The Changing Overdose Crisis in Central Florida: A Community Needs Assessment
What is Project Opioid?

At Project Opioid, we empower leaders to confront the overdose crisis. We align leaders around one shared goal: to reduce opioid deaths in their communities. We educate leaders on how to build a coalition, launch a regional overdose initiative, and promote high-level advocacy to transform and save the greatest number of lives in their communities.

Founded in 2018, Project Opioid was created in response to the raging opioid epidemic that claimed the lives of nearly 450,000 people across America in one decade. Since then, the opioid crisis driven by the pervasive use of fentanyl has reached unprecedented heights. This new dynamic is contributing to the greatest mental health, substance abuse, and overdose crisis in U.S. history. The startling new data on opioid overdose and death calls for leaders to urgently embrace a different approach to solving the overdose epidemic.

Do you have questions? Do you want to get involved?

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Key Findings:

1) Fatal overdoses are rising at an unprecedented rate in the State of Florida, and Central Florida is rising even faster than Florida.
   a. Fatal overdoses reached over 100,306 in the United States for the period between April 2020 and April 2021, a 28.5% increase from the same time period in 2019-2020. This equals approximately 8,359 deaths a month, and 275 a day.
   b. In the state of Florida, there were 7,892 overdose deaths between April 2020 and April 2021, a 26% increase in the same time period in 2019-2020. This equals 657 overdose deaths a month, and almost 22 a day.
   c. In the greater Central Florida region, there were over 1,618 deaths between March 2020 and March 2021, a rate of 34.51 per 100,000 of the population. With Brevard and Volusia Counties showing considerably higher rates of 56 per 100,000 of the population.
   d. In Central Florida, there were 616 overdose deaths between March 2020 and March 2021, a 28% increase in the same time period in 2019-2020. This equals 51 overdose deaths a month, and over 1.5 a day.

2) Fentanyl has changed the game in Central Florida and is fueling the overdose epidemic in our community.
   a. In the state of Florida, fentanyl was listed as the cause of death in 91% of drug overdose deaths in 2020, and deaths caused by fentanyl increased by 63% (2,058 more than 2019)
   b. Fentanyl caused deaths in Central Florida have increased 172% since 2015 in Central Florida.
   c. Fentanyl was present in the body of 86% of the drug overdose deaths in Central Florida in the first 6 months of 2021.
   d. In Seminole County, fentanyl as the cause of death increased over 400% between 2015 and 2020 and caused 75% of the overdose deaths in the first 6 months of 2021.

3) Central Floridians are taking mixed illicit drugs, most combined with fentanyl knowingly or unknowingly, with deadly results.
   a. Of the 1,061 overdose deaths that occurred in Central Florida between January 2020 and June of 2021, only 134 (13%) had only one drug present at the time of death. Of these 134 deaths, 37% were caused by fentanyl, 32% by cocaine, and 16% by ethanol (alcohol).
   b. Of the 821 deaths that were caused by fentanyl during this 18 month period, 410 co-occurred with cocaine, 236 co-occurred with ethanol/alcohol, 131 with methamphetamines.
   c. Mixing fentanyl with other drugs increases the potency and potential for overdose and death.

4) Overdose deaths among racial minorities are growing at a higher rate than their White counterparts.
   a. In 2021, 13% of the overdose deaths in Central Florida were in the Black population, 82% were among White Floridians.
   b. Overdose deaths in the Black population have increased over 200% between 2015 and 2021, while White overdose deaths have increased 144% during this same time.
Introduction:

The opioid epidemic as we know it has changed radically since the Centers for Disease Control first declared it a public health emergency in 2017 and enacted several measures to reduce the overprescribing of opioids to the American public. At that time, over 40% of the 70,237 overdose deaths involved a prescription opioid and 191 million prescriptions were dispensed to American patients. From 2000-2010, the number of prescription pill deaths increased over 1,000 times in the state of Florida, from 152 to 2,023 highlighting the apex of the prescription pill crisis.

Fast forward to 2021, where we are living in the post-pandemic world, the prescribing of opioids is at an all-time low, only 142,816,781 prescriptions for opioids were dispensed in 2020, but we are still living with the ramifications of this public health crisis. In 2020, we saw an unprecedented amount of overdose deaths in the US, an astonishing increase of 33% to 93,331 Americans, since that public health emergency was declared, yet these deaths look different. More individuals are dying with multiple drugs in their systems, proportionately fewer with prescription opioids, a dramatic increase in the number of individuals dying from illicit fentanyl, and the demographics of those overdosing and dying has also shifted.

The purpose of this report is to investigate what is driving this unprecedented increase in overdose deaths and determine why so many people are still dying at the hands of illicit drugs. We will seek to answer the following questions to determine what is happening in the state of Florida and Central Florida and make recommendations as to what leaders can do to reverse this deadly trend.

1) What is the opioid crisis and how did we get here?
2) How common is opioid use disorder in the state of Florida and our community? How has this changed in the last five years?
3) Is the face of the overdose crisis changing?
4) Which drugs are killing people in the state of Florida and our community?

5) What is fentanyl and how is it impacting the state of Florida and our community?

Methodology:

There are several methods and resources available to track overdose data at the national, state, and county level and, while all these data sets rarely agree down to the number, each represents an important aspect of the overdose crisis. Therefore, several different reporting agencies, as well as original data were used to compile these results. It is important to note, that while the exact numbers may not always align, the trends represented by each of these reports is essential to understanding the changing nature of the overdose crisis in Florida.

