

# Utah Health Status Update: *Prescribing Practice in Utah*

November 2016

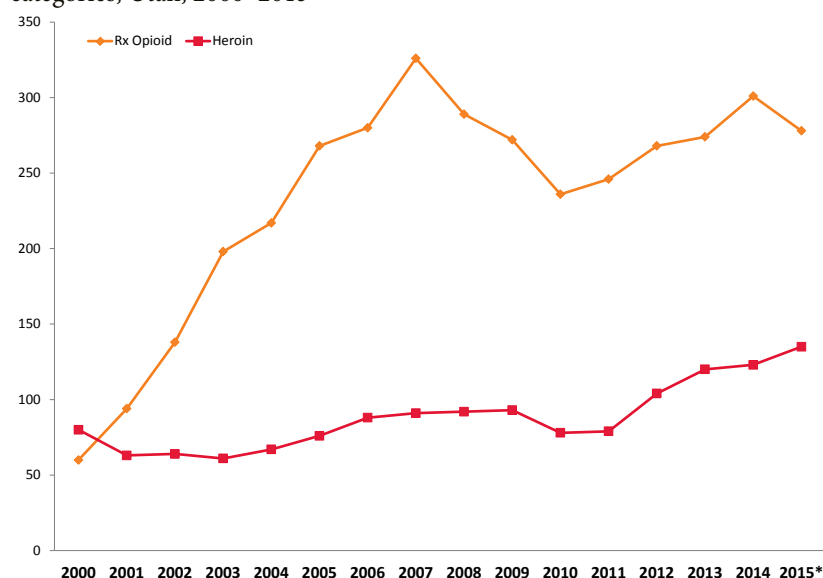
Utah is currently experiencing a prescription opioid abuse epidemic. Utah has the fourth highest rate of drug overdose deaths in the nation.<sup>1</sup> The majority of overdose deaths in the state involve opioids.<sup>2</sup> Prescription opioid-related deaths have surpassed deaths involving heroin since 2001 (Figure 1). As the rate of overdose deaths involving prescription opioids decreased, the rate of deaths involving heroin rose (Table 1).

Given the high number of deaths associated with prescription opioids, understanding the role of opioid prescribing is vital to patient safety. A consistent relationship has been identified in prescribing practice and the rate of overdose deaths; on the national level, the quadrupling of opioid-related deaths since

1999 has paralleled the quadrupling in the amount of opioid prescription drugs dispensed over the same time period.<sup>3</sup> The Centers for Disease Control and Prevention (CDC) released guidelines intended to promote best practices in prescribing opioids, helping clinicians understand and manage the risks inherent for patients receiving these drugs. The guidelines include avoiding high-dose prescriptions, avoiding co-prescribing opioids and benzodiazepines, and consulting their state's Prescription Drug Monitoring Program (PDMP) to assess the patient's prescription history for risks prior to writing new prescriptions.<sup>4</sup>

## Prescription Opioid Deaths

Figure 1. Number of unintentional and undetermined opioid deaths by select categories, Utah, 2000–2015



\* 2015 data are preliminary  
Source: Utah Department of Health Violence and Injury Prevention Program, Utah Violent Death Reporting System

### KEY FINDINGS

- In 2015, there were 888.5 opioid analgesic prescriptions dispensed per 1,000 residents in the state. This translates to about 9 prescriptions per every 10 Utahns.
- In 2015, of all opioid prescriptions, 1 in 7 females received high-dose opioid prescriptions (13.7%) compared to 1 in 5 males receiving high-dose opioid prescriptions (18.8%).
- Twenty-two percent of patients who had an opioid prescription had an overlapping opioid prescription, and 13.8% had an overlapping benzodiazepine prescription. The rate of patients obtaining prescriptions from multiple providers (sometimes referred to as “doctor shopping”) was 27.1 per 100,000 patients included in the Controlled Substance Database (CSD).
- With increased provider education, using the CSD to inform prescribing decisions, and prescribing guidelines, we expect to see changes in prescribing behavior in Utah; ultimately leading to a reduction of opioid overdose deaths.

