

Utah health status update

Key findings

- More than 300 infants in Utah have died from sudden unexpected infant death (SUID) in the past 10 years. This number nearly matched the number of deaths in children of all ages from either firearm or transportation injuries (Figure 1).
- In Utah, more infants die of SUID than any other single-year age group who die from all types of injury (Figure 2).
- Nearly all of the infants who died because of SUID were found to have been sleeping in preventable unsafe situations.
- More should be done to promote the American Academy of Pediatrics recommendations and support parents with ways to provide safe sleep environments for their infants.



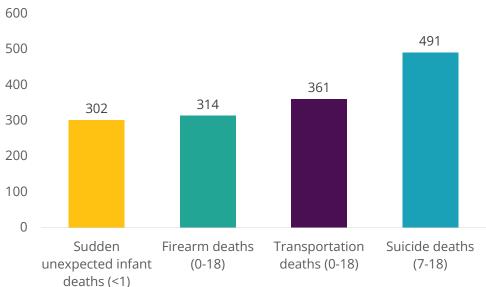
Infant sleep-related death and errors in risk perception

Sudden unexpected infant deaths (SUID) is a category used to describe the sudden and unexpected death of an infant (younger than age 1 year) in which the cause was not obvious before investigation.¹ After investigation, the vast majority of these deaths appear to have some connection to unsafe infant sleep practices. Many people are familiar with the term sudden infant death syndrome (SIDS), but SUID is the more current category that is used to capture these types of deaths.

In Utah, over the past 10 years, about 30 infants died each year due to SUID (a rate of 61.9 per 100,000 infants).² For context, it is useful to compare SUID to other leading causes of injury death in childhood (Figure 1), and since SUID only impacts infants, to look closer at the number of children who die as a result of preventable deaths at each age (Figure 2).

Comparing SUID to other leading causes of injury death in Utah between 2013 and 2022

Figure 1. The number of infants dying from SUID was similar to the number of children of all ages dying from firearm and transportation injuries during the same time frame.



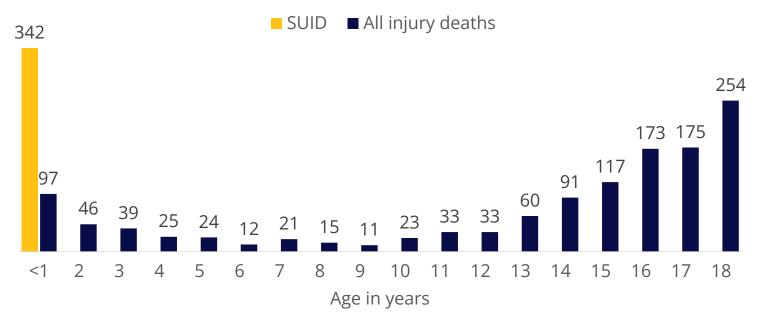
*Firearm deaths include suicides, homicidess, and accidental injury deaths Source: Utah death certificate database



Feature article continued

All injury deaths vs. SUID by age in years, Utah, 2013-2022

Figure 2. The number of infants who die from SUID is higher than the number of 18-year-olds, or any other single-year age group, who die from all types of preventable injury deaths.



Source: Utah Death Certificate Database

Utah data shows that nearly the same number of infants died from SUID as children of all ages died from all types of firearm injuries or transportation injuries between 2013 and 2022.² Yet, the population of children of all ages is 20 times larger than the population of just infants. If we divide injury deaths in children into 1-year age groups, we find that more children die in their first year of life from SUID than from any other year of life from injury (Figure 2). This highlights how many children are lost due to SUID.