- **Center for Disease Control** - Reports overdose deaths from their Vital Statistics Reporting System (stemming from death certificates) for 12-month periods. These are classified according to the decedent’s county of residence and the month in which the death occurred.
- **FDLE Medical Examiners Commission** - Reports overdose deaths through the Medical Examiner’s offices from all 25 districts in the state of Florida. Includes demographic as well as toxicology results indicating the types of drugs in decedents.
- **Seminole County Overdose Data** - Seminole County’s civilian investigator uses law enforcement reports, reviews data from the Seminole County Fire Department and uses data sent from the Lake County Medical Examiner’s office for non-fatal overdoses. When a fatal overdose record is received, the investigator updates the database to reflect the nature of the toxicity.

Information to answer these research questions was drawn from peer-reviewed research, databases, research reports, and news articles. The data used for the July-December 2020, and January-June 2021 county-level analysis was provided by the Florida Department of Law Enforcement Medical Examiner’s Offices for each county in this needs assessment. Data was also obtained from the State Florida Department of
Law Enforcement office, the Florida Department of Health, and specifically, their OD2A program, as well as information and data from our statewide partners. More data and information came from Community Health Assessments, WONDER, Drug Epidemiology Network, DEA, HIDTA, PDMP, FROST, and NSDUH. CDC data is vital to the compilation of this report.

Geographic Region:

The scope of this report includes an analysis of the overdose crisis in the state of Florida, as well as a deep dive into the Central Florida community. For the purposes of this report, Central Florida is defined as Orange, Osceola, and Seminole counties. According to the 2020 US Census, Florida is the third-largest state in the country with over 21.5 million residents that is growing in both size and racial and ethnic diversity. While the majority of Floridians are White, the state has seen increasing ethnic diversity in the last 10 years, as both the Black and Hispanic populations have grown. The 2020 Florida poverty rate is 12.7% of the population, which is slightly higher than the US poverty rate of 11.4%.

The tri-county region of Central Florida comprises approximately 2.3 million residents and covers over 2,800 square miles. However, each of these counties is distinct in its demographic composition. Orange County is by far the largest with over 1.4 million residents. It also has the highest proportion of Black residents as well as a Hispanic population that is proportionally larger than the state of Florida.

Osceola County, while geographically over four times larger than Seminole County, has the smallest population of any county in Central Florida. It also has the largest Hispanic population in the tri-county region with over 55% of its residents of Hispanic descent. Osceola County also has the highest poverty rate in the region with over 13% of residents in poverty. Osceola County has a concentrated population with a large amount of empty land. Most of the population lives very close to Orange County. Osceola County has seen the most rapid growth since the 2010 Census. Osceola County, in addition to having the highest poverty rate, is also the least educated. Only 21.8% of residents have a Bachelor’s degree compared to the state average of 29.9%.

Seminole County is majority white and is thought of as the suburban county to Orlando. It is the most educated county in the region and has the lowest poverty rate of any of the Central Florida counties. However, over the past 10 years, the county has rapidly diversified and seen a drop in median age. Seminole County is now under 60% white and has seen a rapid increase in the Hispanic and Asian populations in recent years. Seminole County, despite rapid diversification, is the only county in Central Florida that is majority white, showing the diversity of Central Florida and illustrating the need to study overdoses in Black and Brown communities. All 3 counties are majority female, even though overdoses disproportionately occur in men.

<table>
<thead>
<tr>
<th></th>
<th>Orange County</th>
<th>Osceola County</th>
<th>Seminole County</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1,429,908</td>
<td>388,656</td>
<td>470,856</td>
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<tr>
<td>Percentage White</td>
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<td>30.1%</td>
<td>58.9%</td>
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<td>Percentage Black</td>
<td>22.8%</td>
<td>14.1%</td>
<td>13.1%</td>
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<tr>
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<td>55.8%</td>
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<td>26.4%</td>
</tr>
<tr>
<td>Percentage Asian</td>
<td>5.7%</td>
<td>2.9%</td>
<td>5.0%</td>
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</tr>
<tr>
<td>Percentage Male</td>
<td>49.1%</td>
<td>49.4%</td>
<td>48.4%</td>
<td>48.9%</td>
</tr>
<tr>
<td>Poverty Rate</td>
<td>12.6%</td>
<td>13.4%</td>
<td>9.3%</td>
<td>12.7%</td>
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</table>
The opioid crisis or opioid epidemic as it is often termed is a blanket statement used to refer to the growing number of drug overdoses and deaths from prescription and illicit opioids. The number of people dying from accidental opioid overdose is substantially higher than overdoses from all other drugs combined because of the way opioids work on the brain. In 2020, over 255 Americans died each day from a drug overdose, mostly caused by opioids, making this epidemic a true public health emergency. However, we did not arrive at these numbers overnight, rather the opioid epidemic has been growing since the 1990s and, many believe, was accelerated by the pandemic.

The CDC and public health experts generally divide the opioid epidemic, which has claimed the lives of nearly a million people since 1999, into 3 “waves.” The first wave was driven by the over prescription of opioid medications after drug companies pushed pills into pharmacies and doctors’ offices in the late 1990s. This overprescribing created what was commonly known as “pill mills” where unethical doctors fed the opioid addiction of millions of Americans with tragic results. In the wake of an onslaught of overdose deaths in the 2000s, policymakers adopted a multi-pronged approach to decrease the supply of prescription opioids in the market. These changes in both prescribing and dispensing caused a sharp decline in the number of prescriptions for opioids that were being filled in the US and soon these drugs became much harder to obtain.

