Event

The Drug Enforcement Administration (DEA) Philadelphia Division’s Intelligence Program (PDIP) reviewed a set of 2019 data indicators to assess the current prescription opioid threat in Pennsylvania.

Significance

The PDIP strives to maintain situational awareness of the threat posed by prescription opioids in Pennsylvania, and to share these analyses with stakeholders in federal, state, and municipal governments. In 2013, the PDIP published a Pharmaceutical Threat Assessment for Pennsylvania that found prescription opioid availability and abuse at epidemic levels. In 2016 and 2019, the PDIP published updated assessments detailing prescription opioid availability and abuse trends; this 2020 assessment builds on the previous analyses.

Details

Similar to previous analyses, the PDIP reviewed 2019 data, tracking prescription opioid dispensing; theft/loss; registrant ordering; and drug-related overdose deaths to assess the threat posed by the misuse of prescription opioids.

This assessment includes analysis of data on oxycodone, hydrocodone, and tramadol products; based on investigative reporting, and law enforcement and public health sources of information, these are the substances most frequently diverted for illicit use. Previous assessments included only oxycodone and hydrocodone; however, tramadol, a Schedule IV prescription opioid, has arisen in recent years as a popular prescribing alternative to oxycodone and hydrocodone. As a result, law enforcement reporting indicates that tramadol has emerged on the illicit drug market with increasing frequency.
Analysis of oxycodone, hydrocodone, and tramadol products dispensed by Pennsylvania pharmacies in 2019 revealed the following significant trends:

- The total quantity of oxycodone, hydrocodone, and tramadol products dispensed by Pennsylvania pharmacies decreased ~15 percent from 2018 to 2019.
- The number of unique patients receiving oxycodone, hydrocodone, and tramadol products from Pennsylvania pharmacies decreased ~nine percent from 2018 to 2019 (see Figure 1).
- This trend echoed previous reporting, albeit at a slower rate of decline when compared to previous years (2015-2018).

**Figure 1. Oxycodone, Hydrocodone, and Tramadol Products Dispensed by Pennsylvania Pharmacies (Pills and Unique Patients), 2018-2019**

- From 2018 to 2019, for the aforementioned drug categories, the total number of pills prescribed per patient declined ~seven percent; the number of total prescriptions declined ~four percent; and the number of pills per prescription declined ~twelve percent.

- Similar to previous reporting, five milligram (mg) and 10-mg strength oxycodone and hydrocodone pills were most frequently dispensed in 2019; the overall percentage of dispensing by milligram-strength remained stable with 2018 reporting.

- Similar to 2018, Pennsylvania-based practitioners prescribed the majority (~68 percent) of oxycodone, hydrocodone, and tramadol products dispensed by Pennsylvania pharmacies. Prescribers in New Jersey, New York, Maryland, Ohio, Delaware, and West Virginia (all states contiguous to Pennsylvania) comprised ~25 percent of total
prescribers, for a total of ~93 percent of prescribers located in Pennsylvania and surrounding states.

- Geographic analysis revealed the distribution of oxycodone, hydrocodone, and tramadol products per capita in every Pennsylvania county (based on patient residence) in 2019 (see Figure 2). Counties with the highest rate of prescribing for residents were located in central and southwest Pennsylvania. As previously reported, these regions showed the lowest rate of decline in resident prescriptions from 2015-2018.

**Figure 2. Number of Oxycodone, Hydrocodone, and Tramadol Pills Dispensed per Capita (by county of patient residence) in Pennsylvania, 2019**

The diversion of prescription opioids into the illicit drug supply for misuse occurs most often after they are dispensed by a pharmacy or doctor for a perceived legitimate medical purpose. Therefore, a reduction in prescribing of prescription opioids can ultimately lead to a decrease in diversion of pills into the illicit drug market.

**Registrant Ordering**

As of March 2020, DEA’s Diversion Control Division reported over 78,000 active registrants in Pennsylvania with DEA registrations for Schedules II to V. As expected with a reduction in dispensing, analysis of data reported to DEA’s Automated Reports and Consolidated Orders System (ARCOS) revealed that ordering of oxycodone and hydrocodone products by dispensing/retail DEA registrants in Pennsylvania, to include pharmacies, hospitals, practitioners, mid-level practitioners, and treatment providers decreased approximately 9.5
percent from 2018 to 2019 (see Figure 3). This trend mirrors previous reporting, although the rate of decline in ordering slowed from 2018 to 2019 when compared to previous years.

![Figure 3. Oxycodone and Hydrocodone Products Ordered by Retail DEA Registrants in Pennsylvania, 2018-2019](image)

**Theft and Loss**

Federal regulations (21 CFR 1301.76(b)) require that registrants notify DEA of the theft or significant loss of any controlled substance within one business day of discovery. Analysis of theft and loss data from Pennsylvania registrants identified oxycodone and hydrocodone products as the most frequently stolen or lost; of those that reported, the combined total number of pills/tablets stolen/lost in 2019 totaled approximately 140,000. This represents less than .5 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.

**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.

As previously reported, the presence of prescription opioids in drug-related overdose decedents has decreased steadily in Pennsylvania since 2015 (see Figure 4). In 2019, preliminary data from 35 counties reporting the presence of prescription opioids in overdose deaths showed an average presence of ~14 percent. It was previously suggested, and is reaffirmed in this reporting, 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.
The threat posed by the misuse of prescription opioids in Pennsylvania continues to evolve. Analyzed data indicates that decreases in prescribing have resulted in fewer pills available in the illicit drug market, ultimately resulting in a decline in prescription opioid-involved overdose deaths since 2015. The PDIP will continue to monitor pertinent data indicators and share resultant analyses with partners and stakeholders.