Utah Health Status Update

KEY FINDINGS

- **Approximately 60% of fentanyl samples submitted to the Utah State Crime Lab by law enforcement agencies were in the form of counterfeit pills (Figure 1).[2]**
- **The Utah Highway Patrol reported large increases in fentanyl pill seizures in 2021 (Figure 3).**
- **From 2016–2020, 84% of fentanyl overdose deaths involved more than one drug, primarily methamphetamine (25%), oxycodone (20%), and alprazolam, also known as Xanax (18%).[2]**

Fentanyl in Utah

Utah and the rest of the United States as a whole, are battling a series of opioid overdose epidemics outlined in three waves. The first opioid epidemic began with increased prescriptions of opioids in the late 1990s. The second wave began in 2010 with increased deaths involving heroin. The third is a deadly and ongoing wave that involves synthetic opioids such as fentanyl.

What is Fentanyl?

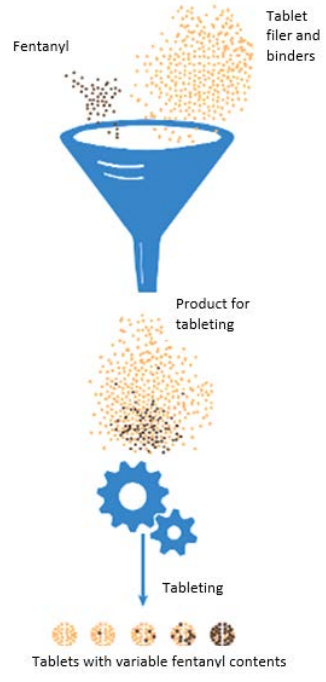
Fentanyl is a synthetic opioid approved for treating severe pain and is 50 to 100 times more potent than morphine.[1] However, most recent cases of fentanyl-related harm, overdose, and death in the U.S. are linked to illicitly manufactured fentanyl (IMF).[1] A lethal dose of fentanyl is small compared with other opiate drugs (oxycodone, hydrocodone, and heroin) due to its extreme potency.

Where Does Fentanyl Come From?

Currently, most fentanyl involved in overdose deaths enters the U.S. illegally from Mexico. In general, it is distributed in two ways. The illicitly manufactured Fentanyl is added to other drugs as a way to sell a stronger, more addictive, and more profitable substance for criminal organizations. Fentanyl can also be distributed as "pressed" or counterfeit pills, which are often marketed as legitimate pharmaceutical drugs, like oxycodone. Approximately 60% of fentanyl samples submitted to the Utah State Crime Lab were in the form of counterfeit pills (Figure 1).[2]

Fentanyl Production

Figure 1. Process of illicitly manufactured fentanyl production into tablet form.



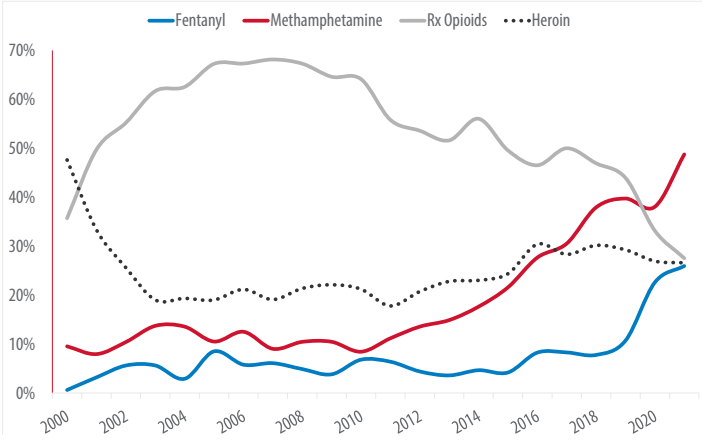
Public Health and Law Enforcement Data Show Common Death Trends

The number of deaths in Utah involving fentanyl more than doubled from 2019 (n=53) to 2020 (n=120) (Figure 2).[2] From 2016–2020, those who died from fentanyl use were more likely to be males ages 24–44, compared with those who died by non-fentanyl opioid overdoses.[1]

Feature article continued

Percentage of Drug Involved Deaths In Utah, by Drug Type, Utah 2000–2021[2]

Figure 2. The number of deaths in Utah involving fentanyl more than doubled from 2019 (n=53) to 2020 (n=120).

