



Prescription Drug Misuse Tracking

DELAWARE

OVERVIEW

- Measures were selected from areas relevant to prescription drug misuse across the spectrum.
 - Outcomes
 - Providers
 - Patients
 - Treatment
 - Law enforcement / Diversion
 - Insurers
- The purpose of these measures is to:
 - Establish baseline measures for quantifying the problem.
 - Describe the public health problem (prescription drug misuse) in Delaware.
 - Track and monitor changes in the selected measures.



We need to paint the picture.

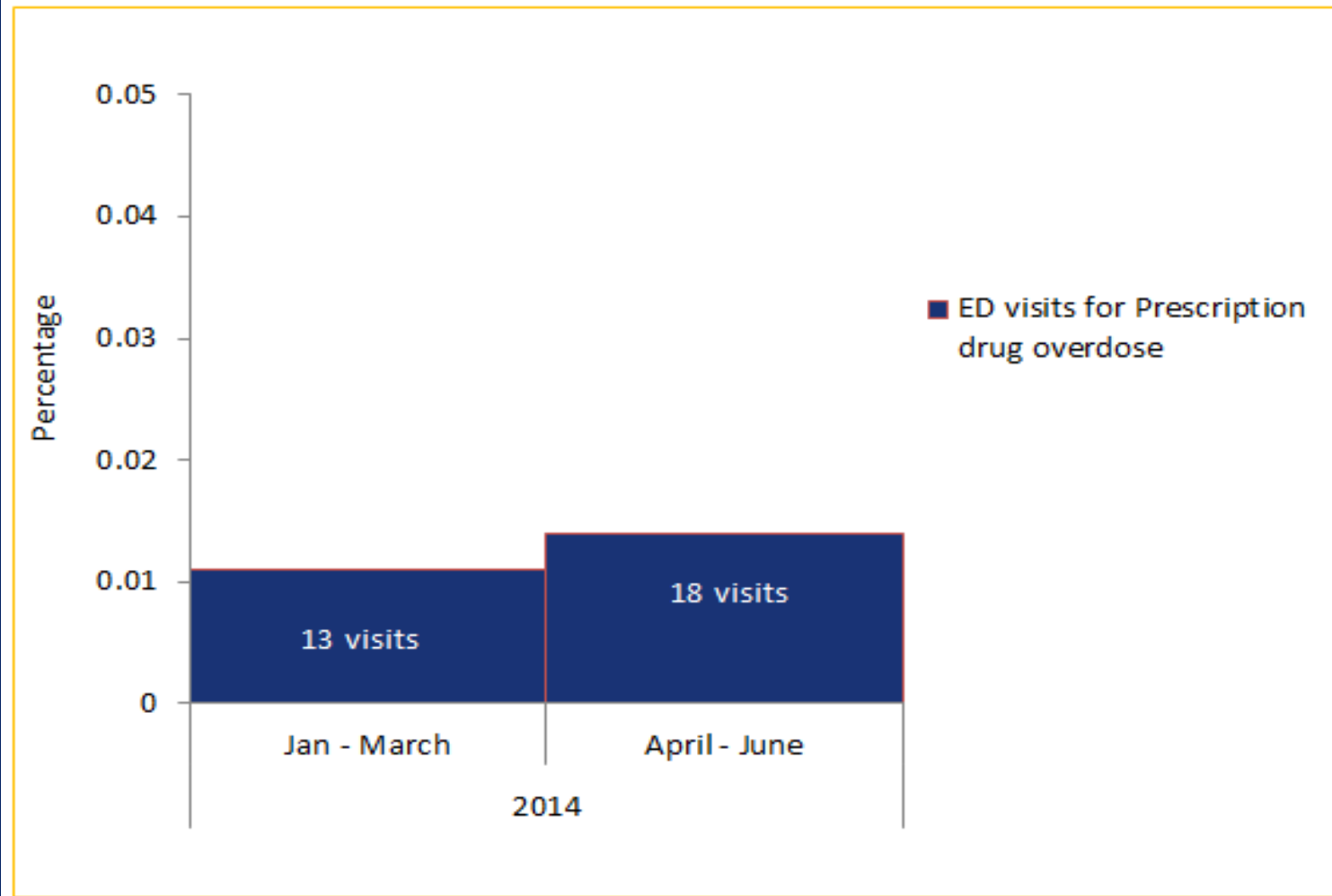
Prescription drug abuse progress measures

Key Prescription Drug Abuse Progress Measures

Area	Measure		Delaware										Comments
	Measure	Source	Time 1	Data	Time 2	Data	Time 3	Data	Time 4	Data	Time 5	Data	
Outcome	Age-Adjusted Prescription Drug Overdose Death Rate Per 100,000	Delaware Division of Public Health, Health Statistics Center	2007	8.5	2008	11.2	2009	12.3	2010	12.8	2011	13.5	
	Number of Prescription Drug Emergency Department Overdose-related visits	Division of Public Health, Syndromic Surveillance							Q1, 2014	13/117 680	Q2, 2014	18/1283 94	
Providers	Opioid Prescription Rate per 1000 state residents	Brandeis (Table 1.2)/PMP	Q1, 2012	211.8	Q2, 2012	207.0	Q3, 2012	212.2	Q4, 2012	211.2	2012	842.2	
	Percentage of patients prescribed long-acting/extended release (LA/ER) opioids who were opioid-naïve and mean daily dosage per LA/ER prescription, by quarter and year	Brandeis (Table 6.1)/PMP	Q1, 2012	9.3	Q2, 2012	8.9	Q3, 2012	8.5	Q4, 2012	8.4	2012	8.8	The number of opioid-naïve patients receiving at least 1 LA/ER opioid Rx per quarter, divided by the total number of patients who received an LA/ER opioid Rx per quarter and multiplied by 100. LA/ER is defined as one with no opioid prescriptions in the previous 60 days.
	Percentage of patients prescribed more than 100 Mean Morphine Equivalents (MMEs) per day	Brandeis (Table 2.1)/PMP	Q1, 2012	18.81	Q2, 2012	17.35	Q3, 2012	16.68	Q4, 2012	16.55	2012	17.35	The % of patients receiving >100 MMEs daily refers to the % of patients with > 100 MMEs per day prescribed for all drugs used by the
	Benzodiazepines Prescription Rate per 1000 residents	Brandeis (Table 1.2)/PMP	Q1, 2012	108.2	Q2, 2012	108.5	Q3, 2012	111.0	Q4, 2012	110.9	2012	438.6	
	Percentage of days with overlapping prescriptions across opioid and benzodiazepine drug classes	Brandeis (Table 3.2)/PMP	Q1, 2012	12.7	Q2, 2012	12.9	Q3, 2012	13.1	Q4, 2012	13.1	2012	13.0	The number of days with both an opioid and benzodiazepine prescription divided by the total number of opioid rx days.
	Queries to PMP	Department of State	Q2, 2013	70031	Q3, 2013	77167	Q4, 2013	78299	Q1, 2014	82760	Q2, 2014	87831	Queries from users (all pharmacists and prescribers)
Patients	Multiple Drug Episode Rates, Opioids per 100,000 residents	Brandeis (Table 4.2)/PMP	Q1, 2012	13.5	Q2, 2012	10.9	Q3, 2012	10.3	Q4, 2012	8.5	2012	10.8	Multiple provider episode rate is defined as use of 5 or more prescribers and 5 or more pharmacies within 3 months and is based on the current 3 months. The annual rate is calculated as the average quarterly rate for the specified year.
	Multiple Drug Episode Rates, Benzodiazepines per 100,000 residents	Brandeis (Table 4.2)/PMP	Q1, 2012	10.4	Q2, 2012	8.1	Q3, 2012	8.5	Q4, 2012	7.6	2012	8.6	
Treatment	State funded adult admissions for treatment for opiates and synthetics	DSAMH	2009	1400	2010	1359	2011	1643	2012	1793	2013	1261	fiscal year
	Percent of Medicaid clients pharmaceutically treated for drug abuse who were treated with methadone.	Medicaid	2014-03	59.2	2014-04	70.3	2014-05*	70.2	2014-06*	70.2	2014-07*	67.7	* counts may not be complete as encounters can take several months to be submitted to DMMA.
Law Enforcement/Diversion													
Insurers	Number of Medicaid patients enrolled in a Patient Restriction Review												This is a CDC recommended measure. Need data from insurers.

