

Utah Drug Monitoring Initiative

Annual Report

Analysis of the impact related to illicit drug use in Utah – 2020/2021 October 2021

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 joint report 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 regarding the impact of illicit narcotics use in Utah. 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 methods utilized to compile certain data sets. Data identified in this report supersedes all other reported DMI data.

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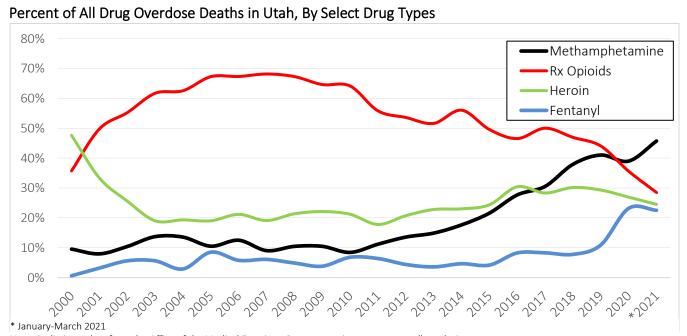
Executive Summary

Data from 2020, and provisional 2021 data, shows that total drug-related fatalities in Utah are increasing. This is a departure from the trend of declining drug-related fatalities observed in the previous annual Drug Monitoring Initiative (DMI) report. The main driver of the increasing deaths is fentanyl. The number of deaths involving fentanyl more than doubled from 2019 (54) to 2020 (122; 125% increase).

Deaths involving prescription opioids have been trending downward with a 37% overall decrease since 2014, the first year included in this report. Similar to prescription opioids, heroin involved deaths have been declining since 2018. While the downward trends in some categories are encouraging, opioids in general continue to pose the most significant drug-related threat to life in Utah, primarily driven by illicitly manufactured fentanyl imported into the United States from Mexican Transnational Criminal Organizations (TCO).

We assess methamphetamine will very likely continue to be a significant drug threat and that negative health outcomes as a consequence of its use to its users will increase in the Utah population. In 2020, deaths involving methamphetamine exceeded those of the entire class of prescription opioids. As of Q1 2021, methamphetamine remains the most common drug involved in Utah overdose deaths. Methamphetamine maintains a high presence among Utah law enforcement seizures, Utah Poison Control Center contacts, crime lab submissions, Utah Department of Substance Abuse and Mental Health treatment admission drug reporting, and among participants of Utah Syringe Exchange Programs.

We assess that the prevalence of fentanyl, in counterfeit pill and powder form, will likely increase throughout Utah, leading to an increase in overdoses. Furthermore, fentanyl will likely be underreported due to misclassification without the implementation of enhanced methods for detecting its presence and use with multiple drugs. The increasing prevalence of fentanyl and other synthetic opioids will likely supplant unadulterated heroin in the drug environment; however, heroin will continue to be a significant threat to Utah. We further assess the overall prevalence and overdoses associated to legitimate pharmaceutical opioids will likely continue to decrease as a result of numerous public health interventions to prevent over prescribing.



 $Note: Preliminary\ data\ from\ the\ Office\ of\ the\ Medical\ Examiner; Drug\ categories\ are\ not\ mutually\ exclusive$

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Acknowledgements

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 evolves with the ever-changing landscape of illicit and prescription drug threats in the State of Utah. The current report focuses on methamphetamine, fentanyl, heroin, prescription drugs, and other synthetic substances that continue to emerge.

This joint report was supported by the staff from following public health and public safety agencies participating in the Utah Drug Monitoring Initiative:









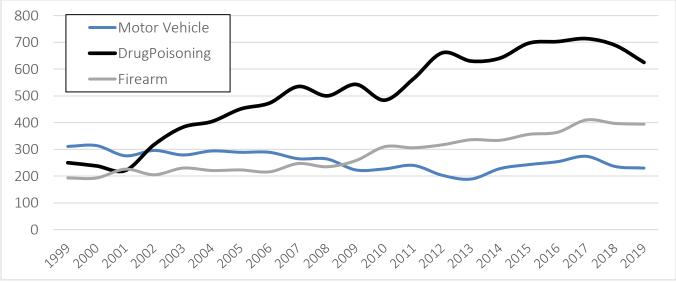




Overview of General Drug-Related Data

In Utah, drug overdose deaths have been the leading cause of injury deaths since 2002.