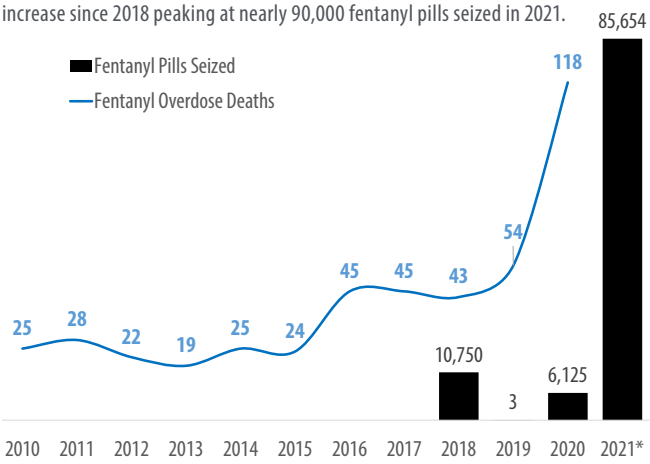


* Data is only for January-June of 2021 and is preliminary and subject to change
Source: Utah Office of the Medical Examiner

From 2016–2020, 84% of fentanyl overdose deaths involved more than one drug, primarily methamphetamine (25%), oxycodone (20%), and alprazolam, also known as Xanax (18%).[2] Fentanyl related deaths have continued to rise with the increase of counterfeit pills seized. As of August 2021, the Utah Highway Patrol reported large increases in fentanyl pill seizures (Figure 3).

Fentanyl Deaths and Law Enforcement Seizures in Utah

Figure 3. The trends of fentanyl seizures and fentanyl related deaths have continued to increase since 2018 peaking at nearly 90,000 fentanyl pills seized in 2021.



* January-August of 2021
Note: Medical examiner data for 2021 is not yet available
Source: Utah Office of the Medical Examiner and Utah Highway Patrol

What Are We Doing: Current Responses

In June of 2020, fentanyl test strip (FTS) distribution began through several Utah Syringe Services Programs. The fentanyl test strips indicate the presence of fentanyl. With the approximate cost of each fentanyl test strip at one dollar, this represents a low-cost intervention for preventing fentanyl overdoses and encouraging harm reduction behaviors.

Recommendation to Mitigate the Impact of Fentanyl: Public Awareness Campaign

There is a need for public awareness campaigns with education on the existence of counterfeit pills and emphasis on the dangers and unpredictable dosing of fentanyl in counterfeit pills. Many, especially adolescents and other "naïve" users are unaware of the risks.[3-4]

Sharp increases in fake prescription pills containing fentanyl prompted the DEA to issue its first public safety alert in six years along with a public awareness campaign, One Pill Can Kill. Utah could benefit from a similar local fentanyl awareness campaign.[3]

Fentanyl Information and Resources

- **Obtaining Naloxone: https://naloxone.utah.gov/free-naloxone-resources**
- **Overdose Identification and Response/Naloxone Training: https://naloxone.utah.gov/n-training**
- **Utah Syringe Exchange Program: sites.google.com/utah.gov/usen/home**
- **Fentanyl Report: https://vipp.health.utah.gov/wp-content/uploads/SIAC-2021-134-Utah-DMI-Fentanyl-Report.pdf**
- **Drug Enforcement Agency Public Safety Alert: https://www.dea.gov/alert/sharp-increase-fake-prescription-pills-containing-fentanyl-and-meth**
- **Drug Enforcement Agency Fentanyl Awareness Website: https://www.dea.gov/onepill**

