



UTAH DRUG MONITORING INITIATIVE

ANALYSIS OF THE IMPACT RELATED TO ILLICIT DRUG USE IN UTAH – 2018/2019



This report addresses DHS HSEC Codes: HSEC-5.9.6, HSEC 5.9.7, HSEC 6.2.1, HSEC 6.2.3 and SIAC Standing Information Requirements: UTSIAC-05-04

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Scope Note - This assessment was completed based on information obtained from the Utah Department of Public Safety (DPS), Utah Department of Health, Utah Office of the Medical Examiner, Utah DPS Crime Laboratories, Utah Poison Control Center, and state and local law enforcement agencies. This assessment will focus on data obtained to update the impact of illicit drug use in Utah for the years 2014 to 2019, when available. Some data sets are not available to the current year, so the most recent data available will be represented. All data obtained from medical professionals did not include personally identifiable information and complies with all data sharing agreements. Data may also vary from year to year based on method and codes utilized to compile certain data sets. Data identified in this report supersedes all other reported DMI data.

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Executive Summary

The Utah Drug Monitoring Initiative (DMI) was developed to provide a historical review of the impact of illicit and prescription drugs to the State of Utah, as well as identify emerging substances or trends that pose a threat to public health and public safety in Utah. Primary focus in the program is given to threats from opioids, which includes prescription medication, heroin, fentanyl, and other synthetic substances that continue to emerge. In addition, DMI focuses on the threat from methamphetamine, cocaine, and marijuana use and distribution throughout Utah.

Transnational Criminal Organizations (TCO) continue to be the most significant threat in regards to the illegal production, transportation, and distribution of illicit drugs such as methamphetamine, heroin, and cocaine. TCOs are also a source of supply for bulk marijuana shipments; however, recreational states, such as California and Oregon, are emerging as a primary source of supply for bulk marijuana and THC-infused products, such as edibles, wax, electronic cigarettes/cartridges, and other items.

Provisional 2019 data shows that total drug-related fatalities in Utah could decrease for the fourth consecutive year. Drug related fatalities involving prescription opioids, heroin, cocaine, and methamphetamine all decreased while fentanyl fatalities trended upward.* Deaths involving prescription opioids have been trending downward with a 38% overall decrease since 2014, the first year included in this report. While the overall downward trend in drug related deaths is encouraging, illicit use of opioid-related drugs, such as heroin, fentanyl, and other synthetic opioids, continue to pose the most prevalent threat to Utah.

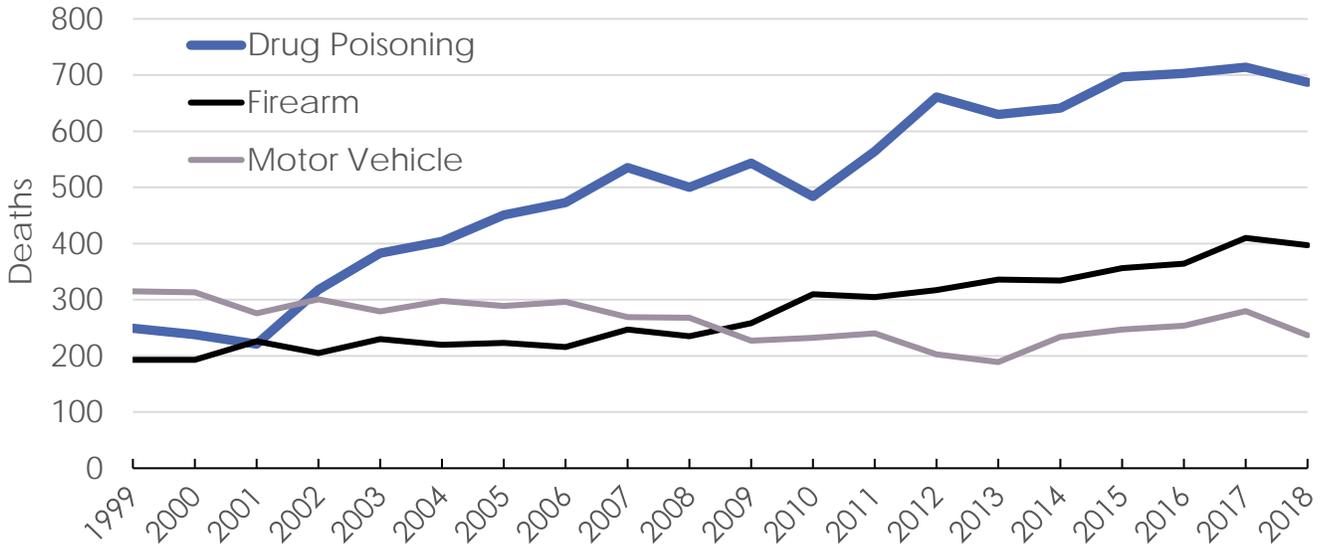
Methamphetamine continues to emerge as a significant threat in Utah. Data from the Utah Department of Health (UDOH) Office of the Medical Examiner showed that methamphetamine fatalities overtook heroin fatalities for the first time in Utah in 2018. The trend continued in 2019 where deaths involving methamphetamine nearly exceeded those involving prescription opioids. Additionally, treatment admissions for methamphetamine reached record levels in 2019. Methamphetamine seizures from Utah drug task forces have increased 278% during the reporting period (2014-2019) and DPS Interdiction team seizures have increased 259% during the same period.

Deaths involving cocaine declined 15% from 2018 to 2019 and reached a new low for years included in this report. Utah drug task force cocaine seizures have increased 466% during the reporting period, primarily over the past two years (2018-2019); while DPS Interdiction team cocaine seizures have remained somewhat stable during this timeframe, with the exception of a spike in 2017.

*2019 numbers are still preliminary and not final; therefore the final fatality numbers for each of these drugs can increase which could change the assessment and data in this report.