Hospital emergency department visits

Figure 1. Percentage of Delaware emergency department visits related to prescription drug overdoses

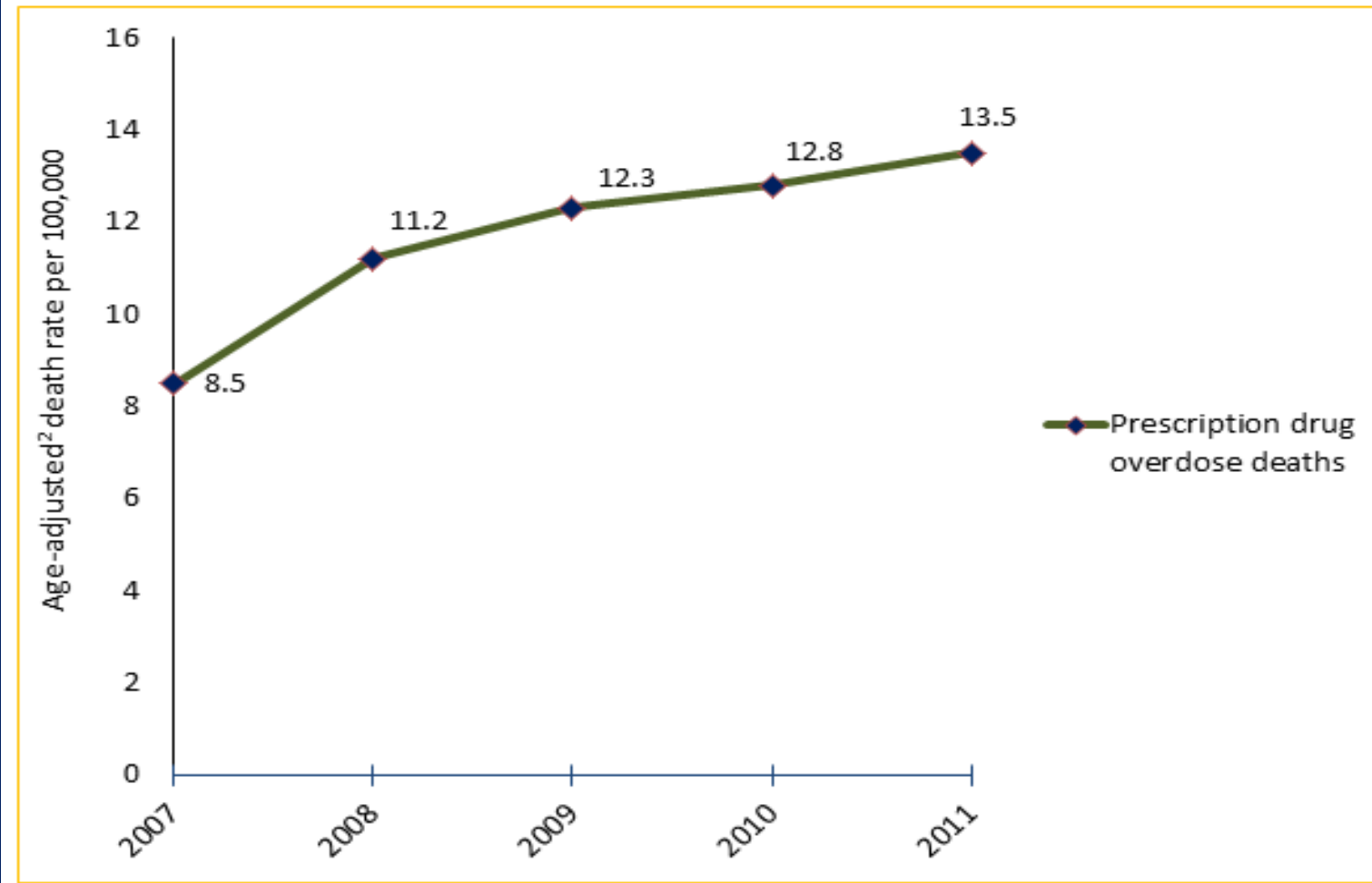


Source: Delaware Electronic Reporting and Surveillance System

- During the first half of 2014, there were 246,074 emergency department visits.
- A small percentage of all visits (0.01% or 1 visit per 10,000 ED visits) was attributed to patients with chief complaints related to prescription drug overdoses.

Prescription drug overdose deaths

Figure 2. Prescription drug¹ overdose deaths, Delaware 2007-2011



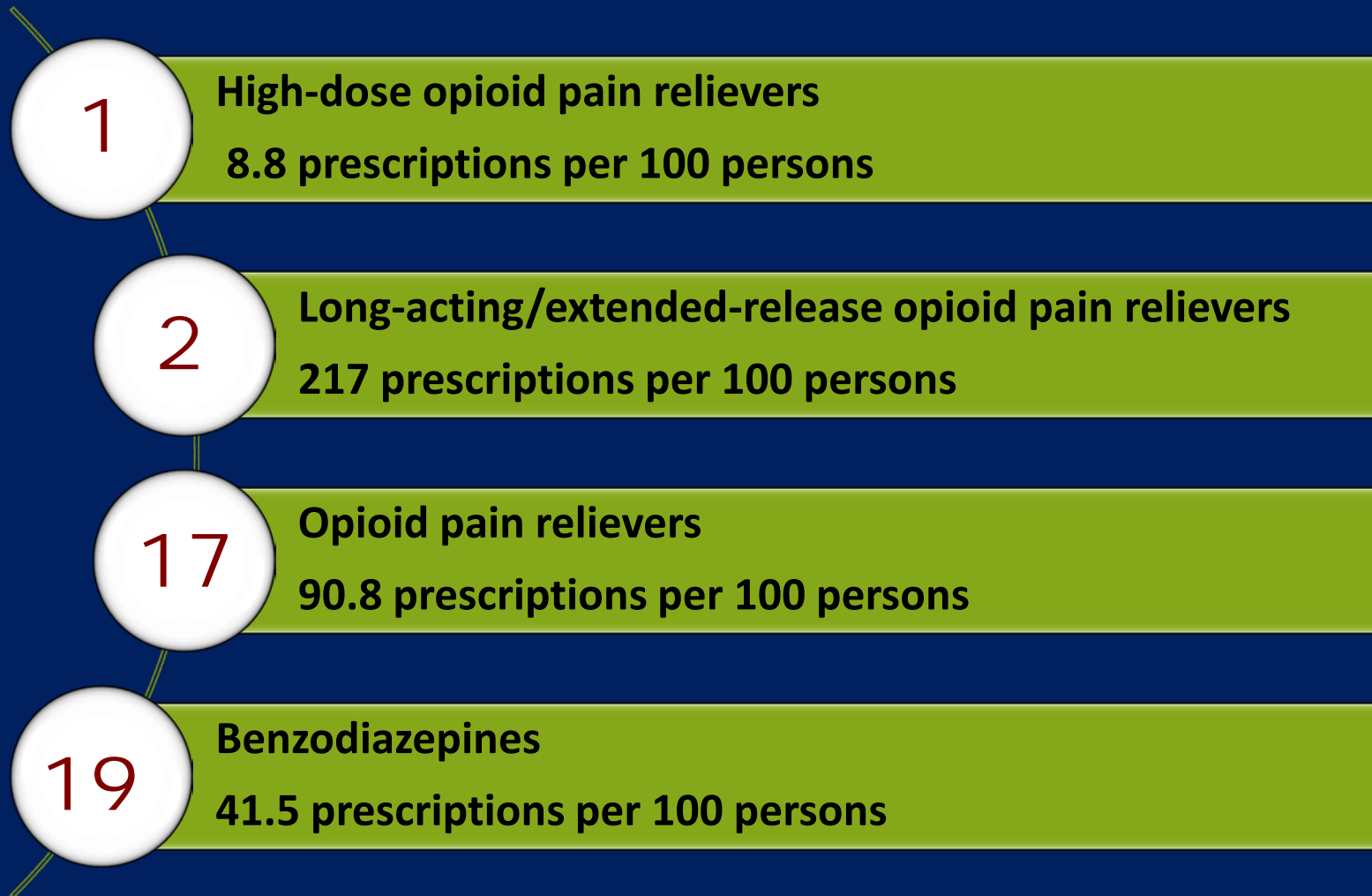
1. Type of drug using both T-codes and cause of injury field; 2. Rates are age-adjusted to the 2000 US Standard Population; Source: Delaware Health Statistics Center