In 2010, as prescription opioids were becoming less and less common on the streets, the United States saw an increase in deaths caused by another opioid, heroin. This increase in deaths, known as the second wave of the opioid crisis, marked a move for many from substances obtained from a pharmacy to those obtained on the street. Because of this shift, the second wave quickly gave way to the third wave of the crisis, the rise of synthetic opioids in 2013.

This wave is marked by the emergence of synthetic opioids such as fentanyl which is 80-100 times stronger than morphine. For the first time in Florida history, in the 2020 Interim Medical Examiner’s report, fentanyl, the most pervasive synthetic opioid driving the “third wave,” was the most prevalent drug in people who died of an overdose, passing alcohol and Xanax. Some public health experts now believe that the United States has passed into a “fourth wave,” driven by polysubstance use and fentanyl-laced drugs such as cocaine, counterfeited benzodiazipines and painkillers, and methamphetamines.

![Three Waves of the Rise in Opioid Overdose Deaths](source: National Vital Statistics System Mortality File)
How common is opioid use in the state of Florida and Central Florida five years ago and now?

Opioid Use in Florida

The Current State of Fatal Overdoses in Florida

Since the days of the pill mills, Florida has been at the center of the overdose crisis and that trend has continued into 2020 when Florida ranked second in the nation, behind only California, for the number of overdose deaths. The CDC predicts that between April of 2020 and April of 2021, over 7,892 Floridians died from a drug overdose. This represents a 26% increase in deaths from the previous year and the continuation of a trend that was already in place before the pandemic. While overdoses increased dramatically during the pandemic, they began 2020 at a higher level than 2019, even in the first two and a half months before the onset of the pandemic. Overdoses peaked in May 2020 but remained high throughout the rest of 2020- higher than any previous year and are expected to continue into 2021.

A recently released report from the Florida Department of Law Enforcement Medical Examiner’s Office found that of the 208,708 deaths investigated by the medical examiner’s office in 2020, drugs were present at the time of death in 14,708 cases, this is an increase of 2,134 deaths, or a 17% increase from 2019. The vast majority of these cases had more than one drug present in the body at the time of death, indicating a crisis that is not just growing, but becoming more complex.

A Historical Perspective of Fatal Overdoses in Florida

Over the last five years, overdose deaths in Florida have continued to rise at an unprecedented pace. According to the Center for Disease Control (CDC), between April 2015 and April 2016, there were 3,705 overdose deaths in the state of Florida. In 2021, that number jumped to 7,892, an unbelievable 113% increase in a five-year time period. These trends are similar to those found by the Florida Medical Examiner’s office which shows that deaths caused by overdoses increased 125% between 2015 and 2020. Overdose trends have been trending upward since 2015 when approximately 291 Floridians died of a drug overdose each month. The trends show a slight decline in overdose deaths in Florida during 2018, but that trend was already reversing before the pandemic. It is estimated that during 2020, approximately 618 Floridians died each month, or 20 a day from a drug overdose, most likely from an opioid.
Fatal Overdoses in Central Florida

Much like the state of Florida, fatal overdoses from drugs such as fentanyl, cocaine, and heroin continue to plague the tri-county region. According to the CDC’s Vital Statistics Rapid Release program, overdoses in Central Florida rose 28% from March 2020 to March 2021, in comparison to the 30% rise in the state of Florida during this same period. This increase means that approximately 51 people died of a drug overdose each month between March 2020 and March 2021 in Central Florida.

Greater Central Florida

When the geographic scope of Central Florida is expanded, additional variations in fatal overdose deaths as reported by the CDC emerge. In particular, the rate of overdose deaths per 100,000 of the population for Brevard and Volusia counties are the highest in the region at approximately 56 individuals per 100,000. An analysis of the overdose deaths in these counties using medical examiner data for the first 6 months of 2021 indicates that fentanyl is the driving force in these counties.

A Historical Perspective of Fatal Overdoses in Central Florida

Using the data from the FDLE Medical Examiner’s office we can evaluate the ways in which the overdose crisis has changed in Central Florida from 2015 to 2021. This longitudinal analysis of the data shows a similar pattern to the state of Florida. A sharp increase in overdose deaths in this region, with a 172% increase in overdose deaths during this time period.
Prevalence of Opioid Use Disorder

The Florida Department of Children and Families used a combination of the National Survey on Drug Use and Health (NSDUH) and population estimates to determine the prevalence of opioid use disorder in the state of Florida, as well as individual counties. This analysis estimates that over 650,000 Floridians have inappropriately used a prescription pain reliever or used heroin in the last 12 months, this represents about 4% of the over 18 population of the state of Florida. This same analysis found that there are approximately 72,000 individuals with this condition in the tri county area of Central Florida.¹⁰

<table>
<thead>
<tr>
<th>County</th>
<th>Non Medical Pain Reliever Use Disorder</th>
<th>Heroin Use Disorder</th>
<th>Total PR Use Disorder/Heroin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>42,163</td>
<td>3,523</td>
<td>45,686</td>
</tr>
<tr>
<td>Osceola</td>
<td>11,300</td>
<td>944</td>
<td>12,244</td>
</tr>
<tr>
<td>Seminole</td>
<td>13,383</td>
<td>964</td>
<td>14,347</td>
</tr>
<tr>
<td>Central Florida</td>
<td>66,846</td>
<td>5,431</td>
<td>72,277</td>
</tr>
<tr>
<td>Florida</td>
<td>611,399</td>
<td>48,032</td>
<td>659,431</td>
</tr>
</tbody>
</table>

Is the face of the overdose crisis changing?