1. Centers for Disease Control and Prevention, Fentanyl. https://www.cdc.gov/opioids/basics/fentanyl.html.
2. Utah Statewide Information and Analysis Center; SIAC 2021-134; Utah Drug Monitoring Initiative, Fentanyl Report; 2 July 2021.
3. Counterfeit Pills Fact Sheet. (27SEP2021). [Fact Sheet]. U.S. Department of Justice Drug Enforcement Administration. https://www.dea.gov/sites/default/files/2021-09/DEA_Fact_Sheet-Counterfeit_Pills.pdf
4. Fake pills that contain deadly fentanyl—Public health—County of santa clara. (30SEP2021). Retrieved October 21, 2021, from https://publichealth.sccgov.org/fake-pills-contain-deadly-fentanyl

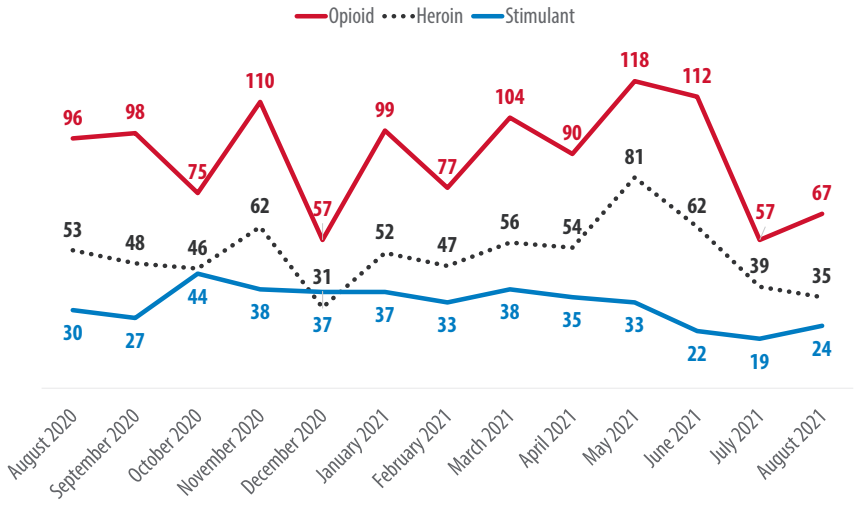
Non-fatal Drug Overdose Trends in Utah

Syndromic surveillance provides public health officials with near real-time data from emergency departments to detect and monitor disease outbreaks.[1,2] Syndromic data can be used as an early warning system for diseases of public health concern, such as COVID-19 or the flu, to ultimately help determine if a public health response is necessary.[1]

Syndromic surveillance is also helpful in monitoring drug overdoses. Analysts search emergency department data for specific key words related to drug overdose to monitor for spikes/anomalies and categorize it further by certain demographics including county, age, race/ethnicity, and sex. Figure 1 provides drug overdose syndromic data trends. This provides baseline data so potential spikes, for example the sharp increase in November 2020 for opioid/heroin overdoses, can be detected. Emergency department data has basic information on a patient's chief complaint which does not always provide a definitive diagnosis. As a result, it is more like a preliminary health check and requires more investigation. This information can be combined with other drug overdose data sources, such as hospital discharge data, death data, law enforcement reports, and naloxone distribution data. While syndromic data is not the final word on overdose events with spikes/clusters, it is a great resource for monitoring trends.

Non-fatal Drug Overdose Trends, Total per Drug Category by Month, Utah, August 2020– August 2021[1]

Figure 1. Opioids were reported as the top reason for non-fatal drug overdoses peaking at 118 total opioid overdoses in May 2021 during August 2020-August 2021.



Note: Data repSource: Electronic Surveillance System for Early Notification of Community-based Epidemics (ESSENCE)

1. National Syndromic Surveillance Program (NSSP). (2021, August 19). What is Syndromic Surveillance? Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/nssp/overview.html.