General Overview of Drug-Related Data

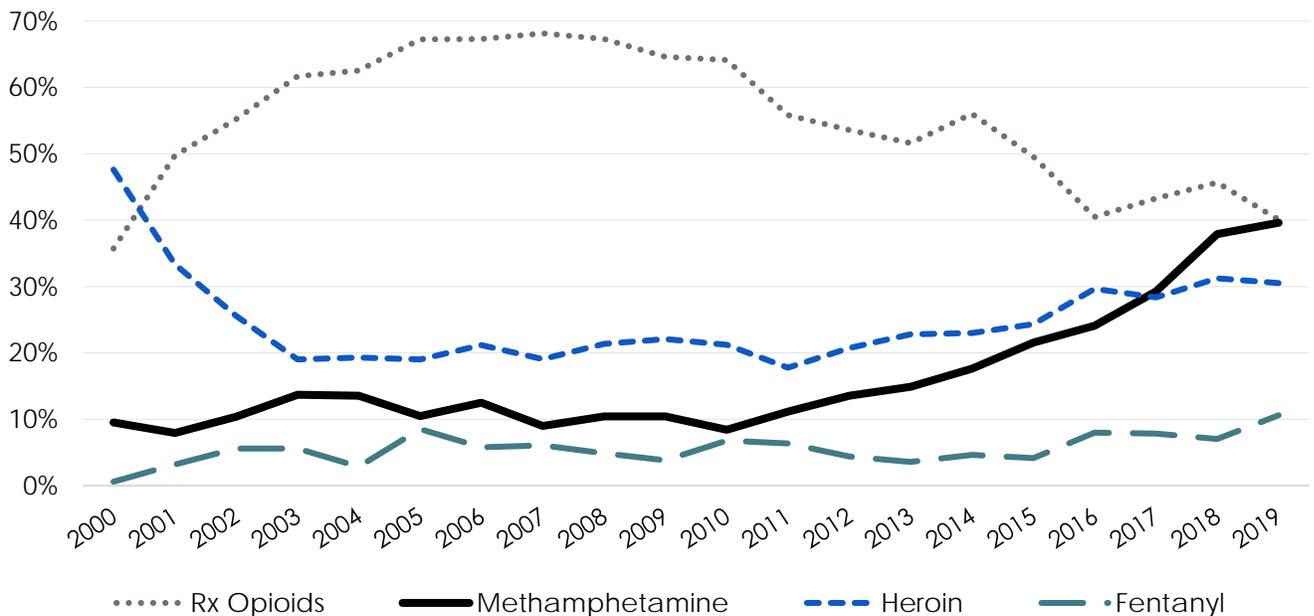
- According to the Drug Enforcement Administration's 2019 National Drug Threat Assessment, drug-related fatalities outnumbered fatalities from firearms, motor vehicle crashes, suicides, and homicides in the United States every year between 2011 and 2018. In Utah, drug overdose deaths have been the leading cause of injury deaths since 2002.



Source: Utah Indicator-based Information System for Public Health (IBIS-PH)

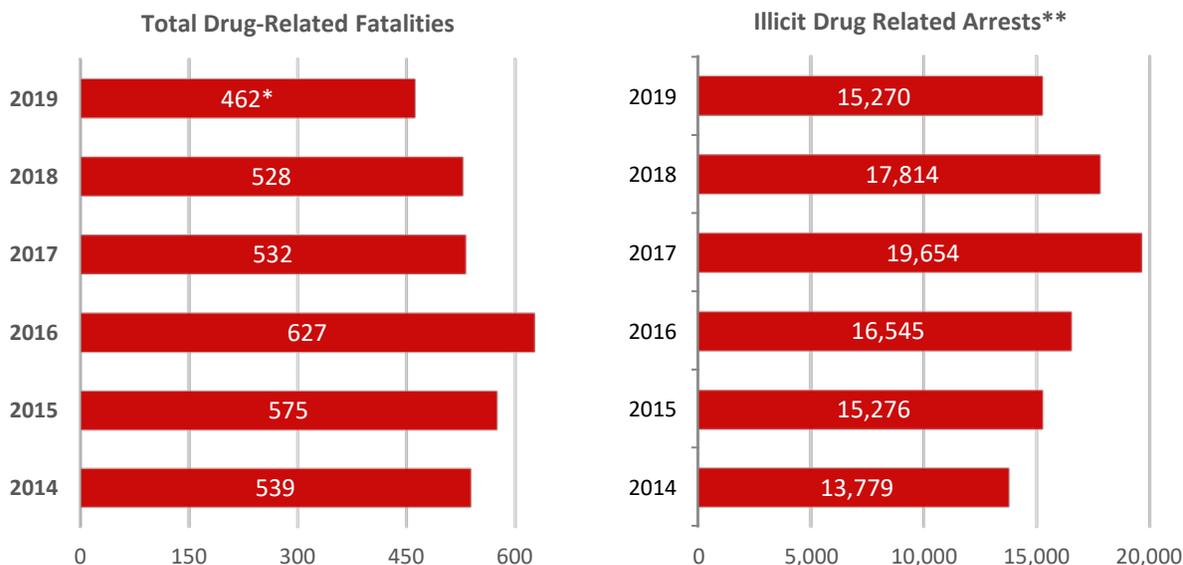
- Since 2001, the majority of unintentional and undetermined drug deaths in Utah have involved prescription opioids. However, based on 2019 data, the percentage of deaths involving methamphetamine (40%) nearly exceeded deaths involving prescription opioids (40%).

Utah Drug-Related Deaths by Drug Types (Percentage)



Note: Drug categories are not mutually exclusive

- According to preliminary information from the Utah Office of the Medical Examiner, the 2019 drug-related fatalities in Utah declined by 13% compared to 2018.
- According to information from the Utah Bureau of Criminal Identification, obtained through the Uniform Crime Reporting program, illicit drug related arrests** in Utah increased approximately 42% between 2014 and 2017, then have decreased by 22% through 2019.



* Preliminary Data

** Illicit drug related arrests include the following categories: Sale/Mfg Opium/Cocaine or Derivative, Sale/Mfg Marijuana, Sale/Mfg Synthetic Narcotics, Sale/Mfg Dangerous Non-Narcotic Drugs, Possess Opium/Cocaine or Derivative, Possess Marijuana, Possess Synthetic Narcotics, and Possess Dangerous Non-Narcotic Drugs.