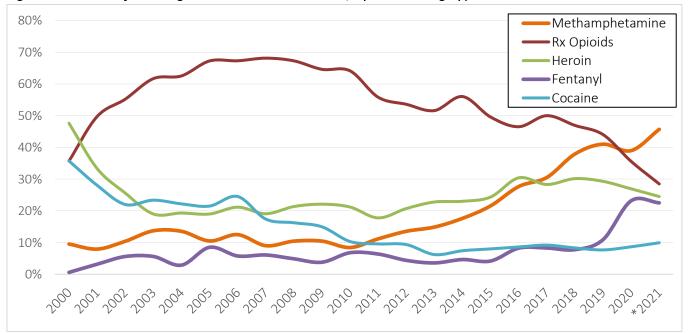
Figure 1. Leading cause of injury deaths, Utah, 1999 - 2019



Source: Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health

For nearly two decades, the majority of unintentional and undetermined drug deaths in Utah involved prescription opioids. However, Meth has been the most common, single drug involved in an overdose since 2017 but it surpassed the number of all prescription opioids (oxycodone, hydrocodone, etc.) in 2020.

Figure 1. Percent of All Drug Overdose Deaths in Utah, By Select Drug Types

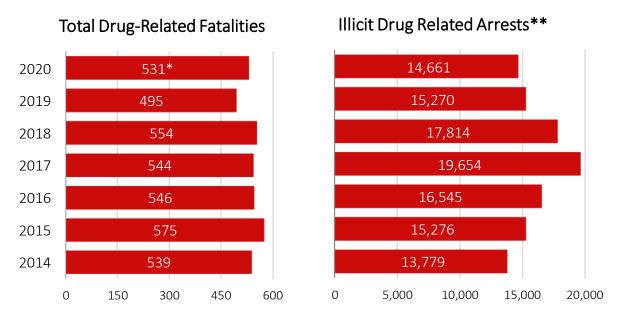


^{*} January-March 2021

Note: Preliminary data from the Office of the Medical Examiner; Drug categories are not mutually exclusive

In 2020, drug-related fatalities in Utah increased by 7% compared to 2019, according to data from the Utah Office of the Medical Examiner.

According to information from the Utah Bureau of Criminal Identification, obtained through the Uniform Crime Reporting program, illicit drug related arrests** in Utah decreased by 4% between 2019 and 2020. Since 2017, drug related arrests have decreased by 25% through 2020.



^{*} Preliminary data from the Office of the Medical Examiner

The following should be understood when reviewing the data on the following pages:

- The Office of the Medical Examiner (OME) is the source for all drug-related fatality data in this report. At the time of writing, the OME considers 2020 data to be preliminary, as such, the numbers in this report may differ slightly from future reports or other products presenting OME data. Reports like this one are most beneficial when used to monitor trends spanning multiple years.
- 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 numbers for each year will be less than the combined numbers
 identified for each drug.
- 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.

^{**} Illicit drug related arrests include the following: 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.

