

# FENTANYL PILL SEIZURES IN THE UNITED STATES 2020 - 2023

This study assesses changes in fentanyl pill seizures throughout the United States from 2020 through 2023. The analysis is based on seizures reported from the network of thirty-three High Intensity Drug Trafficking Areas (HIDTA) that cover all fifty States and Puerto Rico/Virgin Islands. Findings suggest a substantial increase in fentanyl pill seizures in 2023, with Arizona constituting a significant hot spot and the western U.S.—demonstrating elevated seizure levels in general.

**Drug Threat Analysis Group**

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## Executive Summary

This study assesses changes in fentanyl pill seizures throughout the United States from 2020 through 2023. The analysis is based on seizures reported from the network of thirty-three high Intensity Drug Trafficking Areas (HIDTA) that cover all fifty States and Puerto Rico/Virgin Islands. The following topline findings are noted:

1. Fentanyl pill seizures throughout the HIDTA network were low to non-existent in most HIDTA AORs through 2022.
2. Pill seizures increased in the initial quarter of 2023 and then declined in the final quarters of that year.
3. Arizona was a significant outlier in 2023, with almost double the fentanyl pill seizures of the next highest area.
4. Fentanyl pill seizures are more prevalent in the western AORs.

## Methods

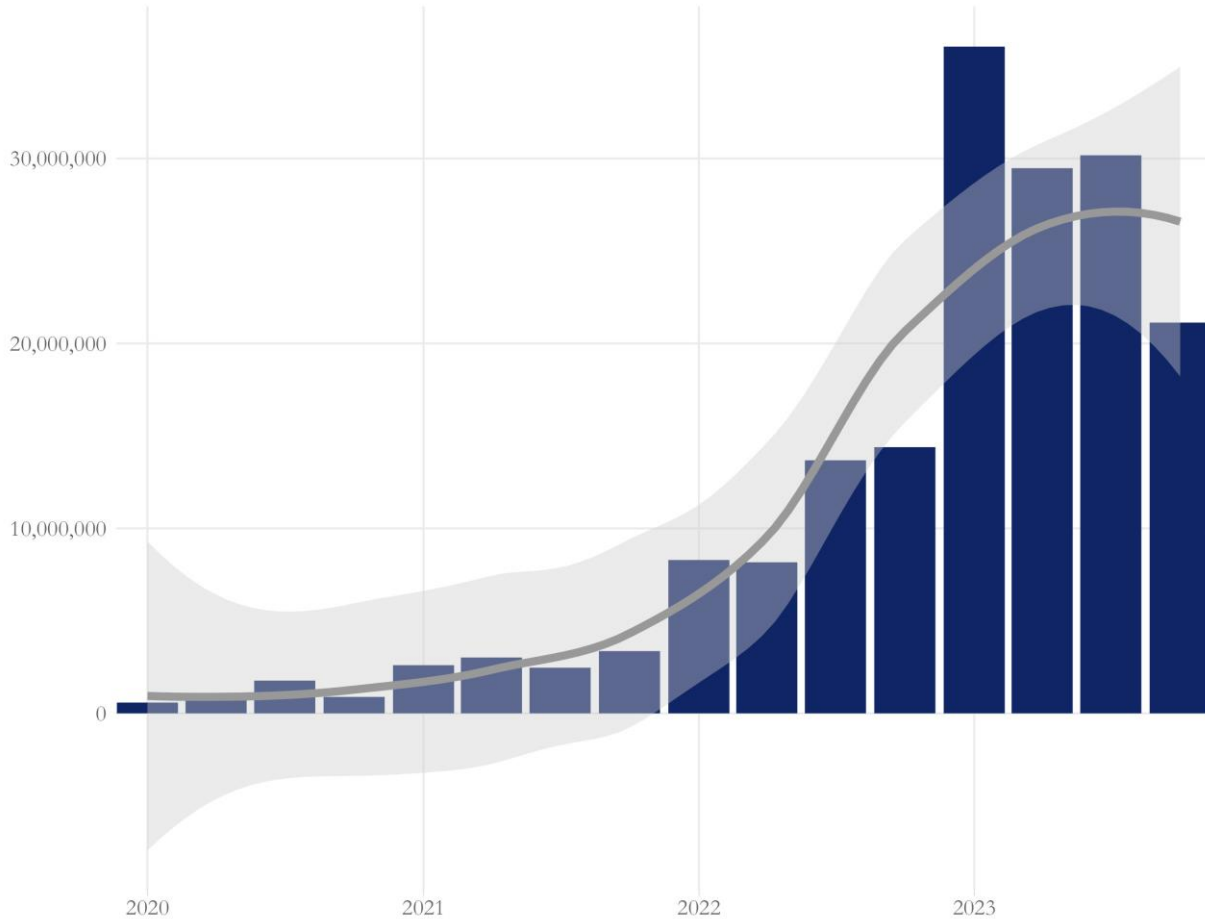
This study used data from the HIDTA Performance Management Process (PMP) to assess changes in the volume of illicit fentanyl pill seizures over time. The study analyzed seizure data over time and across geographic locations, focusing on HIDTA areas and counties within HIDTAs. The volume of fentanyl pill seizures was analyzed quarterly from 2020 through 2023 to identify trends and patterns over time. Data were summarized using R,<sup>1</sup> RStudio,<sup>2</sup> and ggplot2.<sup>3</sup>

A graph was prepared for each of the thirty-three HIDTA programs that display total pills seized by quarter and a loess regression line that shows the overall seizure trend for the period.<sup>4</sup>

## Findings in Brief

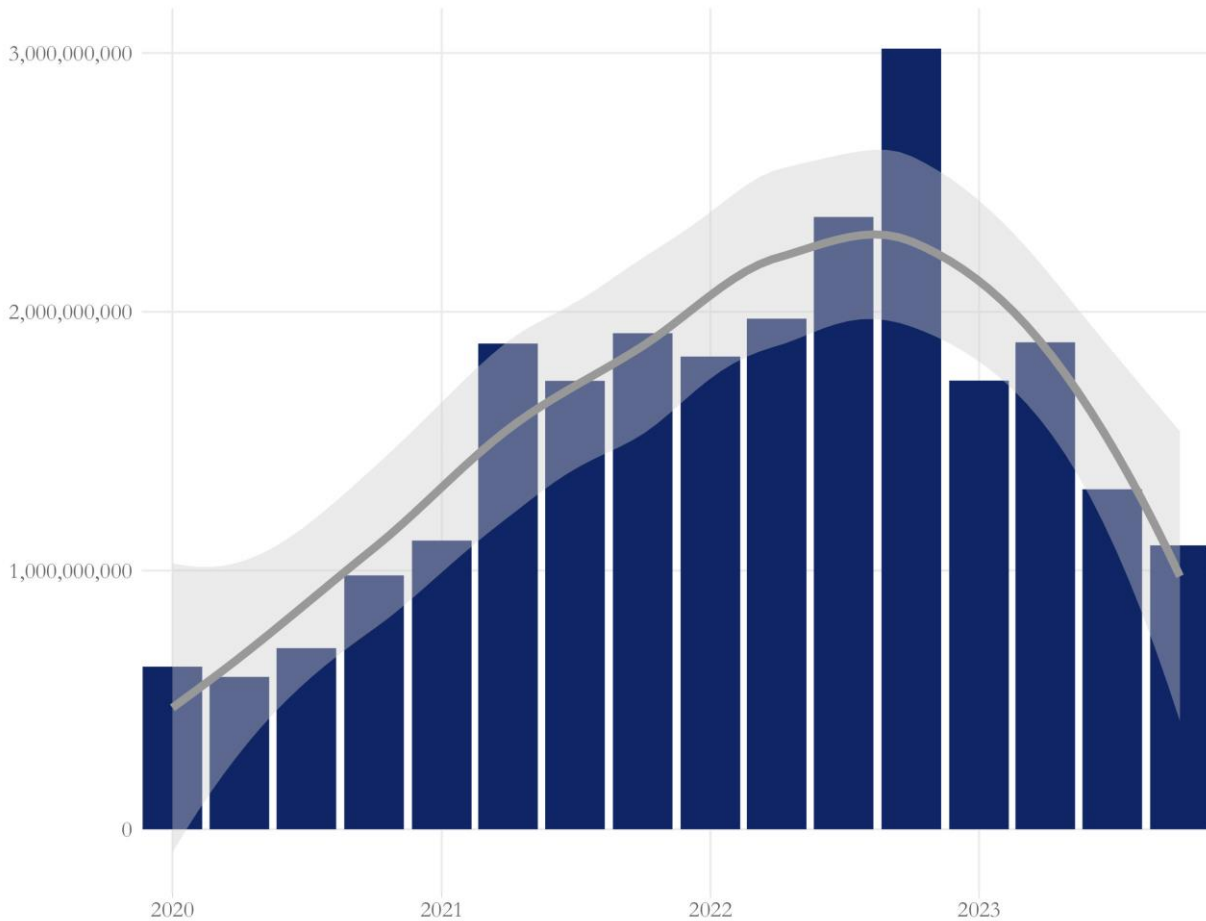
### U.S. Fentanyl Pill Seizures

Fentanyl Pill seizures increased exponentially from 2020 through Q1 of 2023, as evidenced by Figure 1, which displays seizures by quarter for the analysis period. Pill seizures appear to have declined somewhat through the remainder of the year.



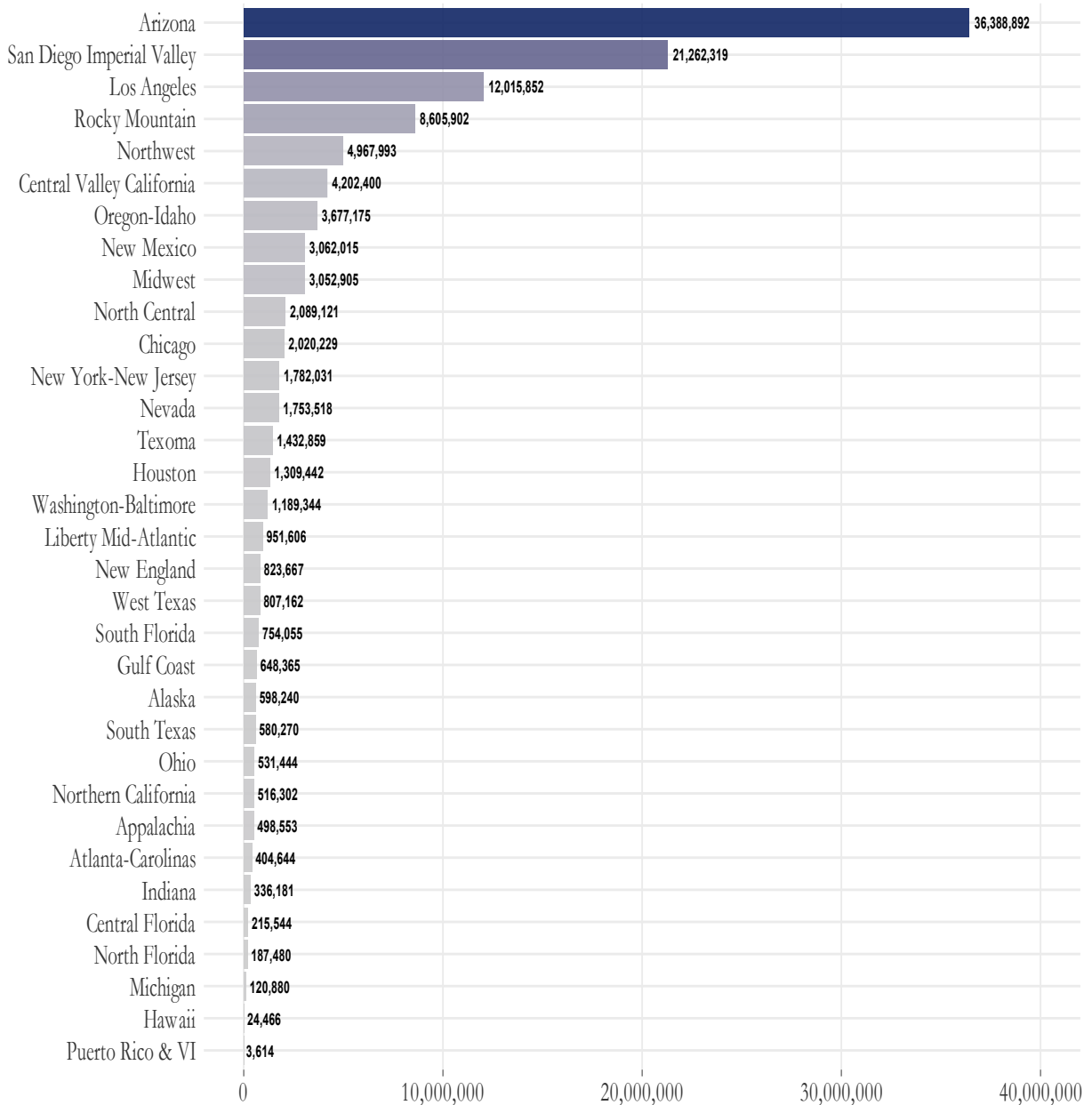
*Total Seized Fentanyl Pills by Quarter*

While fentanyl powder remains more prevalent in the market than pills, overall powder seizures peaked in Q4 of 2022 and declined significantly through 2023. This decline is a departure from multiple years of significant increases in fentanyl powder seizures. These findings may signal fentanyl in aggregate is declining and that illicit fentanyl pills could be emerging as a replacement or a considerable alternative to fentanyl powder.



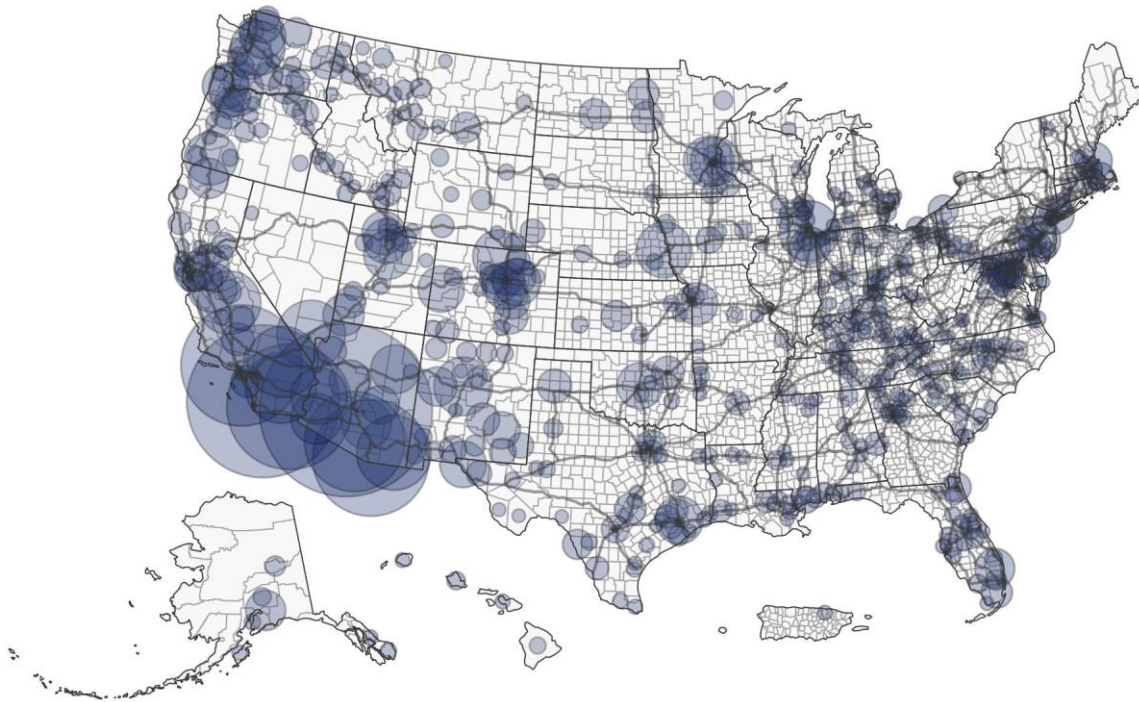
*Total Seized Powdered Fentanyl by Quarter (Excluding Pills)*

Analysis of 2023 seizures by HIDTA shows that Arizona stands out significantly, with nearly double the seizures of the second-highest HIDTA. The overall distribution of seizures shows a steep drop from the top few HIDTAs to the remaining AORs.



*Total Seized Fentanyl Pills by HIDTA - 2023*

The following figure shows seizure amounts by county. The circles are proportional to the total volume of fentanyl pills seized for each respective county in 2023. Major highways are superimposed to provide insight into potential drug trafficking routes throughout the U.S. This visualization shows the most significant number of seizures around the Southwest border, with a particular emphasis on Arizona.