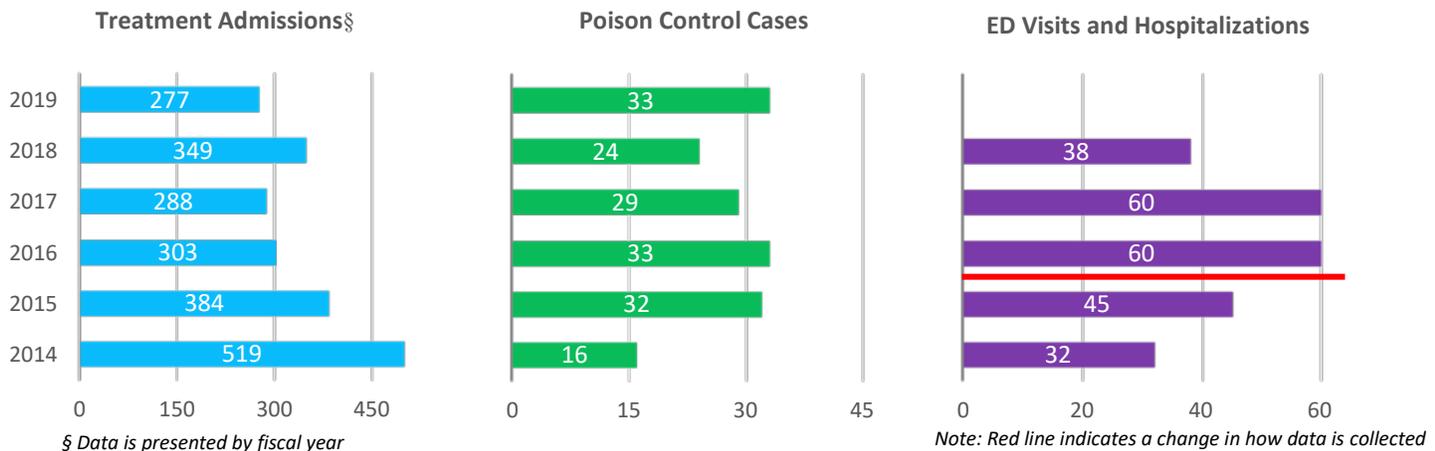
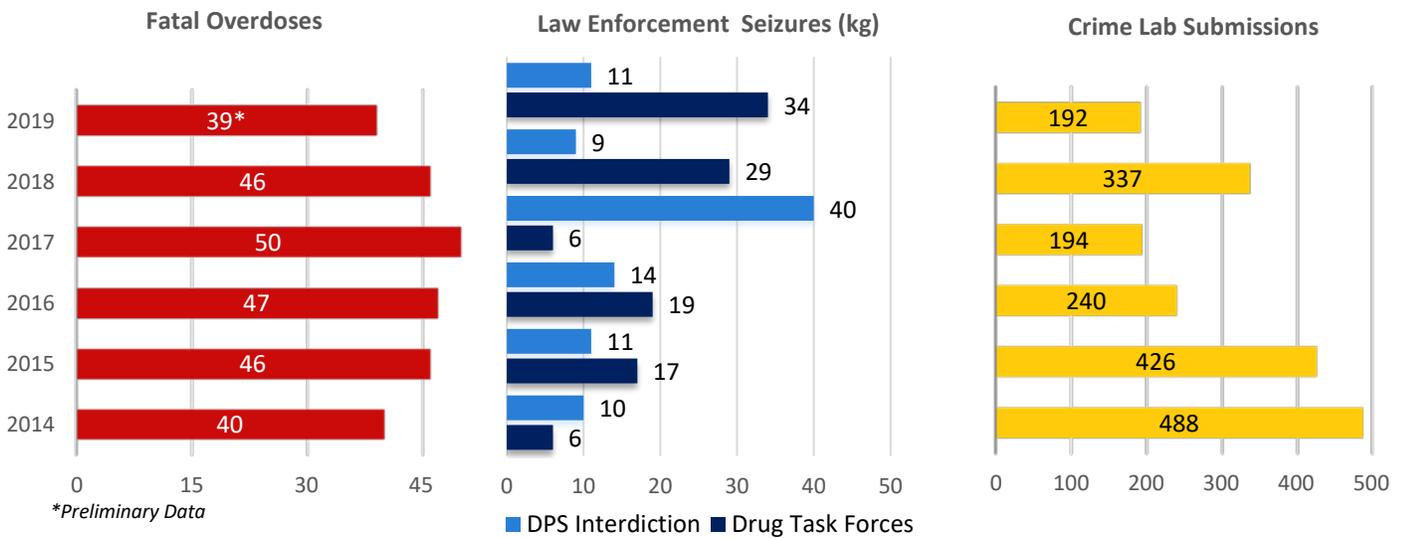
ADMINISTRATIVE NOTES FOR DRUG-RELATED DATA

The following notes identify circumstances that should be understood when reviewing the individual drug-related data on the following pages:

- All drug-related fatalities identified in this report are of unintentional or undetermined intent. Each section identifies the number of fatalities in which that particular drug was identified. Since multiple drugs can be identified in fatalities the overall total fatality number for each year will be less than the combined numbers identified for each drug.
- The 2019 fatal overdose numbers for all drugs are preliminary, as there are still pending fatalities that are not officially documented at this time. The identified number is subject to increase as pending toxicology results are finalized. This report provides an official final update for 2018 fatal overdose numbers from previous reporting.
- Law Enforcement seizure data has been separated into Utah Drug Task Forces and DPS Interdiction categories due to the reporting period differing between the two data sets. Utah Drug Task Force data is obtained from the Utah Commission of Criminal and Juvenile Justice (CCJJ) and is reported by state fiscal year (Jul-Jun). DPS interdiction data is collected from High Intensity Drug Trafficking Area (HIDTA) seizure reports and is reported by calendar year.
- The red line displayed between the years 2015 and 2016 for the ED Visits and Hospitalization data represents a change in International Classification of Diseases (ICD) code reporting for these data sets. This applies to all drug-related ED Visits and Hospitalizations in this report.