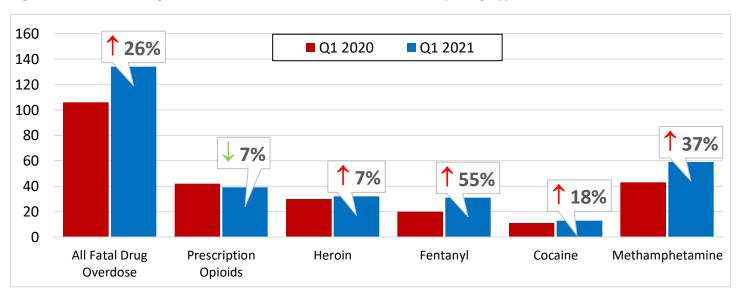
Fatal Drug Overdose

- Overall, drug overdose deaths increased by approximately 7% from 2019 to 2020.
- Methamphetamine was the most common drug involved in fatal overdoses in 2020. Prior to 2020, prescription opioids had been the most common drugs involved in overdose deaths for about 20 years.
- Fentanyl was a major driver of the overall increase; there was a 125% increase for fatal overdoses involving fentanyl from 2019 to 2020.
- Fentanyl deaths increased across all age groups compared to 2019 (Figure 3). The largest increase was among the 18-24 year age group (166% increase) followed by 25-34 (100% increase).
- In continuation of a multi-year trend, deaths involving heroin and prescription opioids declined in 2020.
- Approximately 72% of all drug overdose deaths in 2020 involved more than one drug. See appendix A for a breakdown of drugs involved in polysubstance overdose deaths.
- In Q1 of 2021, there were 134 fatal drug overdose deaths, a 26% increase compared to Q1 of 2020.

Table 1. Drugs Involved in Fatal Overdoses, Utah, 2010 – 2021, Q1

												Q1	Q1
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020	2021
All Drugs	368	439	502	531	539	575	546	544	554	495	531 ↑	106	134
Prescription Opioids	236	245	269	274	302	285	254	272	260	218	189 ↓	42	39
Heroin	78	78	104	121	124	140	166	154	167	145	143 ↓	30	32
Fentanyl	25	28	22	19	25	24	45	45	43	54	123 🕇	20	31
Cocaine	38	42	47	33	40	46	47	50	46	38	46 ↑	11	13
Methamphetamine	31	49	68	79	95	124	151	166	210	203	207 ↑	43	59

Figure 3. Percent Change in Fatal Overdoses, Q1 2020 & Q1 2021, by Drug Type



Fentanyl deaths increased across all age groups compared to 2019 (Figure 4). The largest increase was among the 18-24 year age group (166% increase) followed by 25-34 (100% increase).

180 160 140 120 100 80 80 40 20 0 18-24 25-34 35-44 45-54

Figure 4. Percent Increase in Fentanyl Related Deaths in Utah from 2019 to 2020, by Age Group

Historically, the highest percent of opioid related fatalities were found in the 35-44 age group; for fentanyl related fatalities, the 25-34 age group has the highest percent of fatalities (Figure 5).

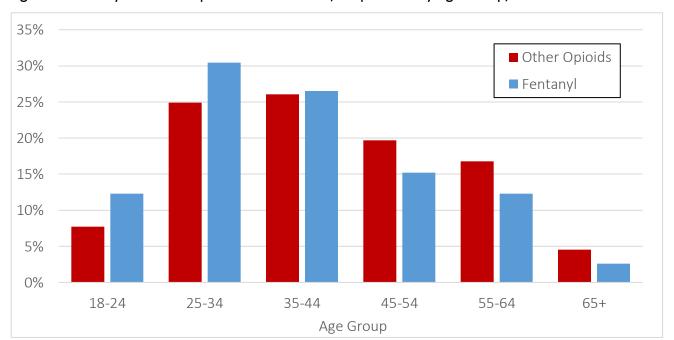


Figure 5. Fentanyl vs. Other Opioid Deaths in Utah, Proportions by Age Group, 2016-2020