2. West Virginia Department of Health & Human Services. (n.d.). Syndromic Surveillance. Retrieved from https://oeps.wv.gov/ssp/pages/default.aspx.

Exploring Wasteful Healthcare Spending in Utah

House Bill 195–Identifying Wasteful Healthcare Spending was passed in 2020, which enacted UCA §26-33a-117–Identifying potential overuse of non-evidence-based health care. This bill, in part, requires the Utah Department of Health Office of Health Care Statistics (OHCS) to contract with an organization to provide a nationally-recognized health waste calculator and work with the Utah Health Data Committee (HDC) to produce a report and submit to the Utah Health and Human Services Interim Committee annually. The Milliman MedInsight Health Waste Calculator (HWC) was selected for this project, which was used to analyze claims submitted to the Utah All Payer Claims Database (APCD) for calendar year 2019. The APCD includes medical and pharmacy claims from Medicaid, Medicare Advantage, and qualifying commercial insurance carriers. Claims for approximately 70% of Utahns are included in the APCD. The most recent 7.0 version of the Health Waste Calculator uses 48 measures. These measures span several areas of healthcare, including diagnostic testing, screening tests, disease approach, preoperative evaluation, routine follow up, monitoring, and common treatments. The Health Waste Calculator's measures were informed by an array of national efforts, including Choosing Wisely, the U.S. Preventive Services Task Force, the American Medical Association's Physician Consortium for Performance, and other medical and research-based sources.

The Healthcare Waste classifies a service as either "necessary," "likely to be wasteful," and "wasteful." According to Milliman, the following definitions for each of these three categories are provided:[1]

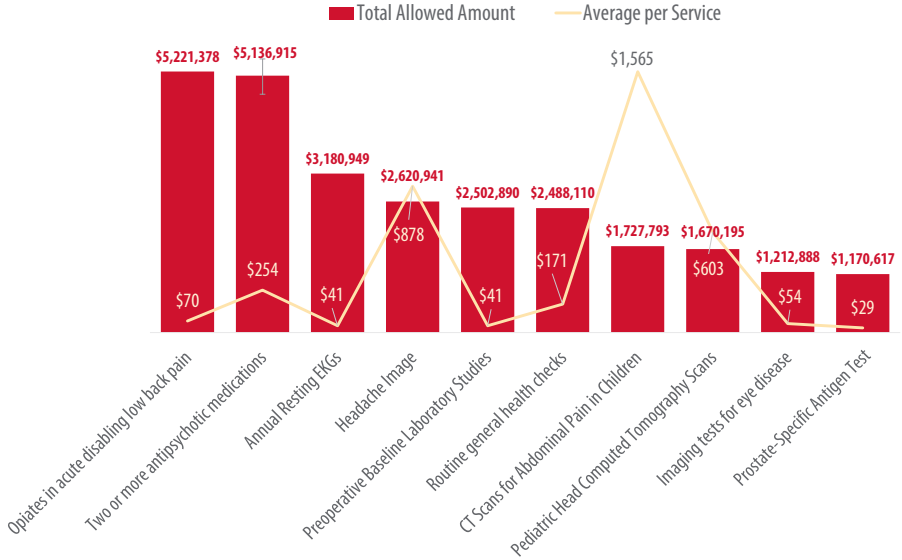
- **Necessary**: Confirms data suggests appropriate services were administered by the healthcare provider
- **Likely to be wasteful**: Indicates the need to question the appropriateness of services rendered
- **Wasteful**: Flags a cause for concern, as the service probably should not have occurred

The OHCS conducted a thorough analysis of the data provided by the Health Waste Calculator and opted to focus on claims flagged "wasteful." Figure 1 represents the top 10 healthcare waste categories for the entire Utah population used in the report. It is important to note the different waste categories do not suggest a specific procedure or prescription is always wasteful. Each of these measures has a corresponding description, source, specialty label, and other elements compiled by the tool. The recommendations of the top three waste categories in Figure 1 include:

- **Opiates in Acute Disabling Low Back Pain**: Don't prescribe opiates before evaluation and a trial of other alternatives is considered.[2]
- **Two or More Antipsychotic Medications**: Don't routinely prescribe two or more antipsychotic medications concurrently.[3]
- **Annual Resting EKGs**: Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms.[4]

Top 10 Wasteful Healthcare Spending by Category in Utah, 2019

Figure 1. Opiates, antipsychotic medications, and EKGs reported the most healthcare spending in 2019.



Note: The results of this analysis have been discussed with multiple stakeholder groups. Recommendations are to continue to review the data and methodology in depth and have further discussion regarding next steps and how to best utilize the data.
Source: Utah All Payer Claims Database (APCD), Utah Department of Health Office of Healthcare Statistics

1. https://www.medinsight.milliman.com/-/media/medinsight/pdfs/medinsight-health-waste-calculator.ashx
2. https://www.choosingwisely.org/clinician-lists/aapmr-opiates-for-low-back-pain/
3. http://www.choosingwisely.org/doctor-patient-lists/american-psychiatric-association/
4. https://www.choosingwisely.org/clinician-lists/american-academy-family-physicians-annual-electrocardiograms/

Monthly Health Indicators

Monthly Report of Notifiable Diseases, September 2021	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis *(Campylobacter)*	53	58	339	378	0.9
COVID-19 (SARS-CoV-2)‖	Cases updated at https://coronavirus.utah.gov/case-counts/.				
Shiga toxin-producing *Escherichia coli (E. coli)*	37	23	165	106	1.6
Hepatitis A (infectious hepatitis)	1	4	5	38	0.1
Hepatitis B, acute infections (serum hepatitis)	1	2	10	12	0.8
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza.				
Meningococcal Disease	0	1	1	2	0.6
Pertussis (Whooping Cough)	0	41	48	249	0.2
Salmonellosis *(Salmonella)*	38	38	214	258	0.8
Shigellosis *(Shigella)*	6	7	39	37	1.0
Varicella (Chickenpox)	9	11	42	121	0.3
West Nile (Human cases)	17	10	18	12	1.5
Quarterly Report of Notifiable Diseases, 3rd Qtr 2021	**Current Quarter # Cases**	**Current Quarter # Expected Cases (5-yr average)**	**# Cases YTD**	**# Expected YTD (5-yr average)**	**YTD Standard Morbidity Ratio (obs/exp)**
HIV/AIDS†	28	27	50	61	0.8
Chlamydia	2,776	2,442	5,752	5,081	1.1
Gonorrhea	839	624	1,752	1,239	1.4
Syphilis	53	32	100	63	1.6
Tuberculosis	5	5	7	18	0.4
Medicaid Expenditures (in Millions) for the Month of September 2021	**Current Month**	**Expected/ Budgeted for Month**	**Fiscal YTD**	**Budgeted Fiscal YTD**	**Variance over (under) Budget**
Mental Health Services	$3	$2	$51	$52	($1.1)
Inpatient Hospital Services	$13	$12	$41	$42	($1.0)
Outpatient Hospital Services	$4	$3	$8	$9	($0.9)
Nursing Home Services	$20	$20	$52	$53	($1.1)
Pharmacy Services	$11	$11	$33	$34	($1.6)
Physician/Osteo Services‡	$4	$5	$13	$14	($1.4)
Medicaid Expansion Services	$38	$37	$201	$202	($1.2)
***TOTAL MEDICAID	**$172**	**$172**	**$888**	**$892**	**($4.2)**

‖ Updates for COVID-19 can be found at https://coronavirus.utah.gov. This includes case counts, deaths, number of Utahns tested for disease, and latest information about statewide public health measures to limit the spread of COVID-19 in Utah.