- There appears to be an increasing trend in deaths related to prescription drug overdoses in Delaware.

Provider measures



Prescribing rates - Delaware's rank

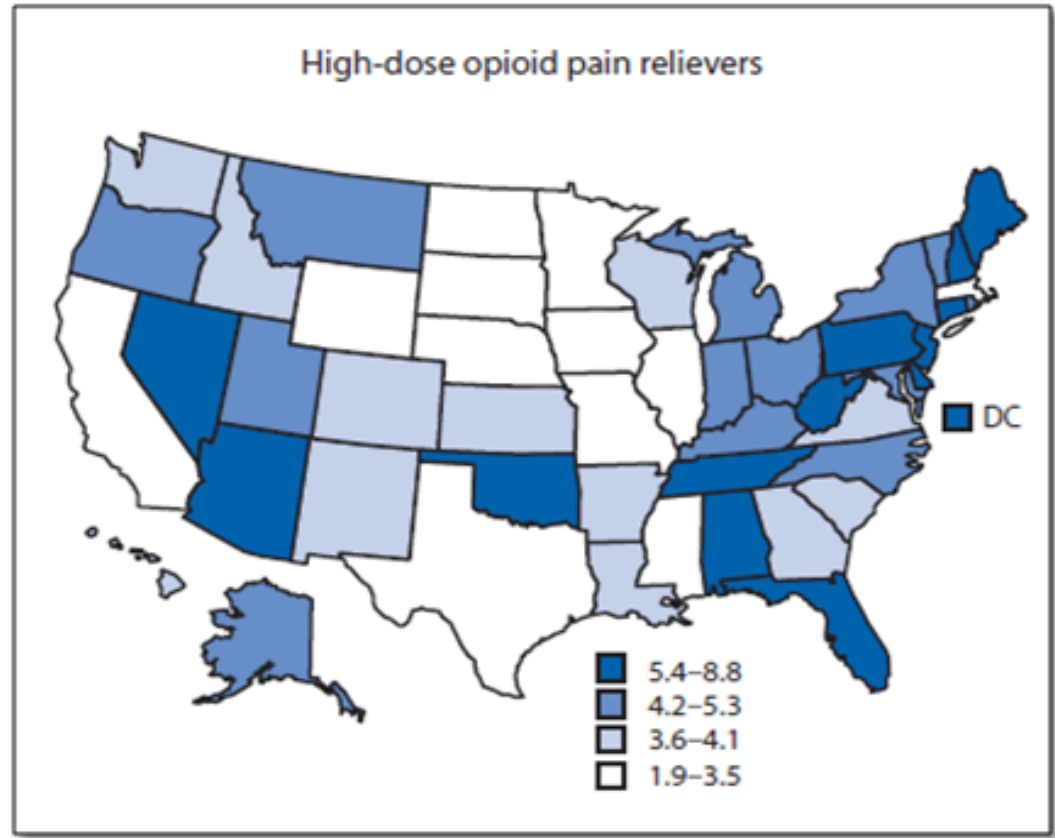


Source: IMS Health data; [Paulozzi LJ](#), [Mack KA](#), [Hockenberry JM](#); Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC. Vital signs: variation among States in prescribing of opioid pain relievers and benzodiazepines - United States, 2012. [MMWR Morb Mortal Wkly Rep.](#) 2014 Jul 4; 63(26):563-8.

High-dose and LA/ERs

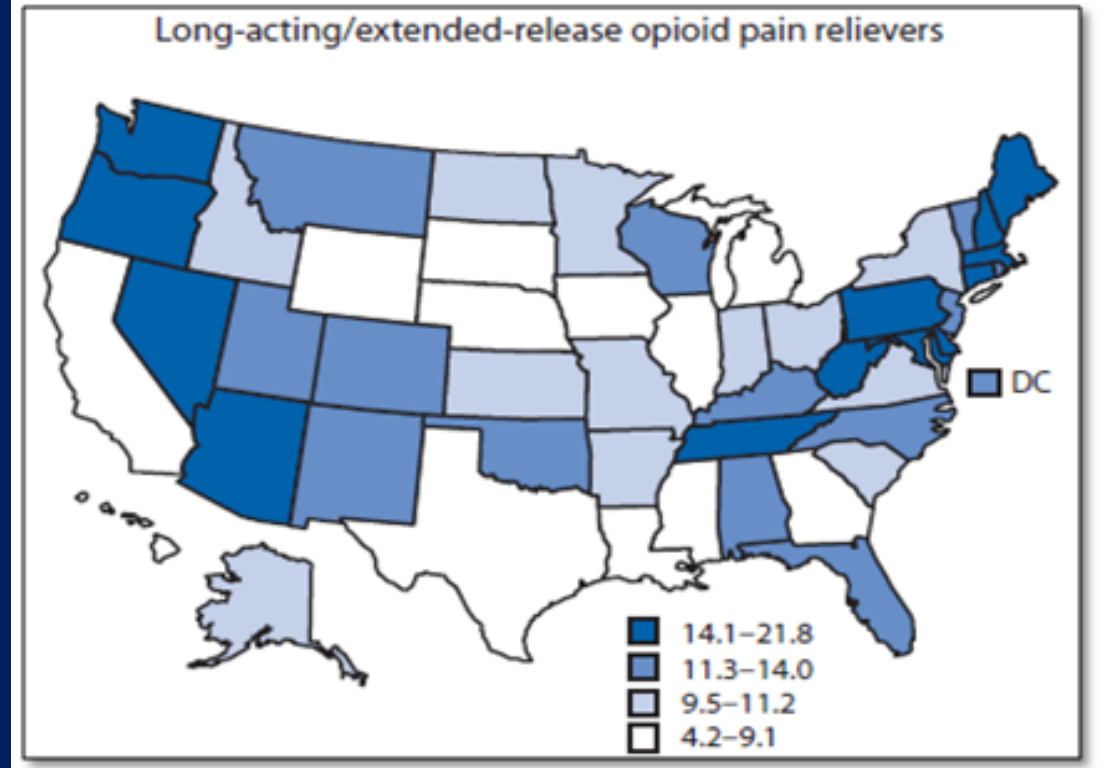
Delaware ranked #1 in nation

Figure 4. Prescribing rates for high-dose opioid pain relievers per 100 persons (in quartiles), by state and drug type, United States 2012