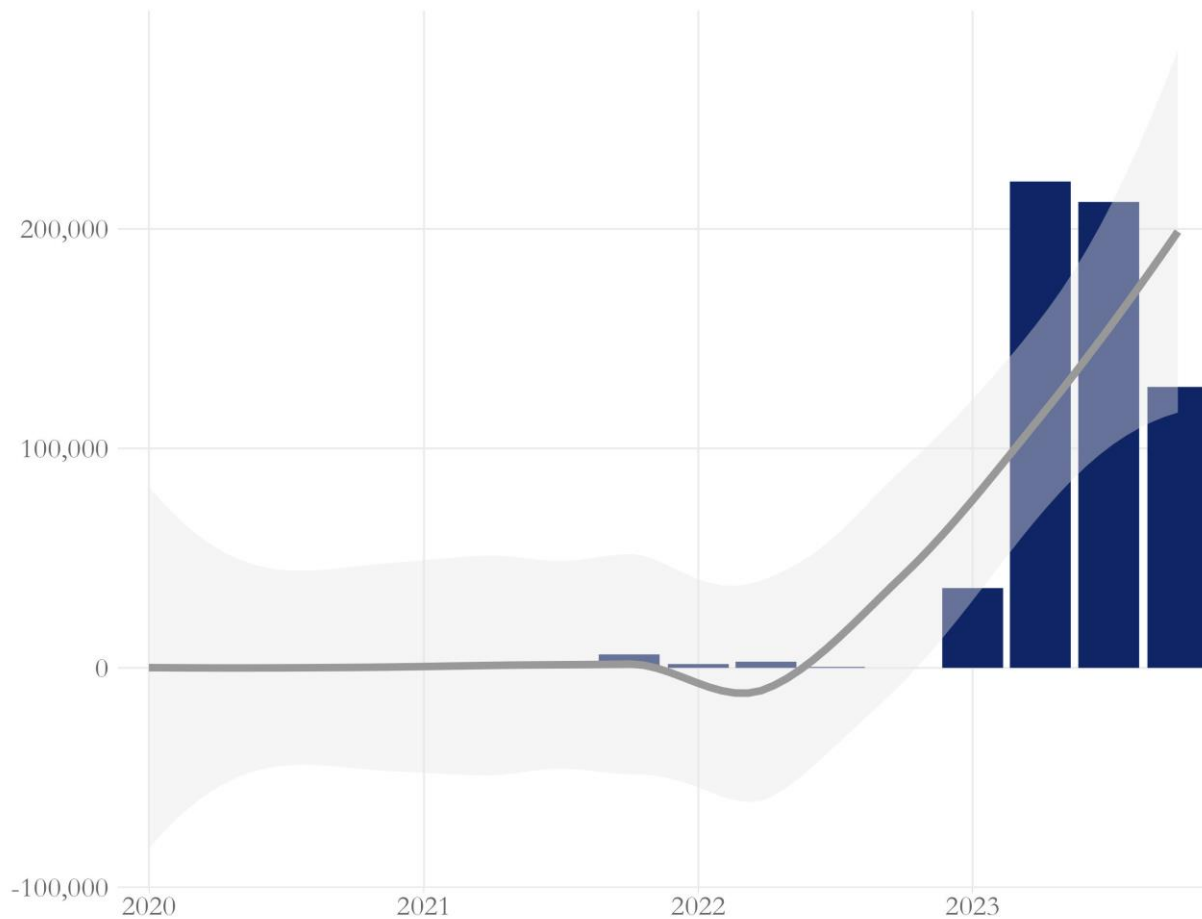
*Total Seized Fentanyl Pills by County - 2023*

## Fentanyl Pills by Quarter for Alaska HIDTA

**Trend:** Fluctuating with significant peaks and troughs from Q1 2020 through Q1 2024, with the highest quantities observed in 2023.

**Peak:** Reached 221,588 doses in Q2 2023.

**Insight:** The loess regression line indicates an overall increasing trend, suggesting escalating trafficking activity over the period.



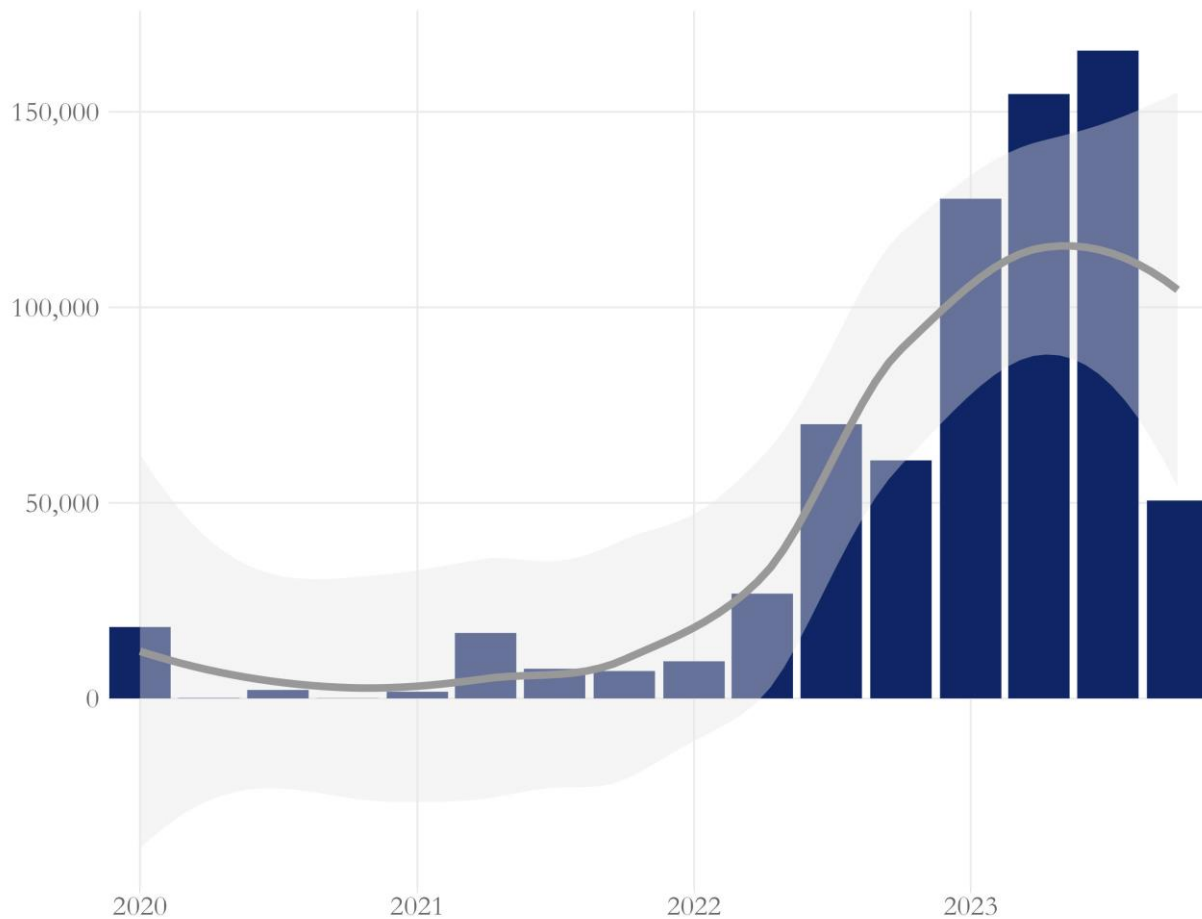
*Total Seized Fentanyl Pills by Quarter for Alaska HIDTA*

## Fentanyl Pills by Quarter for Appalachia HIDTA

**Trend:** Steady increase in fentanyl pill seizures through Q3 2023, followed by a steep decline in Q4.

**Peak:** Peaked at 165,638 doses in Q3 2023.

**Insight:** The loess regression line confirms a clear upward trend throughout most of 2023, with a marked change in trend evidenced in Q4.



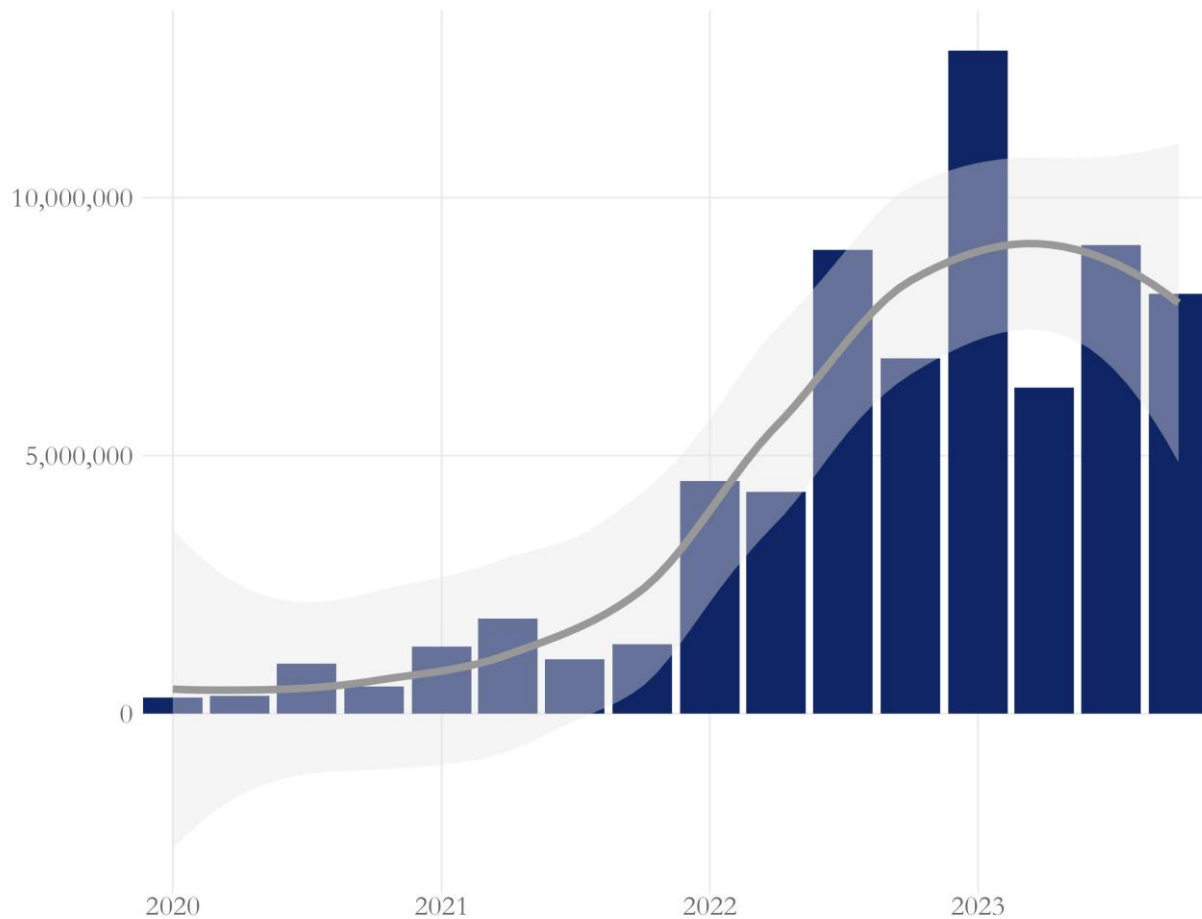
*Total Seized Fentanyl Pills by Quarter for Appalachia HIDTA*

## Fentanyl Pills by Quarter for Arizona HIDTA

**Trend:** There was an exponential rise in fentanyl pill seizures from early 2020 through early 2023.

**Peak:** Reached 12,851,135 doses in Q1 2023.

**Insight:** Reflects Arizona's pivotal role as a hot spot for fentanyl pill trafficking, indicating it is the most crucial point of entry for illicit fentanyl pills from Mexico.



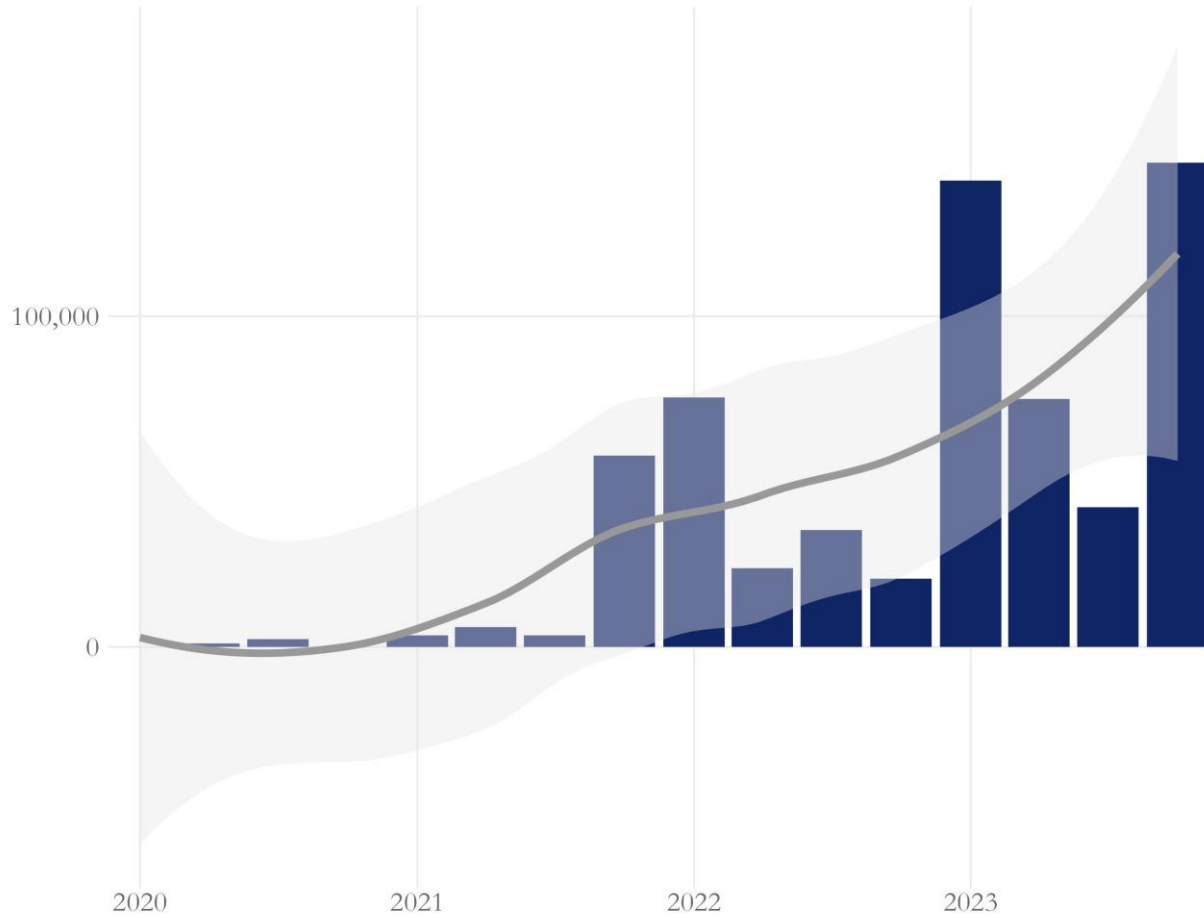
*Total Seized Fentanyl Pills by Quarter for Arizona HIDTA*

## Fentanyl Pills by Quarter for Atlanta - Carolinas HIDTA

**Trend:** Low activity until 2021, followed by notable increases in 2022 and 2023.

**Peak:** Reached 146,416 doses in Q4 2023.

**Insight:** Reflects emerging trafficking issues or enhanced detection capabilities.



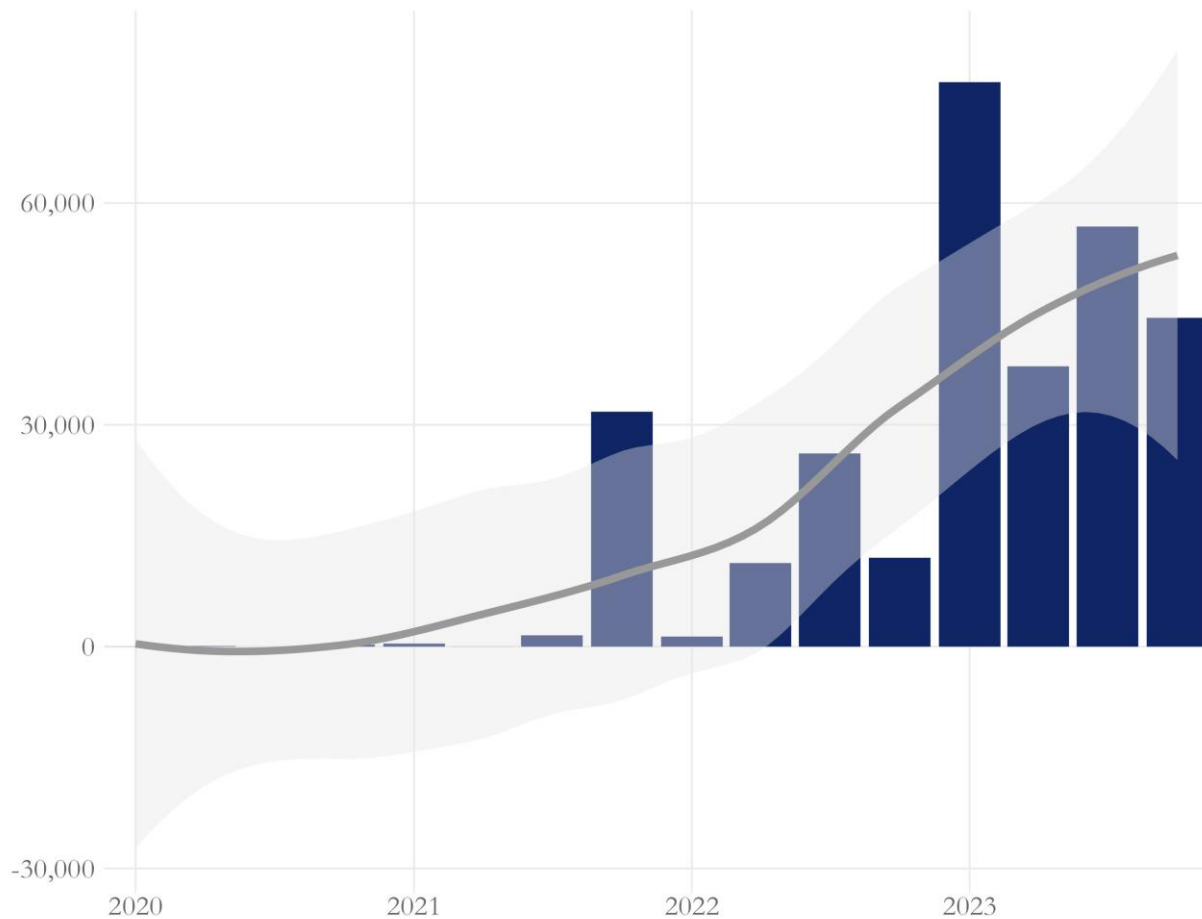
*Total Seized Fentanyl Pills by Quarter for Atlanta - Carolinas HIDTA*

## Fentanyl Pills by Quarter for Central Florida HIDTA

**Trend:** General upward trend in fentanyl pill seizures from Q1 2020 to Q4 2023, with significant peaks and troughs observed throughout the period.

**Peak:** Reached 76,342 doses in Q1 2023.

**Insight:** The loess regression line indicates an overall seizure increase, likely reflecting higher trafficking volumes.



