UTAH DEPARTMENT OF HEALTH

Utah Health Status Update: *Opioid Overdose Deaths by Occupation Groups in Utah, 2012–2017*

February 2019

KEY FINDINGS

- **Opioid overdose deaths were higher in Utah than for the nation in 2016.**
- **The most common occupational groups for males who died from heroin or prescription opioid overdoses were 'construction'; 'installation, maintenance, and repair'; and 'material moving'.**
- **For females who died from prescription opioids, the most common occupational groups were 'healthcare support,' 'healthcare practitioners and technical,' and 'food preparation and serving'.**

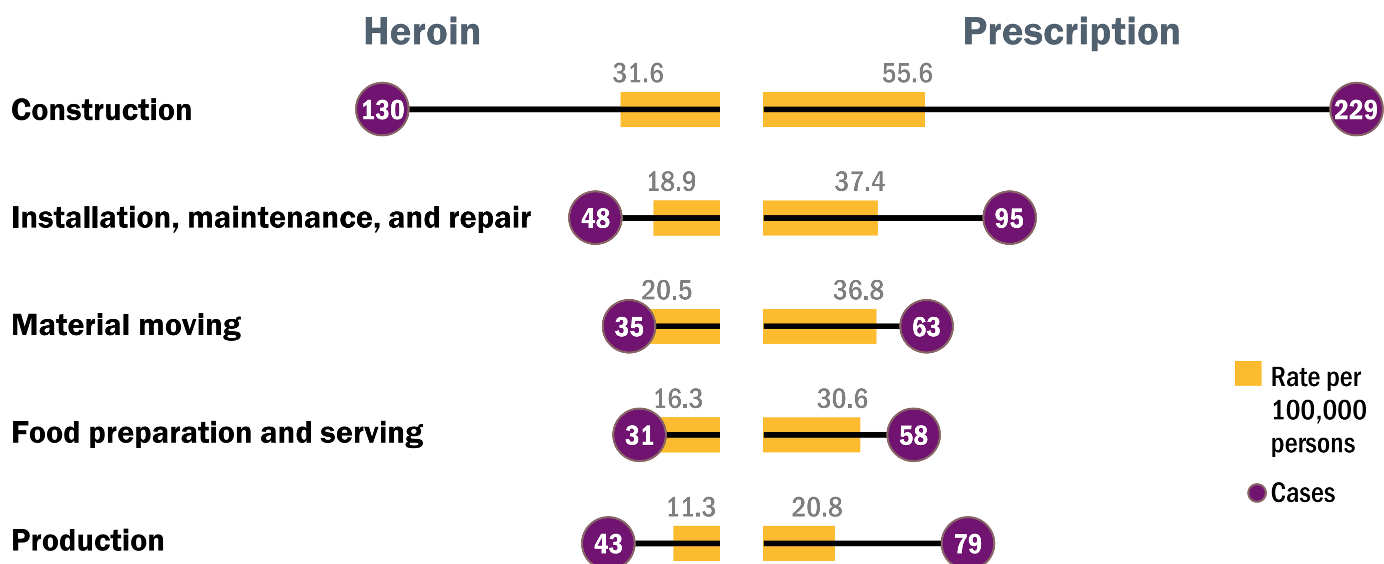
The opioid epidemic is a serious national concern with devastating consequences for all states, including Utah. Nationally, drug overdoses are a leading cause of death and injury with 115 people dying daily from a drug overdose. The Utah opioid overdose death rate among adults (17.4/100,000 persons in 2017) was above the national rate. Not only does this epidemic impact public health, but it also has important economic consequences, and certain populations may be adversely affected. The Utah Department of Health conducted an analysis to assess opioid overdose deaths by occupational groups.

Information on overdose deaths is collected in the Utah Violent Death Reporting System. This system uses data from the Office of the Medical Examiner, law enforcement, and vital records. It includes data on demographics, toxicology (drug test results), and circumstances surrounding a death. The main occupation someone had in their lifetime is collected in this system. We used these data to identify all persons aged ≥16 years that had died from a drug overdose in 2012–2016. Deaths from drug overdose suicides were not included. We calculated death rates specific to heroin and prescription opioid use. This was done by sex for 26 occupation groups. We used the American Community Survey to get the number of people in each occupation group in Utah.

