

# Updating the Prescription Opioid Threat in Pennsylvania



DEA  
BULLETIN



(U) This DEA Bulletin is based on preliminary reporting and may be subject to updating as additional information becomes available.

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## Event

The Drug Enforcement Administration (DEA) Philadelphia Division's Intelligence Program (PDIP) reviewed a set of data indicators for the years 2015-2018 to assess the current prescription opioid threat in Pennsylvania. Analysis revealed that a positive change in the prescription opioid threat may be underway, as evidenced by decreased levels of prescription opioids ordered and dispensed; fewer patients receiving prescription opioids; decreases in prescription opioids dispensed to age groups more associated with illicit opioid use/overdose; and decreased presence of prescription opioids in overdose deaths. However, this situation may be tempered by trends indicating increased dispensing of higher strength pills and increases in the average amount of medication dispensed per patient.

## Significance

The PDIP published a *Pharmaceutical Threat Assessment for Pennsylvania*<sup>i</sup> in 2013 that found prescription opioid availability and abuse at epidemic levels. Since then, new substances were introduced into the illicit drug market from myriad sources of supply, and legislation designed to reduce prescription opioid supply was enacted in Pennsylvania<sup>ii</sup>. Therefore, a review of data indicators can aid in understanding the impact of legislative and policy changes since they occurred. As a result, the improved understanding and re-evaluation of the prescription opioid threat in Pennsylvania and its correlation to the state's current opioid crisis is beneficial to stakeholders in federal, state, and municipal governments.

## Details

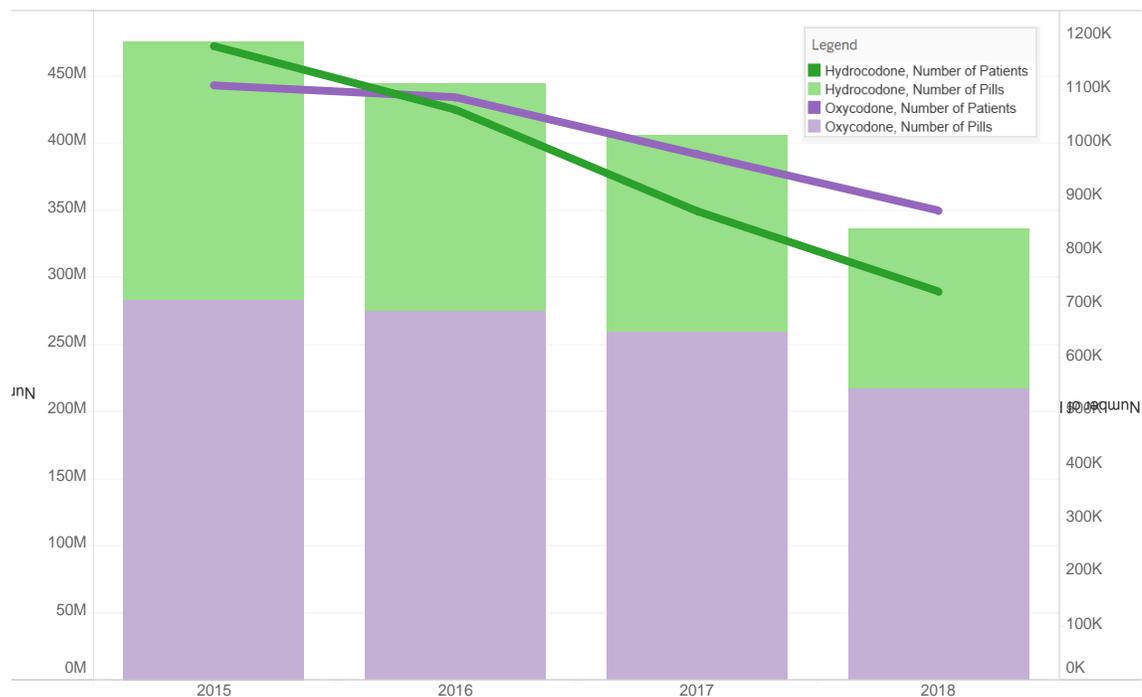
In 2016, the PDIP published an assessment of prescription opioid trends in Pennsylvania during 2014-2015<sup>iii</sup>. The analysis then pre-dated the introduction of an updated Pennsylvania Prescription Drug Monitoring Program (PDMP)<sup>iv</sup>. The PDIP assessment was considered a baseline measure of oxycodone and hydrocodone dispensing trends and was used for comparative future analysis.