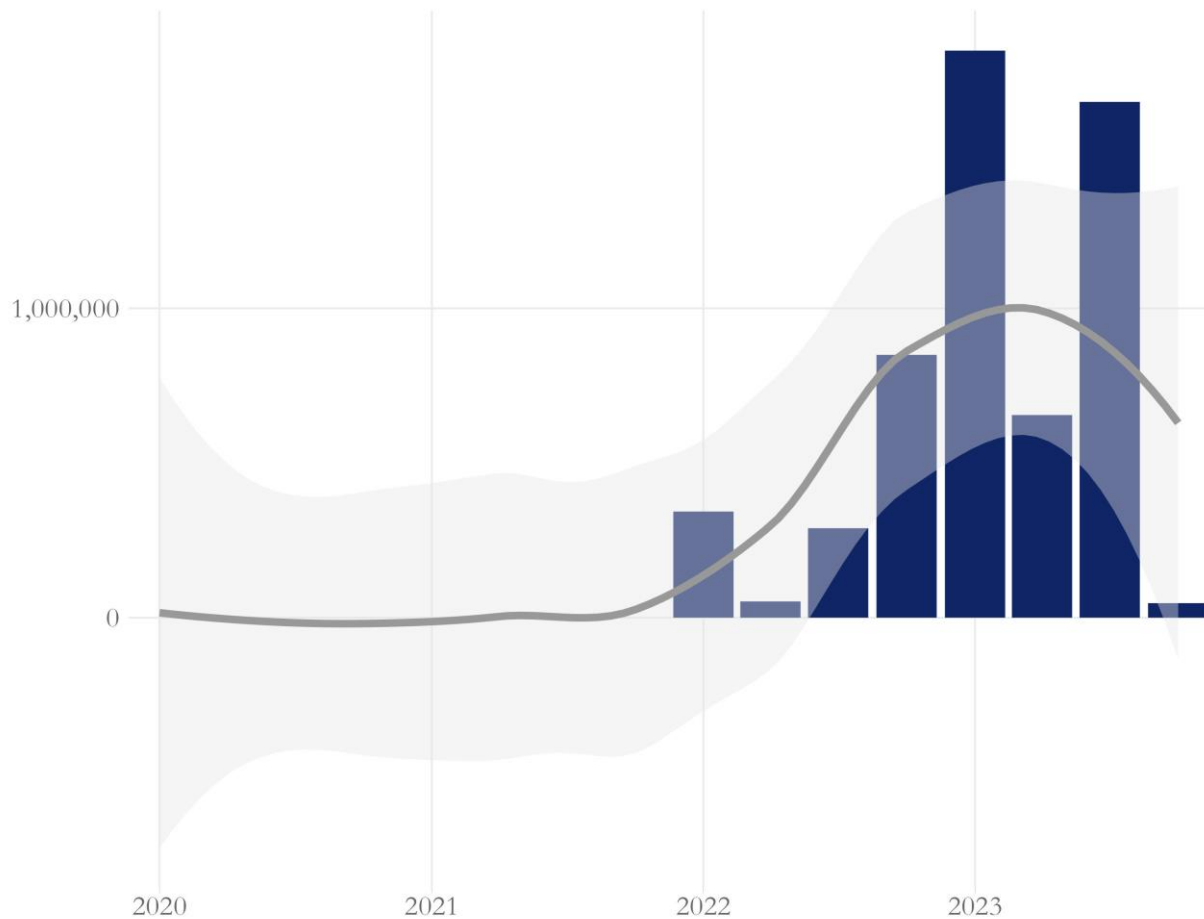
*Total Seized Fentanyl Pills by Quarter for Central Florida HIDTA*

## Fentanyl Pills by Quarter for Central Valley California HIDTA

**Trend:** Limited fentanyl pill seizure activity until Q1 2022, followed by significant activity with pronounced peaks and troughs through Q3 2023 and a substantial decline in Q4 2023.

**Peak:** Reached 1,833,034 doses in Q1 2023.

**Insight:** Reflects a period of heightened trafficking activity with a notable decline towards the end of 2023.



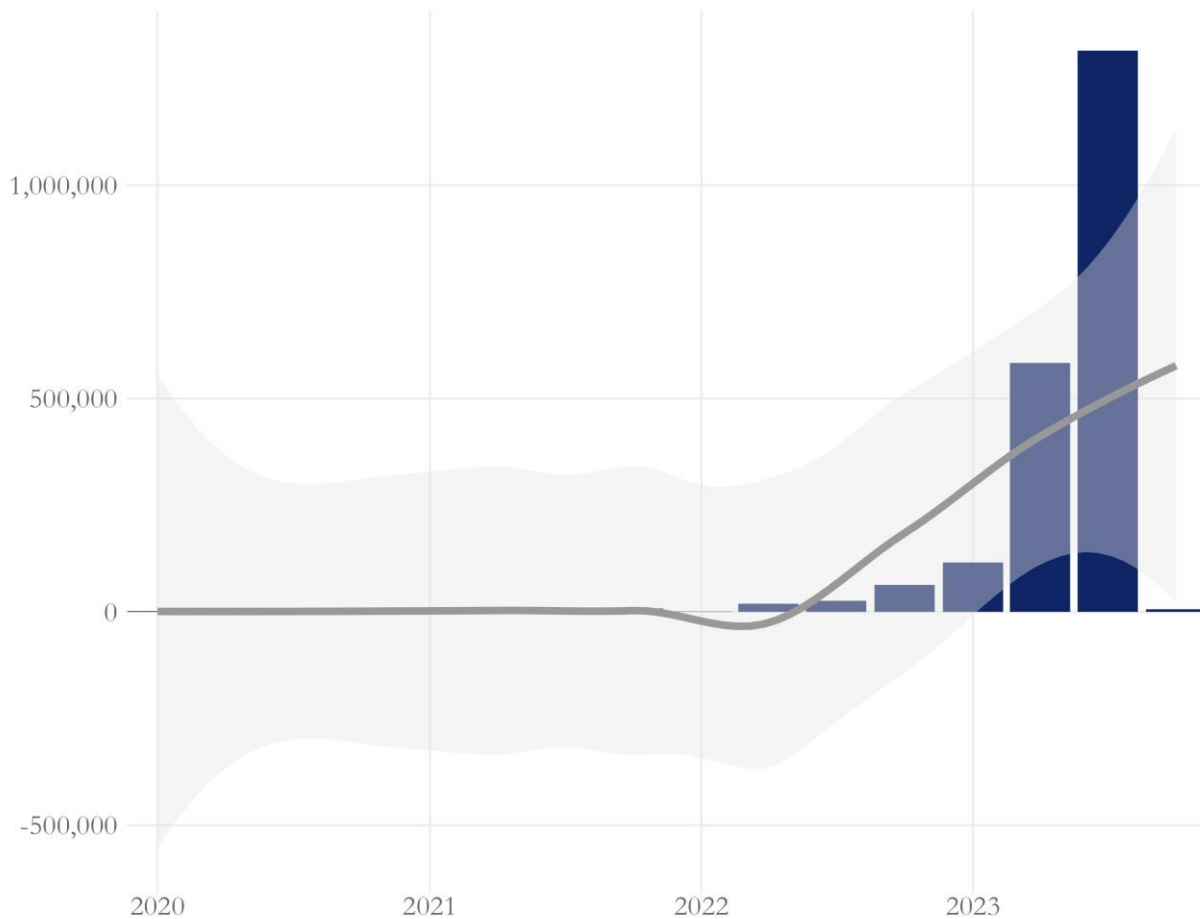
*Total Seized Fentanyl Pills by Quarter for Central Valley California HIDTA*

## Fentanyl Pills by Quarter for Chicago HIDTA

**Trend:** Limited pill seizures from 2020 through Q1 2020, followed by exponential increases through Q3 2023 and a precipitous drop in Q4 2023.

**Peak:** Reached 1,315,156 doses in Q3 2023.

**Insight:** The Loess regression line, which smooths out short-term fluctuations to show long-term trends, reflects that seizure activity has been trending upward over the entire period, suggesting a rise in trafficking activity despite the recent decline.



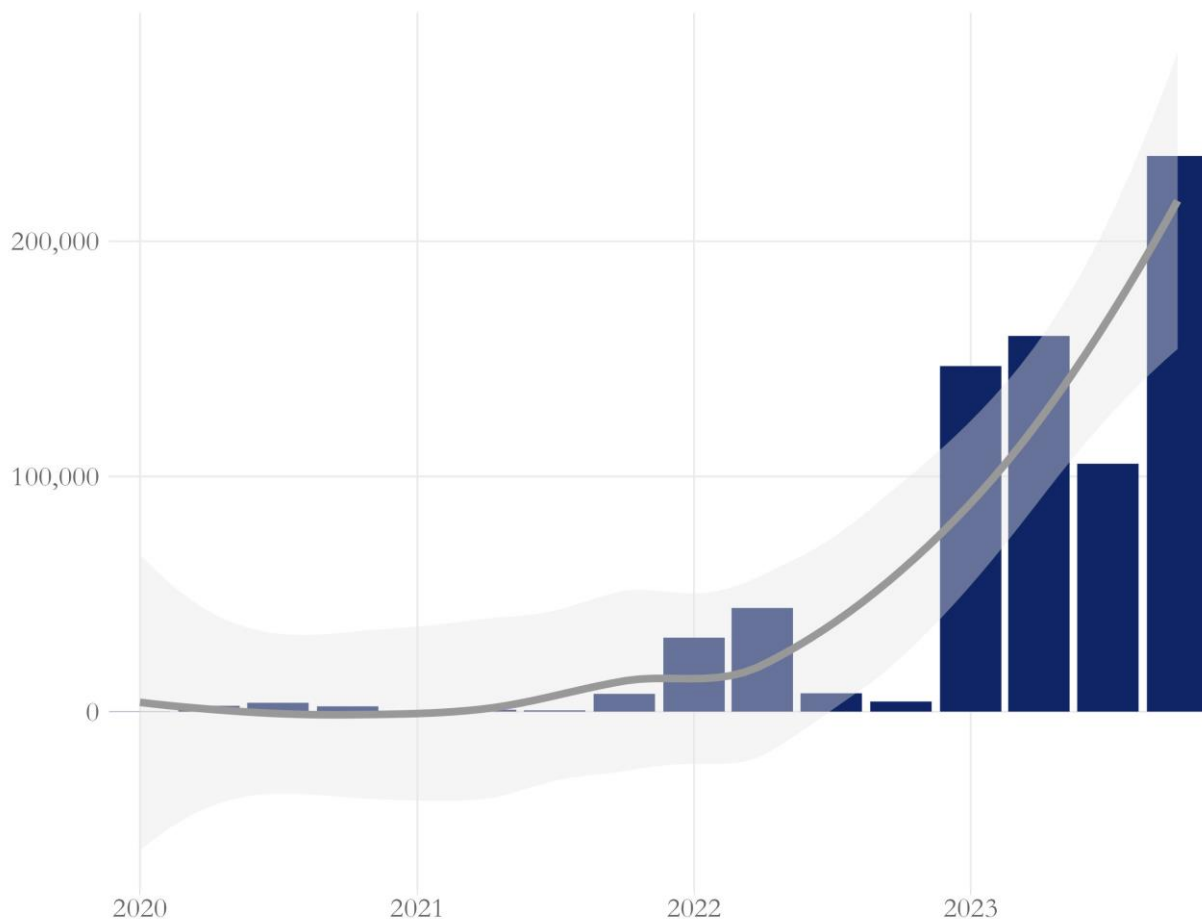
*Total Seized Fentanyl Pills by Quarter for Chicago HIDTA*

## Fentanyl Pills by Quarter for Gulf Coast HIDTA

**Trend:** Low levels of pill seizures early in the period, followed by exponential increases with pronounced peaks and troughs.

**Peak:** Reached 236,269 doses in Q4 2023.

**Insight:** Starting from Q1 2022, the general trend of fentanyl pill seizures has been increasing significantly. The loess regression line, which smooths out short-term fluctuations to highlight long-term trends, indicates that despite minor ups and downs, the overall trajectory of seizures has been upward through the end of the period.



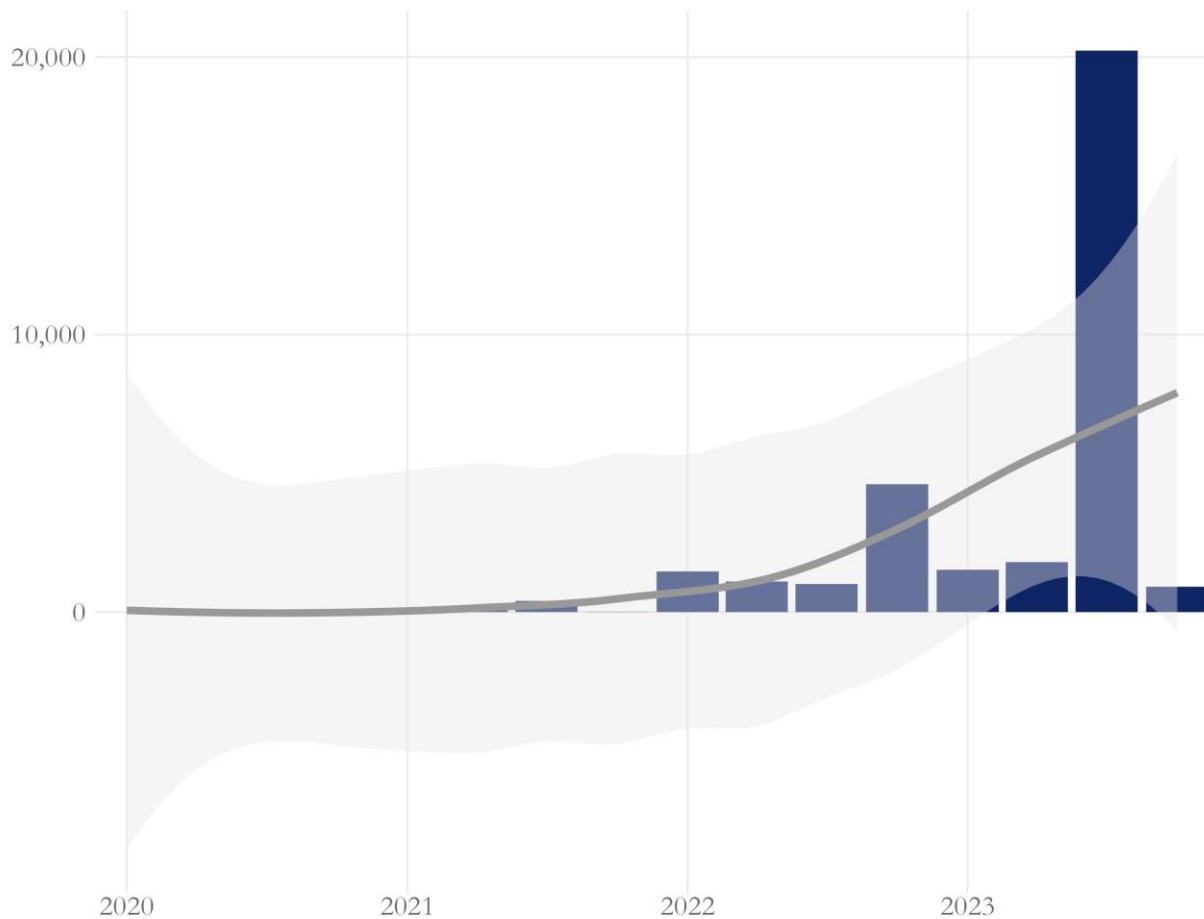
*Total Seized Fentanyl Pills by Quarter for Gulf Coast HIDTA*

## Fentanyl Pills by Quarter for Hawaii HIDTA

**Trend:** Limited pill seizure activity through 2020 and 2021, with a notable increase in Q1 2022.

**Peak:** Reached 20,230 doses in Q3 2023.

**Insight:** The loess regression line suggests an overall increase throughout the reporting period.



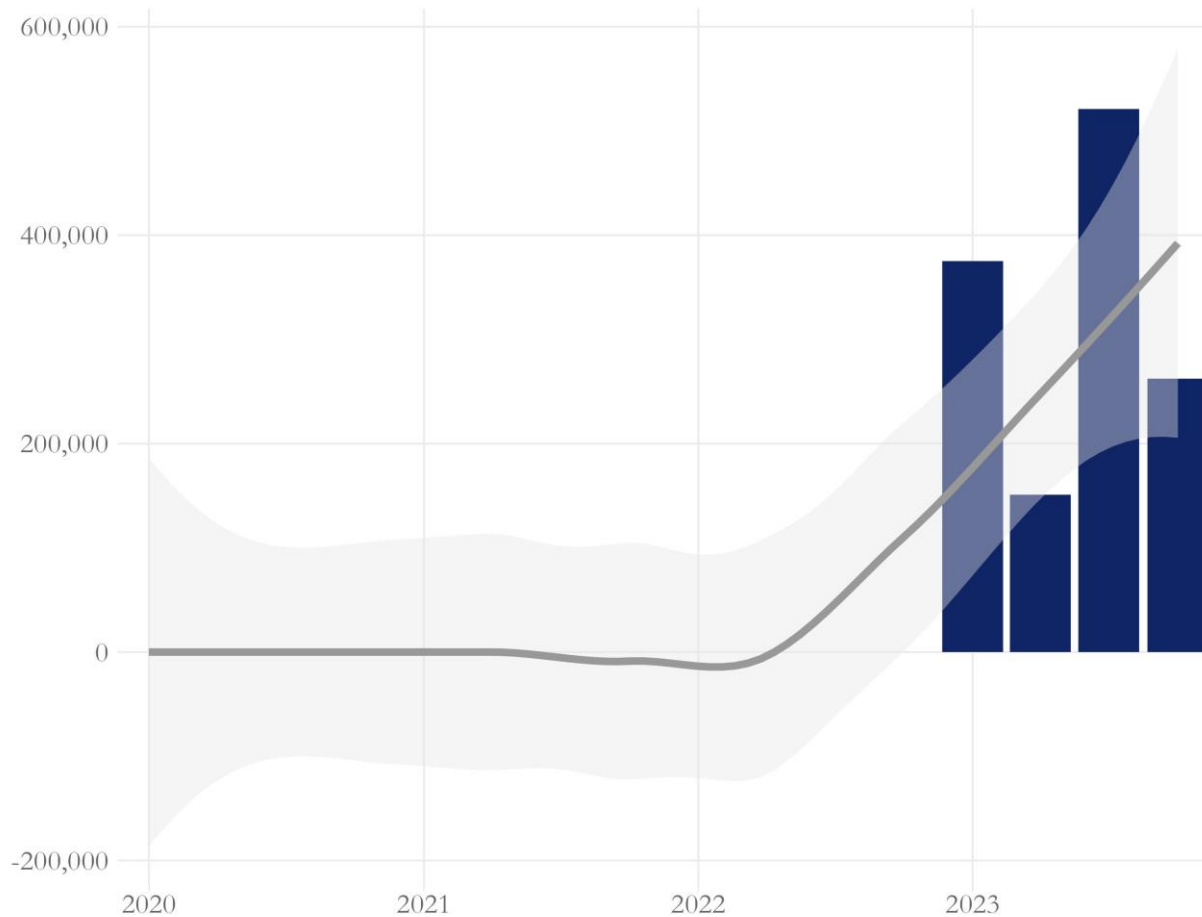
*Total Seized Fentanyl Pills by Quarter for Hawaii HIDTA*

## Fentanyl Pills by Quarter for Houston HIDTA

**Trend:** No fentanyl pill seizures logged until 2023.

**Peak:** Reached 521,040 doses in Q3 2023.

**Insight:** Reflects a sudden increase in trafficking activity in 2023, marked by significant spikes in specific quarters.