Among males that died of heroin or prescription opioids overdose, the top three occupational groups were 'construction'; 'installation, maintenance and repair'; and 'material moving'. In these categories, respectively, 130, 48, and 35 men died of a heroin-related overdose while 229, 95 and 63 died of a prescription drug-related overdose. The rates per 100,000 persons (ranging from 18.9 to 55.6 in these occupation groups) are presented in Figure 1. Occupational groups with the most prescription opioid-related deaths among females, shown in Figure 2, were 'healthcare support' (40 deaths), 'healthcare practitioners and technical' (54 deaths), and 'food preparation and serving' (51 deaths). Mortality rates ranged from 19.6

Male Heroin and Prescription Opioid Overdose Deaths by Occupation

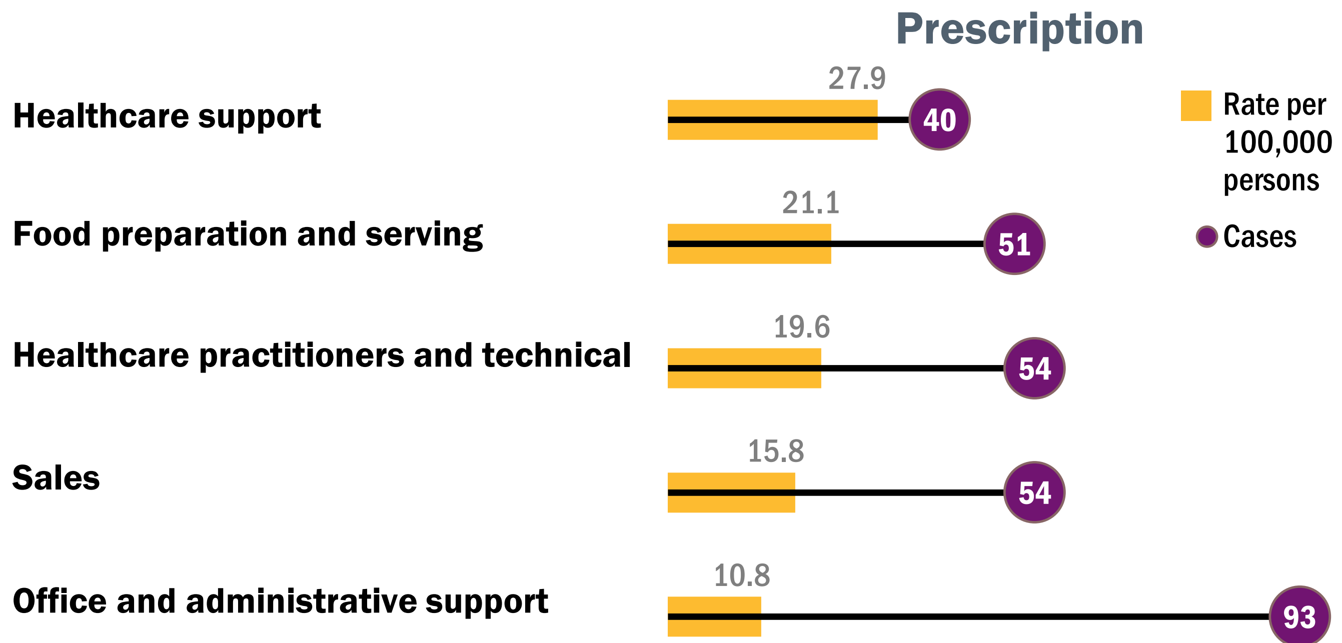
Figure 1. Number of cases and population-adjusted mortality rate per 100,000 persons for deaths associated with heroin and prescription opioids by occupation among males in Utah, 2012–2017.



Source: Utah Violent Death Reporting System

Female Prescription Opioid Deaths by Occupation

Figure 2. Number of cases and population-adjusted mortality rate per 100,000 persons for deaths associated with prescription opioids by occupation among females in Utah, 2012–2017.



Source: Utah Violent Death Reporting System

to 27.9 per 100,000 persons in these groups. This report does not include heroin-related overdose deaths for females by occupation group because of small numbers.

The results of this analysis presents the occupational groups experiencing the greatest burden of opioid overdose deaths, and reveal that the highest risk occupational groups differ by sex. Many occupational groups had opioid-associated death rates exceeding 20 per 100,000 persons. These groups are an important source of economic well-being for the state. They are disproportionately impacted by the epidemic. This is important to consider when developing specific interventions and when directing future funding and research for the opioid epidemic.

For additional information about this topic, contact Elizabeth Brutsch, 801-538-9124, ebrutsch@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, (801) 538-9191, chdata@utah.gov.

UDOH ANNOUNCEMENT:

During the 2018 general session of the Utah State Legislature, the Utah Department of Health Bureau of EMS and Preparedness (BEMSP) received $250,000 to establish and develop a multi-stakeholder pediatric quality improvement network in accordance with the Utah Emergency Medical Services Act (Utah Code 26-8a-205 and 250) and as directed by Senate Joint Resolution 6. The BEMSP contracted with Primary Children's Hospital to establish the Utah Pediatric Trauma Network and develop; refine; and recommend methodology, standards, and guidelines to reduce morbidity, mortality, and the cost of injury to pediatric trauma patients in Utah. Project activities include creating operational and regional councils to review sentinel cases, establishing benchmarks and triage guidelines, assessing compliance to established guidelines, and conducting an annual pediatric trauma care conference for network participants. Visit https://bemsp.utah.gov/operations-and-response/specialty-care-vulnerable-populations/emsc/ for more information.