## Opioid Mortality and Prescribing Indicators

Table 1. Opioid mortality and prescribing indicators, Utah, 2014 and 2015

Mortality Indicators per 100,000 Population	2014	2015
Rate of drug overdose deaths	22.0	22.8
Rate of drug overdose deaths involving opioids	16.5	15.8
Rate of drug overdose deaths involving prescription opioids	15.8	15.1
Rate of drug overdose deaths involving heroin	3.7	4.2
<b>Prescribing Indicators</b>		
<b>2015</b>		
% of patients prescribed high-dose prescription opioids	12.1%	
% of long-acting/extended-release opioids prescribed to opioid-naïve patients	15.7%	
% of patients with overlapping opioid prescriptions	22.0%	
% of patients with overlapping opioid and benzodiazepine prescriptions	13.8%	
Rate of multiple provider episodes (≥5 prescribers and ≥5 pharmacies in a six-month period) per 100,000 patients	27.1	

Source: Utah Department of Health Violence and Injury Prevention Program, Utah Violent Death Reporting System and Department of Commerce Division of Occupational and Professional Licensing, Utah Controlled Substance Database

Utah's PDMP, known as the Controlled Substance Database (CSD), is housed in the Department of Commerce Division of Occupational and Professional Licensing (DOPL). The database includes all controlled prescriptions dispensed in Utah, and prescriptions must be entered in the database within one day of being filled.<sup>5</sup> The CSD is a promising state-level intervention tool that can be used to inform and improve prescribing practices in Utah.<sup>6</sup> While all prescribers in the state are registered with the CSD, they are not required by law to refer to the CSD when writing a prescription.

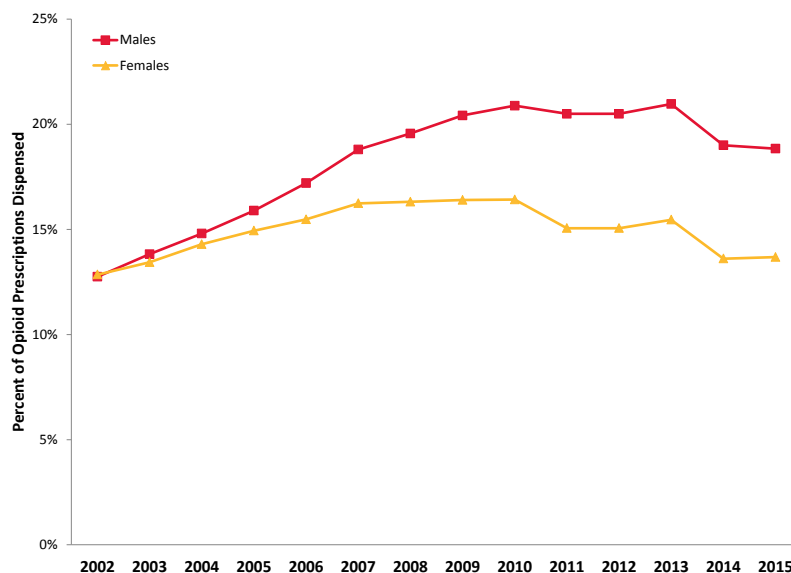
Analysis of CSD data show that there was a 29.4% increase in the rate of prescription opioids dispensed from 2002 to 2015 (686.4 to 888.5 per 1,000 population, respectively). In 2015, this translates to about nine opioid prescriptions per every 10 Utahns.

Although the CDC guidelines recommend avoiding high-dose opioid prescriptions, 12.1% of Utah patients received high-dose opioid prescriptions in 2015. Morphine milligram equivalents (MME) are “the amount of morphine an opioid dose is equal to when prescribed, often used as a gauge of the abuse and overdose potential of the amount of opioid that is being given at a particular time.”<sup>7</sup> Daily MMEs were calculated for each opioid prescription and categorized as high (MME>90) or low-dose (MME≤90). From 2002 to 2015, the overall percentage of high-dose opioid prescriptions increased by 24.2% while low-dose opioid prescriptions decreased by 2.7%. In 2015, of all opioid prescriptions, one in seven females received high-dose opioid prescriptions (13.7%) compared to one in five males receiving high-dose opioid prescriptions (18.8%) (Figure 2).

