

Schedule II Opioid Prescribing: Barnstable County, Massachusetts: Data from the Massachusetts Department of Public Health's Prescription Monitoring Program



Background:

- Prescription monitoring programs (PMPs) are important tools to support safe and appropriate opioid prescribing. Information provided by PMPs can help prescribers and pharmacists identify individuals who might be misusing or abusing controlled substance prescription drug products and therefore might need intervention, such as referral to treatment.
- The MA PMP, established through joint regulations with the Board of Registration in Pharmacy in 1992, collects dispensing information on Schedule II through V controlled substances dispensed by MA pharmacies and out-of-state pharmacies that deliver to MA residents.

Key Data Findings:

- In 2013, 14.3 percent of the Barnstable County resident population received a Schedule II opioid prescription compared to 11.1 percent of the state population. It is important to note that many individuals within the Commonwealth and within specified geographic areas (e.g., county, city/town) received multiple Schedule II opioid prescriptions during a given year while a significant portion of the population received none.
- MA PMP examines use of multiple prescribers and multiple pharmacies by a single individual in order to evaluate possible "Activity of Concern." In Barnstable County, MA, there was a rate of 15.5 per 1,000 persons surpassing the threshold of Activity of Concern among those who received at least one Schedule II opioid prescription during 2013. In 2013, the state rate of individuals with activity of concern was 14.3 per 1,000 persons.

Table 1. Schedule II opioid data reported to the MA PMP by calendar year (2009—2013).

	cy 2009	cy 2010	cy 2011*	cy 2012*	cy 2013*
Barnstable County					
Census Population: Barnstable County	215,994	215,888	215,888	214,947	214,990
Total Number of Schedule II (i.e., CII) Opioid Prescriptions	108,303	108,037	109,219	110,943	111,537
Total CII Opioid "Solid" Dosage Units	7,033,396	7,092,966	6,921,744	6,997,423	6,982,337
Number of Individuals Who Received a CII Opioid Prescription	30,791	30,382	30,644	30,976	30,775
Percent of Individuals Who Received CII Opioid Prescription (of total population)	14.3	14.1	14.2	14.4	14.3
Individuals with Activity of Concern	591	514	563	502	478
Rate of Individuals with Activity of Concern (per 1,000 CII opioid population)	19.2	16.9	18.4	16.2	15.5
Total State of Massachusetts					
Census Population: Massachusetts	6,517,613	6,547,629	6,547,629	6,645,303	6,692,824
Total Number of Schedule II (i.e., CII) Opioid Prescriptions	2,472,849	2,484,951	2,580,785	2,692,327	2,680,740
Total CII Opioid "Solid" Dosage Units	153,403,950	158,198,257	167,017,256	174,548,244	171,777,833
Number of Individuals Who Received a CII Opioid Prescription	700,341	718,081	723,012	744,304	741,908
Percent of Individuals Who Received CII Opioid Prescription (of total population)	10.7	11.0	11.0	11.2	11.1
Individuals with Activity of Concern	11,850	10,807	10,965	10,931	10,636
Rate of Individuals with Activity of Concern (per 1,000 CII opioid population)	16.9	15.0	15.2	14.7	14.3
* Estimates based on 2010 population					
Data Source: MA Department of Public Health, Prescription Monitoring Program, September 2014					
U.S. Census Bureau: http://quickfacts.census.gov/qfd/states/25000.html					

Data Notes:

- The Drug Enforcement Administration (DEA) has the authority to classify the drugs (usually the main active ingredient) used in prescription drug products in Schedules II – V based on an evaluation that determines the drug's safe medical use and potential for abuse or addiction (US DEA. <http://www.justice.gov/dea/druginfo/ds.shtml>).
- Schedule II contains drugs with the highest abuse potential. Schedule II opioid drugs include oxycodone, fentanyl and morphine. Data in this report are restricted to prescriptions related to Schedule IIⁱ opioids only. Hydrocodone combination products such as Vicodin were classified as Schedule III opioids during the time that this data was reported and are not included in the data reported. In October 2014, hydrocodone combination products were reclassified as Schedule II.
- Reporting of prescriptions for drug products in Schedules III - V was not required prior to 2011. Prescriptions for Schedule II non-opioid drugs (e.g. amphetamine, methylphenidate) are not included in the data presented.
- MA PMP defines "Activity of Concern" for opioids as individuals who are obtaining Schedule II opioid controlled substance prescriptions from different prescribers and having those prescriptions dispensed at different pharmacies. Measures of "Activity of Concern" cannot ascertain the underlying clinical condition of the patient or the reasons why a patient may be receiving Schedule II opioid prescriptions from multiple prescribers.

Data Dictionary for Table 1.

Data Fields	Definition
<i>Census Population</i>	All intercensal estimates are calculated by the U.S. Census Bureau and based on 2010 U.S. Census, Population for the County and for State.
<i>Total Number of Schedule II Opioid* Prescriptions</i>	A count of the total number of Schedule II opioid prescriptions reported to the MA PMP during the specified time period for specified geographic area. An opioid is defined as any substance having an addiction-forming or addiction-sustaining liability similar to morphine or being capable of conversion into a drug having addiction-forming or addiction-sustaining liability.
<i>Total Schedule II Opioid "Solid" Dosage Units</i>	This is a count of the total number of Schedule II opioid solid dosage units (i.e., tablets, pills, capsules or patches) dispensed during the specified time period for specified geographic area.
<i>Number of Individuals Who Received a Schedule II Opioid Prescription</i>	A count of the total number of unique individuals who have received at least one Schedule II opioid prescription during the specified time period for the geographic area based on patient's first and last name and date of birth as reported by the pharmacy on the prescription record. No identifiable information is released for any individual in this county level data.
<i>Percent of Individuals who Received a Schedule II Opioid Prescription (of total population)</i>	The percent of individuals in the population that have received one or more Schedule II opioid prescriptions during the specified time period for each geographic area. The percentage is calculated by dividing the number of individuals who received a Schedule II opioid prescription by the total number of individuals reported in the census and multiplying the product by one hundred.
<i>Individuals with Activity of Concern**</i>	A count of the number of individuals during the specified time period for each geographic area who meet a specified threshold for activity of concern.
<i>Rate of Individuals with Activity of Concern (per 1,000 population)</i>	This is the rate of individuals who meet the specified activity of concern threshold among those individuals who have received one or more Schedule II opioid prescriptions during the specified time period for the geographic area. The rate is calculated by dividing the number of individuals reaching the threshold for activity of concern by the number individuals who received a Schedule II opioid prescription and multiplying the product by one thousand.
*An opioid is defined as any substance having an addiction-forming or addiction-sustaining liability similar to morphine or being capable of conversion into a drug having addiction-forming or addiction-sustaining liability.	
** For purposes of annual data reporting, DCP defines "Activity of Concern" for opioids as obtaining Schedule II opioid or Schedule II-V opioid controlled substance prescriptions from 4 or more different prescribers and having those prescriptions dispensed at 4 or more different pharmacies.	

ⁱ In order to accurately compare data over time between 2009 and 2013 (5-year interval) only Schedule II prescription data are provided for general public and community-specific data requests. MA PMP will routinely begin providing data for all Schedule II-V opioids once 2015 data become available.