Fatal Overdoses in Florida

In the first six months of 2015 (used for comparative purposes), 1,647 Floridians died of an overdose. This loss of life was primarily in the white community (89%), among males (65%), between the ages of 25 and 44 (43%). These fatal overdoses represent a similar pattern that was seen across the US during the first three waves of the opioid epidemic. However, in recent years, as we potentially enter the fourth wave of the epidemic, marked by fentanyl analogs, we are seeing a shift in the demographics of those that are being impacted by this crisis.

In the first 6 months of 2020, there were 3,706 overdose deaths in the state of Florida and while many of the demographic trends hold true, there is a shift in who is dying from drug overdoses. While the majority of overdose deaths in the state of Florida continue to be among the white population (85%), there is a disproportionate increase among the Black population (233%, 125 to 416) compared to the total increase in Florida (125%, 1647 to 3706) as well as the population change in this demographic.

There has also been a subtle shift in the gender of overdose victims in the state of Florida in the last five years. In 2015, 65% of those dying from an overdose were men, and 36% were women. In 2020, we see that demographic trend shift slightly to a more male-dominated issue with 71% of the decedents being men. Again, if you look at the percent change among men during this time frame (145% 1076 to 2637), it slightly outpaces the total increase in overdoses in Florida.

The age of overdose victims in Florida has declined slightly since 2015, with the average age of a fatal overdose falling from 44 to 43. However, this fall in the average age is likely attributable to an increase in children between the ages of 0 and 4 that died of a drug overdose during the first six months of 2020. When looking at age groups, those 25-44 made up 43% of the overdose deaths in 2015, and 51% of the deaths in 2020, but only made up 25% of the population in both 2010 and 2020.

Fatal Overdoses in Central Florida

Central Florida, defined as Orange, Seminole, and Osceola counties, has not been spared the proliferation of fentanyl. Fentanyl is now the leading cause of overdoses in Central Florida as of 2020. What began 2015 as a minor component of the overdose crisis is now by far the driver of the vast majority of opioid and all deaths in Central Florida. At one point, it thought progress was being made in reversing the upward trend in fentanyl deaths but they have since dramatically increased. In fact, heroin overdoses have decreased while fentanyl deaths continue to rise in shocking fashion. Fentanyl overdoses are up 658% since 2015 in Central Florida. In fact, heroin as a cause of death, once the main drug driving overdoses up, is down from previous highs, even while fentanyl drives overdoses to record highs. The Black share of overdoses is also up from 10% to 12% in Central Florida. The share of deaths does not tell the whole story though. Since 2015, Black overdoses are up 320%, often as a result of cocaine and fentanyl combinations.

Another trend similar but more extreme than the statewide trend is the gender gap in overdoses. In 2015, about 70% of overdose victims in Central Florida were men. In 2020, that had increased to 78%. This reveals a stark reality in the victim profile of drug decadents. In all three counties, there are more women than men, so males dying at a much higher rate is even more extreme.

The average age of the Central Florida victim has decreased from 43.5 years old to 42.6 years old from 2015-2020. This is not a significant change but is a decrease nonetheless. The face of a victim is changing.

Overall, the change in the face of someone who has died of a drug overdose in Central Florida in 2020 compared to 2015 is they are more likely to be Black,
male, slightly younger, and much more likely to be a fentanyl victim.

**Orange County in 2021**
The profile of the increasing number of overdose deaths in Orange County has changed. There were 288 overdose deaths in Orange County in the first 6 months of 2021, more than one per day in the county, mostly due to fentanyl. The average age was 42, or about the state average.

While 234 were whites, it’s important to note that the white category includes Hispanics. 40 were Blacks, 4 were in Asian individuals, and 10 were classified by the Medical Examiner as others. The Black share of overdoses is up to 14%, an increase from 2015 and higher than Central Florida as a whole. 18.75% of all overdoses were in nonwhites, primarily Blacks in this majority minority county.

One trend that has not changed since 2015 is the male dominance of overdoses- 232 of the overdoses were in males and 56 were in females. This profile is even more male than Central Florida as a whole, at 80.5% male. Compared to the state of Florida, Orange County drug decadents are much more likely to be men than women.

The face of a victim in Orange County in 2021 is more likely to be Black, younger, male, and more likely to be a victim of fentanyl rather than heroin compared to 2015.

**Osceola County in 2021**
There were 74 fatal overdoses in the first half of 2021 in Osceola County. The average age of a victim was 40, younger than the state average.

60 were in white individuals, 8 in Blacks, 6 as others. Osceola County has a large Hispanic population (over 50%) and the Medical Examiner classifies their overdoses as white overdoses.

As in Orange County, 54 were male while a much smaller number, 20, were females. However, the percentage of male decadents in Osceola County was lower than Orange county, with 73% being male compared to 80% in Orange County. Like most areas, the overall population is more female than male.

27 people died with only one drug in their system. Among Black decadents, all were caused by multiple drugs. 7 were classified as fentanyl deaths, 5 by cocaine, 3 by methamphetamine, and 2 by bath salts. This follows the trend of polysubstance drug deaths becoming more and more common, with the common denominator being fentanyl.

The face of a victim in Osceola County in 2021 is more likely to be male, younger, and someone who has overdosed on fentanyl compared to 2015.