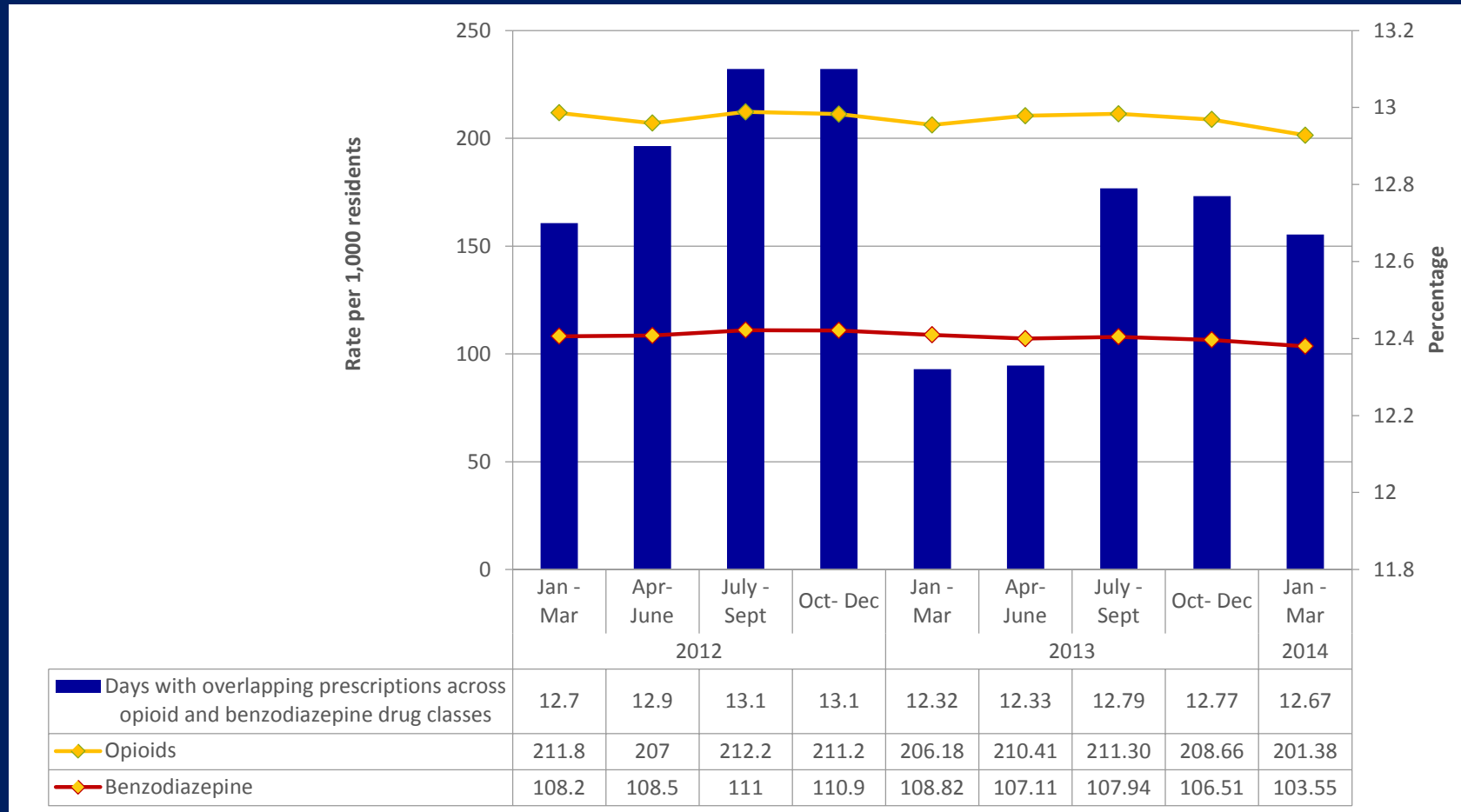
Delaware ranked #2 in nation

Figure 4. Prescribing rates for long-acting/extended-release opioid pain relievers per 100 persons (in quartiles), by state and drug type, United States 2012



Source: IMS Health data; [Paulozzi LJ](#), [Mack KA](#), [Hockenberry JM](#); Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC. Vital signs: variation among States in prescribing of opioid pain relievers and benzodiazepines - United States, 2012. [MMWR Morb Mortal Wkly Rep.](#) 2014 Jul 4; 63(26):563-8.

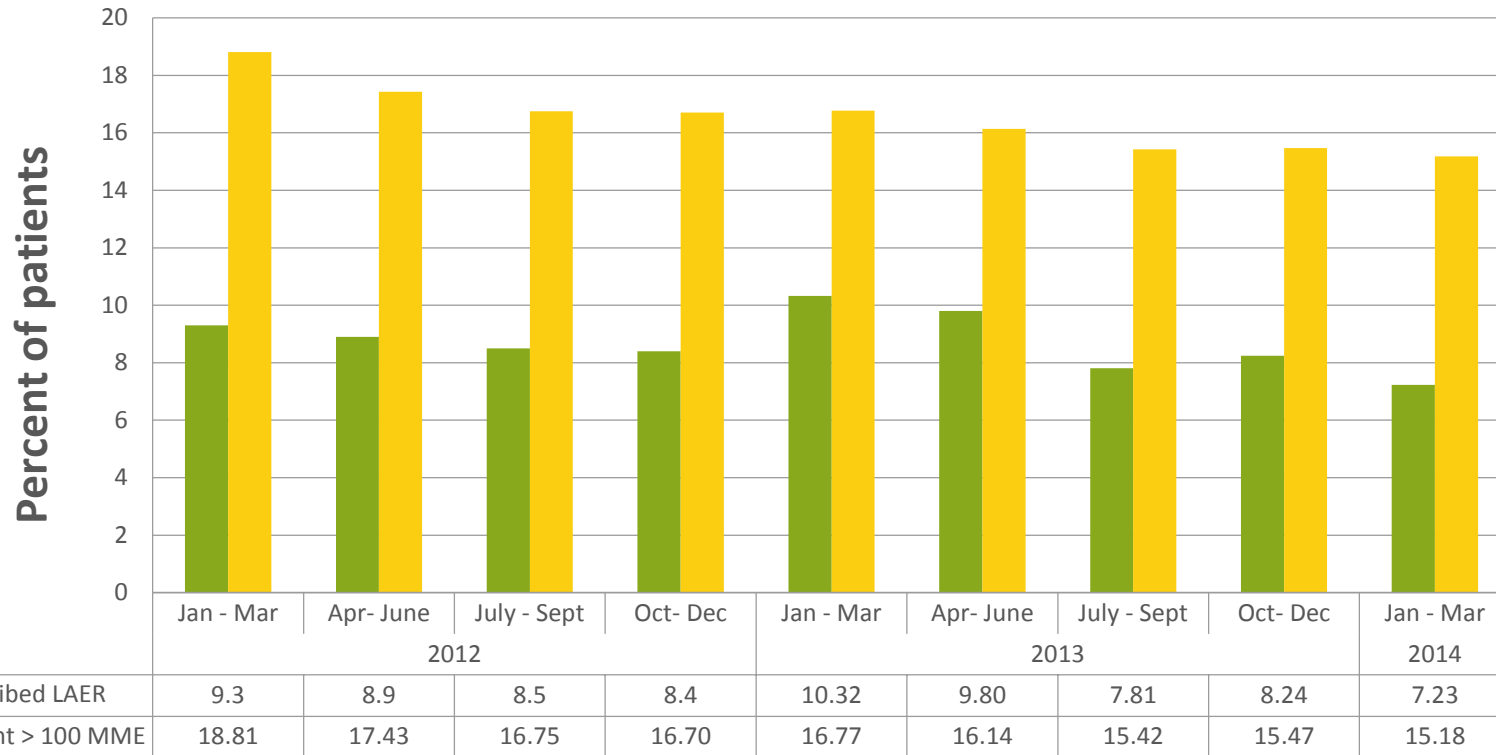
Prescription rates and overlapping prescription days