For this update, the PDIP reviewed similar datasets as in 2016, sourced from the state’s PDMP as well as DEA registrants, to include data tracking prescription opioid dispensing; theft/loss; registrant ordering; and drug-related overdose deaths to assess the current prescription opioid threat.

Analysis of oxycodone and hydrocodone products dispensed by Pennsylvania pharmacies from 2015 through 2018<sup>v</sup> revealed the following significant trends:

- ❖ The total quantity of oxycodone and hydrocodone products dispensed by Pennsylvania pharmacies decreased approximately 30 percent from 2015 to 2018. In addition, the number of unique patients receiving oxycodone and hydrocodone products from Pennsylvania pharmacies decreased approximately 27 percent from 2015 to 2018. (See Figure 1).

**(U) Figure 1: Oxycodone and Hydrocodone Products Dispensed by Pennsylvania Pharmacies (Pills and Unique Patients), 2015-2018.**



Source: Pennsylvania Prescription Drug Monitoring Program Data analyzed by DEA

- ❖ While 5 milligram (mg) and 10 mg strength oxycodone and hydrocodone pills were most frequently dispensed from 2015 to 2018, analysis of the strength (in mg) of all pills dispensed revealed increased dispensing of 10, 15, and 20 mg oxycodone and hydrocodone pills from 2015 to 2018, with a concurrent decrease in 5 mg products.
- ❖ Although the number of unique patients receiving prescription opioids decreased, analysis of the amount of medication (in mg) dispensed per patient revealed an overall increase in both oxycodone (9 percent) and hydrocodone (7 percent) products from

2016 to 2018.<sup>1</sup> This further supports the trend that fewer patients are receiving fewer quantities of yet higher strength pills.

- ❖ Pennsylvania-based practitioners prescribed the majority of oxycodone and hydrocodone products dispensed by Pennsylvania pharmacies throughout the reviewed time period (2015 to 2018). Of interest, prescribing practitioner locations for oxycodone and hydrocodone prescriptions changed significantly from 2015 to 2018. Pennsylvania-based practitioners increased from approximately 60 percent (in 2015) to 70 percent of prescribers in 2018. Corresponding decreases were noted among New Jersey, New York, Maryland, Ohio, and Florida-based prescribers of pills dispensed in Pennsylvania. The largest increase in Pennsylvania-based prescribers during the reviewed time period took place from 2015 to 2016. Moreover, this coincides with the implementation of the updated PDMP. Therefore, it is possible that patients reduced their reliance on out of state doctors once Pennsylvania practitioners and pharmacies were able to query the PDMP for overlapping prescriptions.
- ❖ Analysis of patient gender was consistent across the reviewed time period: female patients made up approximately 55 percent of oxycodone and hydrocodone product recipients. Age analysis identified the largest age group of recipients as 65 and over. However, analysis of changes over time identified notable decreases among age groups most associated with illicit opioid use and overdose. This was evidenced by a 41 percent decrease in the number of patients ages 25 to 34 and a 36 percent decrease in the number of patients aged 15 to 24 and 35-44, respectively, between 2015 and 2018.
- ❖ Geographic analysis identified a decrease in oxycodone and hydrocodone products dispensed per capita<sup>2</sup> in every Pennsylvania county (based on patient residence) from 2015 to 2018. The decreases ranged from 2.28 percent in Fayette County to 45.25 percent in Montour County. (See Figure 2).

The diversion of prescription opioids into the illicit drug supply for misuse occurs most frequently after they are dispensed by a pharmacy or doctor for a perceived legitimate medical purpose. While it is not possible to quantify the exact amount of prescription opioids available in the illicit drug supply, there appears to be a link between a higher quantity of pills prescribed and dispensed into legitimate circulation (i.e. increased availability), and a consequent increase in diversion to the illicit drug market for possible misuse.<sup>vi</sup> As such, a reduction in prescribing of prescription opioids virtually guarantees a reduction in the availability of prescription opioids for diversion into the illicit drug market.