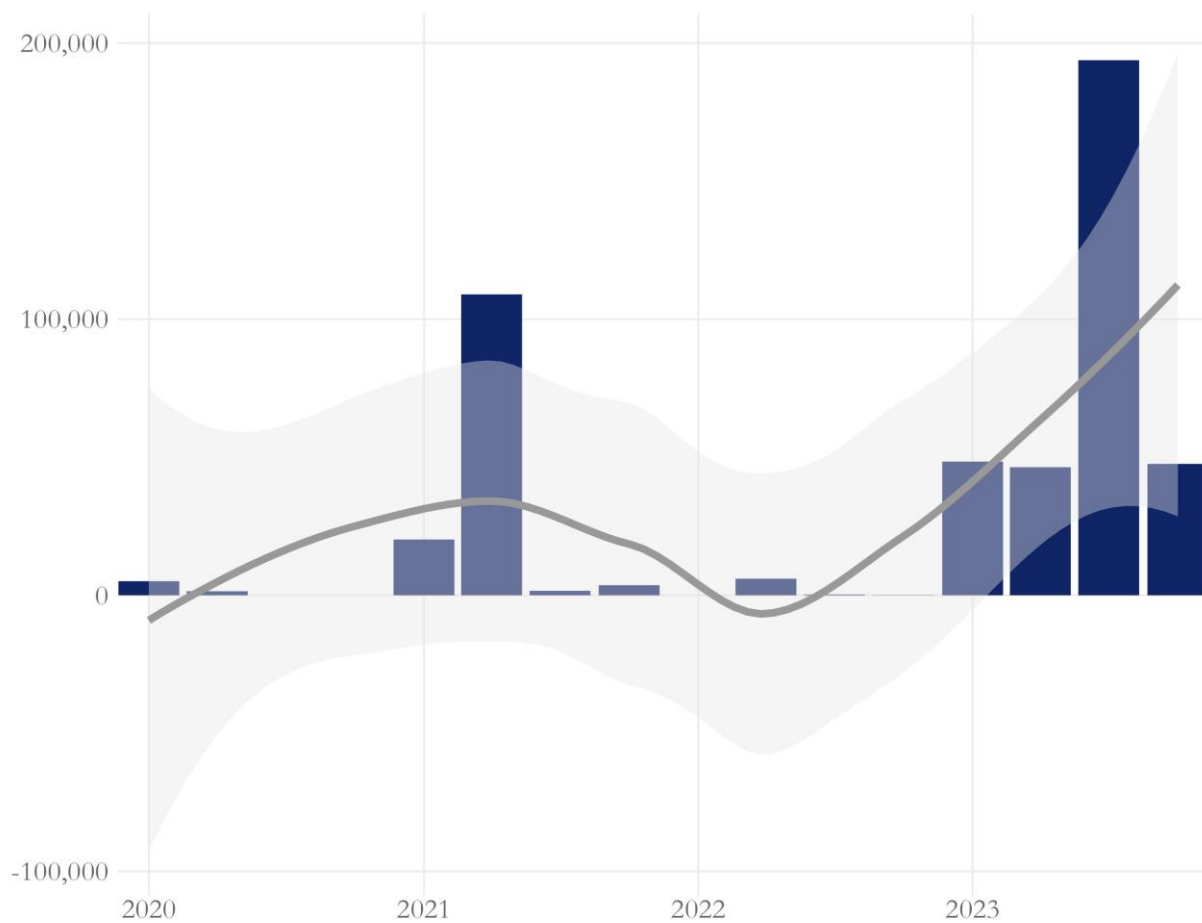
*Total Seized Fentanyl Pills by Quarter for Houston HIDTA*

## Fentanyl Pills by Quarter for Indiana HIDTA

Trend: Sporadic pill seizure activity throughout the entire period.

Peak: Reached 193,793 doses in Q3 2023.

Insight: Trafficking activity was irregular and sporadic, characterized by bursts with significant increases in pill seizures during specific quarters, notably in Q2 2021 and Q3 2023.



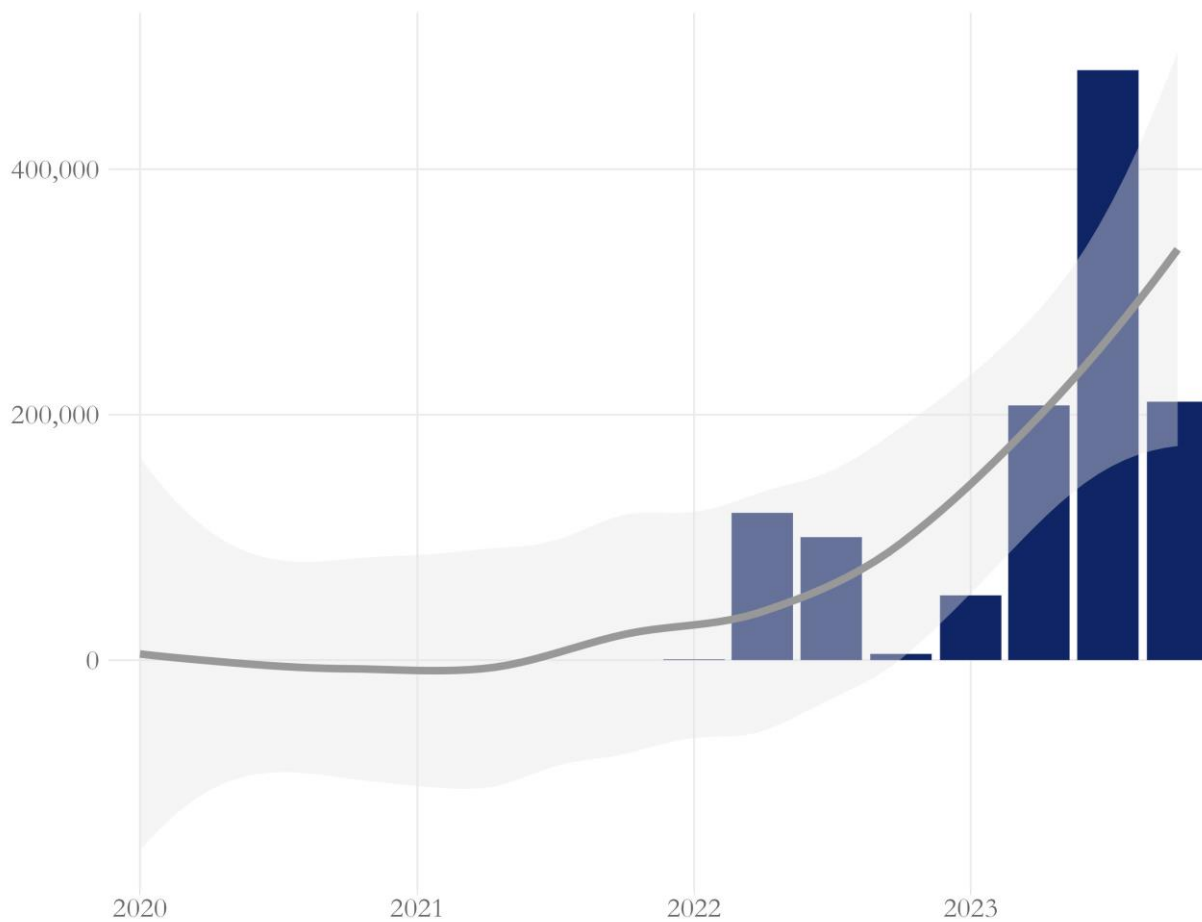
*Total Seized Fentanyl Pills by Quarter for Indiana HIDTA*

## Fentanyl Pills by Quarter for Liberty Mid-Atlantic HIDTA

**Trend:** No significant pill-related seizure activity until Q2 2022, followed by elevated activity with fluctuations.

**Peak:** Reached 480,736 doses in Q3 2023.

**Insight:** The overall trend, indicated by the Loess regression line, shows an exponential increase in seizures during the latter part of the period despite a decline in the final quarter.



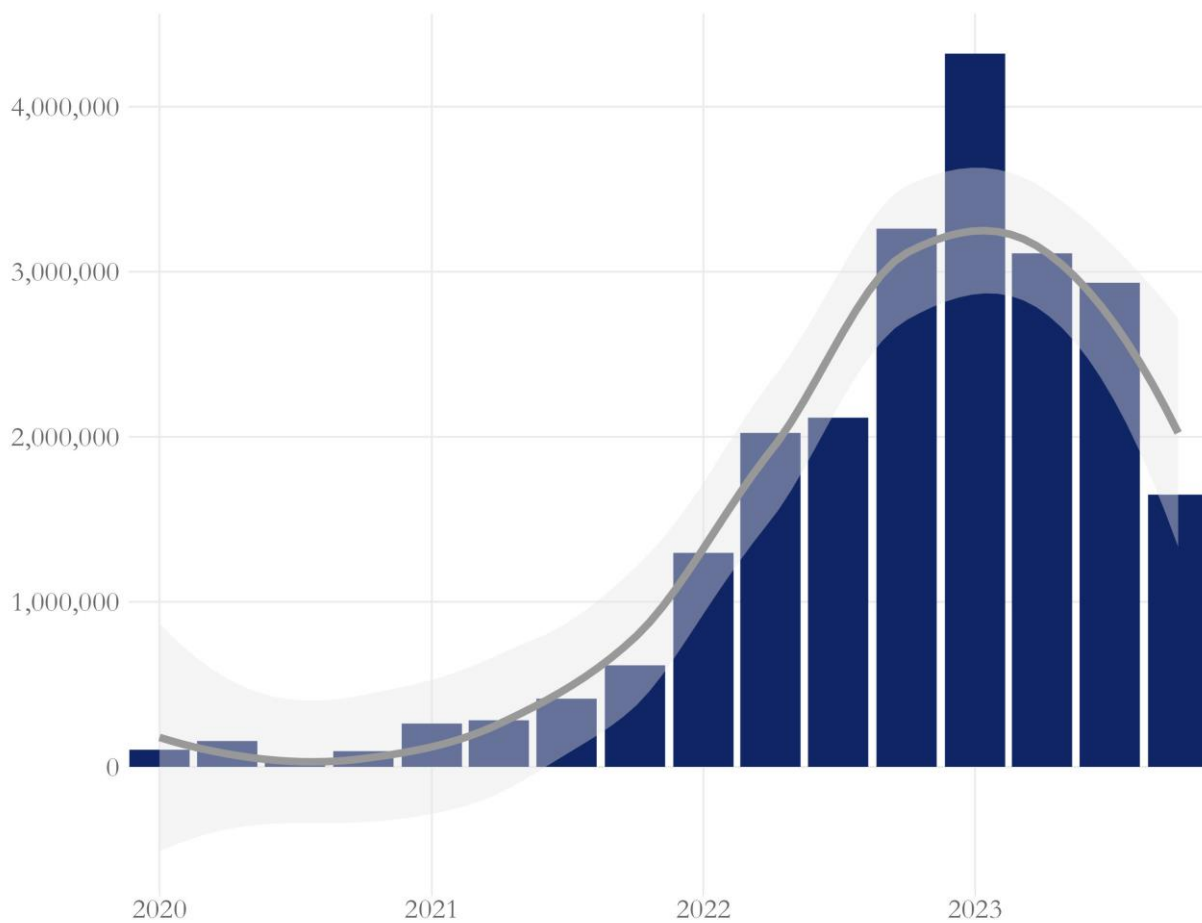
*Total Seized Fentanyl Pills by Quarter for Liberty Mid-Atlantic HIDTA*

## Fentanyl Pills by Quarter for Los Angeles HIDTA

**Trend:** Pill seizure activity was present throughout the period, with exponential growth through Q1 2023, followed by declines in the final three quarters of 2023.

**Peak:** Reached 4,321,647 doses in Q1 2023.

**Insight:** The loess regression line suggests that pill seizures may have peaked and are now on a decline for the Los Angeles HIDTA.



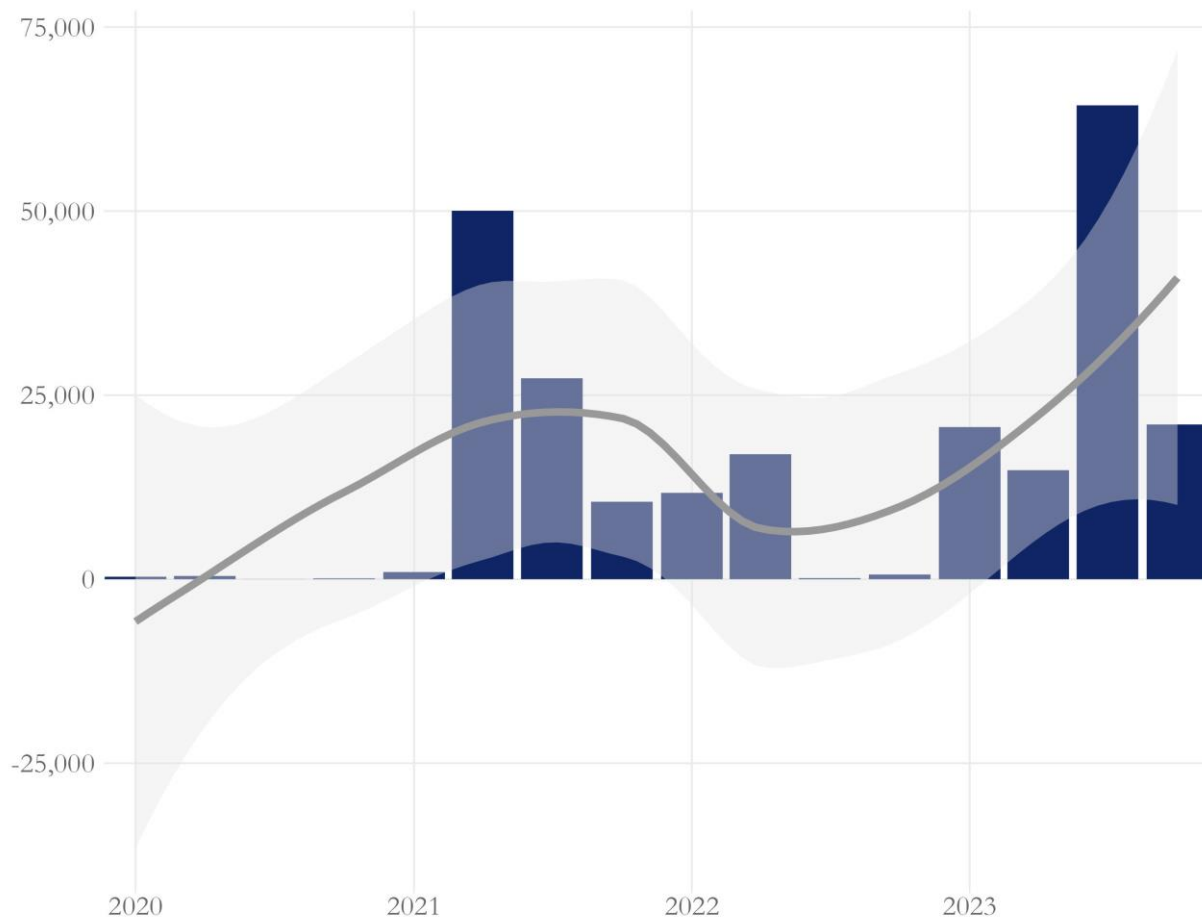
*Total Seized Fentanyl Pills by Quarter for Los Angeles HIDTA*

## Fentanyl Pills by Quarter for Michigan HIDTA

**Trend:** Fentanyl pill seizures for the Michigan HIDTA were bimodal, with significant peaks in Q2 2021 and Q3 2023.

**Peak:** Reached 64,374 doses in Q3 2023.

**Insight:** Although there was a significant decrease in fentanyl pill seizures in Q4 2023, the overall trend indicated by the loess regression line shows that the general direction of pill seizures is still increasing. This suggests that the decrease might be temporary, and that the upward seizure trend could continue.



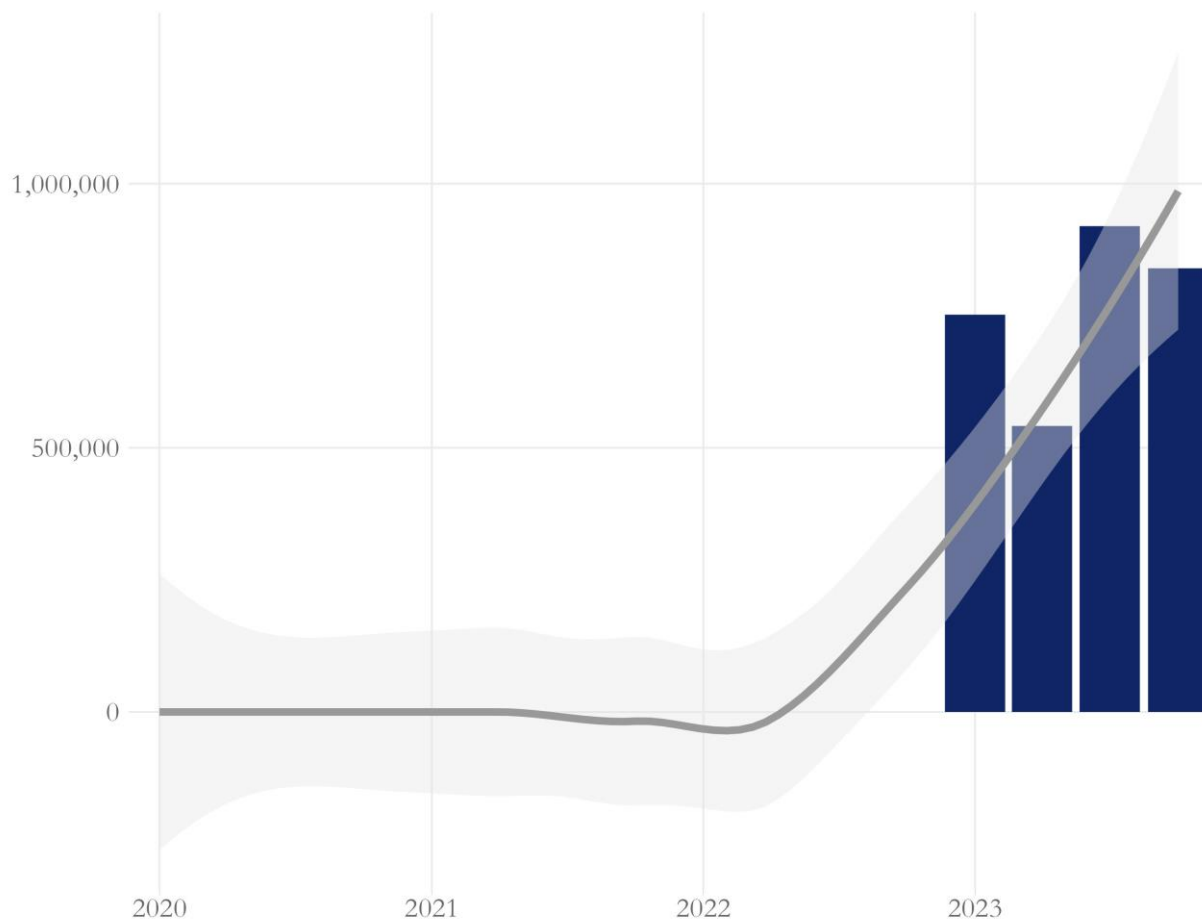
*Total Seized Fentanyl Pills by Quarter for Michigan HIDTA*

## Fentanyl Pills by Quarter for Midwest HIDTA

**Trend:** Limited pill seizure activity was logged until Q1 2023, followed by significant activity for the rest of the year.