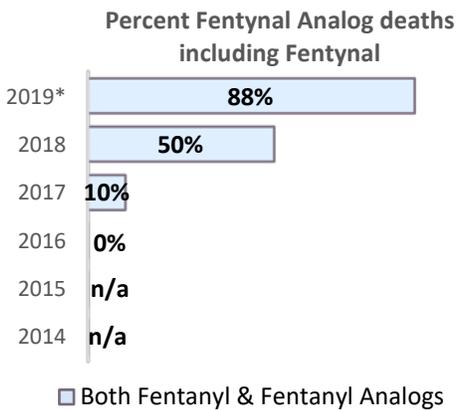
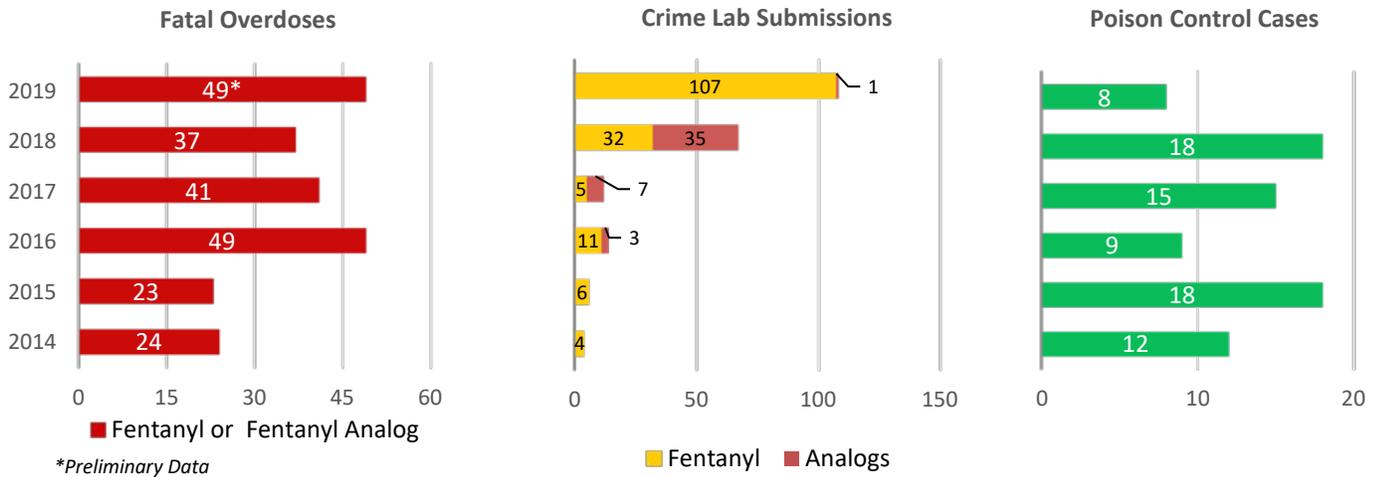
Cocaine

- Cocaine fatalities increased by 15% from 2014 to 2018; however, preliminary data for 2019 indicates a 15% decrease from 2018.
- Cocaine seizures by Utah drug task forces increased from 2018 to 2019 by 17%, with an overall increase from 2014 to 2019 of 466%.
- Cocaine seizures by DPS Interdiction team remained somewhat consistent from 2014 to 2019, with a spike in 2017.
- The number of cocaine submissions to the state crime lab declined from 2014 to 2019 by 60%.
- There was a 46% overall decrease in cocaine residential treatment admissions from 2014 to 2019. From 2018 to 2019, admissions decreased by 21%.
- Cocaine-related poison control cases increased 106% over the report period. Cases increased by 37% from 2018 to 2019.
- Cocaine-related emergency department visits and hospitalizations decreased by 37% from 2016 to 2018.