**Seminole County in 2021**
There were 45 total overdose deaths in the first half of 2021 in Seminole County, 34 of which were caused by fentanyl. This is 76% of the total overdoses. Even more starkly, no overdose was recorded where fentanyl was present but not the cause of death.

While Seminole County has rapidly diversified, it is still the whitest county of the Tri-County region and the overdose numbers reflect that. 89% of the overdoses occurred in white individuals, despite the county only being 58% white. Again, overdoses disproportionately occur in males but not to the extent of Orange County. 76% of overdose victims were men, higher than the state average and an increase from 2015.

Seminole County overdose victims tend to be younger than in the other counties and across the state, with more overdoses recorded in the 30-40 range compared to the state average of 42.

Overall, in 2021, compared to 2015, an overdose victim in Seminole County, is more likely to be younger, less white, and more likely to have died of fentanyl.
Prescribing Trends in Florida

Florida was one of the last states to employ a Prescription Drug Monitoring Program (PDMP) which tracks prescriptions of controlled substances and has been very effective in stopping “pill mills” or “doctor shopping”. Since its inception in 2009, the PDMP has been very effective at reducing the number of prescription opioids that reach the street and reducing the number of prescription opioid deaths.

Prescribing for prescription opioids in the state of Florida is at an all-time low, with the morphine milligram equivalents (a standard measure for the quantity and strength of prescribed opioids) down almost 70% since 2017\textsuperscript{11}. Simultaneously, the overdose death rate for the two most commonly prescribed opioids, hydrocodone, and oxycodone, have decreased by 2.9 and 5.7 percent respectively\textsuperscript{11}. However, the overdose death rate in the state of Florida continues to climb.

What drugs are killing people in Florida?

Across the board, not only in the state of Florida but across the country prescribing opioids is down, as are the deaths that are attributed to prescription opioids\textsuperscript{2,11}. In early 2015, prescription opioids were cited as the cause of death in 33% of the individuals that died of an overdose in the state of Florida\textsuperscript{9}. In 2020, that number dropped to just 10% of the individuals\textsuperscript{9}. Heroin has a similar trend, dropping from 14% of deaths to just 6%\textsuperscript{9}. So what is killing Floridians? The emergence of illicit fentanyl marked a dramatic shift in the overdose crisis in Florida.

Each year since 2015, the number of deaths caused by fentanyl has increased from 12% in 2015 to 47% in 2020, marking an overall increase of 937% during this time\textsuperscript{9}.
What drugs are killing people in Central Florida?

In Orange County, Fentanyl was listed as the cause of death in 87% of the cases (250), the second-highest was cocaine at 137 deaths in the first 6 months of 2021. In Orange County 82 of 288 individuals died with only one drug in their system, 72% of deaths had more than one drug as the cause. In Orange County of those with fentanyl as the COD (250), 48% (120) also listed cocaine as the COD, and 16% (40) listed methamphetamine. In Orange County of the 152 people who died with cocaine in their system, (either present or caused) 89% also had fentanyl in their system. In Osceola County, fentanyl was listed as the cause of death in 81% (60) of the deaths, cocaine was also present in 32 of those deaths. In Osceola County, cocaine was listed the COD in 35 deaths, of those fentanyl was also listed as the COD in 28. In Osceola County, methamphetamines were the third most common COD with 14 deaths, 10 of those deaths also were caused by fentanyl.

The data clearly shows that fentanyl is the number killer when it comes to drug overdoses in Central Florida. The change from 2015-2021 is so large it’s hard to imagine. Even drugs that involve other drugs still have fentanyl as a cause of death. The pervasiveness of fentanyl in the drug supply makes people who believe they are consuming other drugs, such as powder cocaine, unsuspecting victims of fentanyl. Sometimes a dealer will add fentanyl to their drugs to have a “unique” product, one that produces a different high than cocaine or methamphetamine alone. Even in these cases, the users may not know there is fentanyl in their supply, even if not in a lethal amount. Although the number of non-fatal overdoses cannot be accurately measured in their entirety, there are many more non-fatal overdoses than fatal overdoses. When a chart shows fentanyl deaths up 969%, the actual number of non-fatal overdoses is likely up more.
Illicit Fentanyl

Strength
The average amount of naloxone needed to reverse a fentanyl overdose is 3.6mg, meaning that 2 doses of the commonly available naloxone delivery method Narcan are often needed\(^{12}\). Most deaths due to fentanyl are the result of powerful illicitly made fentanyl, often of unknown strength. Generally, the strength of fentanyl is 80-100x that of morphine and about 50x that of heroin\(^{13}\). 2-3mg of fentanyl is sufficient to kill the average adult male, while the equivalent dose of heroin is 30mg\(^{14,15}\). The weight of a lethal dose of fentanyl is equivalent to 3 grains of sugar\(^{15}\).

History
Prior to the widespread proliferation of illegally manufactured fentanyl around 2016, fentanyl primarily came from a singular laboratory in Mexico\(^{12}\). It was shut down in Toluca, Mexico and prevented an earlier surge in illicit fentanyl deaths. Authorities in the mid-2000s realized that fentanyl, due to its potency, was easily smuggled and created compared to heroin because of the small space required for mass production and the low weight of high doses.

It’s also important to note that fentanyl is a purely synthetic opioid\(^{16}\). It is completely manmade and does not require any plant cultivation, making the space required for mass-producing the drug much smaller than heroin\(^{16}\). Crude “laboratories” are capable of mass-producing kilograms of potent, deadly powder that can be used to cut other substances\(^{16}\). The ingredients for producing this fentanyl are dropped off boats from China and picked up by cartels that manufacture and smuggle the drug\(^{16}\). Some ingredients come from India and other south Asian countries, but the main route is through Mexico via China\(^{17}\).

