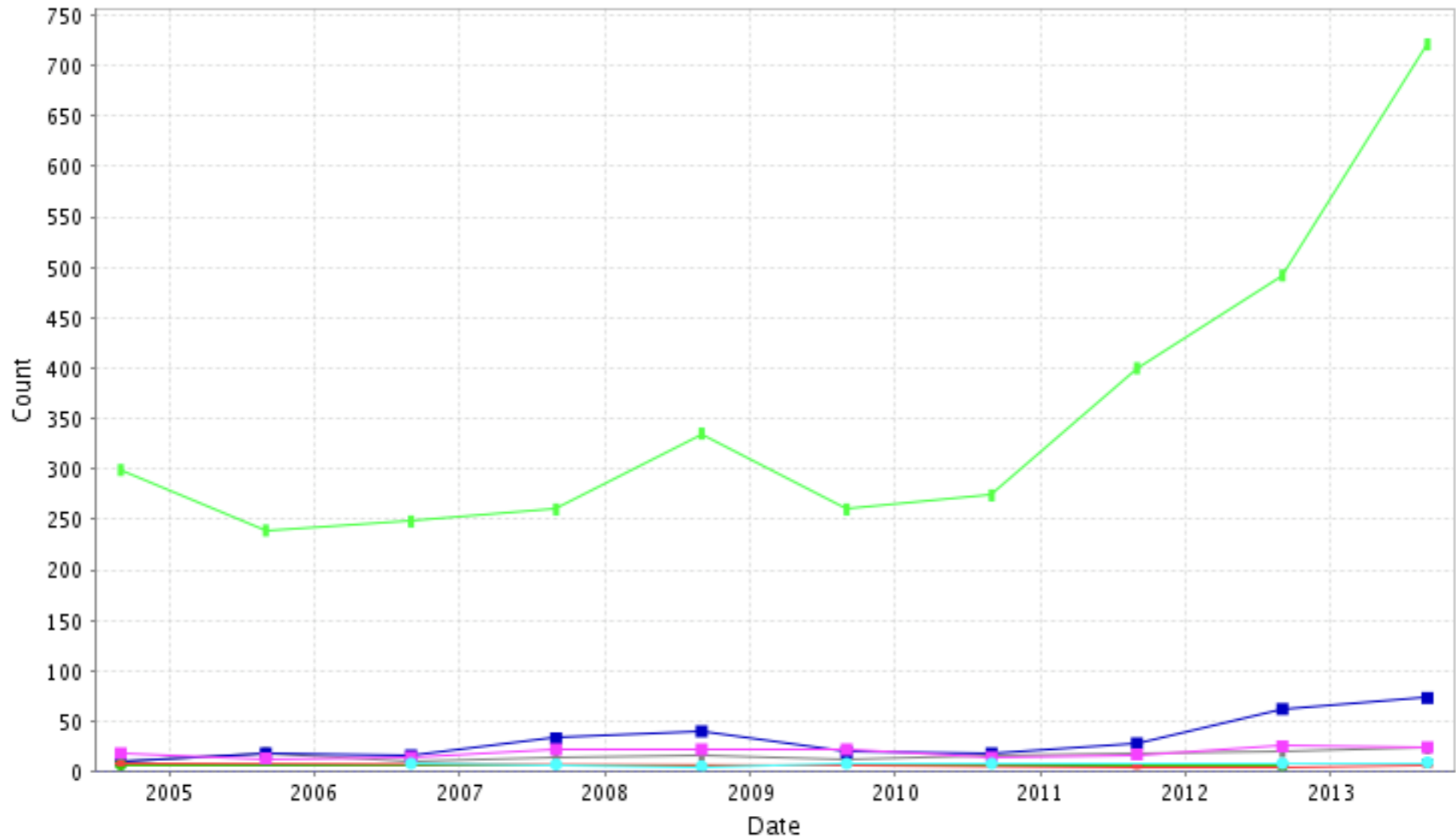
- **excluding duplicates** (counting only one questionnaire for each client for each unique response)
- only include clients admitted between **2004-9-13** and **2014-9-13**
- only clients with reported place of residence in **YORK** county
- primary service of **46,40,**
- primary drug used inappropriately - **0400 Heroin/Morphine**