**Peak:** Reached 919,626 doses in Q3 2023.

**Insight:** As indicated by the loess regression line, the one-year trend shows that the number of pill seizures continues to rise. Despite short-term fluctuations, the general direction is upward, indicating ongoing or increasing pill seizure activity.



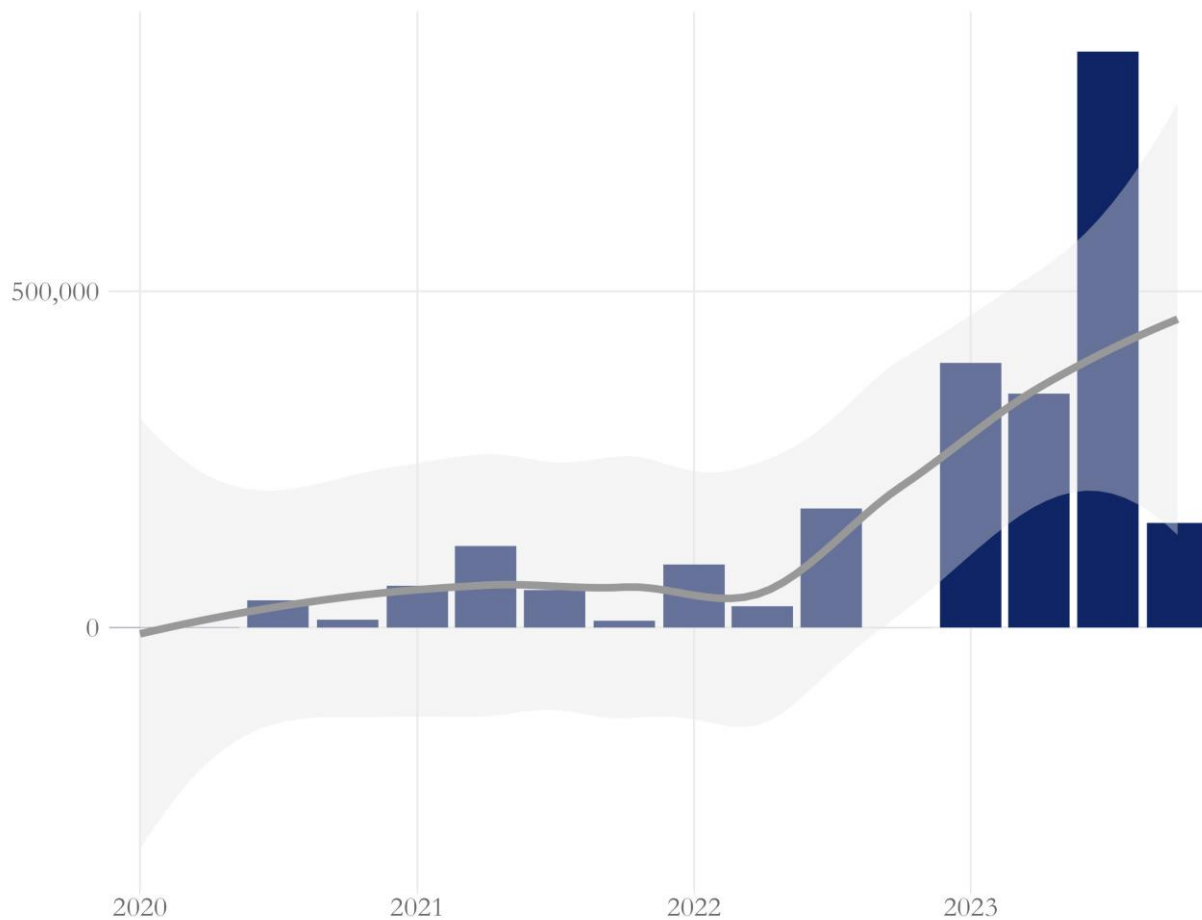
*Total Seized Fentanyl Pills by Quarter for Midwest HIDTA*

## Fentanyl Pills by Quarter for Nevada HIDTA

**Trend:** Significant fentanyl pill seizure activity was observed throughout most of the period, with a notable drop-off in Q4 2022, followed by a surge in the first three quarters of 2023 and a steep decline in Q4 2023.

**Peak:** Reached 856,512 doses in Q3 2023.

**Insight:** The overall trend, as shown by the loess regression line, indicates a general increase in fentanyl pill seizures over the entire period despite any short-term fluctuations or declines.



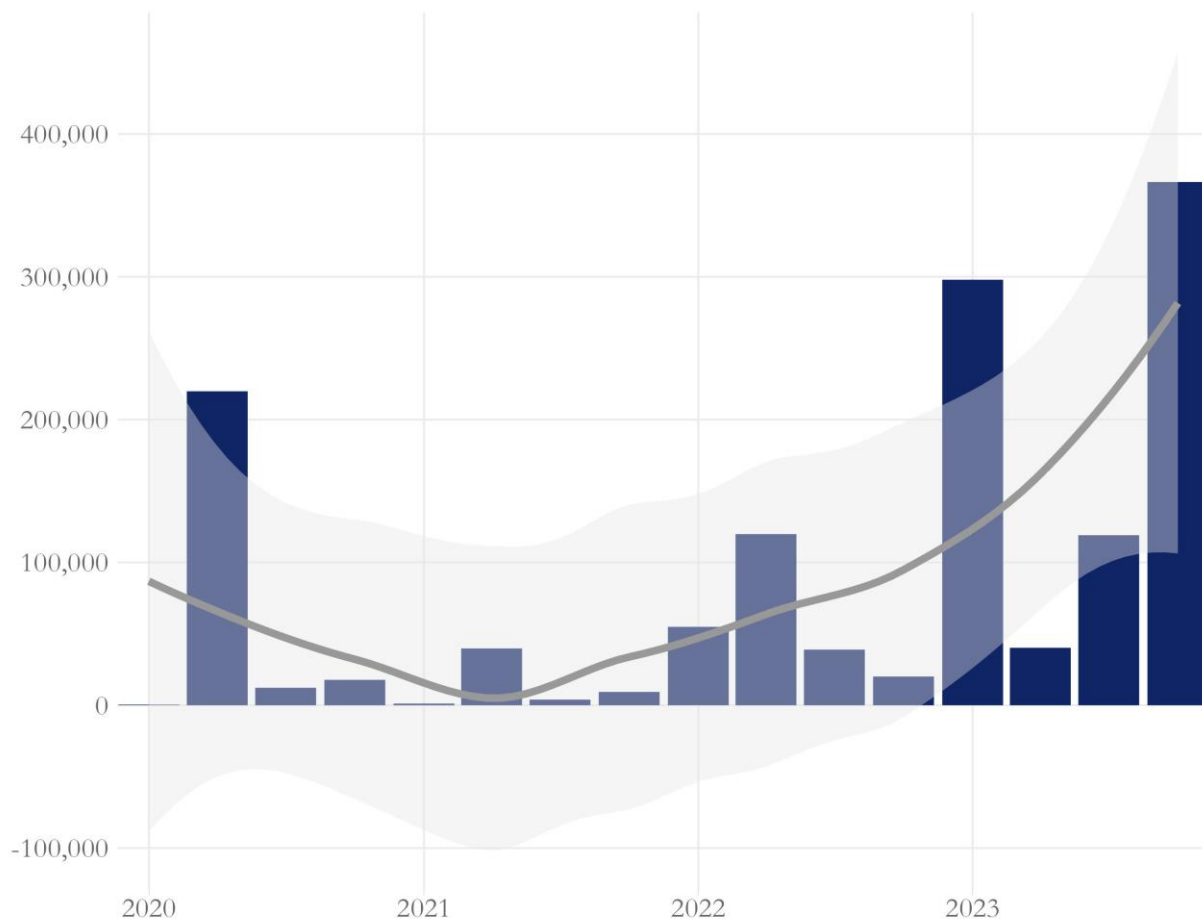
*Total Seized Fentanyl Pills by Quarter for Nevada HIDTA*

## Fentanyl Pills by Quarter for New England HIDTA

**Trend:** Fentanyl pill seizure activity for the New England HIDTA was significant but sporadic throughout the period.

**Peak:** Reached 366,383 doses in Q4 2023.

**Insight:** According to the loess regression line, the overall trend indicates a consistent rise in fentanyl pill seizures starting from Q2 2021 and continuing through the end of the period, regardless of any short-term fluctuations.



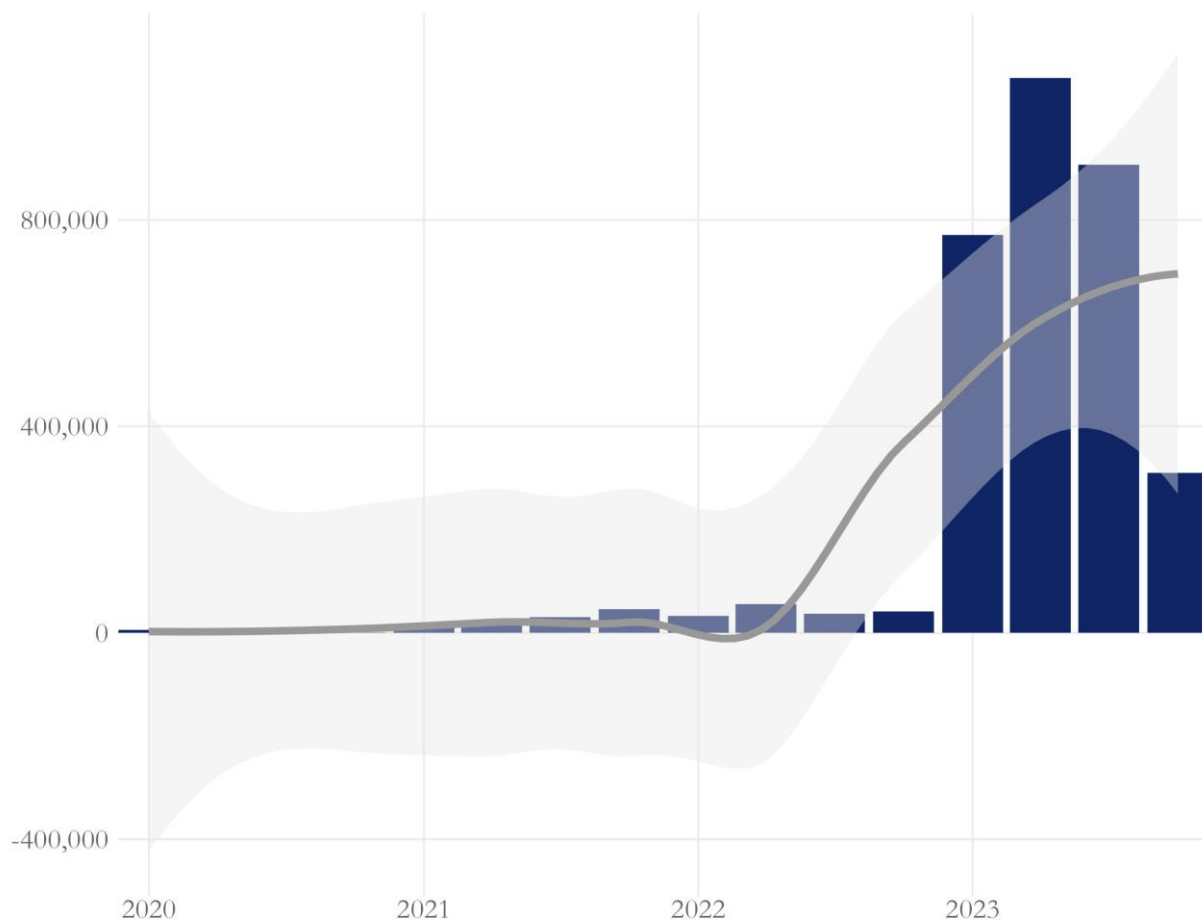
*Total Seized Fentanyl Pills by Quarter for New England HIDTA*

## Fentanyl Pills by Quarter for New Mexico HIDTA

**Trend:** Fentanyl pill seizures were minimal for the New Mexico HIDTA through 2022, with substantial seizure activity occurring in the first three quarters of 2023.

**Peak:** Reached 1,074,834 doses in Q2 2023.

**Insight:** There was a significant and noticeable decrease in the number of fentanyl pill seizures during the fourth quarter of 2023.



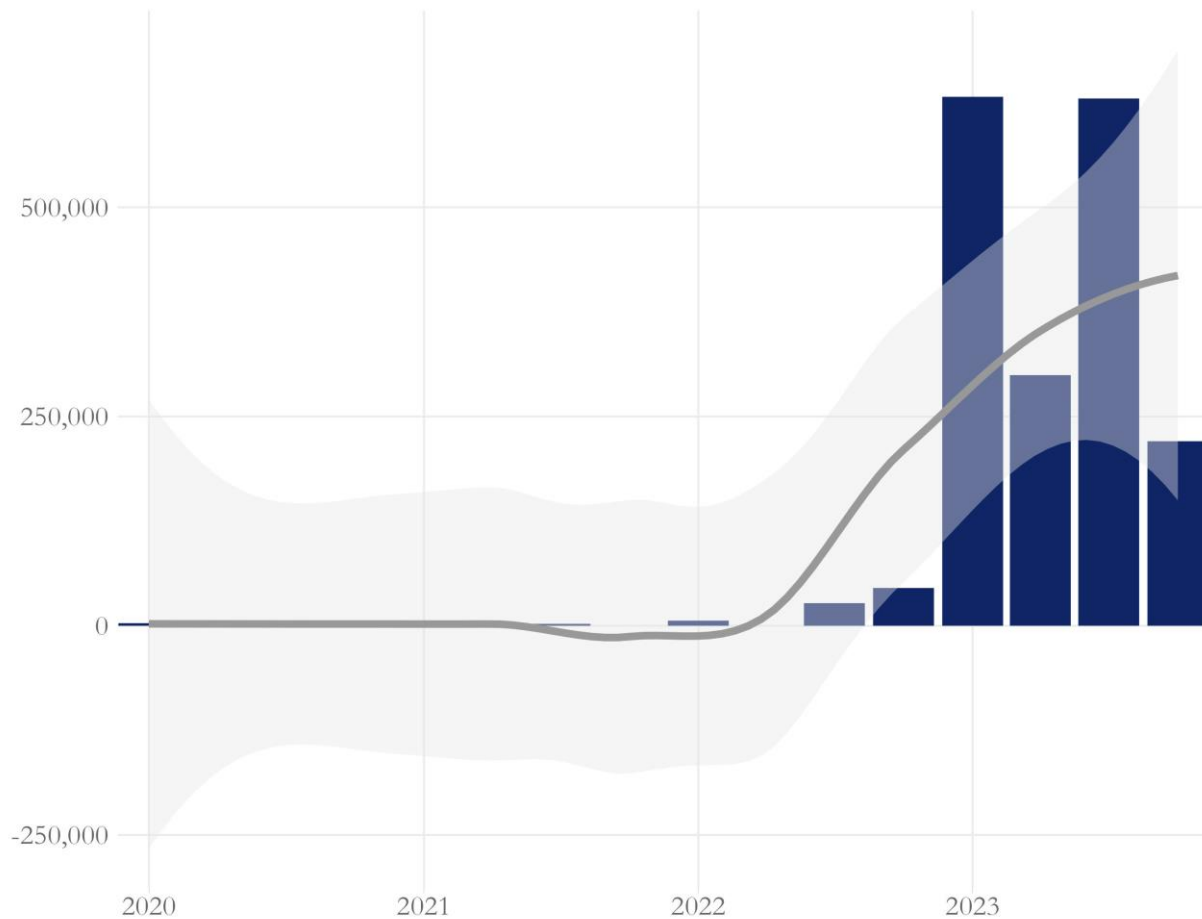
*Total Seized Fentanyl Pills by Quarter for New Mexico HIDTA*

## Fentanyl Pills by Quarter for New York-New Jersey HIDTA

**Trend:** Minimal fentanyl pill seizure activity up until Q2 2022, with 2023 seeing significant increases in seizures compared to previous years.