The word laboratory does not truly represent how crude the production of fentanyl is\(^{16}\). While the production of methamphetamine is dangerous and requires knowledge of chemistry, fentanyl is easily made by anyone. Fentanyl can be produced in impure barrels with these ingredients received in the ocean off the coast of Mexico and brought to the cooking sites\(^{16}\). Due to the small amount needed to make a large profit and the fact that cartels ship fentanyl in many small shipments into the United States, stopping the flow of fentanyl is nearly impossible\(^{17}\). Even a large seizure of fentanyl does not concern cartels because they spread out their shipments into many smaller sizes\(^{17}\).

Usage
The strength of fentanyl and its analogues, along with its ability to be easily smuggled and produced is not lost on international cartels or local dealers\(^{17}\). A large portion of street drugs are now cut with fentanyl\(^{14}\). The result is heroin contaminated with fentanyl sold by dealers to increase profit by reducing volume and increasing and shortening the euphoric effects, leading to more purchases, a stronger high and increased danger. Dealers often do not precisely measure the amount of fentanyl in the heroin they sell to people who think they are simply buying heroin. When this happens, a heroin user may nearly instantly die from the fentanyl present in the heroin because they believe they are using uncut heroin and use a higher than anticipated dose of synthetic opioids. Fentanyl and heroin look identical and therefore heroin is very easy to cut with fentanyl\(^{14}\).

According to the Florida Medical Examiner’s reports published over the past 3 years, there have been almost no pure heroin overdoses, only heroin overdoses in combination with other drugs, most often fentanyl and cocaine\(^{18,19,20}\). The Medical Examiner’s reports also show that there are mono substance deaths involving fentanyl, showing the increased potency of fentanyl compared to heroin and that people are moving to injecting pure fentanyl and knowingly taking the risk of the unknown strength of fentanyl for the greater euphoric effects and high tolerance to heroin for chronic users.
While diverted and inadvertent deaths due to prescription fentanyl occurs, the majority of recent cases of fentanyl related deaths involve illegally made fentanyl. Even deaths involving prescription fentanyl often involve organized crime and amateur but skilled chemists extracting fentanyl from transdermal patches. In Central Florida alone, in 2020, HIDTA law enforcement investigated 12 international Drug Trafficking Organizations (DTOs), showing that large scale organized crime is prevalent locally. 7 of the DTOs traffic in multiple substances and are of Mexican origin, showing that polysubstance trafficking fentanyl, heroin, cocaine, and methamphetamine occurs together in Central Florida. These organized crime organizations are more than capable than “employing” amateur chemists who can create dangerous concoctions using both trafficked and diverted fentanyl. Often, local and regional DTOs recruit local dealers to push illicit substances, often other drugs cut with fentanyl or even carfentanil, which is so powerful that it can tranquilize an elephant with one dart.

These local dealers use fentanyl in heroin, cocaine, methamphetamine, counterfeit OxyContin and hydrocodone pills, and benzodiazepines. Fentanyl and its analogues are among the cheapest drugs available to dealers, especially compared to cocaine and heroin, making them attractive alternatives to pure substances. Ironically, the analogues were often developed to be a safer alternative to fentanyl but have become a major factor in the overdose crisis. As a prescription, fentanyl was originally used in combination with constant oxygen, mitigating the side effects. Needless to say, street users are not using street drugs laced with fentanyl while being supplied oxygen, making respiratory depression a deadly “side effect.”

Illicitly manufactured fentanyl (also known as IMF) is any fentanyl that is created outside of a controlled laboratory, such as a pharmaceutical setting. When most experts refer to “fentanyl,” they almost exclusively refer to IMF, not diverted or prescription fentanyl. The vast majority of fentanyl overdoses are due to smuggled fentanyl produced outside of the United States.

The data clearly shows that fentanyl is the number one killer when it comes to drug overdoses in Central Florida. The change from 2015-2021 is so large it’s hard to imagine. Even deaths that involve other drugs still have fentanyl listed as a cause of death. The pervasiveness of fentanyl in the drug supply makes people who believe they are consuming other drugs, such as powder cocaine, unsuspecting victims of fentanyl. Sometimes a dealer will add fentanyl to their drugs to have a “unique” product, one that produces a different high than cocaine or methamphetamine alone.

Even in these cases, the users may not know there is fentanyl in their supply, even if not in a lethal amount. Although the number of non-fatal overdoses cannot be accurately measured in their entirety, there are many more non-fatal overdoses than fatal overdoses. When a chart shows fentanyl deaths up 969%, the actual number of non-fatal overdoses is likely up more.