The CDC guidelines also recommend that patients who are opioid naïve do not receive long-acting or extended-release opioids; however, 15.7% of these opioids are prescribed to opioid naïve patients. (Opioid naïve patients are those who have not have had an opioid prescription in the past 60 days.) Twenty-two percent of patients who had an opioid prescription had an overlapping opioid prescription, and 13.8% had an overlapping benzodiazepine prescription. The rate of patients obtaining prescriptions from multiple providers (sometimes referred to as “doctor shopping”) was 27.1 per 100,000 patients included in the CSD (Table 1).

## High-dose Prescription Opioids

Figure 2. Percentage of all opioid prescriptions that were high-dose (MME>90) dispensed by sex, Utah, 2002–2015



Source: Department of Commerce Division of Occupational and Professional Licensing Utah Controlled Substance Database

With increased provider education, using the CSD to inform prescribing decisions, and prescribing guidelines, we expect to see changes in prescribing behavior in Utah; ultimately leading to a reduction of opioid overdose deaths.

1. CDC WISQARS, Drug poisoning deaths, all intents, age-adjusted rates, 2012–2014.
2. Prescription Opioid Deaths, <http://health.utah.gov/vipp/pdf/RxDrugs/PDODeaths2015.pdf>.
3. CDC, “Understanding the Epidemic”, <http://www.cdc.gov/drugoverdose/epidemic/index.html>.
4. Prescriber Guidelines, <https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm>.
5. Controlled Substance Database Act, Utah Code 58-37f-301 [online]. (2015) [cited 2016 April]. Available at <http://le.utah.gov/xcode/Title58/Chapter37F/58-37f-S301.html>.
6. Injury Prevention & Control: Opioid Overdose: What States Need to Know about PDMPs [online]. (2016). [cited 2016 October]. Available at <http://www.cdc.gov/drugoverdose/pdmp/states.html>.
7. Prescribing Practice in Utah, <http://www.health.utah.gov/vipp/pdf/RxDrugs/PrescribingPracticeInUtah.pdf>.

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### UDOH ANNOUNCEMENT:

The UDOH Bureau of Health Promotion (BHP) has launched a new interactive web tool to connect providers and the public to all of the health education workshops across Utah. The website was tested among community members and healthcare providers to ensure effective use. New features are being evaluated and added, such as a physician portal that will automatically provide progress reports to doctors who refer patients into workshops, allowing for more personalized healthcare. Please visit the new interactive site at <http://livingwell.utah.gov/>.

## Breaking News, November 2016

### Fentanyl and Naloxone

Fentanyl is a synthetic opioid and can be obtained as a prescription drug or as an illicitly manufactured drug. Given the extreme potency of fentanyl (ranging from 30 to 50 times more powerful than heroin), it poses a high risk of overdose even in small amounts and can enter a person's system through skin contact or inhalation.<sup>1</sup> It can be mixed with or sold as heroin, or pressed into the shape of a prescription pill, so users may unknowingly consume fentanyl believing it to be something else.<sup>2,3</sup> It is believed to be present in counterfeit pills that have been produced and distributed in Utah, which have contributed to several overdoses and at least one death.

The Violence and Injury Prevention Program at the Utah Department of Health (UDOH) continuously tracks fentanyl overdose deaths. Currently, the number of deaths in Utah that have involved fentanyl remains relatively low. However, fentanyl-related deaths have increased in other states, especially along the east coast; Utah, with its high rates of opioid abuse and overdose deaths, may be vulnerable to similar increases.

With the growing availability of fentanyl analogs and other synthetic opioids, such as carfentanil and U-47700, it becomes increasingly important for the state lab to have resources to screen for these drugs as part of the toxicology panel following a suspected overdose death, in order to track the effects of these drugs in the population. Additionally, there needs to be expanded awareness of and access to naloxone, an opioid overdose reversal medication that can be obtained and administered by members of the general public. For more information about naloxone, visit the UDOH Naloxone site, <https://naloxone.utah.gov/>. Given the potency of fentanyl and its analogs, multiple doses of naloxone may be needed to reverse an overdose. There also needs to be increased access to treatment for those seeking help with an opioid addiction. Finally, previous increases in fentanyl-related deaths observed in the U.S. have been interrupted following the dismantling of illicit drug manufacturing labs;<sup>1</sup> therefore, continued partnerships between public health and law enforcement are needed to identify drug trends and reduce the availability of lethal drugs.