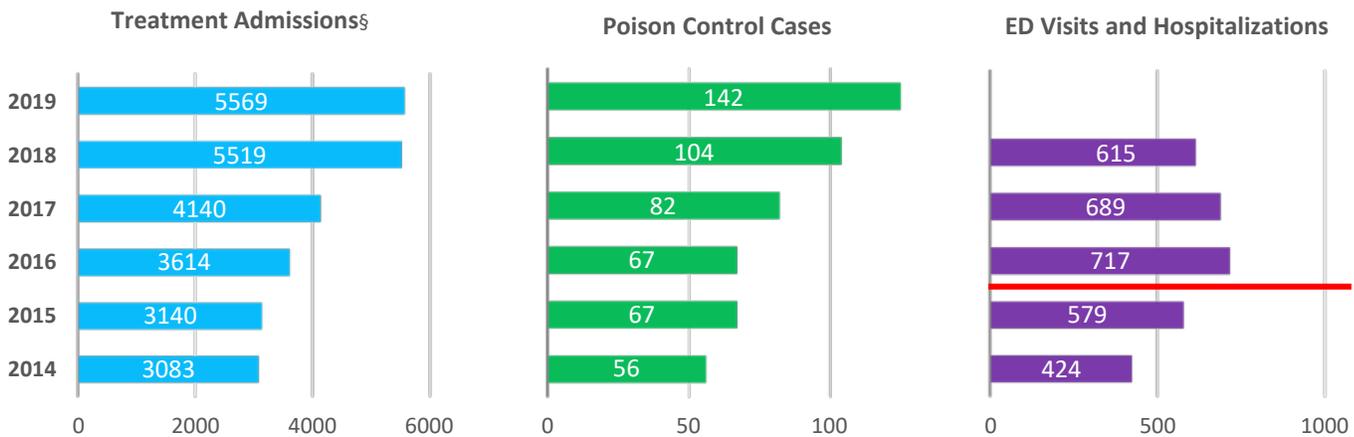
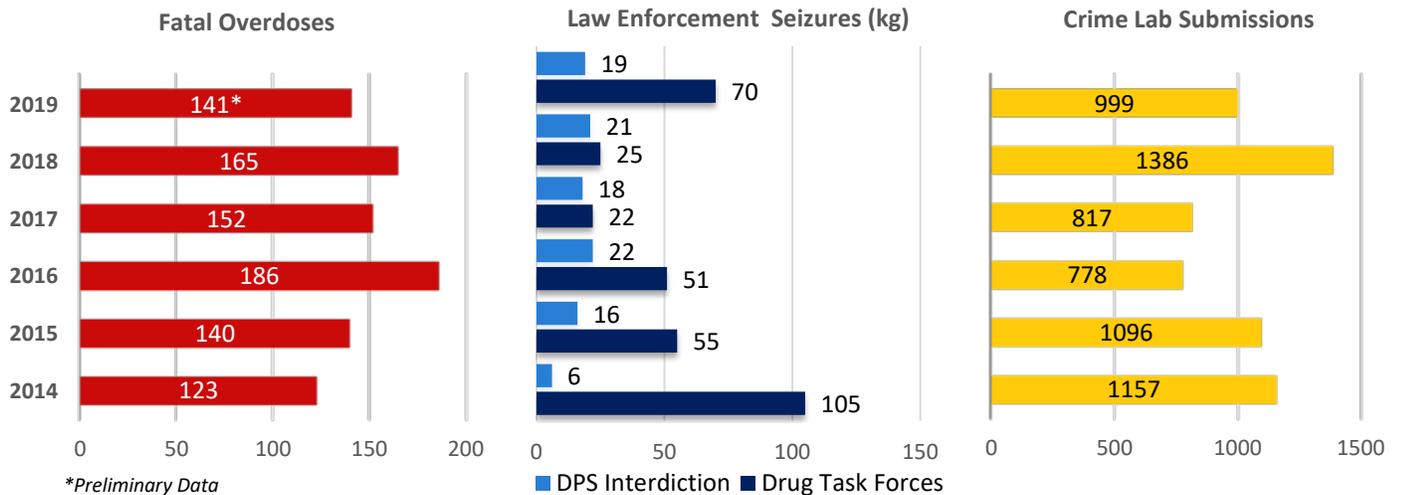
Fentanyl and Analogs

- From 2018 to 2019, preliminary data shows an approximate 32% increase for fatal overdoses involving fentanyl and fentanyl analogs; while fatal overdoses from 2014 to 2018 increased a total of 54%.
- While the number of fatal overdoses involving fentanyl analogs remains relatively low, an increasing proportion of deaths involving fentanyl analogs also involve fentanyl (1/10, 2017; 4/ 8, 2018; 7/8, 2019).
- Seizures by law enforcement have occurred, but specific data related to amounts seized is currently unavailable. Based on crime lab submissions, the most common form of illicit fentanyl identified is counterfeit oxycodone pills, but kilogram-size powder seizures have occurred on several occasions during the reporting period identified in this report.
- From 2018 to 2019, overall crime lab submissions of fentanyl or fentanyl analogs increased by 192%, while non-analog fentanyl submissions increased by 234%.
- Fentanyl and fentanyl analog hospitalizations and emergency department data are unavailable due to the inability to accurately extract it from current surveillance systems.



Heroin

- Preliminary 2019 data indicates that heroin fatalities in Utah declined by 15% from 2018.
- From 2014-2018, heroin-related fatalities increased approximately 34%.
- Utah drug task force heroin seizures increased 180% from 2018-2019; although there was a six-year decrease of 33%, the 2019 seizure total was the highest in the previous five years.
- Heroin seizures by DPS Interdiction team have remained somewhat consistent from 2016-2019; however, there has been a 216% increase from 2014 to 2019.
- The total number of heroin submissions to the state crime lab decreased 28% from 2018 to 2019. This is in contrast to the 70% increase from 2017 to 2018.
- Heroin residential treatment admissions deviated from a six-year upward trend and remained relatively stable from 2018 to 2019. Compared to 2014, heroin residential treatment admissions are up approximately 82%.
- Heroin-related poison control cases increased 154% during the reporting period.
- Preliminary data shows a 14% decrease in heroin-related emergency department visits and hospitalizations from 2016 to 2018.



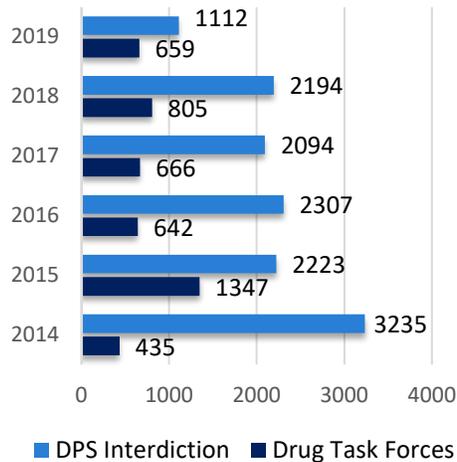
§ Data is presented by fiscal year

Note: Red line indicates a change in how data is collected

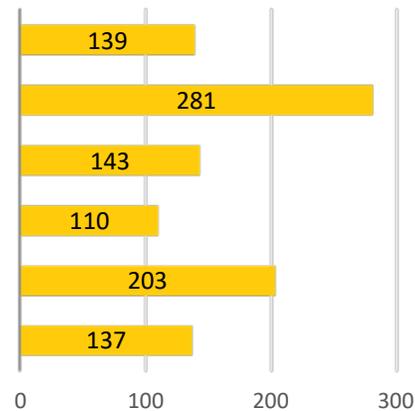
Marijuana

- Marijuana overdose is generally not a recognized cause of death, though it can be a contributing factor in some circumstances. There is insufficient data to report on marijuana-related deaths.
- Marijuana seizures by Utah drug task forces have increased 51% during the reporting period (2014-2019); however, there was an 18% decrease in seizures from 2018 to 2019.
- Marijuana seizures by the DPS Interdiction team have decreased 66% during the reporting period; with a 49% decrease from 2018 to 2019. However, during 2018 (19,861) and 2019 (40,122), THC-infused vaping cartridge seizures have increased significantly.
- The total number of marijuana submissions to the state crime lab decrease by 50% in 2019 after reaching a six-year high in 2018.*
- Marijuana residential treatment admissions decreased 13% overall during the reporting period. From 2018 to 2019, residential treatment admissions remained fairly consistent.
- Marijuana-related poison control cases increased 126% during the reporting period.
- Provisional data shows an approximate 5% decrease in marijuana-related emergency department visits and hospitalizations from 2016 to 2018.