Crime Lab Submissions

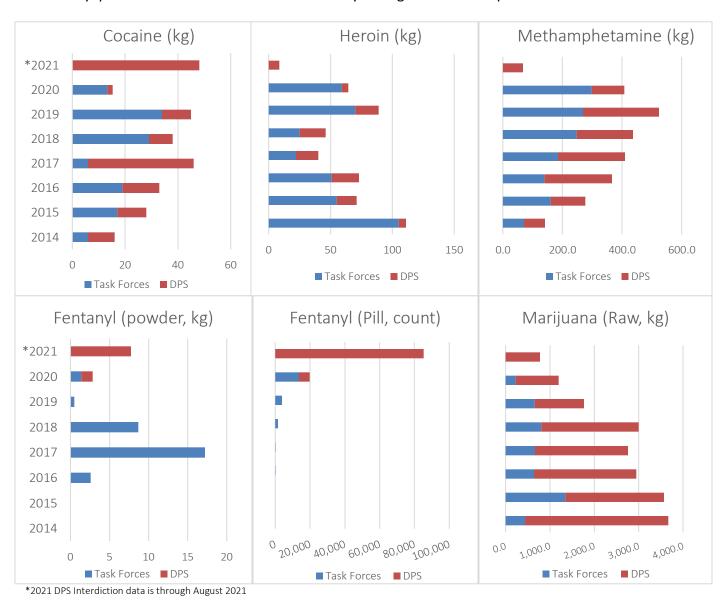
- The overall number of submissions to the Utah State Crime Lab was lower in 2020 compared to previous years, largely due to decreased law enforcement activity as a result of the Covid-19 pandemic.
- Total number of submissions in 2020 decreased by approximately 30% compared to 2019 for drug types included in this report.
- Methamphetamine was the most common substance submitted to the Utah State Crime Lab by law enforcement agencies in 2020; 68% of these were in crystalline form.
- Methamphetamine in pill/tablet form was observed in submissions from several cases in 2020. One of the concerns with this trend is that methamphetamine in pill/tablet may have broader appeal to young adults and college age individuals, a relatively non-traditional methamphetamine user base (SAMHSA 2019).
- In 2020, approximately 60% of fentanyl samples submitted to the Utah State Crime Lab were in the form of counterfeit pills or tablets and only 13% had other drugs present.
- Para-Fluorofentanyl, a fentanyl analog, was identified in two tablets tested in 2021; both carried "M 30" markings imitating those found on common legitimate prescription opioids.

Table 2. Summary of Samples Analyzed by the Utah State Crime Lab in 2020

	2014	2015	2016	2017	2018	2019	2020
Prescription Opioids			341	268	296	272	193
Heroin	1,157	1,096	778	817	1,386	999	648
Methamphetamine	1,930	2,303	1,435	1,507	2,379	2,234	1,551
Fentanyl	4	6	14	12	67	108	67
Cocaine	488	426	240	194	337	192	156
Marijuana	137	203	110	143	281	139	103

Law Enforcement Seizures

- With the exception of fentanyl, law enforcement seizures in 2020 were generally lower compared to previous years; the impacts of the COVID-19 pandemic are likely a significant reason for the decline.
- Utah drug task forces and DPS Highway Interdiction teams seized 407kg of methamphetamine in 2020, a 22% decrease from 2019. This decrease was likely influenced by changes in enforcement activity as a result of the COVID-19 pandemic.
- Fentanyl pill seizures have increased dramatically during the first two quarters of 2021.



Utah Poison Control Center

- The number of Utah Poison Control Center (UPCC) cases involving prescription opioids were essentially the same in 2020 compared to 2019 while all other drugs tracked in this report increased.
- UPCC contacts in 2020 involving marijuana exposure (primarily dried plant and edible preparations) increased by 42% compared to 2019.
- UPCC contacts involving heroin exposure increased by 20% in 2020.