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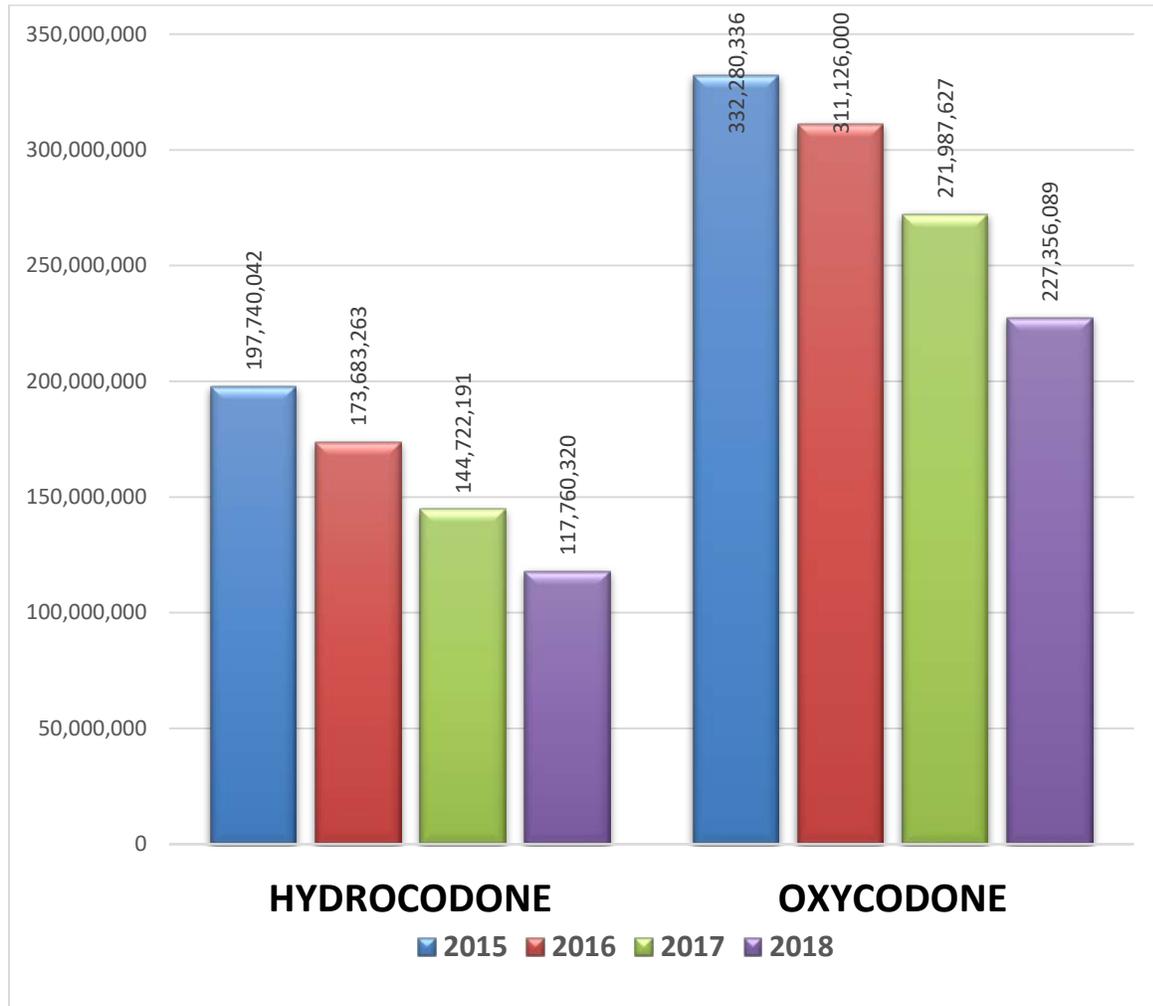
<sup>1</sup> Percentage change calculated for 2016 to 2018 due to introduction of new oxycodone mg strength products in 2016

<sup>2</sup> Population estimates for 2015-2017 obtained from [www.census.gov](http://www.census.gov).



number of pills/tablets reported stolen/lost in 2017 and 2018 totaling approximately 500,000.<sup>ix</sup> This represents less than one percent of the total quantity of oxycodone and hydrocodone products dispensed by Pennsylvania pharmacies and is therefore not considered a primary method of prescription opioid diversion to the illicit drug market.