Source: Delaware Prescription Monitoring Program/ Brandeis

Long Acting/Extended Release and more than 100 MME per day, Delaware

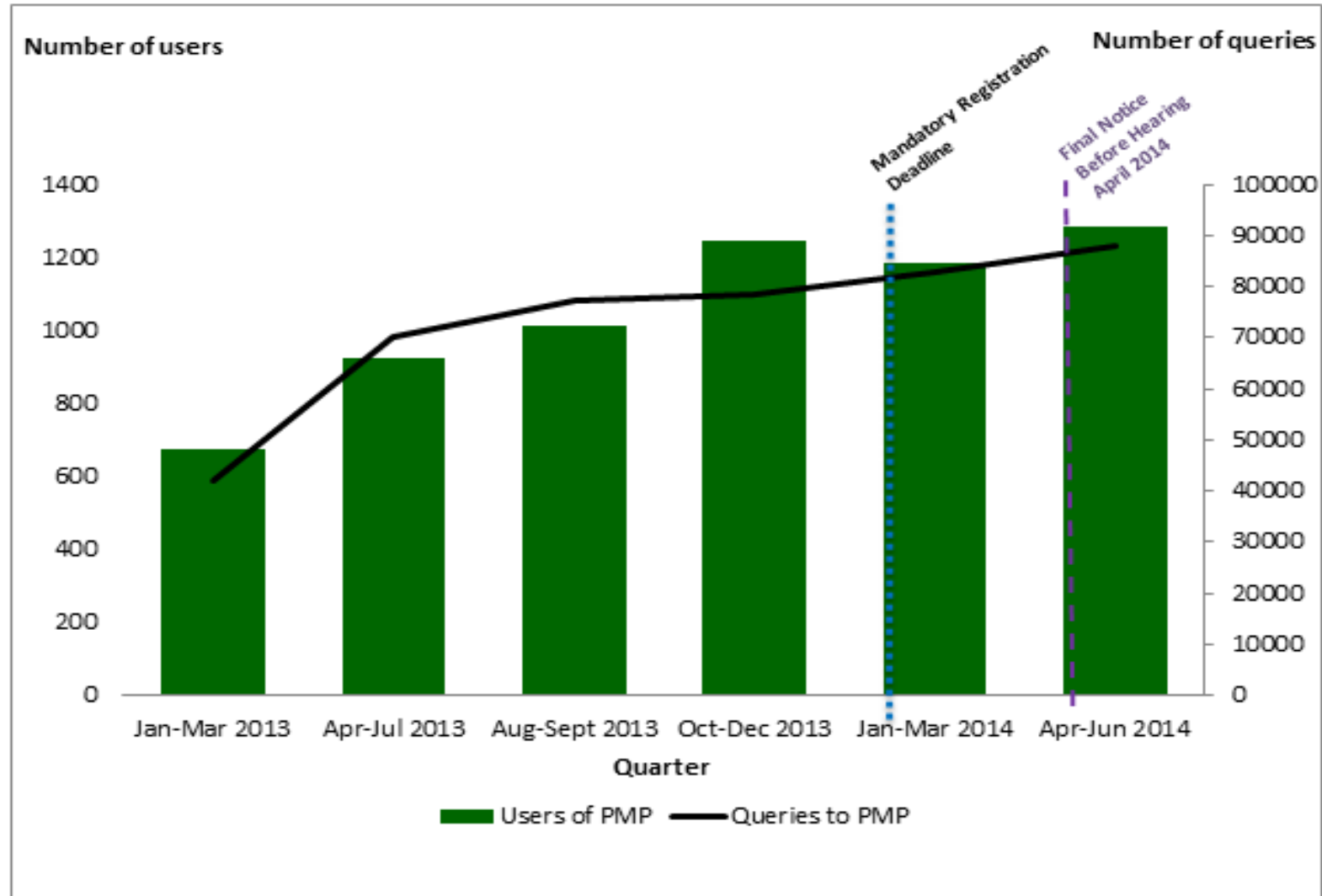
Patients Prescribed long acting/extended release (LAER) opioids who were opioid naive or prescribed more than 100 mean morphine-equivalents (MME) per day



Source: Delaware Prescription Monitoring Program/ Brandeis

Prescription Monitoring Program

Figure 5. Use of Delaware's Prescription Drug Monitoring Program, January 2013 to June 2014



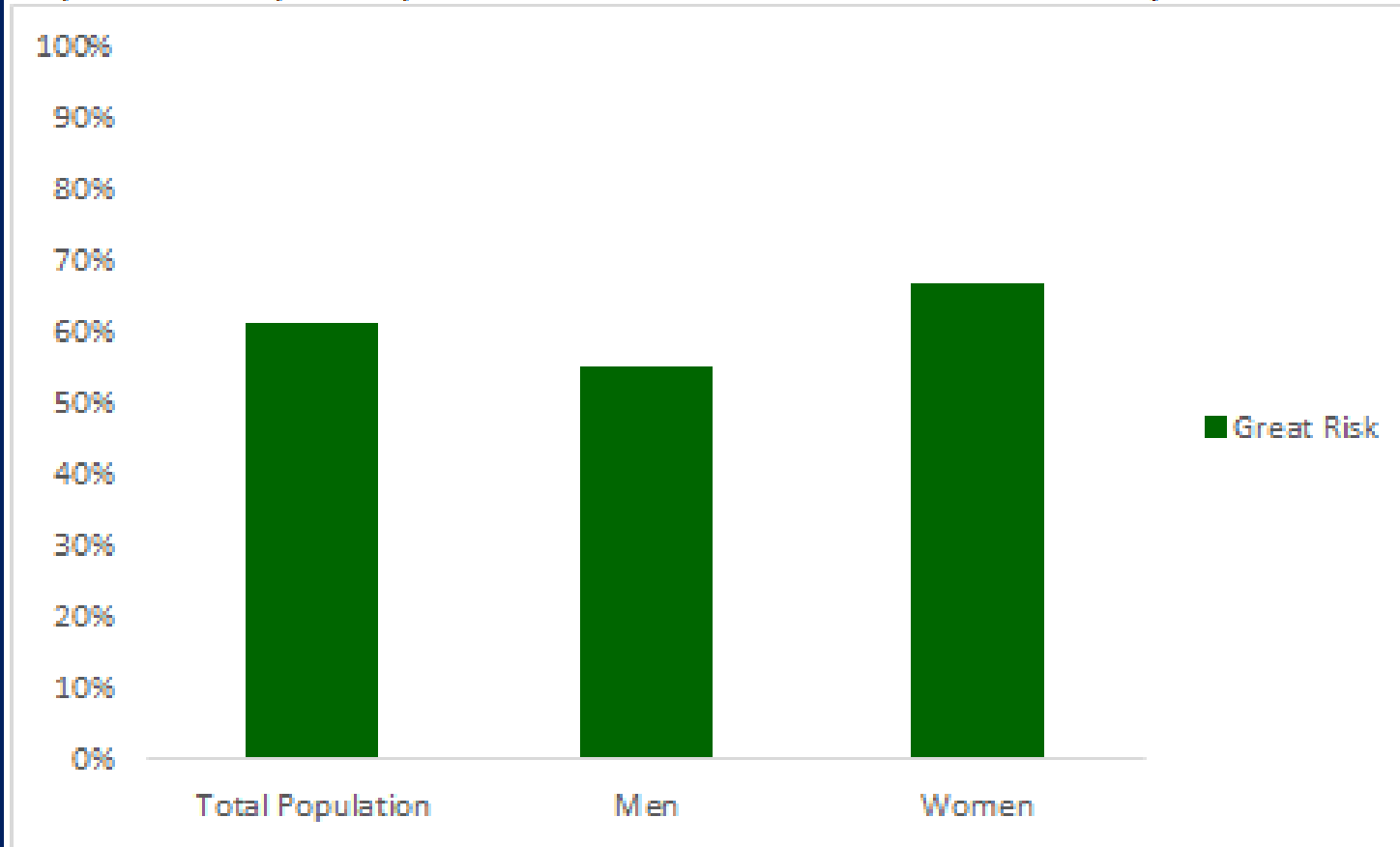
Users of the PMP include all pharmacists and prescribers; Source: Department of State