**Peak:** Reached 632,017 doses in Q1 2023.

**Insight:** Fentanyl pill seizures dropped significantly in the fourth quarter of 2023.



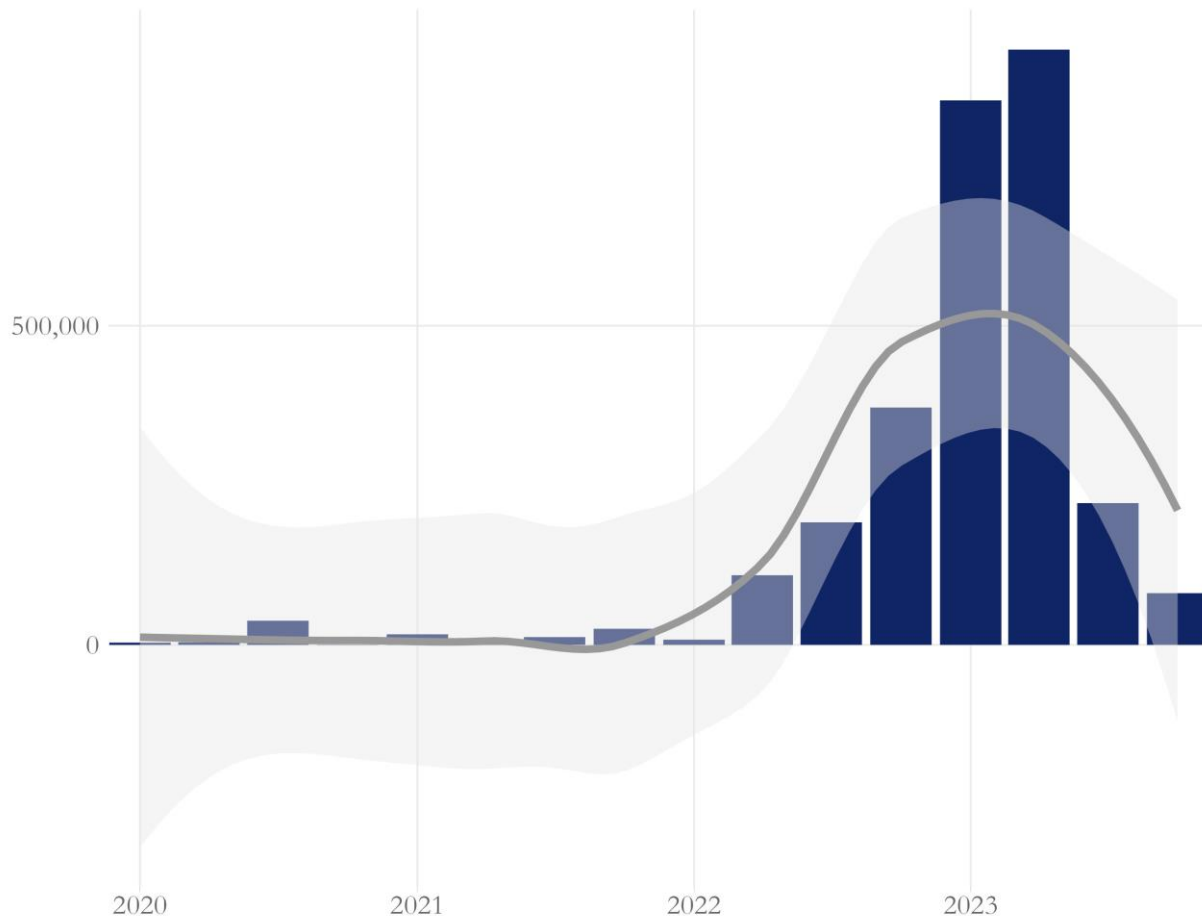
*Total Seized Fentanyl Pills by Quarter for New York-New Jersey HIDTA*

## Fentanyl Pills by Quarter for North Central HIDTA

**Trend:** Limited fentanyl pill activity through Q1 2022, followed by rapid exponential increases through Q2 2023.

**Peak:** Reached 932,730 doses in Q2 2023.

**Insight:** There was a continuous decrease in fentanyl pill seizures during the last two quarters of the reporting period, and the overall trend indicated by the loess regression line suggests that this decline may continue.



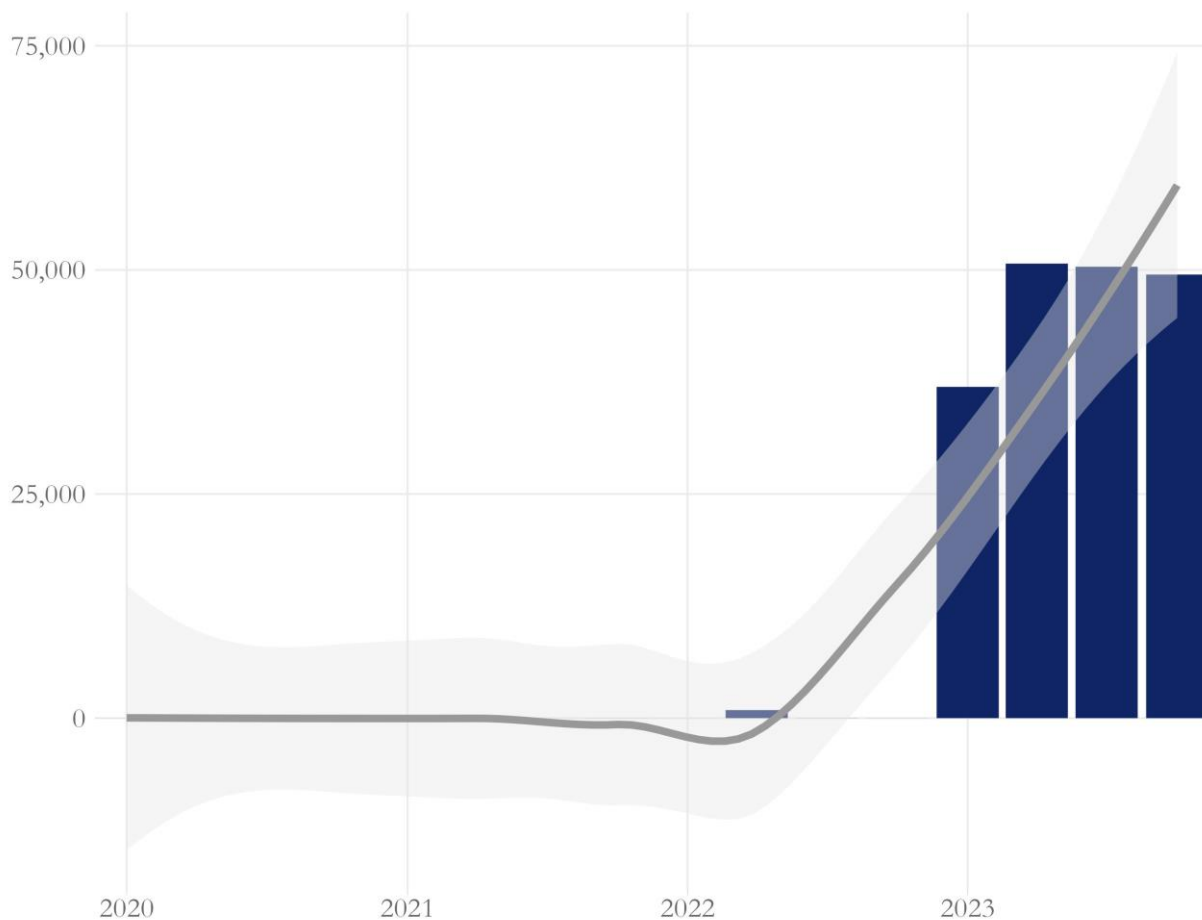
*Total Seized Fentanyl Pills by Quarter for North Central HIDTA*

## Fentanyl Pills by Quarter for North Florida HIDTA

**Trend:** Limited seizure activity through 2022, followed by a sustained surge throughout 2023.

**Peak:** Reached 50,700 doses in Q2 2023.

**Insight:** According to the Loess regression line, the overall trend indicates that the number of fentanyl pill seizures is continuing to rise in the area. Despite any short-term fluctuations, the general direction is upward, suggesting ongoing growth in seizure activity.



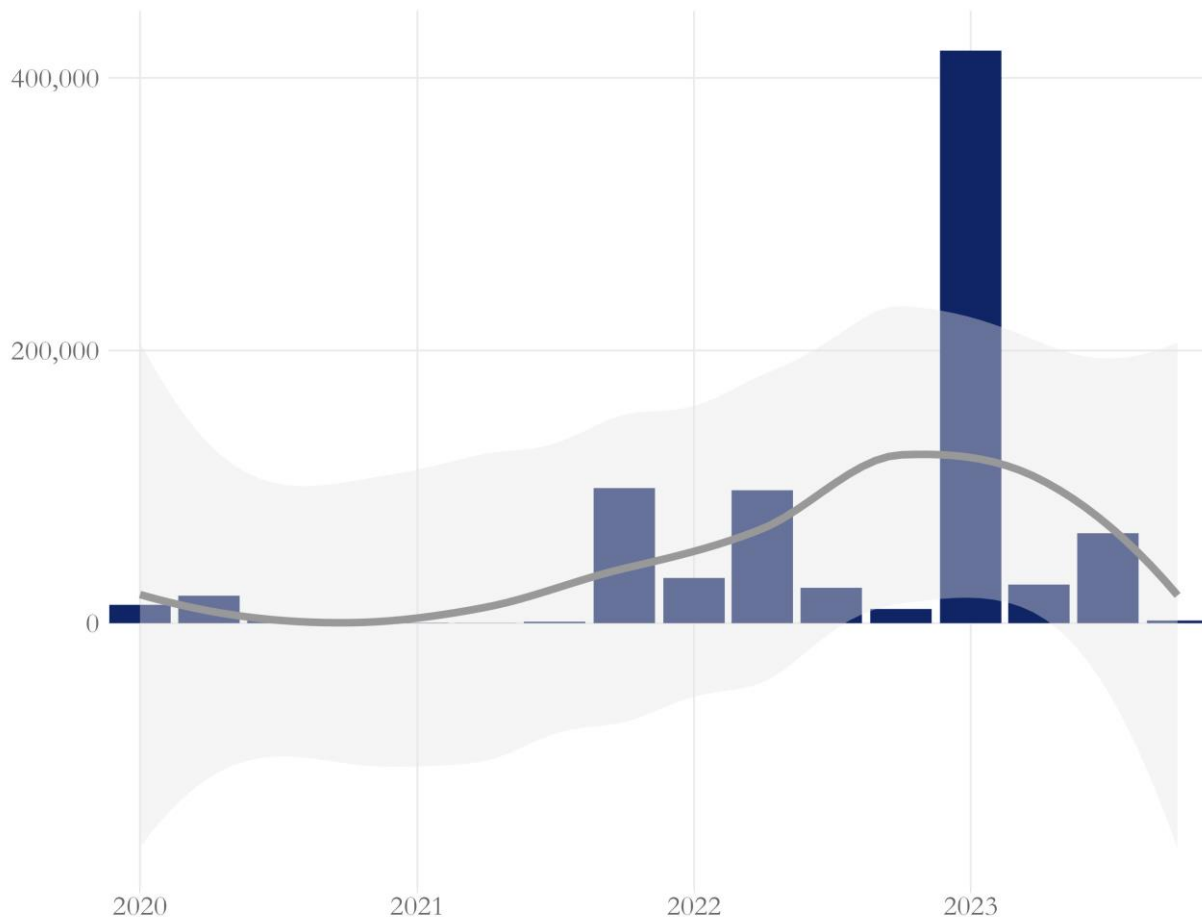
*Total Seized Fentanyl Pills by Quarter for North Florida HIDTA*

## Fentanyl Pills by Quarter for North California HIDTA

**Trend:** Sporadic fentanyl pill seizure activity.

**Peak:** Reached 420,035 doses in Q1 2023 with a significant spike.

**Insight:** The overall trend indicated by the loess regression line shows that the number of fentanyl seizures is currently decreasing. Despite any short-term variations, the general direction of seizure activity is downward.



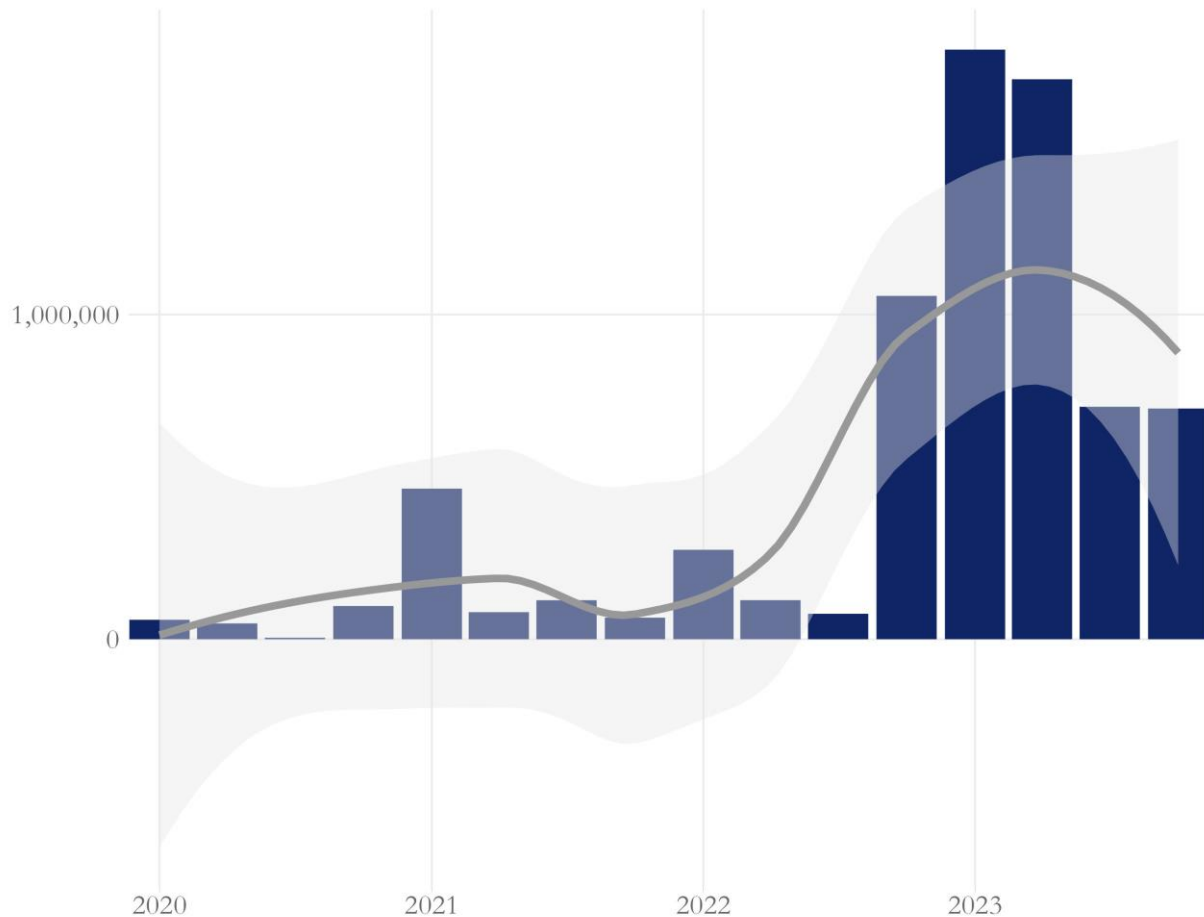
*Total Seized Fentanyl Pills by Quarter for North California HIDTA*

## Fentanyl Pills by Quarter for Northwest HIDTA

**Trend:** Fentanyl pill seizures were present throughout the period, with a significant surge starting in Q4 2022 and continuing through Q2 2023.

**Peak:** Significant increase from Q4 2022 to Q2 2023, with seizures reaching 1,816,270 doses in Q1 2023.

**Insight:** There was a continuous decrease in fentanyl pill seizures during the last two quarters of the period. The overall trend, as indicated by the loess regression line, suggests that the highest level of seizures has been reached, and the numbers are starting to level off.



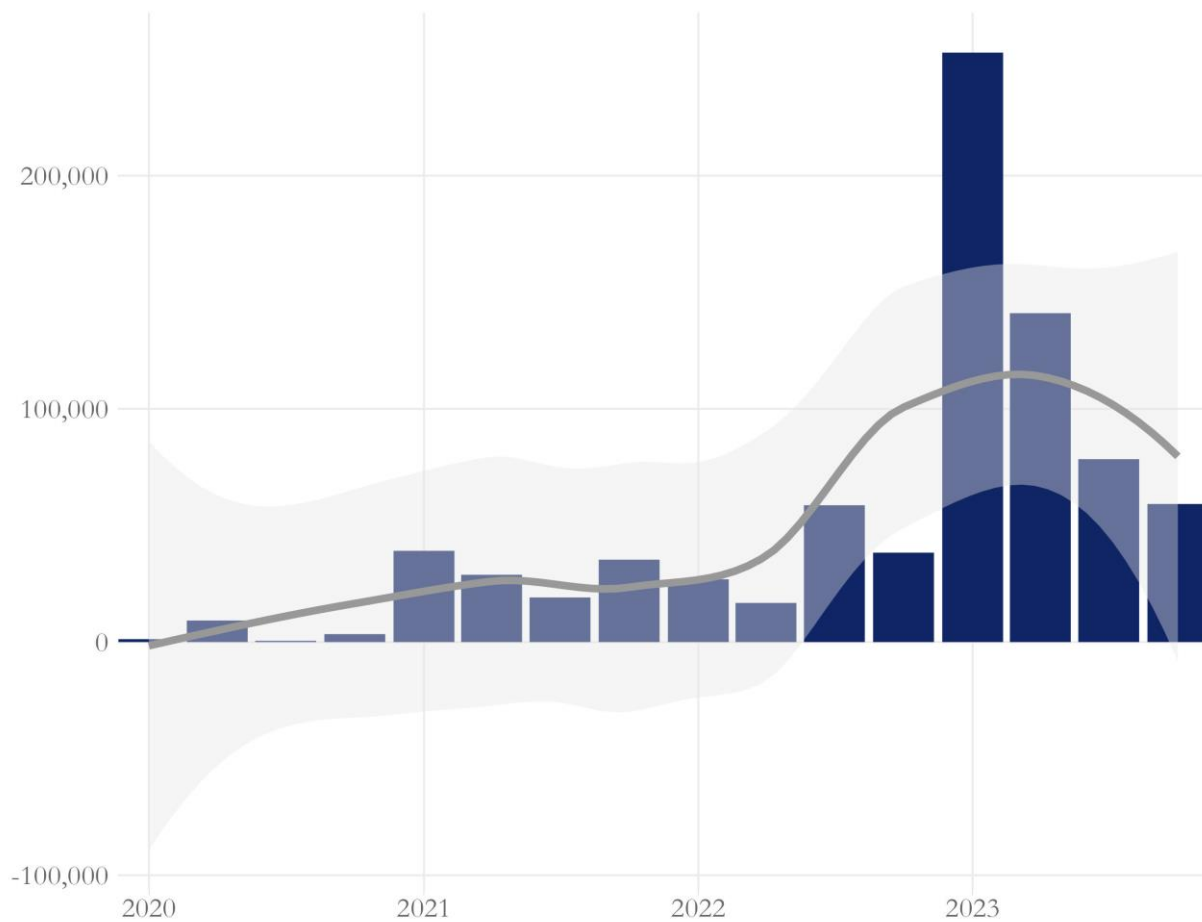
*Total Seized Fentanyl Pills by Quarter for Northwest HIDTA*

## Fentanyl Pills by Quarter for Ohio HIDTA

**Trend:** Fentanyl pill presence was relatively low in the Ohio AOR through 2022.

**Peak:** Significant spike in pill seizures during Q1 2023 when pill seizures reached 252,761.

**Insight:** After a significant spike in fentanyl pill seizures in Q1 2023, the number of seizures decreased over the rest of the year. The overall trend, as indicated by the loess regression line, shows that the number of fentanyl pill seizures in the Ohio AOR is decreasing.