Breaking News, February 2019

Utah Medicaid Adopts Additional Limits on Opioid Prescriptions

There is an epidemic of opioid deaths in the United States with the number of deaths from opioid overdose exceeding those from suicides or motor vehicle crashes.[1] Almost half of opioid overdose deaths are related to medications obtained legally through a prescription, and Utah ranks among the top four states with the highest overdose death rates from prescription opioids.[2] Excessive opioid prescribing (higher than needed quantity), high-dose prescriptions, and chronic use of opioids increase the risk for opioid dependency, overdose, or death.

Effective January 1, 2019, Utah Medicaid adopted morphine milligram equivalent (MME) and cumulative daily morphine equivalent dose (MED) methodology for adjudication of all opioid claims for the treatment of non-cancer pain. The specific morphine equivalent policy changes can be found in the Utah Medicaid Pharmacy Provider Manual at https://medicaid.utah.gov/Documents/manuals/pdfs/Medicaid Provider Manuals/Pharmacy/Pharmacy.pdf. This initiative was added to existing individual opioid quantity limits that were initially adopted in October 2015, and days' supply limitations that were adopted in October 2016 for medical prescriptions and in July 2018 for dental prescriptions.

Improving the way opioids are prescribed through adherence to/compliance with clinical practice guidelines can ensure patients have access to safer, more effective chronic pain treatment while reducing the risk of opioid dependency, overdose, or death.

1. Preventable Deaths. le Deaths. https://injuryfacts.nsc.org/all-injuries/preventable-death-overview/odds-of-dying/. Accessed on February 4, 2019.
2. Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Drug and Opioid-Involved Overdose Deaths – United States, 2013-2017. Accessed on February 4, 2019.

Community Health Spotlight, February 2019

Utah Coalition for Opioid Overdose Prevention (UCO-OP)

The mission of the Utah Coalition for Opioid Overdose Prevention (UCO-OP) is to prevent and reduce opioid abuse, misuse, and overdose deaths in Utah through a coordinated response. It is a multi-disciplinary collaboration involving local, state, and federal entities in the fields of public health, treatment, public safety, healthcare, and education. UCO-OP is comprised of an Executive Committee and a Steering Committee with workgroups in the following areas: Access to Treatment, Advocacy, Data and Evaluation, Harm Reduction, Public Safety, Provider Training and Patient Education, and Public Awareness and Education (see figure). The UCO-OP Strategic Plan, Translating Data to Action 2019 to 2021, has six overarching goals: 1) Promote public awareness of safe storage, safe disposal, opioid risks, signs of an overdose, harm reduction, and naloxone; 2) Evaluate the effectiveness of opioid media campaigns using industry best practices; 3) Increase provider education and training, including tools and resources, to positively change prescribing behavior; 4) Increase targeted naloxone distribution; 5) Increase availability of and access to community prevention resources and physical and behavioral health services, treatment, and resources, and; 6) Improve timeliness of data, surveillance, and evaluation efforts. For more information about UCO-OP and the strategic plan, visit https://ucoop.utah.gov/.

Monthly Health Indicators Report

(Data Through December 2018)

Monthly Report of Notifiable Diseases, December 2018	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*)	28	23	540	520	1.0
Shiga toxin-producing *Escherichia coli* (*E. coli*)	9	4	200	98	2.0
Hepatitis A (infectious hepatitis)	1	10	135	40	3.4
Hepatitis B, acute infections (serum hepatitis)	0	1	31	10	3.0
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza				
Meningococcal Disease	0	0	3	3	0.9
Pertussis (Whooping Cough)	11	45	399	695	0.6
Salmonellosis (*Salmonella*)	20	22	358	375	1.0
Shigellosis (*Shigella*)	5	3	62	45	1.4
Varicella (Chickenpox)	18	20	174	229	0.8

Quarterly Report of Notifiable Diseases, 4th Qtr 2018	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†	15	30	115	121	0.9
Chlamydia	2,616	2,135	10,534	8,784	1.2
Gonorrhea	692	396	2,863	1,718	1.7
Syphilis	44	19	161	81	2.0
Tuberculosis	3	8	18	30	0.6