Law Enforcement Seizures (kg)



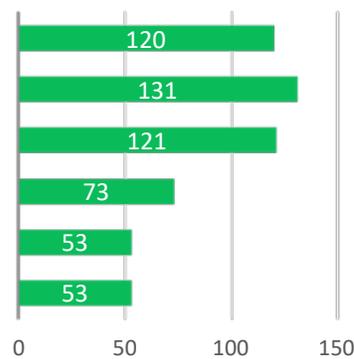
Crime Lab Submissions*



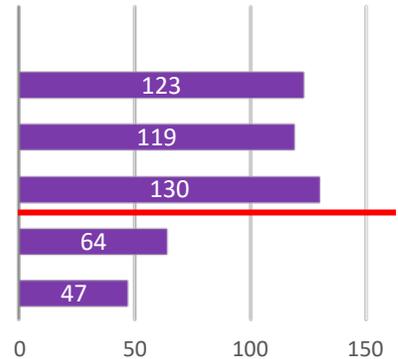
Treatment Admissions§



Poison Control Cases



ED Visits and Hospitalizations



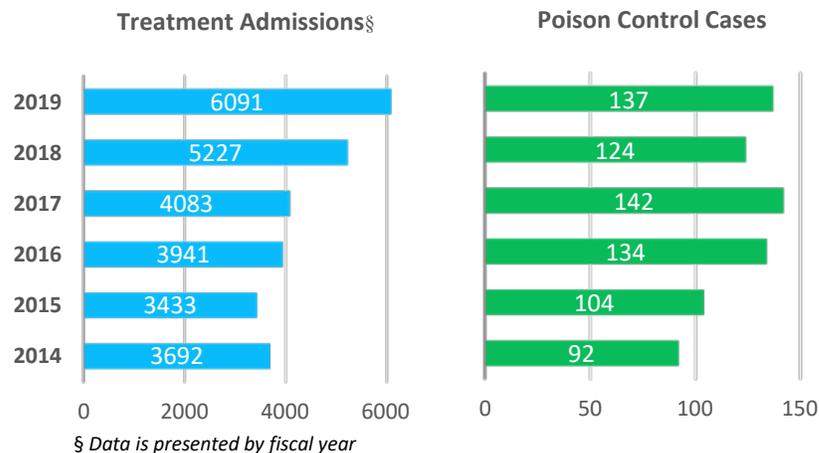
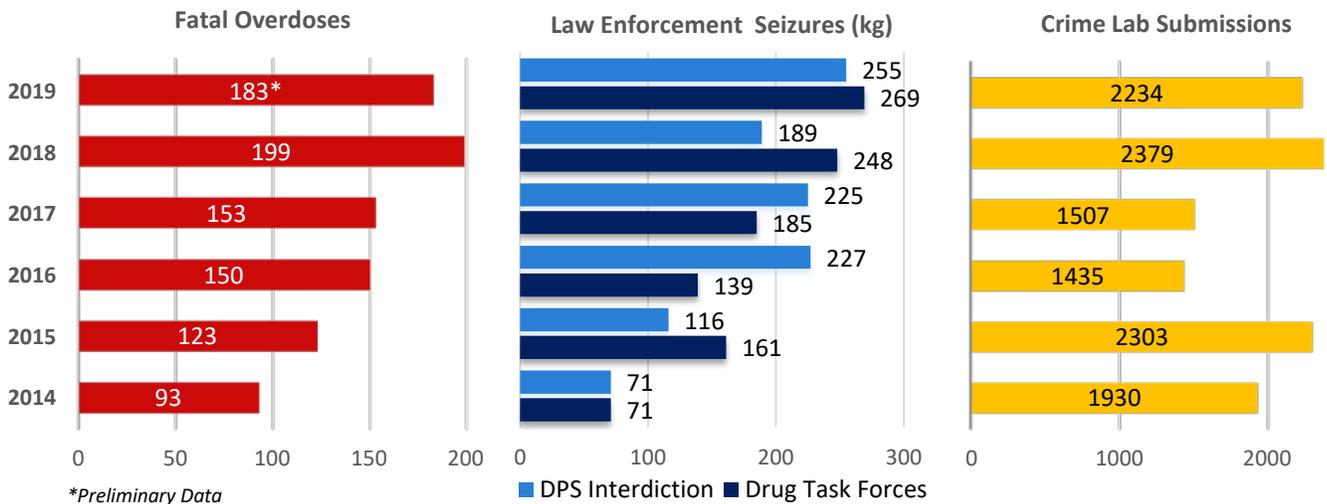
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Note: Red line indicates a change in how data is collected

*The Utah Bureau of Forensic Services marijuana leaf technician program eliminates most of the marijuana submissions to the laboratory by training officers in the field to conduct analysis on suspected leaf marijuana.