Patient measures



Delaware high school students – perceived risk for using unprescribed prescription drugs

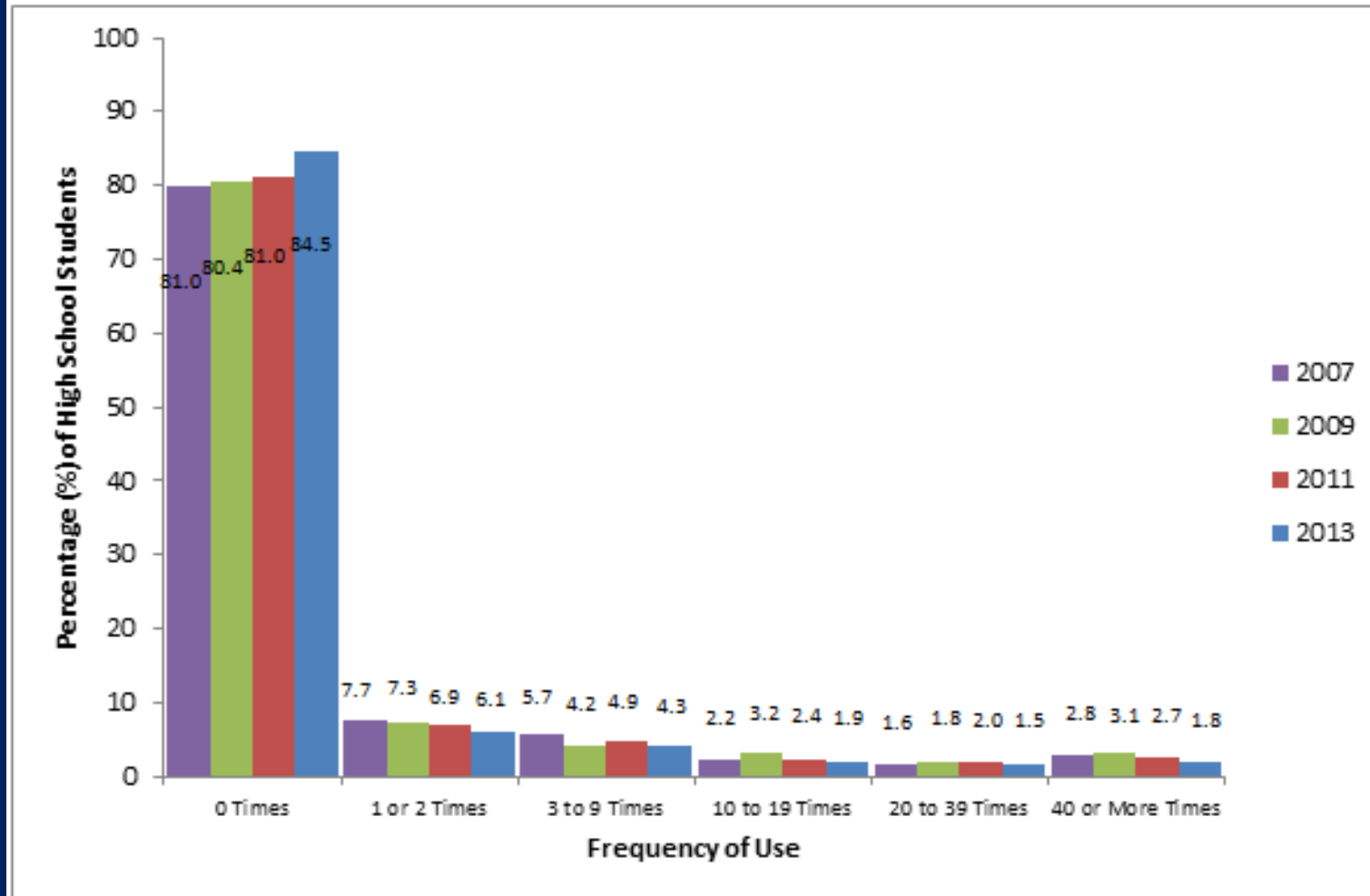
Figure 8. Delaware high school students who report perceived risk of harm to others from use of unprescribed prescriptions, 2011 Youth Risk Behavior Survey



Source: University of Delaware, Youth Behavior Risk Survey 2011

High school student reported ever use of painkillers

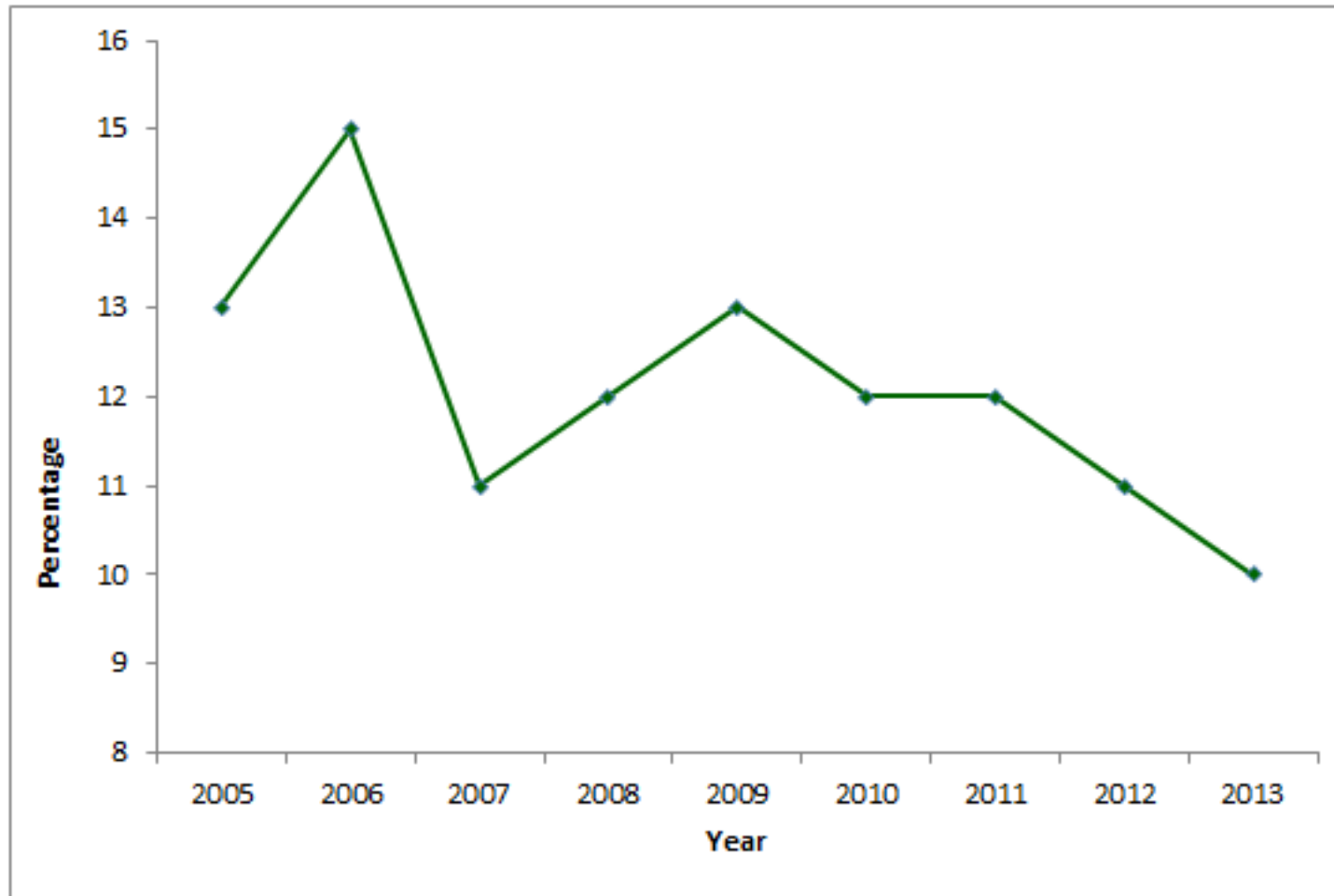
Figure 10. High school students who reported having used painkillers during their lifetime, Delaware 2007-2013