* More information and weekly reports for Influenza can be found at http://health.utah.gov/epi/diseases/influenza.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations.

‡ Medicaid payments reported under Physician/Osteo Services do not include enhanced physician payments.

***The Total Medicaid Program costs do not include costs for the PRISM project.

Monthly Health Indicators

Program Enrollment for the Month of September	Current Month	Previous Month	% Change§ From Previous Month	1 Year Ago	% Change§ From 1 Year Ago
Medicaid	436,036	430,690	+1.2%	358,670	+21.6%
CHIP (Children's Health Insurance Plan)	8,906	9,297	-4.2%	16,417	-45.8%
Commercial Insurance Payments#	**Current Data Year**	**Number of Members**	**Total Payments**	**Payments per Member per Month (PMPM)**	**% Change§ From Previous Year**
Dental	2020	5,667,256	$ 154,748,044	$27.31	N/A
Medical	2020	11,631,161	$ 3,365,207,356	$289.33	-3.8%
Pharmacy	2020	10,845,512	$ 889,492,538	$82.01	+9.4%
Annual Community Health Measures	**Current Data Year**	**Number Affected**	**Percent \ Rate**	**% Change From Previous Year**	**State Rank** (1 is Best)**
Suicide Deaths	2020	651	20.0 / 100,000	-0.019	40 (2019)
Asthma Prevalence (Adults 18+)	2020	250,600	10.80%	0.091	39 (2020)
Poor Mental Health (Adults 18+)	2020	540,700	23.30%	0.079	37 (2020)
Influenza Immunization (Adults 65+)	2020	261,400	68.50%	0.072	23 (2020)
Drug Overdose Deaths Involving Opioids	2020	432	13.3 / 100,000	0.073	20 (2019)
Unintentional Fall Deaths	2020	651	20.0 / 100,000	-0.019	17 (2019)
Infant Mortality	2020	366	11.3 / 100,000	0.046	17 (2018)
Traumatic Brain Injury Deaths	2020	2,272	69.9 / 100,000	0.061	15 (2019)
Obesity (Adults 18+)	2020	663,700	28.60%	-0.021	13 (2020)
Diabetes Prevalence (Adults 18+)	2020	188,000	8.10%	0.013	17 (2020)
Births to Adolescents (Ages 15–17)	2020	318	4.1 / 1,000	0.077	10 (2018)
Childhood Immunization (4:3:1:3:3:1:4)††	2019	49,400	80.00%	0.176	7 (2019)
Motor Vehicle Traffic Crash Injury Deaths	2020	299	9.2 / 100,000	0.276	7 (2019)
High Blood Pressure (Adults 18+)	2020	598,700	25.80%	0.057	7 (2019)
Cigarette Smoking (Adults 18+)	2020	206,500	8.90%	0.011	1 (2019)
Binge Drinking (Adults 18+)	2020	264,500	11.40%	0.009	1 (2019)
Coronary Heart Disease Deaths	2020	1,853	57.0 / 100,000	0.12	1 (2019)
All Cancer Deaths	2020	3,459	106.4 / 100,000	0.037	1 (2019)
Stroke Deaths	2020	916	28.2 / 100,000	-0.01	1 (2019)
Child Obesity (Grade School Children)	2018	38,100	10.6%	+11.6%	n/a
Vaping, Current Use (Grades 8, 10, 12)	2019	37,100	12.4%	+11.3%	n/a
Health Insurance Coverage (Uninsured)	2020	383,500	11.8%	-6.3%	n/a
Early Prenatal Care	2020	34,716	75.9%	-0.0%	n/a

§ Relative percent change. Percent change could be due to random variation.
# Figures subject to revision as new data is processed.
** State rank in the United States based on age-adjusted rates where applicable.
†† Data from 2019 NIS for children aged 24 month (birth year 2017).