The UDOH is partnering with the Department of Public Safety to track overdose deaths in the state through the Drug Monitoring Initiative. This initiative aims to enhance understanding of the illicit drug environment in Utah through an interdisciplinary and comprehensive approach that builds relationships and formalizes information sharing and data exchange. The agencies are working toward establishing a sustainable infrastructure to coordinate data collection, sharing, and analysis in real time within the state and region in order to keep partners informed of ongoing and emerging issues in their communities.

1. DEA issues nationwide alert on fentanyl as threat to health and public safety. March 18, 2015 <https://www.dea.gov/divisions/hq/2015/hq031815.shtml>.
2. Increases in fentanyl-related overdose deaths – Florida and Ohio, 2013-2015 <http://www.cdc.gov/mmwr/volumes/65/wr/mm6533a3.htm>
3. Influx of fentanyl-laced counterfeit pills and toxic fentanyl-related compounds further increases risk of fentanyl-related overdose and fatalities. CDC Health Alert Network. 25 August 2016 <https://emergency.cdc.gov/han/han00395.asp>.

## Community Health Spotlight, November 2016

### Syringe Exchange Programs

Syringe exchange programs (SEPs), also called syringe services programs (SSPs), needle exchange programs (NEPs), or needle-syringe programs (NSPs), are community-based programs that provide access to sterile needles and syringes free of charge. The programs also facilitate safe disposal of used needles and syringes. SEPs are an effective component of a comprehensive, integrated approach to HIV and hepatitis C prevention among people who inject drugs. Most SEPs offer other prevention materials (e.g., alcohol swabs, vials of sterile water, and condoms) and services, such as education on safer injection practices and wound care; overdose prevention, including Naloxone distribution; referral to substance abuse treatment programs; and counseling and testing for HIV and hepatitis C. Many SEPs also provide links to critical services and programs, such as HIV care, treatment, pre-exposure prophylaxis (PrEP), and post-exposure prophylaxis (PEP) services; hepatitis C treatment; hepatitis A and B vaccinations; screening for other sexually transmitted diseases and tuberculosis; partner services; prevention of mother-to-child HIV transmission; and other medical, social, and mental health services.

Syringe exchange programs became legal in Utah on March 25, 2016, when Governor Herbert signed House Bill 308 into law. The bill went into effect May 10, 2016, and states that agencies in Utah “may operate a syringe exchange program in the state to prevent the transmission of disease and reduce morbidity and mortality among individuals who inject drugs and those individuals’ contacts”. Rule 386-900 Special Measures for the Operation of Syringe Exchange Programs, sets forth operating requirements for entities conducting syringe exchange, including providing written notice to the Utah Department of Health 15 days prior to conducting syringe exchange activities. For more information, email [syringeexchange@utah.gov](mailto:syringeexchange@utah.gov) or contact Erin Fratto at 801-538-6701 [efratto@utah.gov](mailto:efratto@utah.gov) or Heather Bush at 801-538-6194 [hbush@utah.gov](mailto:hbush@utah.gov).

# Monthly Health Indicators Report

(Data Through September 2016)

Monthly Report of Notifiable Diseases, September 2016	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis ( <i>Campylobacter</i> )	25	50	359	397	0.9
Shiga toxin-producing <i>Escherichia coli</i> ( <i>E. coli</i> )	6	9	55	84	0.7
Hepatitis A (infectious hepatitis)	0	1	9	6	1.5
Hepatitis B, acute infections (serum hepatitis)	0	0	1	8	0.1
Meningococcal Disease	0	0	2	4	0.5
Pertussis (Whooping Cough)	9	72	143	782	0.2
Salmonellosis ( <i>Salmonella</i> )	18	35	265	277	1.0
Shigellosis ( <i>Shigella</i> )	6	4	59	28	2.1
Varicella (Chickenpox)	12	26	170	202	0.8
West Nile (Human cases)	5	2	12	5	2.4

Quarterly Report of Notifiable Diseases, 3rd Qtr 2016	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†	21	26	80	84	1.0
Chlamydia	2,329	1,989	7,089	5,841	1.2
Gonorrhea	582	266	1,574	659	2.4
Syphilis	20	13	69	37	1.9
Tuberculosis	6	10	14	27	0.5