### Trend Report : Referred by (2004-9-13 to 2014-9-13)

Summary of "Referred by" question results:

- **excluding duplicates** (counting only one questionnaire for each client for each unique response)
- only include clients admitted between **2004-9-13** and **2014-9-13**
- primary service of **46,40,**
- primary drug used inappropriately - **0400 Heroin/Morphine**



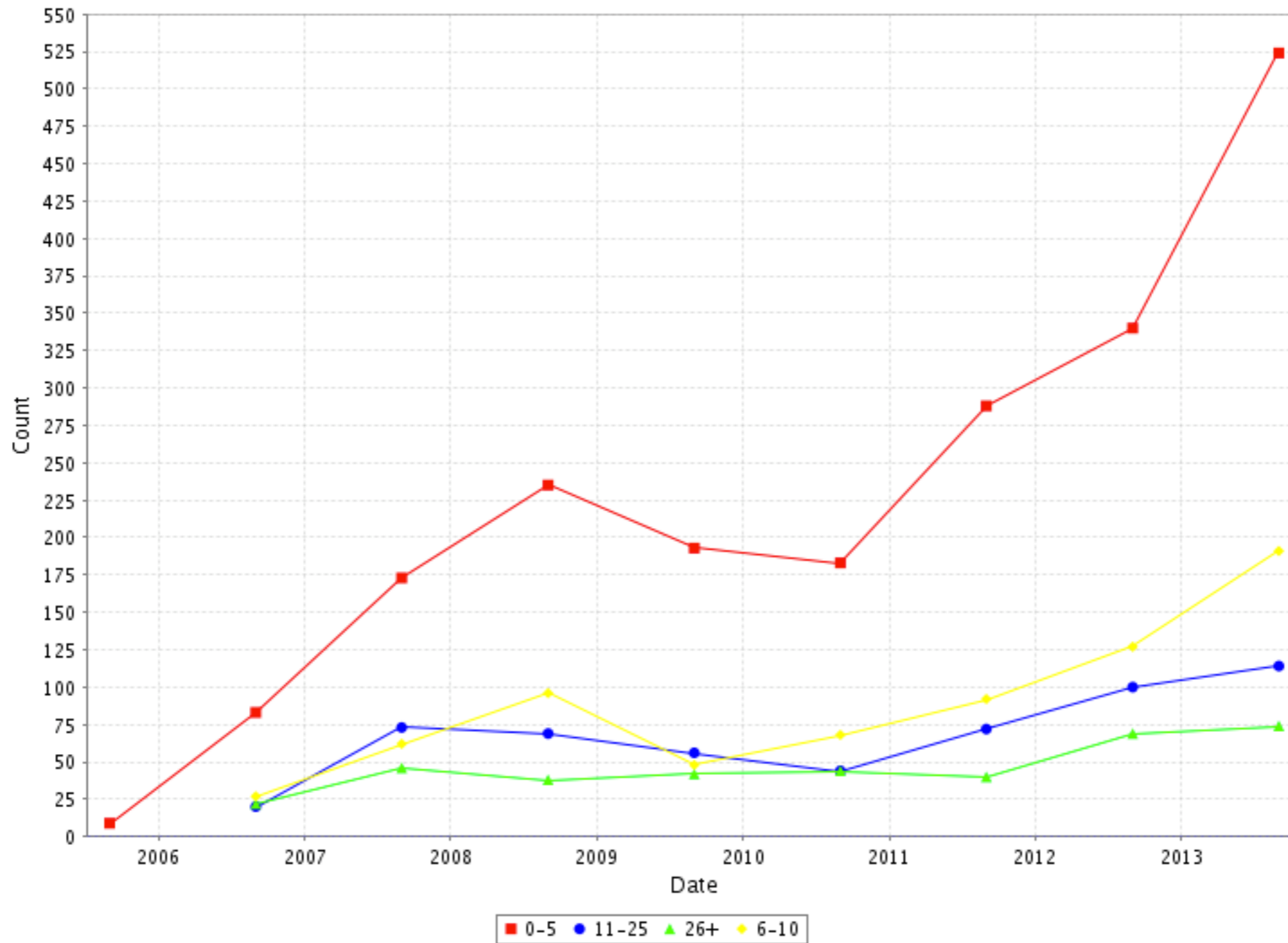
- ADULT PROTECTIVE SERVICES -DHS    ● AUGUSTA/BANGOR MENTAL HEALTH INSTITUTE    ▲ CHILD PROTECTIVE SERVICES - DHS
- ◆ COMMUNITY PROBATION - DSAT    ▬ CORRECTIONAL FACILITY MAINE    ▼ COUNTY JAILS    ◆ DEEP (DRIVER EDUCATION AND EVALUATION PROGRAM)
- ▶ EMPLOYER    ■ FAMILY MEMBER    ◀ FORMAL ADJUDICATION PROCESS    ■ FRIEND    ● HOSPITAL    ▲ MENTAL HEALTH AGENCY    ◆ NETWORK/JASAE
- OTHER    ▼ OTHER PROFESSIONAL (NON-SUBSTANCE ABUSE SPECIALIST)    ◀ PHYSICIAN (NON-SUBSTANCE ABUSE SPECIALIST)
- ▶ PROBATION/PAROLE STATE OF MAINE    ● SELF    ▲ STATE/FEDERAL COURT    ◆ SUBSTANCE ABUSE AGENCY
- SUBSTANCE ABUSE PROFESSIONAL (PRIVATE PRACTICE)    ▲ SUBSTITUTE CARE SERVICES - DHS