**(U) Figure 3: Change in Oxycodone and Hydrocodone Products Ordered by Retail DEA Registrants in Pennsylvania, 2015-2018.**



Source: DEA Automated Reports and Consolidated Orders System (ARCOS)

### Drug-Related Overdose Deaths

Since 2014, the PDIP annually collects, analyzes, and publishes data regarding drug-related overdose deaths in Pennsylvania. The purpose of this analysis is to report the drugs most frequently involved in overdose deaths; assess possible sources of supply; and identify emerging trends in drug availability and abuse.

The presence of prescription opioids in drug-related overdose decedents decreased steadily in Pennsylvania from 2015 (27 percent) to 2017 (20 percent).<sup>x</sup> In 2018, preliminary data from twenty counties reporting the presence of prescription opioids in overdose deaths<sup>5</sup> showed an average presence of less than 13 percent. It is suggested that decreases in availability of prescription opioids, coupled with increased demand for more potent opioids such as heroin and fentanyl, is the foundation for this trend.

## Outlook

As a whole, most indicators of availability and abuse of prescription opioids measured during the period of 2015 through 2018 showed a marked decrease. Such decreases observed across multiple indicators may indicate a shift in the threat that prescription opioids currently presents to the Commonwealth. Close monitoring of these indicators in the future is required to confirm a shift in overall threat.

Changes to Pennsylvania's PDMP in 2016 may have been influential in reducing the number of oxycodone and hydrocodone products dispensed throughout Pennsylvania in recent years, which illustrates the efficacy of opioid-focused legislation enacted in response to the previously identified prescription opioid crisis.

Continued decreases in acquisition and dispensing indicators for oxycodone and hydrocodone products—whether in decreases to overall tablet distribution, pills per patient, and/or in unique opioid patients—should result in a further reduction of prescription opioids available for abuse by patients or diversion to illicit drug markets, and may ultimately reduce the number of new illicit opioid users at risk of overdose.

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<sup>i</sup> DEA Philadelphia Field Division Pharmaceutical Threat Assessment, August 2013.

<sup>ii</sup> The Opioid Threat in Pennsylvania, DEA-PHL-DIR-036-18, September 2018.

<sup>iii</sup> Pennsylvania Prescription Drug Monitoring Program Trends, 2014-2015, DEA-PHL-DIR-006-17, December 2016.

<sup>iv</sup> The Opioid Threat in Pennsylvania, DEA-PHL-DIR-036-18, September 2018.

<sup>v</sup> Pennsylvania Prescription Drug Monitoring Program Data, 2015-2018.

<sup>vi</sup> The Opioid Threat in Pennsylvania, DEA-PHL-DIR-036-18, September 2018.

<sup>vii</sup> DEA Office of Diversion Control ARCOS Database.

<sup>viii</sup> DEA Office of Diversion Control Drug Theft and Loss Database.

<sup>ix</sup> DEA Office of Diversion Control Drug Theft and Loss Database.

<sup>x</sup> The Opioid Threat in Pennsylvania, DEA-PHL-DIR-036-18, September 2018.

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<sup>5</sup> Includes 2018 data from [www.overdosefree.pa.pitt.edu](http://www.overdosefree.pa.pitt.edu) as of 3/22/19 and Philadelphia County data (not-finalized) obtained by the PDIP.

*(U) This product was prepared by the DEA Intelligence Program - Philadelphia Field Division. Comments and questions may be addressed to the Chief, Analysis and Production Section at [DEA.IntelligenceProducts@usdoj.gov](mailto:DEA.IntelligenceProducts@usdoj.gov). For media/press inquiries call (202) 307-7977.*

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DEA PRB 05-28-19-14



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	Very Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied
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