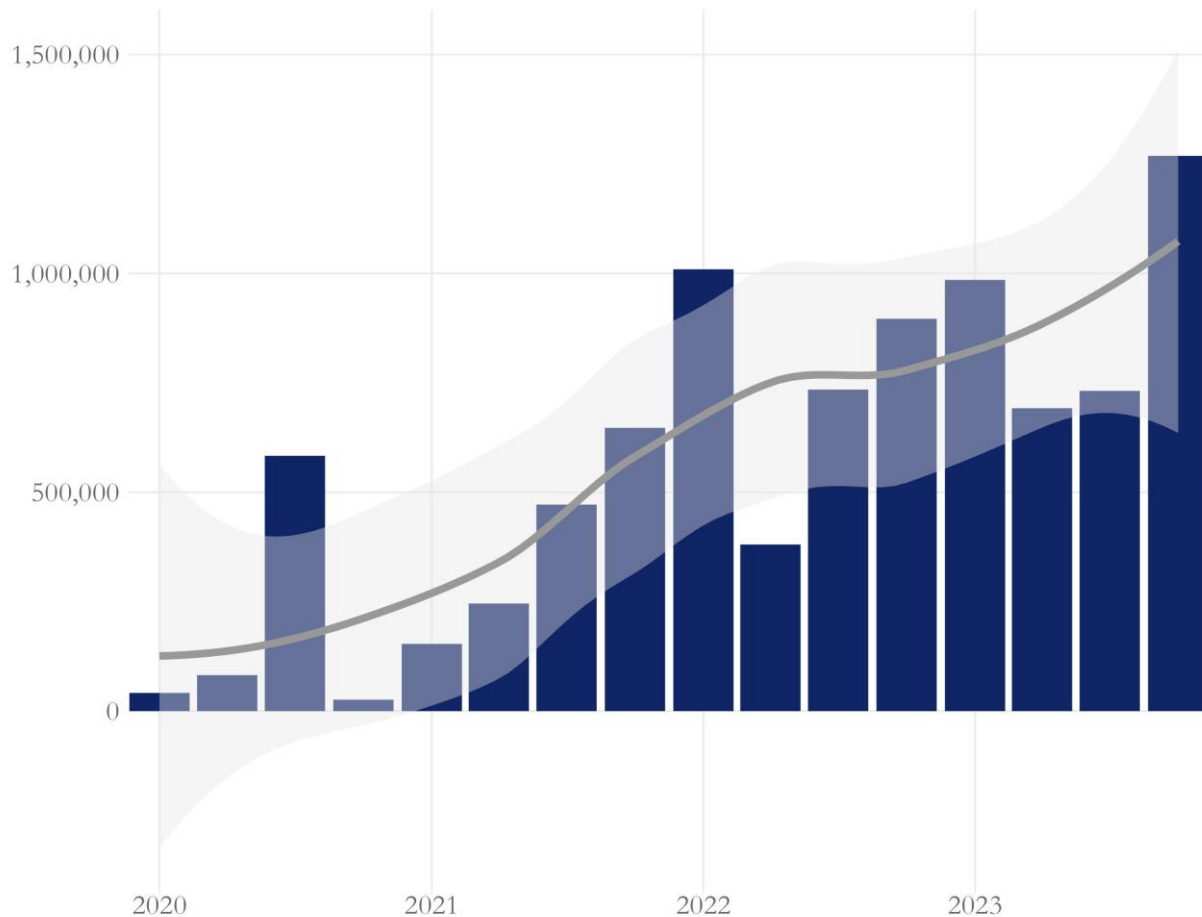
*Total Seized Fentanyl Pills by Quarter for Ohio HIDTA*

## Fentanyl Pills by Quarter for Oregon-Idaho HIDTA

**Trend:** Fentanyl pill seizures experienced fluctuations with several troughs and peaks throughout the reporting period, yet consistently increased overall.

**Peak:** Reached 1,268,438 doses in Q4 2023.

**Insight:** The overall trend, as shown by the loess regression line, suggests that the number of fentanyl pill seizures in the Oregon-Idaho AOR is continuing to rise, indicating a persistent upward trend in seizure activity.



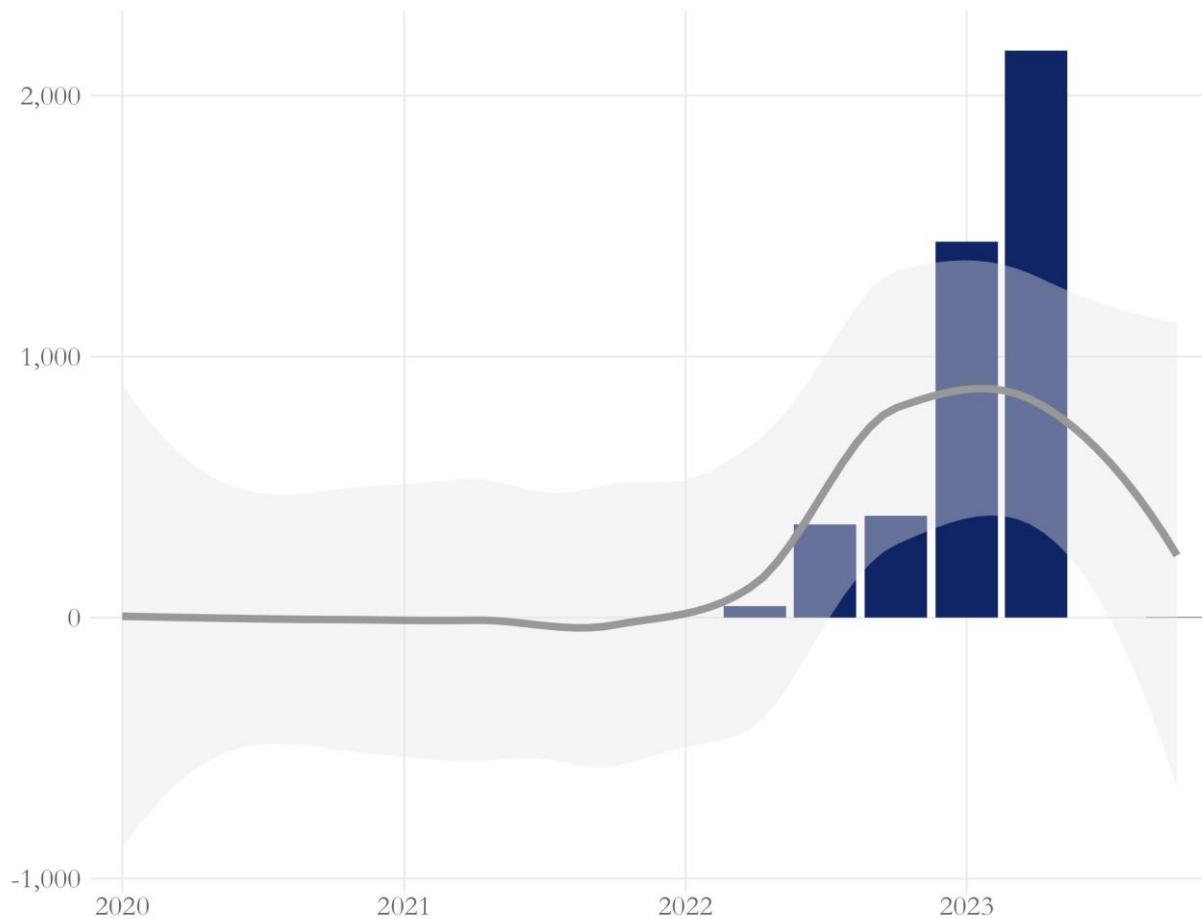
*Total Seized Fentanyl Pills by Quarter for Oregon-Idaho HIDTA*

## Fentanyl Pills by Quarter for Puerto Rico & Virgin Islands HIDTA

**Trend:** Fentanyl pill seizures in Puerto Rico and the Virgin Islands AOR were virtually non-existent through Q2 2022.

**Peak:** Reached 2,172 doses in Q2 2023.

**Insight:** Even at the peak in Q2 2022, seizures remained relatively low.



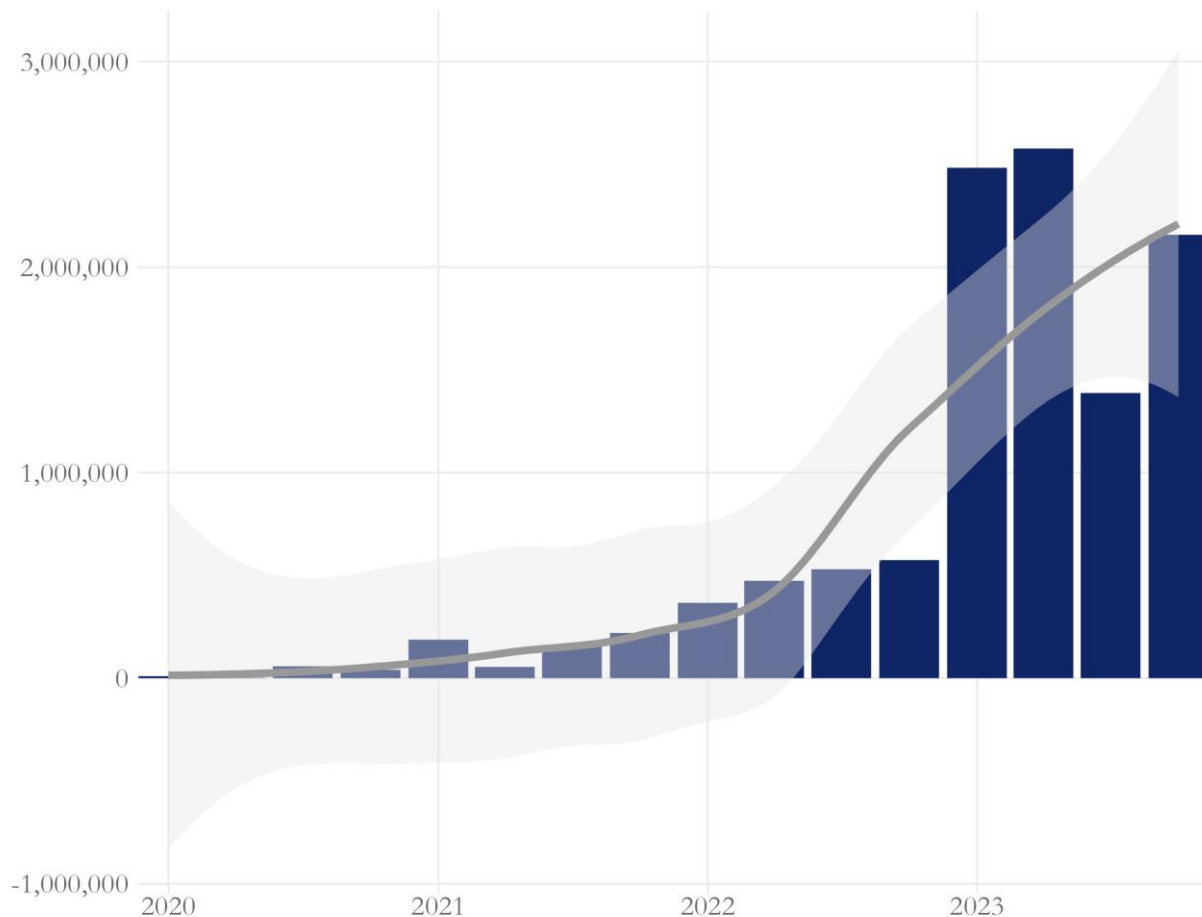
*Total Seized Fentanyl Pills by Quarter for Puerto Rico & Virgin Islands HIDTA*

## Fentanyl Pills by Quarter for Rocky Mountain HIDTA

**Trend:** Fentanyl pill seizures stayed relatively low in the Rocky Mountain AOR through 2022, followed by a significant surge in 2023.

**Peak:** Reached 2,577,070 doses in Q2 2023.

**Insight:** According to the loess regression line, the overall trend indicates that the number of fentanyl pill seizures is still increasing. Despite any short-term variations, the general direction of the data points to a continuing upward trend in seizures.



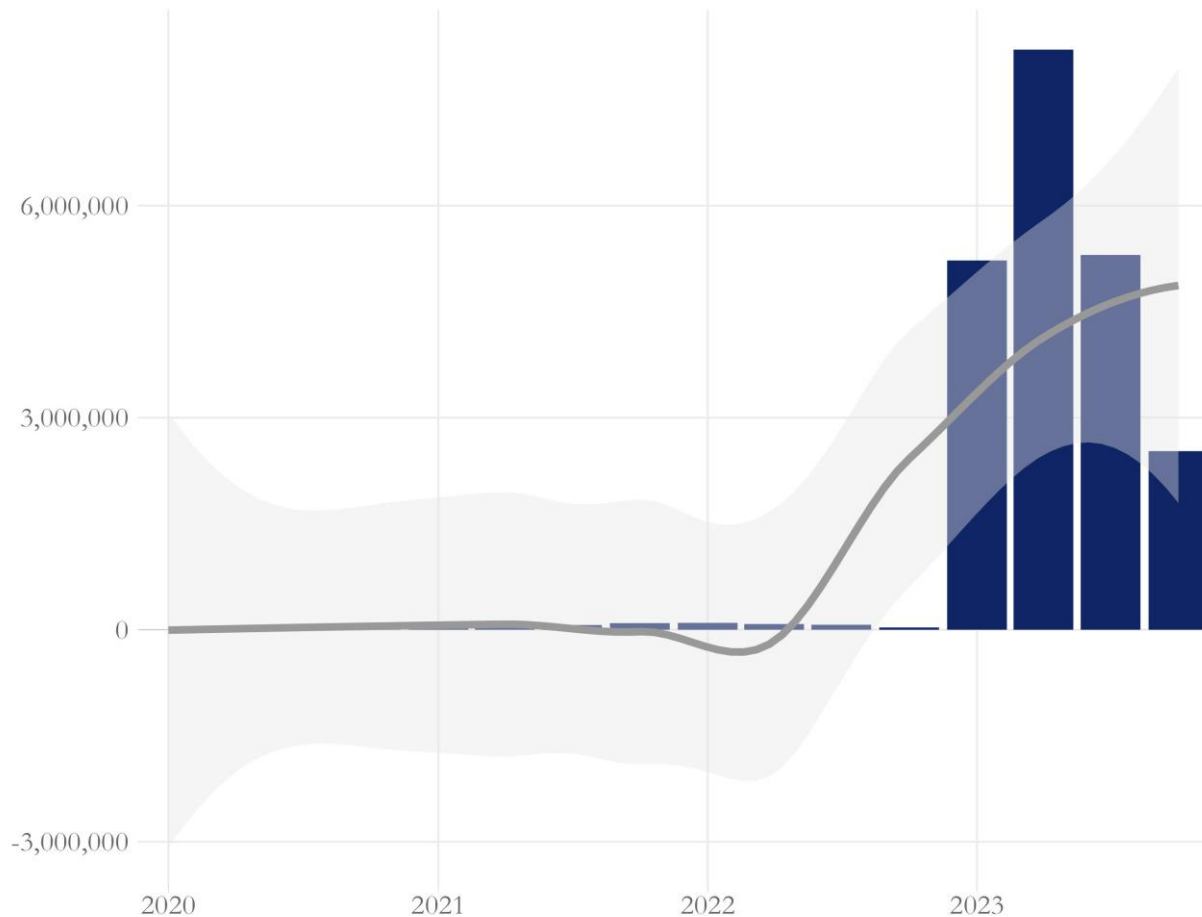
*Total Seized Fentanyl Pills by Quarter for Rocky Mountain HIDTA*

## Fentanyl Pills by Quarter for San Diego Imperial Valley HIDTA

**Trend:** Fentanyl pill seizures remained at low levels in the San Diego Imperial Valley AOR through 2022. In the first half of 2023, a significant seizure surge of pills occurred, followed by declining yet still notable seizures.

**Peak:** Reached 8,207,710 doses in Q2 2023.

**Insight:** The overall trend indicated by the loess regression line suggests that the number of fentanyl pill seizures is likely to keep increasing. Despite any short-term declines or fluctuations, the general direction points to a potential ongoing rise in seizures.