# Trend Report : Days between First phone and Tx (2004-9-13 to 2014-9-13)

Summary of "Days between First phone and Tx" question results:

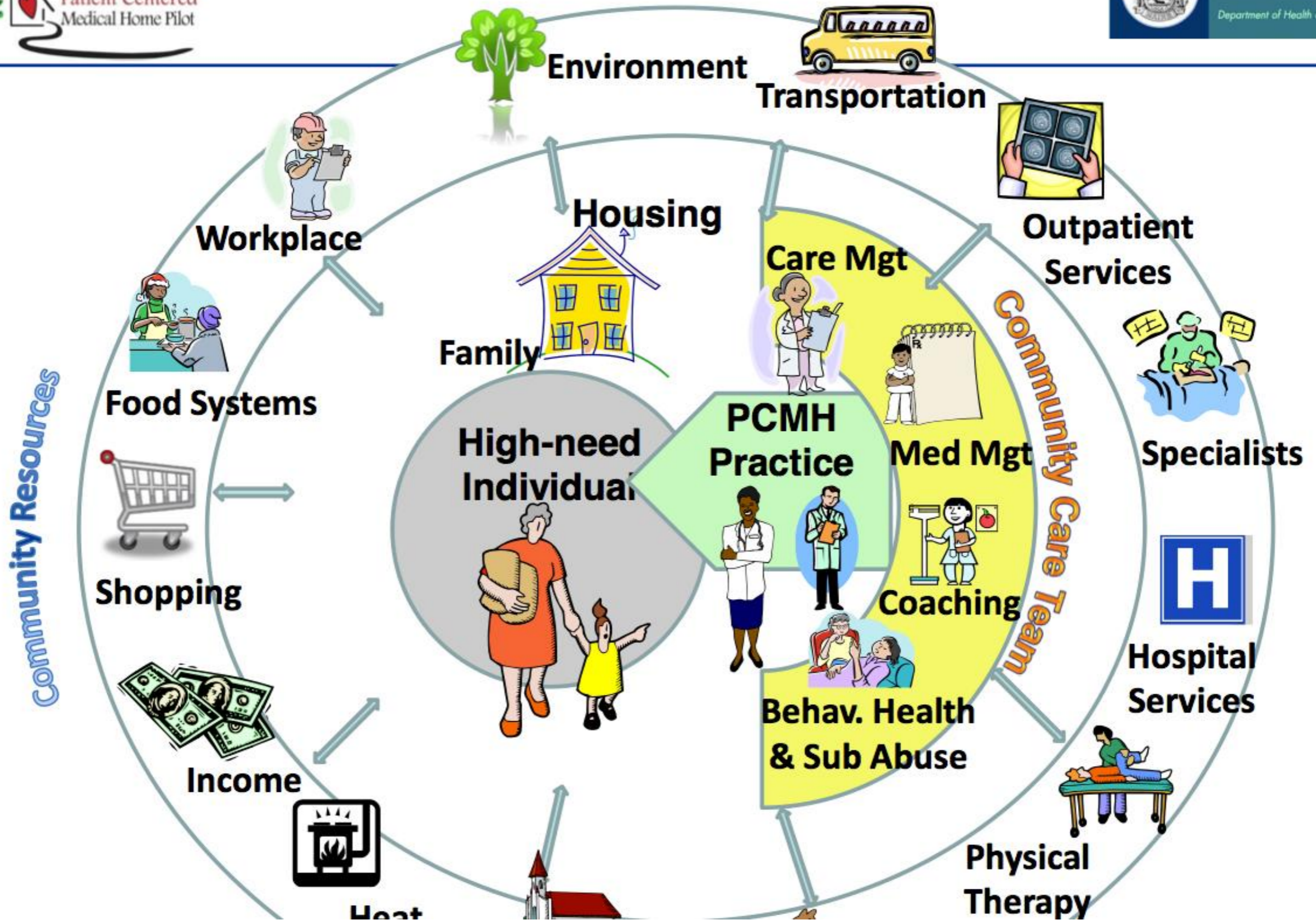
- **excluding duplicates** (counting only one questionnaire for each client for each unique response)
- only include clients admitted between **2004-9-13** and **2014-9-13**
- primary service of **46,40,**
- primary drug used inappropriately - **0400 Heroin/Morphine**