Medicaid Expenditures (in Millions) for the Month of September 2016	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 7.8	\$ 8.4	\$ 23.0	\$ 24.5	\$ (1.5)
Inpatient Hospital	\$ 10.3	\$ 9.3	\$ 26.0	\$ 26.1	\$ (0.1)
Outpatient Hospital	\$ 5.9	\$ 4.7	\$ 10.7	\$ 10.3	\$ 0.4
Long Term Care	\$ 14.7	\$ 14.4	\$ 39.6	\$ 41.1	\$ (1.5)
Pharmacy	\$ 8.7	\$ 9.0	\$ 26.2	\$ 27.0	\$ (0.8)
Physician/Osteo Services	\$ 3.7	\$ 4.0	\$ 8.0	\$ 8.5	\$ (0.5)
TOTAL MEDICAID	\$ 121.7	\$ 119.2	\$ 524.7	\$ 530.9	\$ (6.2)

Program Enrollment for the Month of September 2016	Current Month	Previous Month	% Change* From Previous Month	1 Year Ago	% Change* From 1 Year Ago
Medicaid	291,754	292,186	-0.1%	289,983	+0.6%
PCN (Primary Care Network)	15,905	16,167	-1.6%	12,460	+27.6%
CHIP (Children's Health Ins. Plan)	18,576	18,371	+1.1%	16,441	+13.0%

Health Care System Measures	Annual Visits			Annual Charges	
	Number of Events	Rate per 100 Population	% Change* From Previous Year	Total Charges in Millions	% Change* From Previous Year
Overall Hospitalizations (2014)	281,302	8.9%	-0.8%	\$ 7,281.6	+11.8%
Non-maternity Hospitalizations (2014)	177,881	5.5%	-1.1%	\$ 6,200.8	+11.6%
Emergency Department Encounters (2014)	710,266	22.9%	+2.6%	\$ 1,760.5	+13.2%
Outpatient Surgery (2013)	404,303	13.1%	+7.3%	\$ 2,167.9	+11.5%

Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change* From Previous Year	State Rank§ (1 is best)
Obesity (Adults 18+)	2015	510,400	24.5%	-4.7%	8 (2015)
Cigarette Smoking (Adults 18+)	2015	189,600	9.1%	-6.2%	1 (2015)
Influenza Immunization (Adults 65+)	2015	181,600	59.0%	+1.9%	36 (2015)
Health Insurance Coverage (Uninsured)	2014	303,100	10.3%	-11.2%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2014	234	8.0 / 100,000	+20.2%	17 (2014)
Poisoning Deaths	2014	641	21.8 / 100,000	+0.4%	45 (2014)
Suicide Deaths	2014	555	18.9 / 100,000	-4.0%	41 (2014)
Diabetes Prevalence (Adults 18+)	2015	145,800	7.0%	-1.4%	10 (2015)
Poor Mental Health (Adults 18+)	2015	333,300	16.0%	+0.6%	18 (2015)
Coronary Heart Disease Deaths	2014	1,574	53.5 / 100,000	+2.5%	3 (2014)
All Cancer Deaths	2014	3,033	103.1 / 100,000	+1.0%	1 (2014)
Stroke Deaths	2014	854	29.0 / 100,000	+1.4%	31 (2014)
Births to Adolescents (Ages 15-17)	2014	537	7.9 / 1,000	-8.8%	12 (2014)
Early Prenatal Care	2014	39,005	76.2%	-0.2%	n/a
Infant Mortality	2014	251	4.9 / 1,000	-4.7%	13 (2013)
Childhood Immunization (4:3:1:3:3:1)	2014	36,700	74.6%	n/a#	24 (2014)

† Diagnosed HIV infections, regardless of AIDS diagnosis.

\* Relative percent change. Percent change could be due to random variation.

§ State rank based on age-adjusted rates where applicable.

# In 2014, NIS analysis for the complete 4:3:1:3:3:1 series was updated to provide a more accurate assessment of Haemophilus influenzae type B vaccination. Due to this change, the 2014 results for 4:3:1:3:3:1 coverage are not comparable to prior years.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance has ended for influenza until the 2016–2017 season.