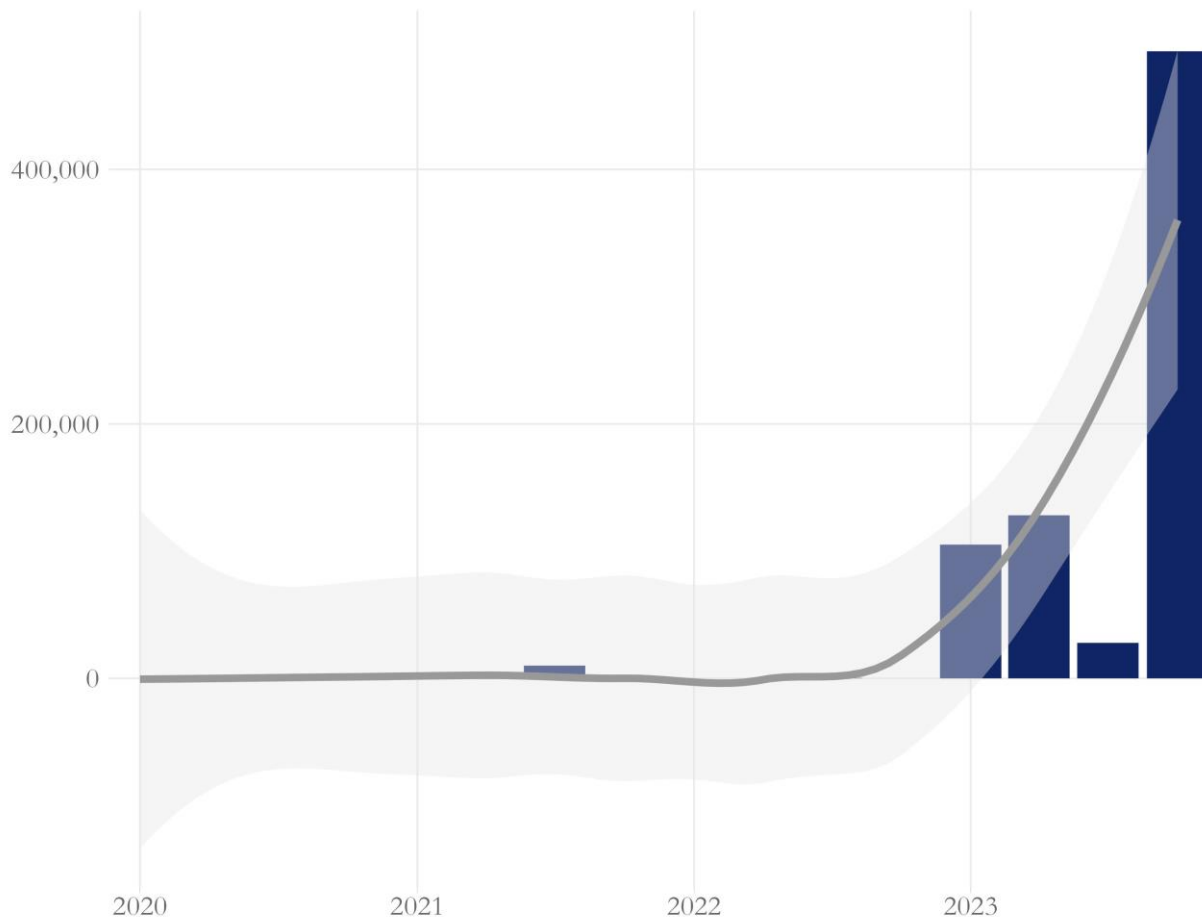
*Total Seized Fentanyl Pills by Quarter for San Diego Imperial Valley HIDTA*

## Fentanyl Pills by Quarter for South Florida HIDTA

**Trend:** Fentanyl pill seizures in the South Florida AOR were minimal through 2022, followed by a substantial surge in 2023.

**Peak:** Reached 492,850 doses in Q4 2023.

**Insight:** The overall trend, as indicated by the loess regression line, points to a continued rise in the number of pill seizures. Despite any short-term variations, the general direction is upward, indicating ongoing growth in seizure activity.



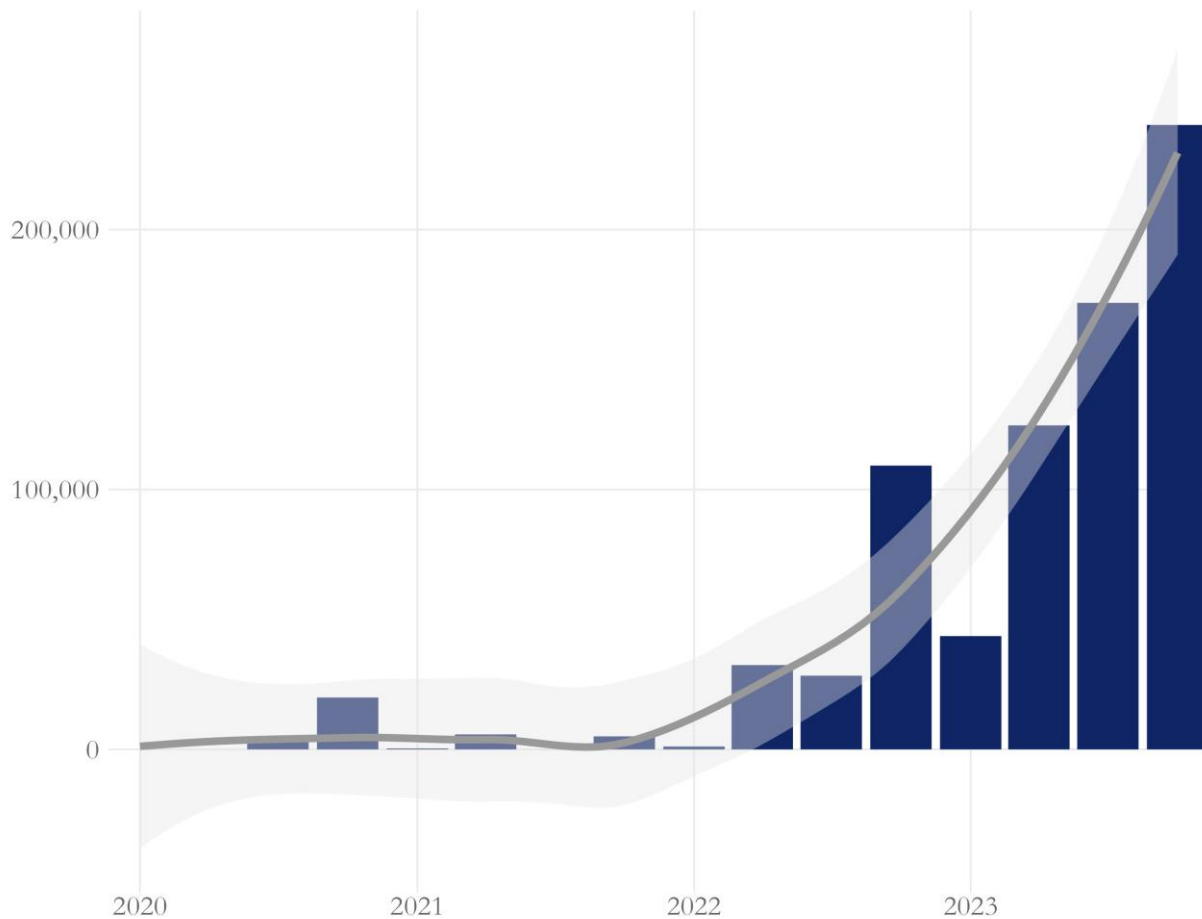
*Total Seized Fentanyl Pills by Quarter for South Florida HIDTA*

## Fentanyl Pills by Quarter for South Texas HIDTA

**Trend:** Fentanyl pill seizures remained low in the South Texas AOR through Q1 2022, followed by exponential increases from Q2 2022 through 2023.

**Peak:** Reached 240,226 doses in Q4 2023.

**Insight:** The overall trend, as shown by the loess regression line, indicates that the number of fentanyl pill seizures is expected to keep increasing. Despite any short-term variations, the general direction suggests a continued upward trend in seizure activity.



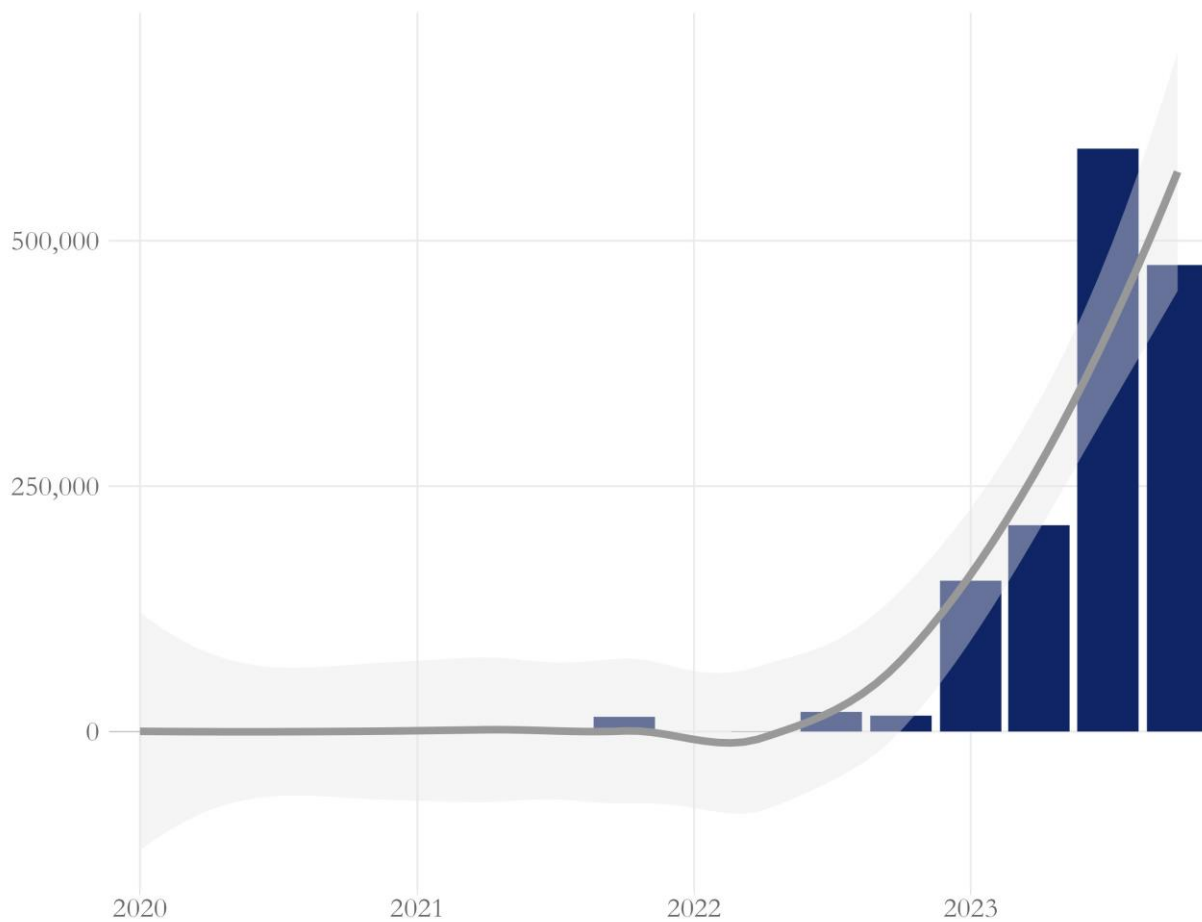
*Total Seized Fentanyl Pills by Quarter for South Texas HIDTA*

## Fentanyl Pills by Quarter for Texoma HIDTA

Trend: Fentanyl pill seizures were negligible in the Texoma AOR through 2022, followed by exponential growth during the first three quarters of 2023 and a decline in the final quarter.

Peak: Reached 593,777 doses in Q3 2023.

Insight: According to the Loess regression line, the overall trend indicates that the number of fentanyl pill seizures in the Texoma area is continuing to increase. Despite any short-term declines, the general direction of seizure activity is upward.



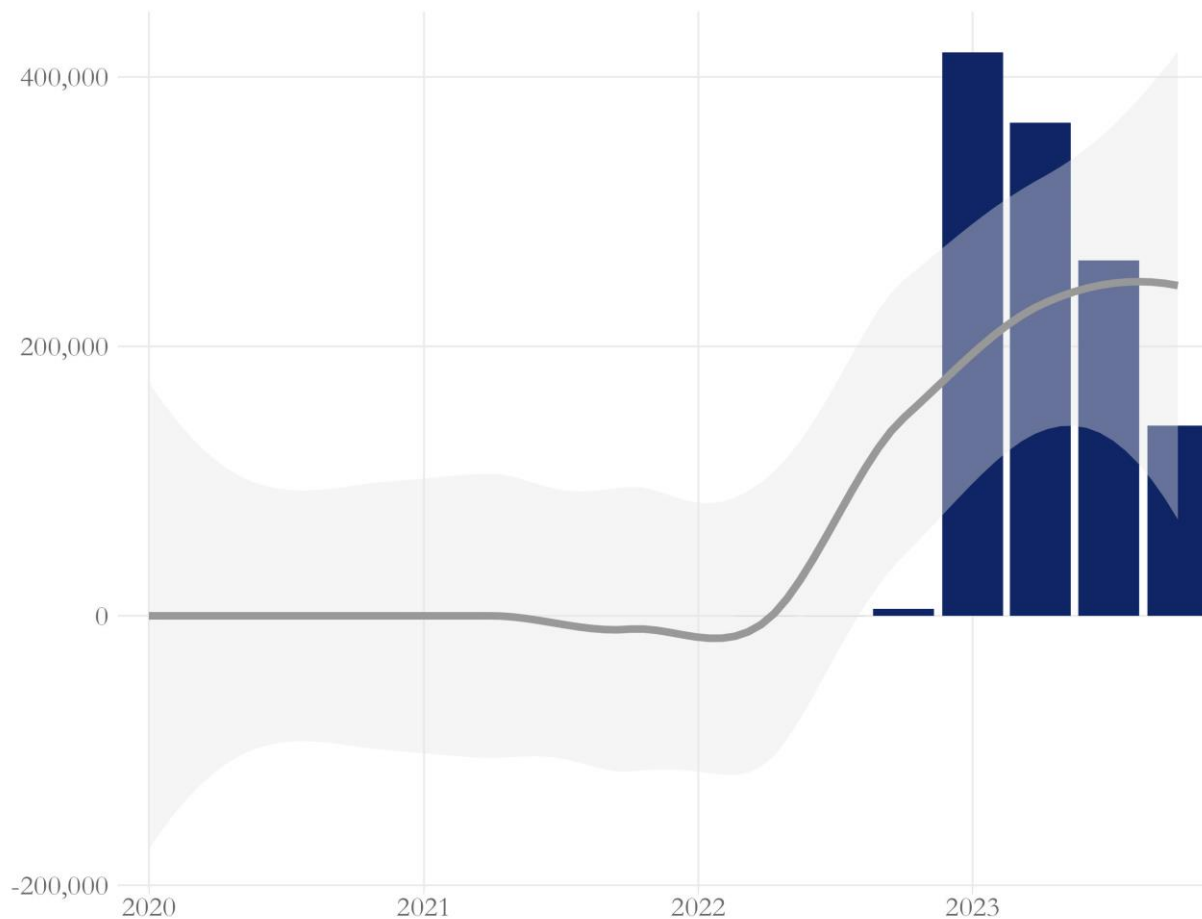
*Total Seized Fentanyl Pills by Quarter for Texoma HIDTA*

## Fentanyl Pills by Quarter for Washington-Baltimore HIDTA

**Trend:** Fentanyl pill seizures in the Washington-Baltimore AOR were negligible through 2022, followed by a significant surge in 2023.

**Peak:** Reached 418,267 doses in Q1 2023, followed by steady declines for the remainder of the period.

**Insight:** The overall trend, as shown by the loess regression line, indicates that the number of fentanyl pill seizures in the Washington-Baltimore AOR has likely reached a stable level and is no longer increasing. Despite short-term fluctuations, the general trend suggests seizure activity has leveled off.



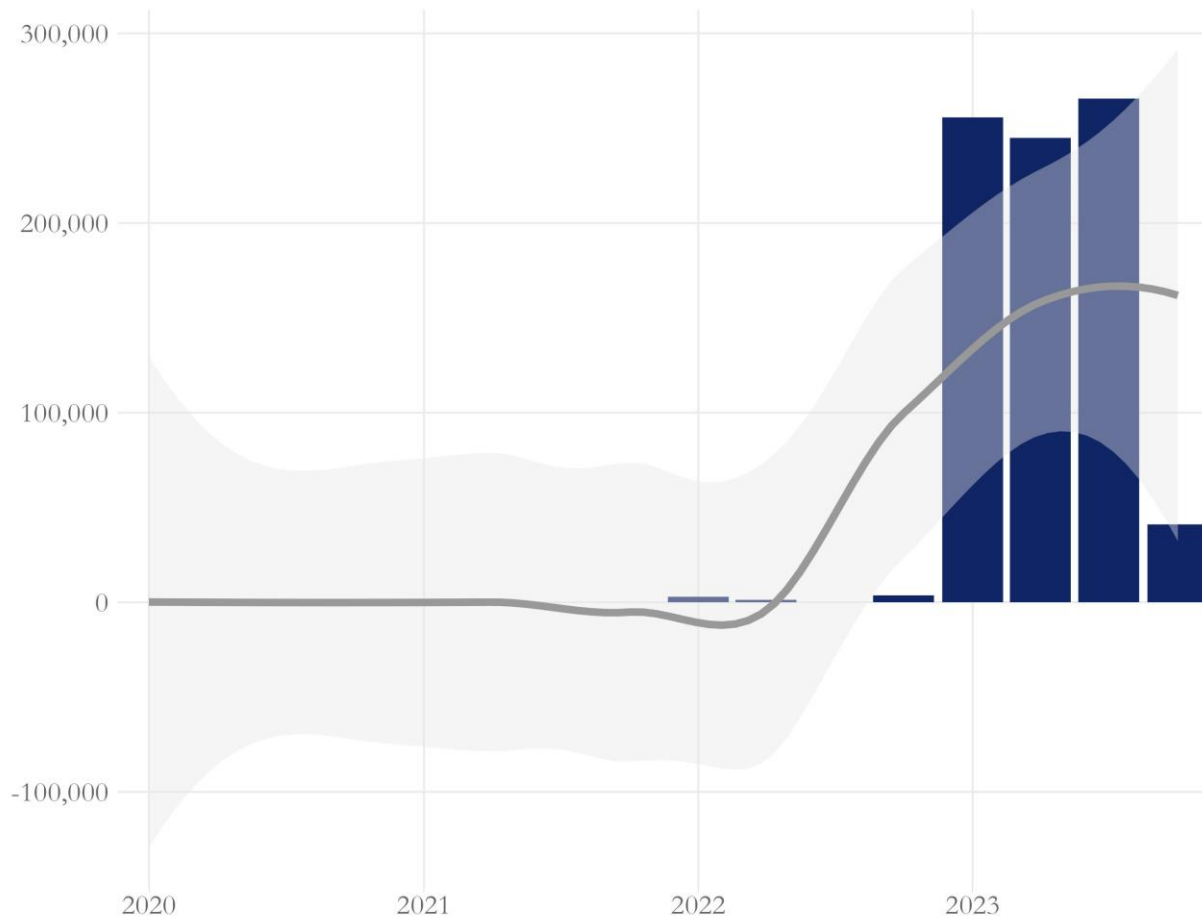
*Total Seized Fentanyl Pills by Quarter for Washington-Baltimore HIDTA*

## Fentanyl Pills by Quarter for West Texas HIDTA

**Trend:** Fentanyl pill seizures were negligible in the West Texas AOR through 2022, followed by a significant surge in the first three quarters of 2023.

**Peak:** Reached 265,582 doses in Q3 2023.

**Insight:** In the final quarter of 2023, the number of fentanyl pill seizures significantly decreased. The Loess regression line indicates that the overall trend in seizure activity has leveled off, suggesting that the number of seizures is no longer increasing and has stabilized in the West Texas area. However, since the AOR is on the southwest border, large spikes may occur that change the trends, with trends returning over time.



*Total Seized Fentanyl Pills by Quarter for West Texas HIDTA*

## References

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