- The question 'Days between First phone and Tx' is not valid before 2007-06-25



# Where does MAT Fit In Primary Care?

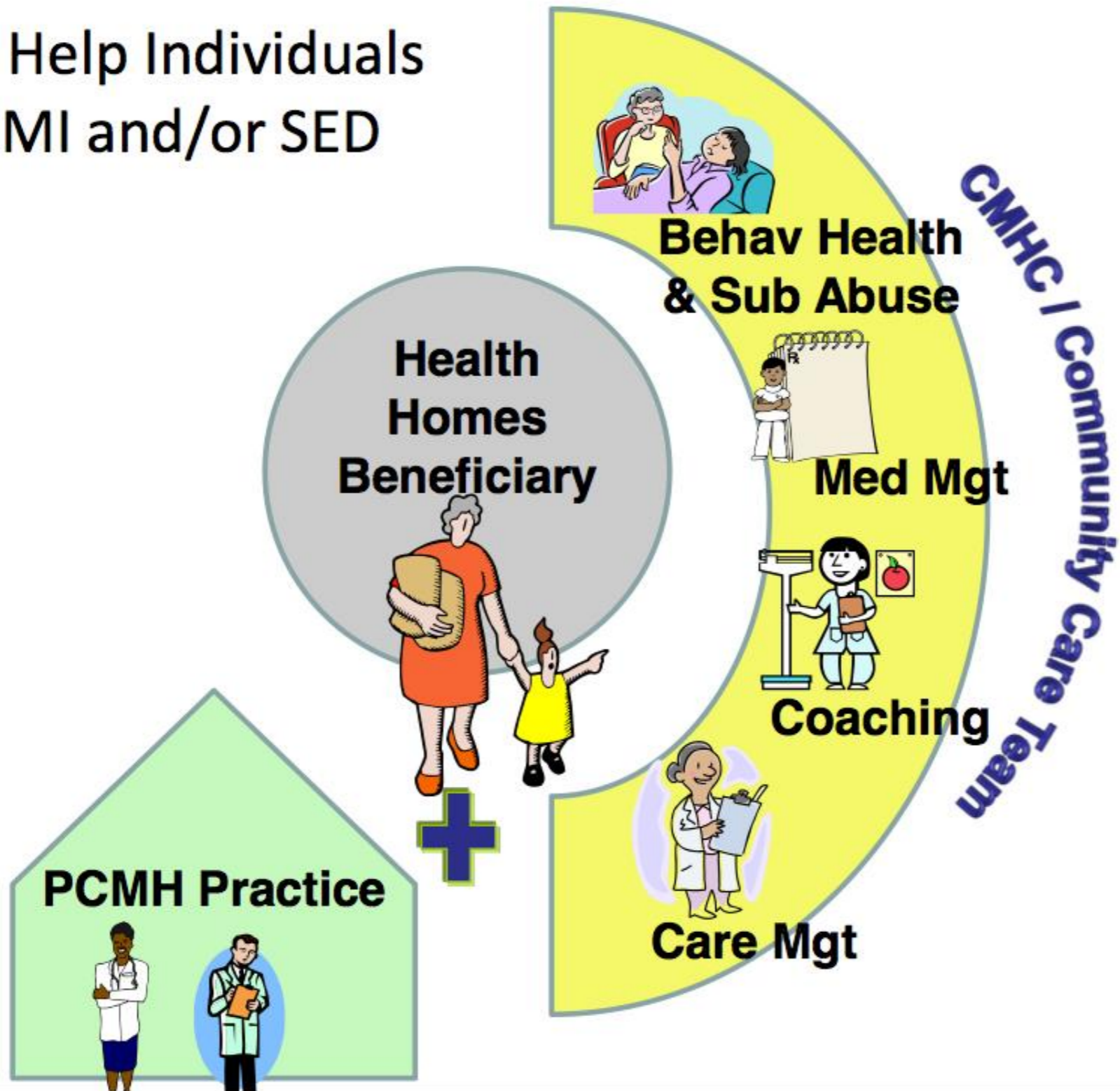






# Maine Health Homes Proposal

**Stage B:** Help Individuals with SPMI and/or SED



# Medical Issues For Individuals in MAT and Their Providers

- Finding a PCP
- Controlled Substance Prescriptions
- Surgery and other Medical Procedures
- Neurocognitive Functioning
- Psychological and Emotional Functioning
- Poor Nutrition
- HCV, HIV, degenerative disease, nicotine, other
- Poverty
- Transportation
- “medical” marijuana

# Methadone Issues

- Medication Interactions - AT (Addiction Treatment) Forum list -[www.atforum.com](http://www.atforum.com)
- QTc prolongation
- other medications with dependency potential
- “medical” marijuana
- Prior Authorization process



# Buprenorphine issues

- Diversion
- Post-Surgery and Procedure Analgesia
- PA process
- Length of Script
- Suboxone marketing
- “medical” marijuana

# Naltrexone Issues

- unconvincing and marginal research base on long term opioid dependence treatment effectiveness
- cost
- once its in its in for a month
- marketing
- has a place in a continuum of addiction care
- recovery means “drug-free”

“What was it that did in reality make me an opium-eater? That affection which finally drove me into the habitual use of opium, what was it? No, but misery. Casual overcasting of sunshine was it? No, but blank desolation. Gloom was it that might have departed? No, but settled and abiding darkness....”

Thomas De Quincey- Confessions of An Opium-Eater