Table 3. Summary of Utah Poison Control Center Human Exposure Cases, CY 2014-2020

	2014	2015	2016	2017	2018	2019	2020
Prescription Opioids	548	536	540	566	521	513	514
Heroin	56	67	67	82	104	142	175
Methamphetamine	92	104	134	142	124	137	148
Fentanyl (non-illicit)	12	18	9	15	18	8	10
Cocaine	16	32	33	29	24	33	35
Marijuana (combined)	53	53	73	119	99	120	171

Figure 6. UPCC Contacts for Prescription Opioids

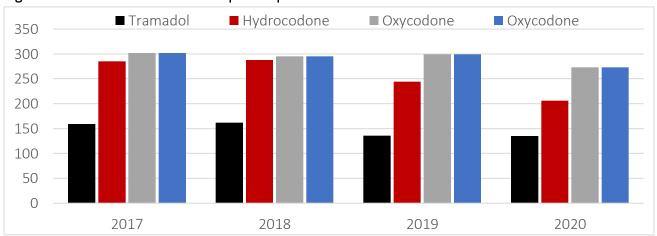
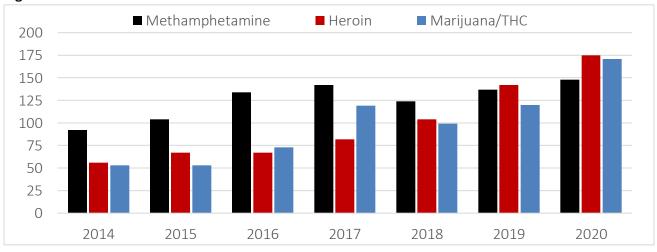


Figure 7. UPCC Contacts for Illicit Substances



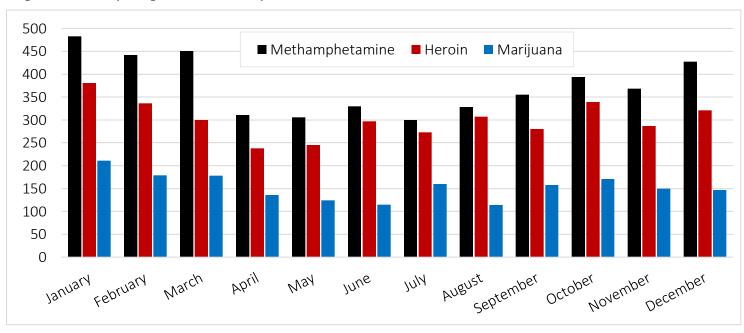
Utah Department of Substance Abuse and Mental Health

- Treatment admissions by all drug types tracked in this report declined in 2020 compared to 2019.
- Admissions dropped in April of 2020, likely due to COVID-19 related stay at home orders and modifications
 in facility operations to observe CDC guidelines for reducing virus transmission. Admissions gradually
 increased in the following months of 2020 (Figure 8).
- Methamphetamine was the most frequent primary drug reported at admission in 2020.

Table 4. Primary Drug Reported at Treatment Admission, CY 2014-2020

	2014	2015	2016	2017	2018	2019	2020
Prescription Opioids	866	811	698	646	671	595	420
Heroin	3,053	3,390	3,904	4,669	5,743	5,226	3,604
Methamphetamine	3,385	3,832	3,950	4,463	5,758	6,055	4,495
Marijuana	2,541	2,365	2,165	2,174	2,384	2,347	1,843

Figure 8. Primary Drug at Admission, by Month, CY 2020



Utah Syringe Exchange Program

In May 2016, Syringe Services Programs (SSPs) became legal in the state of Utah. Syringe services are available in seven counties: Carbon, Davis, Emery, Salt Lake, Tooele, Utah and Weber. New clients are asked a series of intake questions at their first visit including questions on substances used in the past 30 days. If an individual has used more than one substance, they will mark each substance used.

- Utah SSPs enrolled 1,829 new clients in 2020; nearly a 60% increase compared to 2019. In total, Utah SSPs served 3,249 unique individuals at 18,468 encounters.
- Methamphetamine was the most frequently reported drug with 76% reporting use within the past 30 days from their first visit.
- In Q1 of 2021, Utah SSPs enrolled 407 new clients; 20% more than the Q1 average (338) from 2018-2020.