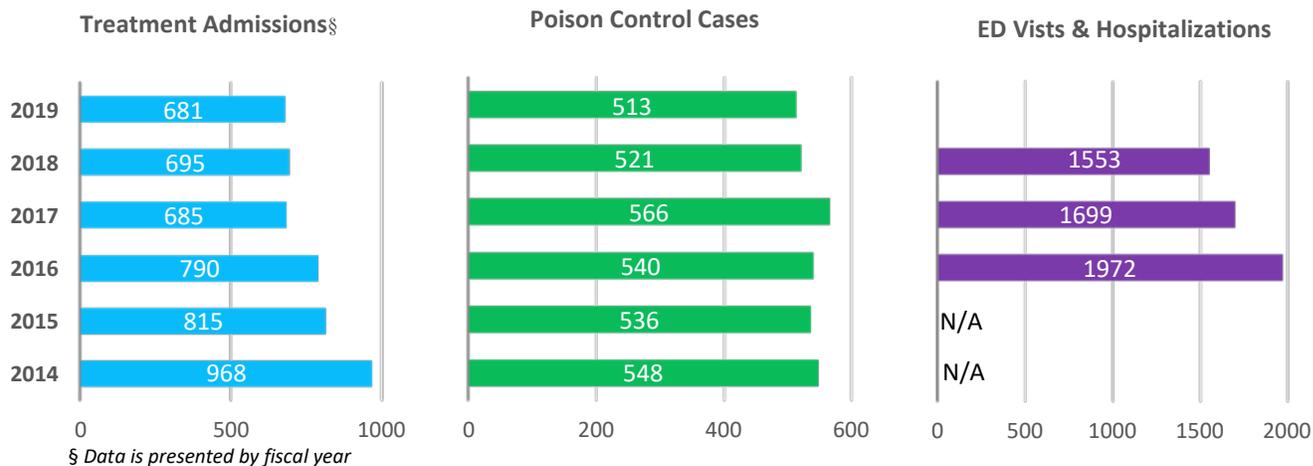
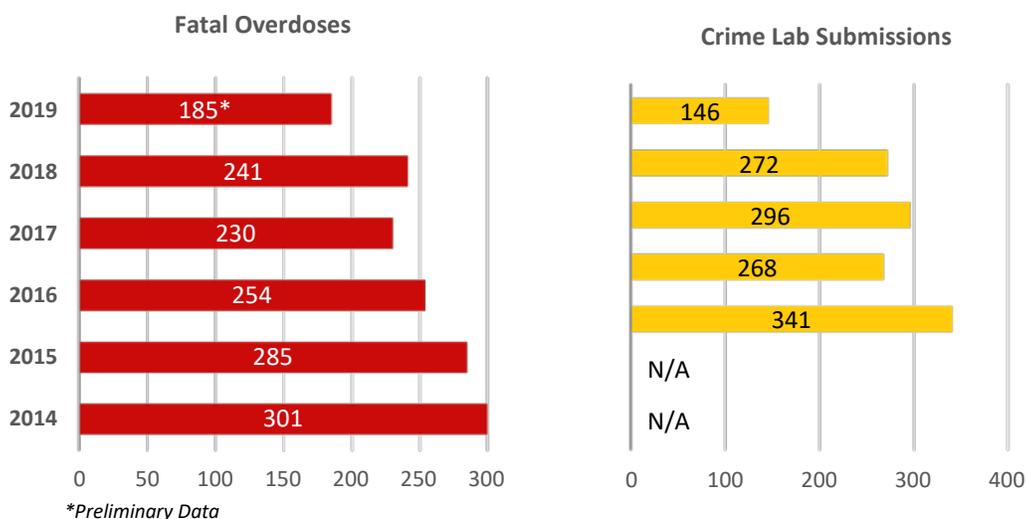
Methamphetamine

- Preliminary 2019 data shows fatal methamphetamine-related overdoses decreased 8% from 2018.
- Methamphetamine-related fatal overdoses between 2014 and 2018 shows an increase of approximately 114%.
- Methamphetamine seizures by Utah drug task forces increased by 278% during the reporting period, with an increase of 8% between 2018 and 2019.
- DPS Interdiction team methamphetamine seizures have increased 259% during the reporting period (2014-2019); with a 35% increase between 2018 and 2019, to a high of 255 kilograms.
- The total number of methamphetamine submissions to the state crime lab decreased by 6% from 2018 to 2019; but an overall increase of 16% during the reporting period.
- There was a 17% increase in methamphetamine-related residential treatment admissions from 2018 to 2019 and an overall 65% increase since 2014.
- Methamphetamine-related poison control cases increased 10% from 2018 to 2019 and 49% overall since 2014.
- Methamphetamine-related hospitalizations and emergency department data are unavailable due to the inability to accurately extract it from current surveillance systems.



Prescription Opioids

- Preliminary 2019 data shows fatal prescription opioid overdoses decreased 23% from 2018 (241) to 2019 (185).
- With the exception of 2018, fatal prescription opioid overdoses have been trending downward each year included in this report. Preliminary 2019 data shows an overall 39% decrease in deaths since 2014, the first year included in this report.
- The number of prescription opioids submitted to the state crime lab decreased by 46% from 2018 to 2019. Submission data was not available for 2014 and 2015.
- There was a slight 2% decline in prescription opioid residential treatment admissions from 2018 to 2019. Over the reporting period from 2014 to 2019, admissions have declined approximately 30%.
- Prescription opioid-related poison control cases remained stable from 2018 (521) to 2019 (513).
- Prescription opioid-related emergency department visits and hospitalizations decreased 9% from 2017 to 2018. Admission data for 2019 is not yet available.



Combined Drug Data for Fatal Overdoses

- The most commonly seen co-occurring substance in fatal overdoses were heroin and methamphetamine. In 2019, there were 68 cases involving methamphetamine and heroin.
- Prescription opioid overdose deaths have seen combinations of heroin and methamphetamine increasing at roughly equal levels during the reporting period.