In 2019, the Utah Department of Health and Human Services (DHHS) began participating in <u>the U.S.</u> <u>Center for Disease Control and Prevention's SUID and Sudden Death in the Young (SDY) case registry</u>. Within this project, Utah is working to improve the processes to identify and collect quality data about these SUID cases. From the data collected to date (2019–2022), it is clear that safe infant sleep needs to be promoted and supported in a more robust way. Specifically, of the 108 Utah infants who died suddenly and unexpectedly during those 4 years, 103 happened while sleeping or in the sleep environment, and unsafe sleep practices were noted in 92.3% of those cases with complete case information (Figure 3).³ Within infant safe sleep we see issues with things in the crib that should not be there, infants who sleep in places not approved for infant sleep, and co-sleeping as major issues (Figure 3).³

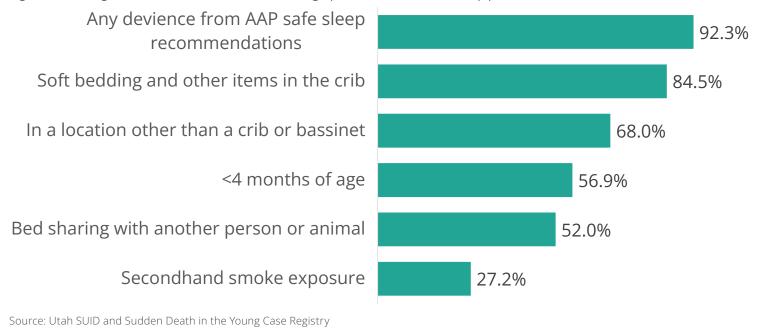
The issue of sudden unexpected infant death has remained underappreciated as a public health priority according to its impact. The last time the country saw a significant change in the rate of deaths was in the 1990s when there was a well-funded National Back to Sleep Campaign. By highlighting the Utah data here, we hope to push for a more robust effort across the state by everyone to support parents in ways to provide a safe sleep environment for their infants using the recently <u>updated AAP recommendations for reducing the risk of sleep-related infant death</u>.



Feature article continued

Common risk factors identified in Utah SUID cases by prevalence, 2019–2022

Figure 3. Investigation of Utah SUID cases found a high prevalence of unsafe sleep practices and other known risk factors.



^{1.} U.S. Centers for Disease Control and Prevention. (2024, June 21). Sudden Unexpected Infant Death and Sudden Infant Death Syndrome, About. Retrieved from https://www.cdc.gov/sids/about/index.htm.

^{2.} Utah Death Certificate Database. Retrieved on June 28, 2024 from Utah Department of Health, Data Systems, and Evaluation, Indicator-Based Information System for Public Health website: <u>https://ibis.utah.gov/ibisph-view/</u>.

^{3.} Utah Department of Health and Human Services, Violence and Injury Prevention Program. (2024). National Child Fatality Review Case Reporting System Database, Utah Data.

^{4.} Trends in Sudden Unexpected Infant Death by Cause, 1990–2020. Retrieved from https://www.cdc.gov/sids/data.htm.

Utah Department of **Health & Human** Services

Fatal fentanyl overdoses in Utah

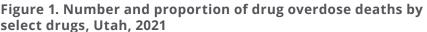
Fentanyl is a synthetic opioid pain reliever up to 50 times stronger than heroin and 100 times stronger than morphine.¹ Pharmaceutical fentanyl is approved for healthcare providers to treat severe pain. Illegally manufactured fentanyl is distributed in illegal drug markets and is often mixed with other drugs such as heroin and methamphetamine. Many times, fentanyl is made to look like prescription drugs, which makes counterfeit drugs indistinguishable from authentic pharmaceutical drugs. Since 2020, most fentanyl-involved overdoses in Utah involve illegally manufactured fentanyl.

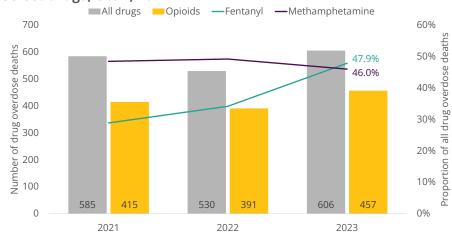
Fentanyl overdose is a significant public health threat in Utah and across the U.S. due to its high death rate and availability. Fentanyl became the most commonly involved drug in overdose deaths in the U.S. in 2021 and for the first time in Utah in 2023. There were 290 fentanyl-involved drug overdose deaths in Utah in 2023. Fentanyl-involved deaths increased 71.6% between 2021 and 2023 and 437% since 2019. This rise is due to the increase of illegally manufactured fentanyl in the Utah drug supply starting in 2020. Fentanyl accounted for 47.9% of all accidental and undetermined drug overdose deaths in Utah in 2023, surpassing methamphetamine (Figure 1).