Source: University of Delaware, Youth Behavior Risk Survey 2007, 2009, 2011, 2013

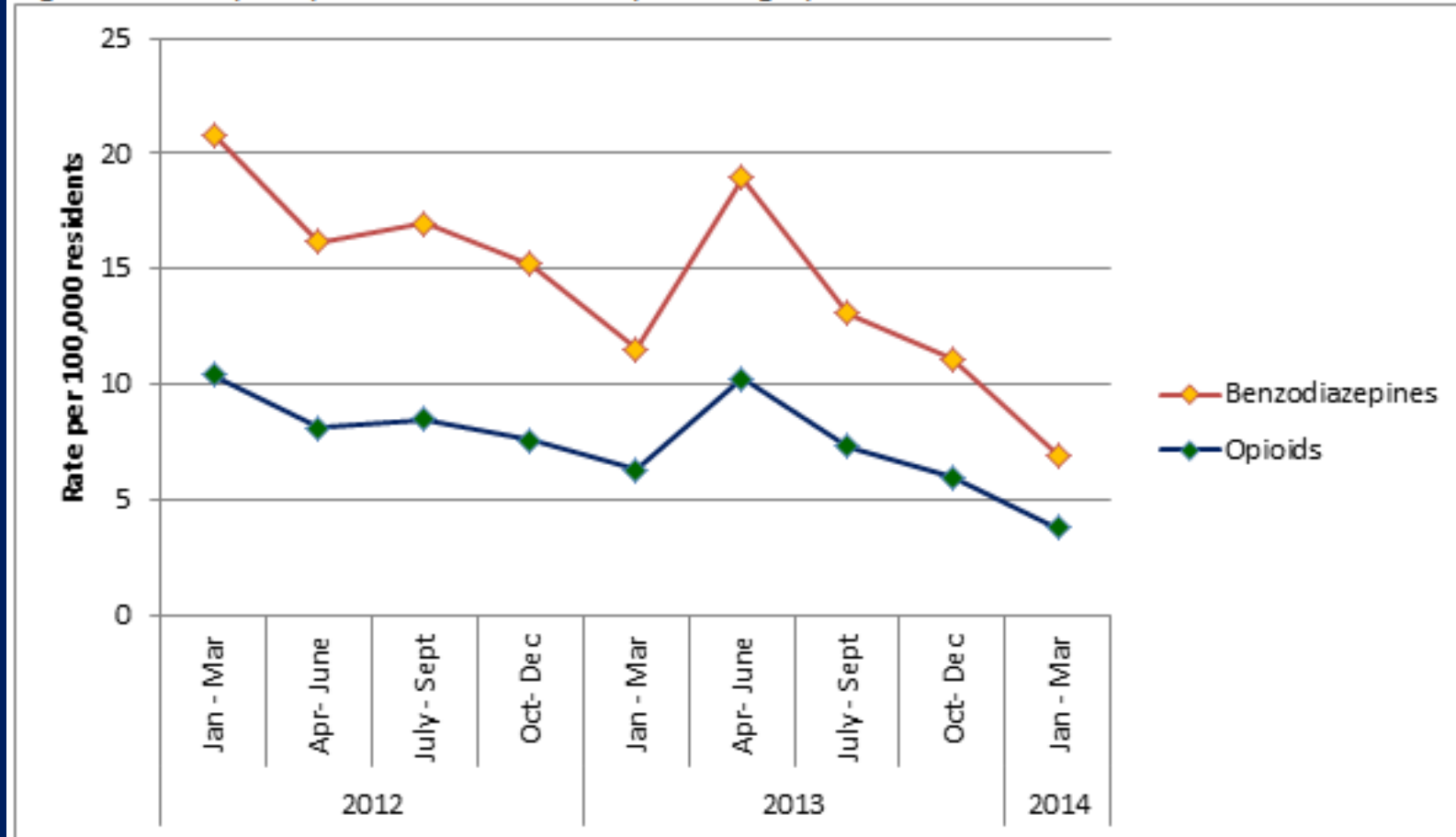
Illegal prescription drug use reported by 8th grade students, Delaware 2005 – 2013

Figure 9. Eighth grade students who have used a prescription drug illegally in the past year, Delaware 2005 – 2013



Multiple drug episodes

Figure 5. Multiple opioid and benzodiazepine drug episodes¹, Delaware 2012

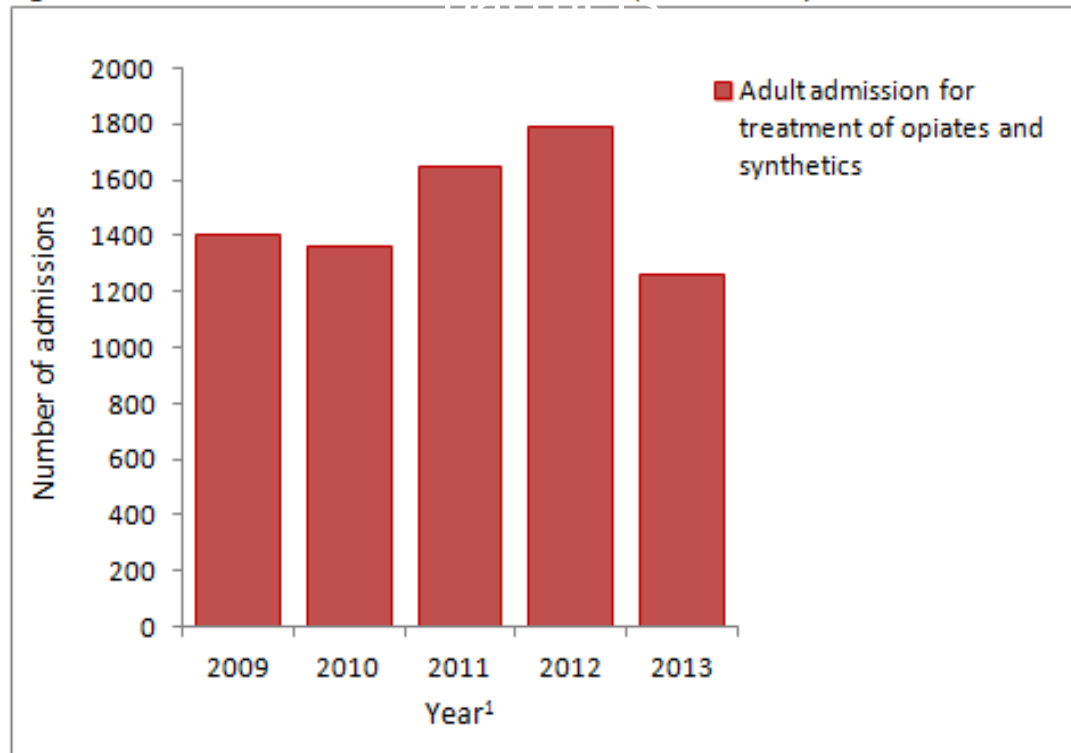


1. A multiple provider episode is defined as use of 5 or more prescribers and 5 or more pharmacies within 3 months and is based on the current 3 months. Source: Brandies Prescription Drug Monitoring Program data tables including Table 4.2.