Table 5. Drugs used in the past 30 days, Reported by New Clients, 2017 - Q1 2021

	2017	2018	2019	2020	2021 Q1
Prescription Pain Medicine	8%	6%	3%	3%	5%
Heroin	64%	62%	67%	67%	63%
Fentanyl	0%	0%	0%	1%	3%
Crack/Cocaine	27%	16%	15%	13%	11%
Methamphetamine /Speed	65%	71%	73%	76%	75%
Cannabis/Marijuana	21%	21%	20%	25%	34%
Alcohol	16%	13%	12%	14%	15%
Benzodiazepines	7%	5%	7%	6%	7%

Drug Specific Spotlight: Methamphetamine Associated Psychosis

From January 2018 to June 2021, there have been approximately 13,000 methamphetamine-related emergency department (ED) and hospital encounters in Utah (figure 9). Of those, approximately 34% (4,435/13,226) involved patients exhibiting signs and symptoms of methamphetamine associated psychosis (MAP). The psychiatric symptoms associated with MAP can resemble mental health conditions like schizophrenia and bipolar disorder. These symptoms include auditory hallucinations, tactile hallucinations, paranoia, and paranoid delusions (Glasner-Edwards, 2014; Radfar & Rawson, 2014; Grant et al., 2012; Su et al., 2018). Previous research shows that approximately 36% of individuals using methamphetamine (MA), regardless of age or sex, report psychotic symptoms (Lecomte et al., 2018).

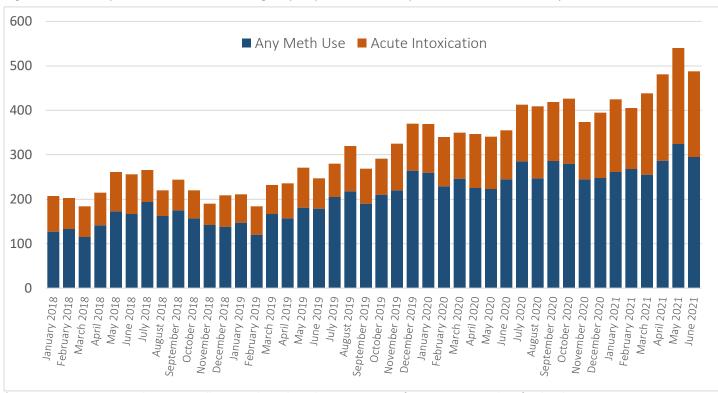


Figure 9. Methamphetamine involved Emergency Department & Hospital Encounters*, January 2018 - June 2021

Further, MAP can arise in patents with no history of mental health issues and can persist during periods of abstinence from MA use (Glasner-Edwards, 2014; Radfar & Rawson, 2014; McKetin et al., 2014). Both short and long-term users of MA are at increased risk of poorer health outcomes including suicide, accidents, and premature death (Darke et al., 2017).

The challenging behaviors and medical complications associated with MA use represent a substantial burden on healthcare resources, in particular for front-line ED clinical staff. Compared to other illicit substances, MA-related ED encounters are more likely to pose a risk to healthcare workers and the law enforcement/EMS per personnel tasked with transporting patients to the ED/hospital (Bunting et al., 2007).

While methamphetamine will likely be considered the next substance use crisis, it has long maintained a presence in the US, particularly the West, throughout the opioid epidemic. Unlike opioid use disorder,

^{*} Data source: ESSENCE syndromic Surveillance, Utah Methamphetamine Case Definition. See appendix B for details.

pharmacological tools for the treatment of MA-related disorders are nonexistent and the evidence base for behavioral interventions is comparatively limited.

Outlook

We assess that methamphetamine will continue to be a significant drug threat and that negative health outcomes as a consequence of its use will increase in the Utah population. Our assessments are further supported by methamphetamine maintaining a high presence among Utah law enforcement seizures and by every data source/metric included in this report.

We assess that the prevalence of fentanyl, in counterfeit pill and powder form, will increase throughout Utah. Furthermore, fentanyl will likely be underreported due to misclassification without the implementation of enhanced methods for detecting its presence.