Comparison Drug	Year*	Fatal Overdoses	with Heroin	with Rx Opioid	with Fentanyl**	with Meth	with Cocaine
Heroin	2014	123	--	16 (13%)		30 (24%)	22 (18%)
	2015	140	--	11 (8%)	0	37 (26%)	22 (16%)
	2016	186	--	19 (10%)	0	60 (32%)	37 (20%)
	2017	152	--	29 (19%)	4(2%)	70 (46%)	26 (17%)
	2018	165	--	40(24%)	4(2%)	80 (48%)	21 (13%)
	2019	141	--	26(18%)	8(6%)	68 (48%)	14 (10%)
Rx Opioid	2014	302	16 (5%)	--	--	16 (5%)	6 (2%)
	2015	285	11 (4%)	--	--	21 (7%)	9 (3%)
	2016	254	19 (7%)	--	--	23 (9%)	8 (3%)
	2017	230	29 (13%)	--	--	22 (10%)	12 (5%)
	2018	241	40 (17%)	--	--	45 (19%)	15 (6%)
	2019	185	26 (14%)	--	--	29 (16%)	9 (5%)
Methamphetamine	2014	95	31 (33%)	16 (17%)	3 (3%)	--	9 (9%)
	2015	124	38 (31%)	21 (17%)	5 (4%)	--	7 (6%)
	2016	150	60 (40%)	23 (15%)	5 (3%)	--	6 (4%)
	2017	153	70 (45%)	22 (14%)	11 (7%)	--	13 (9%)
	2018	199	80 (40%)	45 (23%)	9 (5%)	--	9 (5%)
	2019	183	68 (37%)	29 (16%)	13 (7%)	--	5 (3%)
Cocaine	2014	40	23 (58%)	6 (15%)	0	7 (15%)	--
	2015	46	22 (47%)	9 (20%)	1 (2%)	6 (13%)	--
	2016	47	37 (79%)	8 (17%)	1 (2%)	6 (13%)	--
	2017	50	26 (52%)	12 (24%)	1 (2%)	13 (26%)	--
	2018	46	21 (46%)	15 (33%)	3(8%)	9 (20%)	--
	2019	39	14 (36%)	9(26%)	9(23%)	5 (13%)	--
Fentanyl**	2016	49	0	--	--	4 (8%)	1 (2%)
	2017	41	4 (10%)	--	--	10 (24%)	1 (2%)
	2018	37	4 (11%)	--	--	9 (24%)	3(8%)
	2019	49	8 (16%)	--	--	13 (27%)	9(18%)

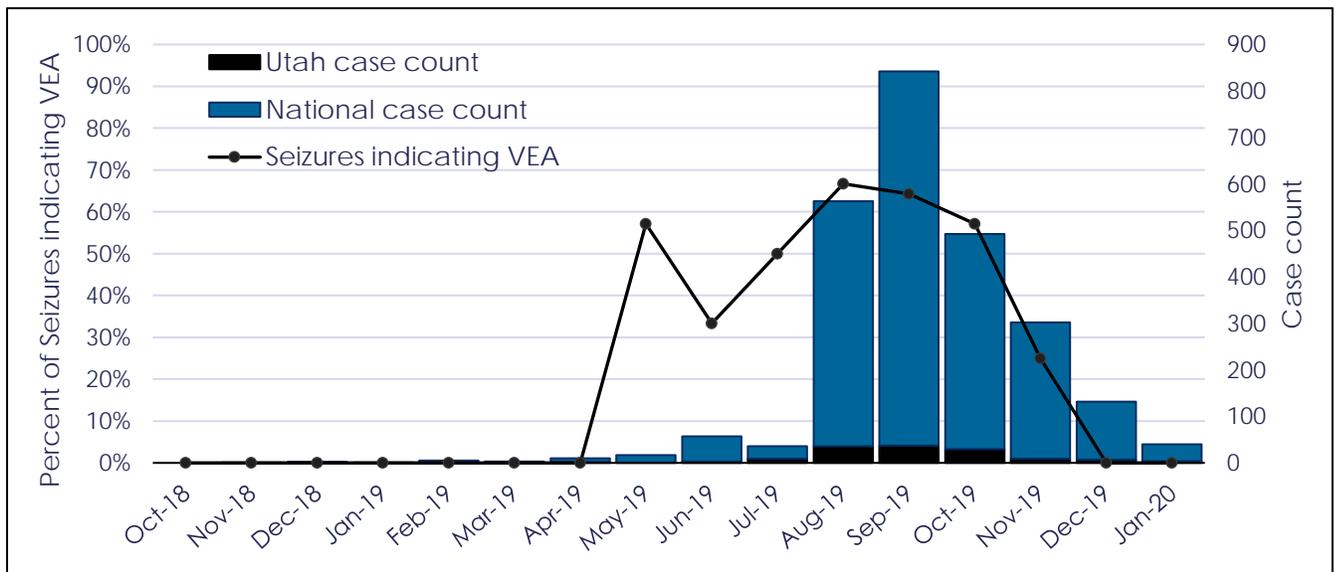
* Death data from 2019 is based on preliminary findings and is subject to increase as pending toxicology results are finalized.

** Fentanyl is most commonly categorized as a prescription drug; it is not possible to differentiate illicit fentanyl during toxicology testing.

2019 Vaping Product Use-Associated Lung Injury Investigation

In 2019, a surge of e-cigarette, or vaping, product use-associated lung injury (EVALI) swept the US. Multiple agencies reported illicit THC-containing vaping products with vitamin E acetate (VEA) as a substance of concern. Due to the illicit nature of the products in question, traditional public health investigations across the nation were limited by the availability of product samples for testing. In response, UDOH and the DPS, leveraged existing relationships to collaborate across agencies, by sharing non-traditional data sources to strengthen laboratory capacity. The Joint UDOH and DPS collaboration was the first in the nation to report significant findings of VEA in a convenience sample of seized illicit vaping products, from prior to, during, and following the outbreak.

The joint effort enabled the screening of 170 products from 96 seizures occurring between October 2018 and January 2020. Thirty-one of the 96 (32%) seizures indicated VEA. The earliest product indicating VEA was from a seizure in May 2019. The highest percentage of seizures indicating VEA was August 2019 (8/12, 67%) followed by September 2019 (8/14, 64%). Several seizures did not indicate VEA, including all products screened from 28 seizures prior to May 2019.



National and Utah EVALI case count and percent of seized Utah THC-containing vaping product indicating vitamin E acetate by month from October 2018 to January 2020

A strong temporal correlation between VEA and EVALI case counts was identified by the joint investigation. The absence of VEA in seizures prior to the outbreak suggest the practice of adding the substance as a diluent or filler started around the time EVALI cases increased and peaked, which occurred a month prior to case counts spiking. The decrease in EVALI cases is likely multi-factorial but aligns with decreasing percentages of seizures indicating VEA. The findings underscore that VEA presents a significant public health threat and should not be added to vaping products.