Treatment measures

Admissions - DSAMH funded clinics

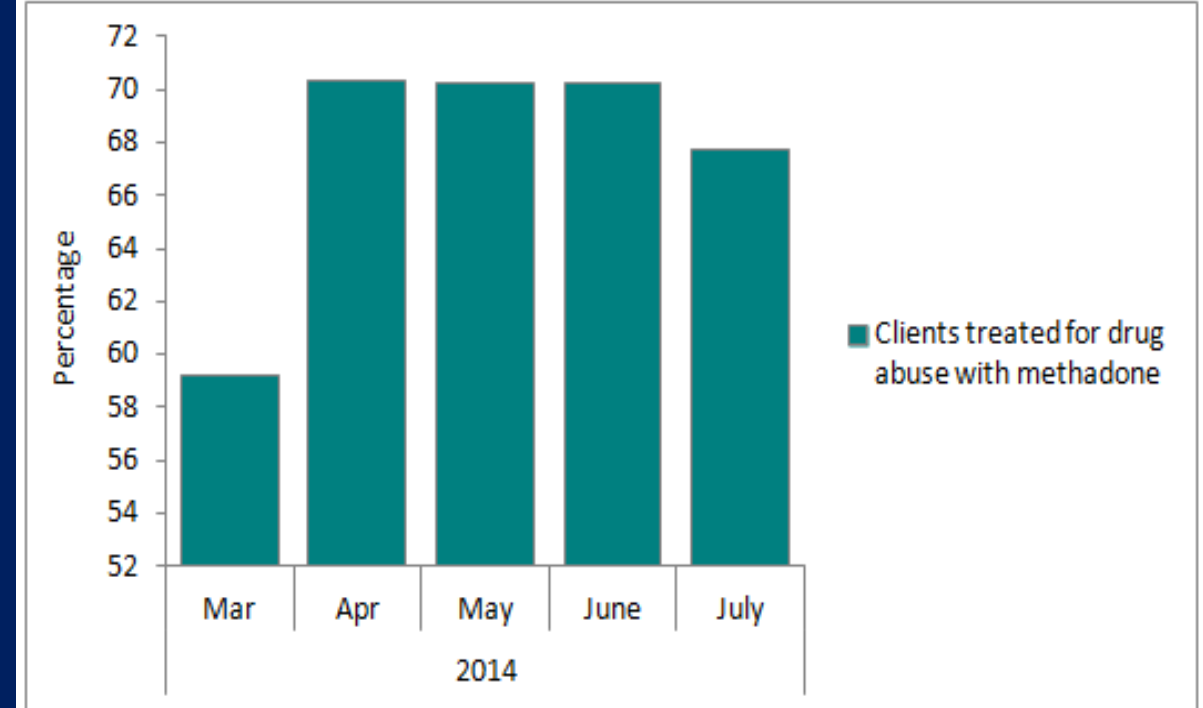
Figure 6. Adult admissions for treatment of opiates and synthetics



1. Fiscal year; Source: Department of Substance Abuse and Mental Health

Medicaid patients – methadone treatment

Figure 7. Medicaid patients pharmaceutically treated with methadone for drug abuse

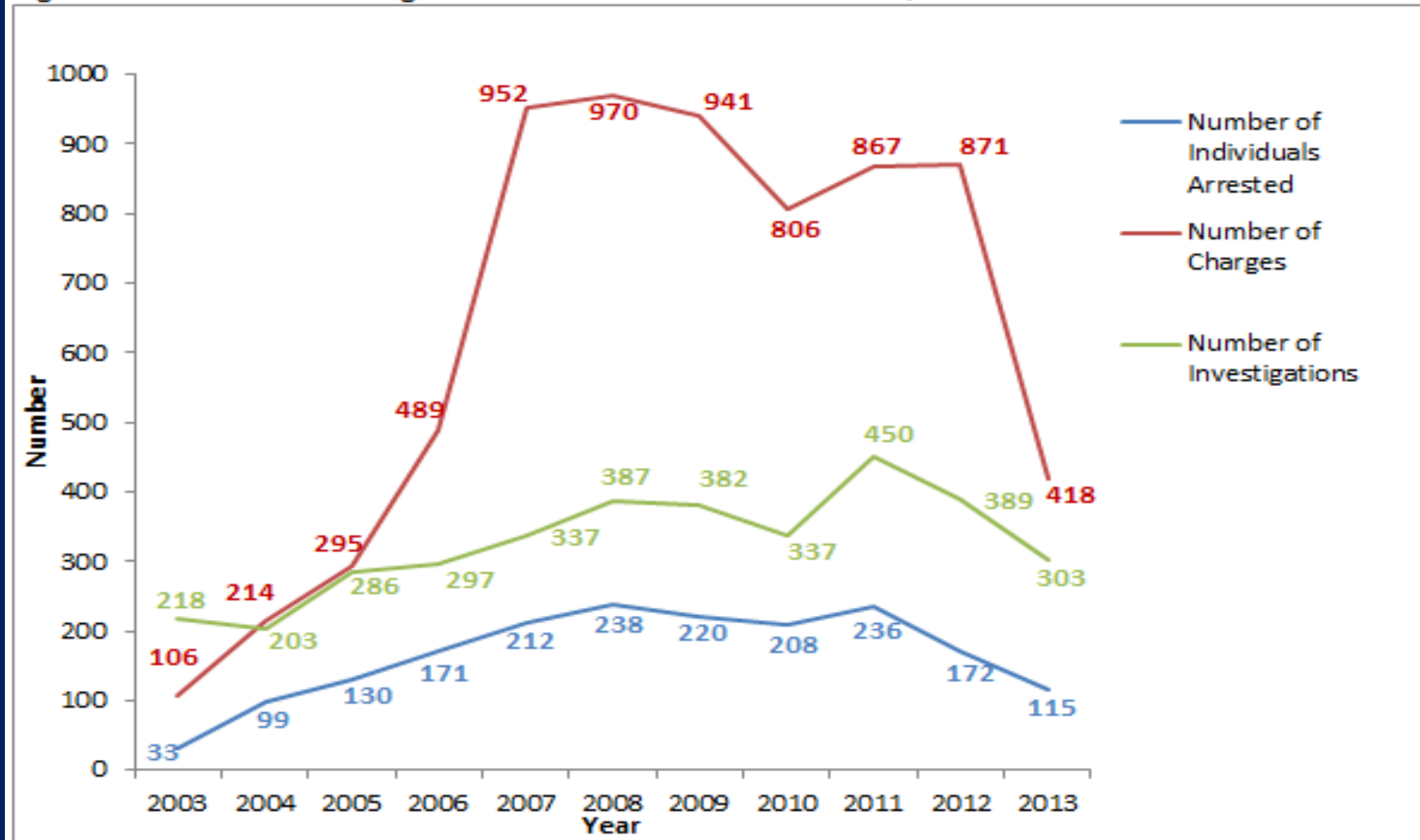


Data may not be complete because encounters can take several months to be submitted to DMMA.
Source: Medicaid

These data do not include Delaware substance abuse funded clients

Drug diversion

Figure 11. State Police Drug Diversion Unit data for Delaware, 2003 – 2013



Source: Delaware State Police, Drug Diversion Unit.

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Insurers	Number of Medicaid patients enrolled in a Patient Restriction Review												This is a CDC recommended measure. Need data from insurers.