Between 2021 and 2023, 84% of fentanylinvolved overdose deaths involved at least 1 other drug. Methamphetamine was the most common drug, which was involved in 41.5% of all fentanyl overdose deaths. Other commonly involved drugs were gabapentin, alcohol, heroin, and cocaine.

Similar to all drugs, males have significantly higher fentanyl overdose death rates than females. The highest rate of fentanyl overdose deaths between 2021 and 2023 was among males ages 25–44. The highest rate among females was also in those ages 25–44 (Figure 2). Fatal drug overdoses among children ages 17 and younger are rare, but the proportion of fentanyl-involved overdoses among this age group is high—80% of overdoses among children ages 0–17 involved fentanyl.

The fentanyl overdose death rate was highest in TriCounty health district between 2021 and 2023. The rate in TriCounty, Weber-Morgan, and Salt Lake health districts are all significantly higher than the state rate (Figure 3).





Sources: Utah Office of Medical Examiner Database

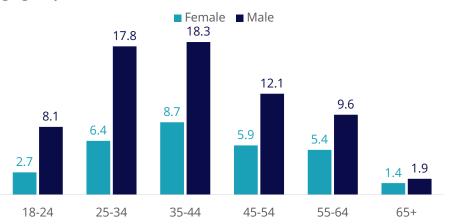


Figure 2. Fentanyl overdose death rate per 100,000 by sex and age group, Utah, 2021–2023

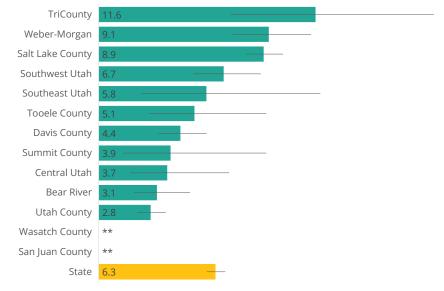
*Rates among people ages 0–17 are suppressed due to small counts. Source: Utah Office of Medical Examiner Database



Overdose is preventable. There are many strategies available to Utahns to prevent fentanyl overdose, such as:

- Learn about the risks of using opioid prescriptions. Know Your Script provides information and strategies regarding safe prescription drug use, safe storage, and safe disposal.
- Reverse overdose. Harm reduction saves lives and increases access to healthcare, social services, and treatment. Utah has 12 syringe exchange programs that offer access to sterile syringes, naloxone, and drug test strips, as well as on-site HIV and HCV tests.
- Treat opioid use disorder. Utah has more than 300 inpatient, residential, and outpatient substance use treatment facilities, among other treatment options. Find options through 211 or local substance use treatment programs.

Figure 3. Fentanyl overdose death rate per 100,000 by local health district of death, Utah, 2021–2023



**The rates in San Juan and Wasatch counties are suppressed due to small counts. Sources: Utah Office of Medical Examiner Database

^{1.} Fentanyl. United States Drug Enforcement Administration. <u>https://www.dea.gov/factsheets/fentanyl</u>

Data are obtained from the Utah Medical Examiner Database (UMED) based on data available for analysis on July 15, 2024; 99.8% of deaths that occurred in 2023 have been certified, meaning counts could change slightly when the remaining pending deaths are certified. Estimates are based on deaths that occurred in Utah, regardless of the decedent's residence status. Crude rates of local health districts were calculated by dividing the number of people who died in that jurisdiction by the Kem Gardner population estimates for that jurisdiction and multiplying by 100,000. Drug poisoning (overdose) deaths were defined as having an International Classification of Diseases, 10th Revision (ICD-10-CM) underlying-cause-of-death code of X40–X44 (unintentional) or Y10–Y14 (undetermined intent). Suicides and homicides were excluded. The immediate cause of death variable (text field) on the death certificate was used to identify drugs without an ICD-10 code (e.g., methamphetamine and fentanyl).