Medicaid Expenditures (in Millions) for the Month of December 2018‡	Current Month	Expected/ Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Mental Health Services§	$ 13.4	$ 13.2	$ 77.8	$ 78.8	$ (1.0)
Inpatient Hospital Services	$ 18.9	$ 18.6	$ 91.5	$ 93.2	$ (1.7)
Outpatient Hospital Services	$ 4.2	$ 4.1	$ 20.3	$ 21.0	$ (0.7)
Nursing Home Services	$ 22.3	$ 22.2	$ 119.6	$ 120.7	$ (1.2)
Pharmacy Services	$ 12.5	$ 12.6	$ 64.3	$ 66.0	$ (1.6)
Physician/Osteo Services	$ 4.6	$ 4.7	$ 27.5	$ 27.9	$ (0.3)
Medicaid Expansion Services	$ 9.2	$ 9.0	$ 46.1	$ 47.8	$ (1.7)
TOTAL MEDICAID#	$ 322.9	$ 322.5	$ 1,276.4	$ 1,281.1	$ (4.6)

* Influenza activity increased to high in December 2018. 122 influenza-associated hospitalizations have been confirmed from September 30, 2018 to December 31, 2018. More information and weekly reports can be found at http://health.utah.gov/epi/diseases/influenza/surveillance/2018-2019/Utah_Weekly_Influenza_Report.html.
† Diagnosed HIV infections, regardless of AIDS diagnosis.

Program Enrollment for the Month of December 2018	Current Month	Previous Month	% Change** From Previous Month	1 Year Ago	% Change** From 1 Year Ago
Medicaid	265,150	269,388	-1.6%	278,807	-4.9%
PCN (Primary Care Network)	17,914	16,807	+6.6%	13,177	+35.9%
CHIP (Children's Health Ins. Plan)	18,054	18,388	-1.8%	19,272	-6.3%

Health Care System Measures (Year)	Annual Visits			Annual Charges	
	Number of Events	Visits per 1,000 Utahns	% Change** From Previous Year	Total Charges in Millions	% Change** From Previous Year
Overall Hospitalizations (2017)	288,787	86.3	+2.9%	$ 9,046.2	+4.5%
Non-maternity Hospitalizations (2017)	190,185	55.4	+1.9%	$ 7,809.6	+5.0%
Emergency Department Encounters†† (2017)	736,146	224.0	+7.4%	$ 2,436.0	+6.5%
Outpatient Surgery (2017)	513,707	156.1	+5.1%	$ 3,595.0	+12.0%

Annual Community Health Measures	Current Data Year	Number Affected	Percent/ Rate	% Change** From Previous Year	State Rank‡‡ (1 is best)
Obesity (Adults 18+)	2017	548,100	25.2%	-0.4%	7 (2017)
Cigarette Smoking (Adults 18+)	2017	193,600	8.9%	+1.1%	1 (2017)
Influenza Immunization (Adults 65+)	2017	187,900	56.0%	+2.0%	40 (2017)
Health Insurance Coverage (Uninsured)	2017	304,000	9.8%	+12.6%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2017	280	9.0 / 100,000	+6.9%	14 (2017)
Poisoning Deaths	2017	714	23.0 / 100,000	-0.3%	29 (2017)
Suicide Deaths	2017	663	21.4 / 100,000	+6.3%	46 (2017)
Diabetes Prevalence (Adults 18+)	2017	154,400	7.1%	-1.4%	6 (2017)
Poor Mental Health (Adults 18+)	2017	395,900	18.2%	+7.1%	22 (2017)
Coronary Heart Disease Deaths	2017	1,692	54.5 / 100,000	+1.8%	5 (2017)
All Cancer Deaths	2017	3,160	101.9 / 100,000	-0.4%	1 (2017)
Stroke Deaths	2017	888	28.6 / 100,000	-6.0%	21 (2017)
Births to Adolescents (Ages 15-17)	2017	420	5.8 / 1,000	-7.6%	13 (2017)
Early Prenatal Care	2017	37,395	77.0%	+2.3%	n/a
Infant Mortality	2017	282	5.8 / 1,000	+7.0%	15 (2016)
Childhood Immunization (4:3:1:3:3:1)	2017	35,600	70.2%	-4.6%	46 (2017)

‡ This state fiscal year (SFY) 2018 report includes supplemental payments to better match the SFY 2018 Medicaid Forecast Budget which costs have not been included in previous years.
§ The SFY 2018 Medicaid Forecast Budget includes Mental Health and Substance Abuse services together while this report only accounts for Mental Health services. This is to stay consistent with the previous years reports.
\# Medicaid Espansion Services was added to the Medicaid program in SFY 2018. Total Medicaid costs exclude the Prism Project.
** Relative percent change. Percent change could be due to random variation.
†† Treat and release only.
‡‡ State rank based on age-adjusted rates where applicable.
Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile Virus will start in June for the 2019 season. Health Care System Measures should not be compared to previous years; a different method was used to determine year of service.