**Sources of Illicitly Manufactured Fentanyl in Central Florida**

**About the CFHIDTA Threat Assessment**

CFHIDTA (Central Florida High Intensity Drug Trafficking Area) covers Central Florida, which by their definition covers the I-4 corridor stretching from Tampa and St. Petersburg to Volusia and Brevard counties. The 2021 report is designed to assist law enforcement in the development of drug enforcement strategies. The report covers a variety of topics, including the regional extent of drug abuse, the organizations conducting drug smuggling (the primary way fentanyl is brought to Florida), and trends.
High Level Observations from the Assessment

The first word of the report is fentanyl, showing how important IMF is to the drug crisis in Central Florida\(^\text{17}\). The first paragraph also mentions that fentanyl is now present in cocaine, methamphetamine, and counterfeit pharmaceutical pills\(^\text{17}\). Due to the accelerating nature of the drug crisis, HIDTA has “high confidence” fentanyl will remain the greatest threat moving forward and that its availability and illegal use will remain “very high.”\(^\text{17}\)

HIDTA Scope

CFHIDTA monitors 3 interstates, I-4, I-95, and I-75 that cross the region\(^\text{17}\). They monitor an additional 10 airports and 3 seaports in the region that are vulnerable to drug trafficking\(^\text{17}\). HIDTA ranks Orlando as safer than only 3% of other cities, giving it a 3 on the crime index\(^\text{17}\). HIDTA in Central Florida sees more crime and drug arrests than other areas in Florida due to the proximity to other countries and healthy transportation via air, ground, sea means that HIDTA believes with high confidence that Drug Trafficking Organizations will continue to operate in Central Florida\(^\text{17}\).

HIDTA and Opioids

CFHIDTA has determined that the top 2 drug threats are fentanyl followed by heroin\(^\text{17}\). This assessment is made in part with Medical Examiner data showing extremely high rates of fentanyl overdose deaths, with the top killer in the state as of the HIDTA report being fentanyl\(^\text{18}\). HIDTA believes that fentanyl will remain the top threat and, despite law enforcement efforts, remain “very high” in availability on the street\(^\text{17}\). HIDTA also believes that fentanyl will be particularly deadly when used in combination with other drugs, specifically mentioning heroin\(^\text{17}\).

The small amount of fentanyl needed to supply local suppliers for long periods of time make it the ideal substance to smuggle\(^\text{17}\). Mexican trafficking organizations smuggling fentanyl are the main source of fentanyl in Central Florida\(^\text{17}\). Atlanta is a known hub of drug smuggling and, subsequently, a substantial amount of fentanyl is first brought from the southwest border to Atlanta before making its way to Florida\(^\text{17}\). There are 12 DTOs under investigation in Central Florida, 7 of which operate multidrug operations\(^\text{17}\). HIDTA has high confidence that these organizations will combine fentanyl with cocaine, heroin, and counterfeit pills with deadly results\(^\text{17}\). The most common poly-drug organizations combine methamphetamine, transported in a form HIDTA calls “ice,” and cocaine\(^\text{17}\). Some fentanyl is mailed into Central Florida directly from China, although this makes up a substantially lower percentage of fentanyl arriving in Florida\(^\text{17}\). Again, the potency and small amount of fentanyl needed to supply a dealer makes a single parcel of fentanyl deadly.

The HIDTA Assessment concludes that fentanyl is inadvertently consumed in other substances, primarily arriving from Mexico\(^\text{17}\). In addition to Atlanta serving as a hub, Puerto Rico also serves as a hub of drugs brought to South Florida from South America, which can make their way to Central Florida on the Interstates that HIDTA monitors\(^\text{17}\). The most prominent cartels in Central Florida are Sinaloa on the eastern half of the region and Jalisco New Generation dominating the western half\(^\text{16,17}\). Both are Mexican in origin\(^\text{17}\). They employ Mexican Americans to supply to local dealers, including their contaminated and poly-drug supplies\(^\text{17}\). In addition, the local dealers can further cut and combine drugs supplied to them by these cartels. These cartels, due to the powerful nature of fentanyl, use many small shipments to reduce the likelihood of a large load lost to drug enforcement\(^\text{17}\).

In addition to these international cartels, 18 regional DTOs operate in the southeast, including Central Florida\(^\text{17}\). These organizations generally operate through Atlanta and bring drugs, including fentanyl, into Florida via I-75 and I-95, using I-4 to cross the region\(^\text{17}\). These organizations are also more likely to use the mail system to deliver drugs. 46 very local DTOs exist in Central Florida\(^\text{17}\). These organizations are diverse in nature but homogenous within the organization. That is, a single organization is generally 100% of any given race when the organization is Hispanic. Many of the organizations were made up of white and Black members, with no Hispanics\(^\text{17}\).
What are the trends in opioid seizures?

Even though heroin overdoses are down and fentanyl overdoses are up, less fentanyl is seized compared to heroin because it is more potent per gram and therefore less mass of fentanyl is needed to cause a lethal overdose. If the lethality of the amount seized were equivalent, 50x as much heroin would be seized as fentanyl. The large decreases in 2020 were due to the COVID-19 pandemic and restrictions on law enforcement activity and disruption in supply chains.

Even with the reduction, the relative increase in fentanyl’s impact in Central Florida can be seen by the closing gap between heroin and fentanyl seizures compared to previous years. As more fentanyl is seized relative to heroin, the larger percentage of overdoses is due to fentanyl. Most of the heroin and fentanyl that was seized in 2018-2020 was transported by car, truck, van, or bus from the southwest border to Central Florida.

In conclusion, HIDTA believes that fentanyl will remain the most significant threat in Central Florida in the following year. HIDTA is concerned that the resumption of normal supply chains will increase the supply of non-fentanyl drugs in 2021, especially methamphetamine. Given HIDTA’s concern over fentanyl in other substances, the growth of other drugs in the supply increases the risk of all drugs, fentanyl and stimulants, and counterfeit pills.

WHAT IS HIDTA?

High Intensity Drug Trafficking Areas (HIDTA) program, created by Congress with the Anti-Drug Abuse Act of 1988, provides assistance to Federal, state, local, and tribal law enforcement agencies operating in areas determined to be critical drug-trafficking regions of the United States. This grant program is administered by the Office of National Drug Control Policy (ONDCP).