We assess that rates of overdose, and overall prevalence of legitimate pharmaceutical opioids will continue to decrease as a result of numerous public health interventions to decrease prescribing.

We assess, with a moderate degree of confidence, that heroin will continue to be a significant threat to Utah despite its plateauing prevalence. As demonstrated in drug environments like New Jersey, the prevalence of heroin, adulterated with fentanyl and other synthetic opioids, is a trend of concern we will monitor in the coming months and years. An increase in the prevalence of adulterated heroin would result in a higher rate of overdoses to unassuming users.

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Appendix A: Polysubstance Drug Data for Fatal Overdoses

Comparison Drug	Year	Total	Heroin	Rx Opioid	Fentanyl	Methamphetamine	Cocaine	Benzodiazepines
	2016	166		22 (13%)	0 (0%)	50 (30%)	36 (22%)	20 (12%)
	2017	154		38 (25%)	6 (4%)	75 (49%)	30 (19%)	34 (22%)
Heroin	2018	167		37 (22%)	6 (4%)	80 (48%)	23 (14%)	44 (26%)
пегоп	2019	145		26 (18%)	11 (8%)	76 (52%)	14 (10%)	29 (20%)
	2020	143		12 (8%)	15 (10%)	79 (55%)	22 (15%)	28 (20%)
	2021 Q1	54		5 (9%)	7 (13%)	41 (76%)	* (7%)	10 (19%)
	2016	255	22 (9%)		17 (7%)	30 (12%)	14 (5%)	105 (41%)
	2017	272	38 (14%)		20 (7%)	39 (14%)	16 (6%)	141 (52%)
Dy Onicid	2018	260	37 (14%)		19 (7%)	50 (19%)	19 (7%)	157 (60%)
Rx Opioid	2019	218	26 (12%)		23 (11%)	43 (20%)	11 (5%)	105 (48%)
	2020	189	12 (6%)		41 (22%)	35 (19%)	8 (4%)	81 (43%)
	2021 Q1	39	5 (8%)		12 (20%)	11 (18%)	* (7%)	26 (43%)
	2016	45	0 (0%)	17 (38%)		* (7%)	* (4%)	18 (40%)
	2017	45	6 (13%)	20 (44%)		12 (27%)	* (4%)	14 (31%)
F	2018	43	6 (14%)	19 (44%)		10 (23%)	* (7%)	18 (42%)
Fentanyl	2019	54	11 (20%)	23 (43%)		18 (33%)	10 (19%)	15 (28%)
	2020	123	15 (12%)	41 (33%)		34 (28%)	13 (11%)	33 (27%)
	2021 Q1	31	7 (14%)	12 (24%)		8 (16%)	5 (10%)	15 (31%)
	2016	120	50 (42%)	30 (25%)	* (3%)		6 (5%)	8 (8%)
	2017	166	75 (45%)	39 (23%)	12 (7%)		16 (10%)	17 (17%)
	2018	210	80 (38%)	50 (24%)	10 (5%)		13 (6%)	16 (16%)
Methamphetamine	2019	203	76 (37%)	43 (21%)	18 (9%)		5 (2%)	10 (10%)
	2020	207	79 (38%)	35 (17%)	34 (16%)		8 (4%)	11 (11%)
	2021 Q1	59	41 (41%)	11 (11%)	8 (8%)		* (1%)	10 (10%)
	2016	49	36 (73%)	14 (29%)	* (4%)	6 (12%)		7 (14%)
	2017	58	30 (52%)	16 (28%)	* (3%)	16 (28%)		9 (16%)
	2018	53	23 (43%)	19 (36%)	* (6%)	13 (25%)		19 (36%)
Cocaine	2019	38	14 (37%)	11 (29%)	10 (26%)	5 (13%)		13 (34%)
	2020	46	22 (48%)	8 (17%)	13 (28%)	8 (17%)		10 (22%)
	2021 Q1	13	* (21%)	* (21%)	5 (26%)	* (5%)		* (21%)