There are currently 33 HIDTAs, and HIDTA-designated counties are located in 50 states, as well as in Puerto Rico, the U.S. Virgin Islands, and the District of Columbia. The DEA plays a very active role and has more than 1,500 authorized special agent positions dedicated to the program. At the local level, the HIDTAs are directed and guided by Executive Boards composed of an equal number of regional Federal and non-Federal (state, local, and tribal) law enforcement leaders.
The SCORE Team

Recognizing early in the opioid crisis the importance of timely, actionable data, Seminole County Sheriff and Project Opioid Co-Chair, Dennis Lemma developed a best practice for the tracking of all overdose incidents in his jurisdiction. This data repository, part of the Sheriff’s Seminole Collaborative Opioid Response Effort or SCORE Team, provides stakeholders in the opioid epidemic the ability to track what is happening in their community in real-time. Because of these efforts Seminole County is on the cutting edge of data sharing and able to respond in a timely manner when new trends, such as the emergence of illicit fentanyl threaten its citizens. Below is an analysis of the history of the opioid crisis in Seminole County since 2017.

Overdoses in Seminole County

The dedication of the SCORE team allows the Seminole County Sheriff’s Office to track their overdoses in real-time. As of the latest report from the SCORE team dated November 1, 2021, there have been 732 overdose incidents in Seminole County so far this year, compared to 620 at the end of October 2020, indicating an 18% increase in overdoses. By comparison in 2017, there were 238 overdose incidents in Seminole County during this time period, resulting in a 208% increase from 2017 to 2021.

The unique relationship that the SCSO has developed with the providers in their county enables them to track nonfatal overdoses efficiently and effectively and “hot spot” areas of concern in the county for additional resources and interventions like the increased availability of Narcan. Because of this surveillance data, and the ability to make real-time adjustments in strategy, the percentage of fatal vs non-fatal overdoses has fallen, even during the emergence of fentanyl.

For example, from 2017 to 2021 nonfatal overdoses increased 270% in Seminole County, but fatal overdoses have increased a still worrisome, but much smaller amount of 54%. In 2017, fatal overdoses made up 29% of the overdose incidents in Seminole County, in 2021, that number fell to 14% even as the much more deadly fentanyl has reached the drug supply.
Demographics of Overdose Victims

The demographic characteristics of overdose victims in Seminole County have remained consistent throughout 2020 and 2021, the data available for this report. Of the 1,202 overdose victims, in January 2020-October 2020 and January 2021-October 2021, 71% are White, and 9% are Black. Given the population of Seminole County, this shows that there is an overrepresentation of White victims which is consistent with data from around the United States. The overdose victims are also overrepresented by males at 68% of the overdose victims, but only 48% of the population of Seminole County.

It is slightly more difficult to draw comparisons for the age of overdose victims in Seminole County versus its population because the age ranges are not the same. However, we do know that approximately half of the population of Seminole County is under the age of 40 based on censusreporter.org. Based on the data provided by the SCSO, we know that over 62% of overdose victims are under the age of 40, once again indicating that this age group is overrepresented in overdose incidents.
Narcan Deployments in Seminole County

One of the greatest successes of the SCORE Team is the widespread usage and availability of Narcan by law enforcement and the reporting of Narcan incidents by Emergency Medical Services (EMS). Since 2019, Narcan deployments by law enforcement and EMS combined have increased 59% in Seminole County, but perhaps more telling is the 55% increase in Narcan deployments by law enforcement alone. By equipping non-medical first responders, Seminole County is saving lives.

Conclusion

Seminole County has seen an increase in overdose incidents much like the rest of the state of Florida. However, by implementing and enacting a real-time, actionable data strategy they are able to respond to the geographic and demographic changes in the overdose crisis. By empowering their law enforcement officers with Narcan, they were able to save lives.
In Central Florida, the overdose crisis has changed over the last six years. Not only has the profile of an overdose victim has changed since 2015, the nature of the crisis has changed as well. Prescription opioids are down almost 70% and heroin overdoses are on the decline yet overdose deaths are up. The culprit is illicit fentanyl made internationally and brought to the United States. Fentanyl has made its way into every drug in Central Florida, including counterfeit pills, cocaine, and methamphetamine. Polysubstance deaths are on the rise and that has changed the profile of victims: victims of overdoses are now younger, more likely to be Black, more likely to be male, and much more likely to have died of fentanyl than in 2015.

Law enforcement and media has tracked fentanyl ingredients from China being brought to Mexico, made in Mexico, smuggled to Atlanta, and brought to Central Florida, where it has been causing this crisis to accelerate. Fentanyl is intelligently smuggled into the region to the point where law enforcement believes it will remain the top threat in Central Florida and that supply chains will recover following the relaxation of COVID-19 related restrictions.

Seminole County has paved the way for illustrating community interventions, such as real time data tracking and efficient Narcan deployment by EMS and Law Enforcement officials, leading to more lives saved. Real time data tracking has led to the conclusion that overdoses are concentrated and overrepresented in those under 40, unlike other counties in the region. This type of data tracking can be the gold standard if properly implemented.

It is time for communities to come together to tackle the overdose crisis head on and improve the lives of our central Floridians. By bringing business, faith, and philanthropic leaders to the table, communities can act and save lives.

Please see Project Opioid Central Florida’s companion report “The Changing Overdose Crisis in Central Florida: What Can Leaders Do To Save Lives?” for details on how leaders can help save lives in their communities.
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