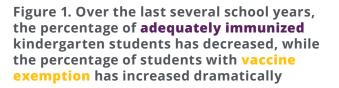
Recent increases in Utah's kindergarten vaccine exemptions

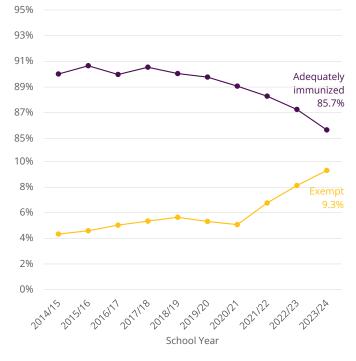
The Utah school immunization rule requires all kindergarteners be adequately immunized against 10 vaccine-preventable diseases. The Utah Department of Health and Human Services collaborates with the Utah State Board of Education to collect immunization data each year on currently enrolled students from all public, private, and parochial schools to make sure the student population is getting these vaccines. Utah parents can request an exemption from school vaccines for medical, religious, and personal belief purposes.

In the several school years before 2020, approximately 90% of kindergarten students were adequately immunized. Over the past 3 years, that percentage has decreased to just 85.7% for the 2023/24 school year. During that same period the percentage of kindergarten students with a vaccine exemption has increased dramatically to 9.3% (Figure 1). Students can also be conditionally enrolled to give them more time to complete needed vaccination, but this percentage has not changed substantially during this period.

Although school vaccine exemptions have increased throughout Utah, they are higher and have increased more quickly in some rural areas of the state. Local health districts in the southwest, northeast, and central parts of the state have much higher school vaccination exemption rates; with some exceeding 15% of students (Figure 2). These areas have large pockets of children who remain susceptible to several vaccine-preventable diseases.

In order to protect communities from outbreaks of dangerous and costly vaccine-preventable diseases, it is important to maintain high levels of immunization. Ideally, 95% or more of students would be adequately immunized throughout the state and exemptions would be limited. When immunization levels fall, children and vulnerable members of the community are left susceptible to dangerous diseases like measles, hepatitis, and polio. It is very important to **educate** parents of school-aged children about the importance of **immunizations** and make sure all children have access to needed vaccines. The <u>Vaccines for</u> <u>Children (VFC) Program</u> offers vaccines at no cost for eligible children to help parents who have difficulty paying for the immunizations.





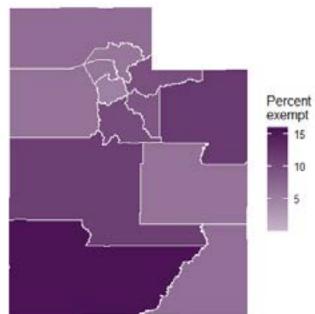


Figure 2. Percent of in-person kindergarteners with a school vaccine exemption in the 2023/24 school year by local health district



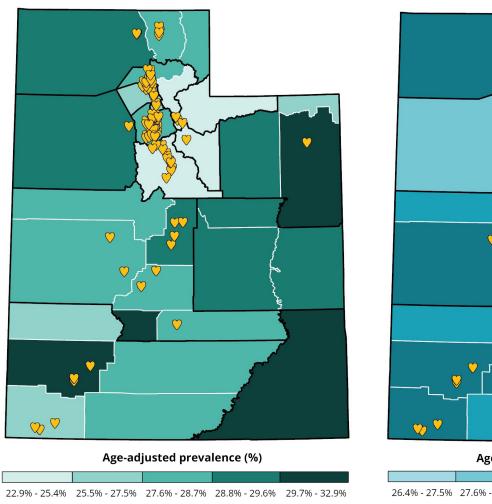
Utah Million Hearts Award: Clinical best practices for hypertension

More than 1 in 4 adults in Utah has been diagnosed with high blood pressure.¹ High blood pressure, also known as essential hypertension, is a critical risk factor for heart disease and stroke. Uncontrolled hypertension can lead to complications such as heart attack, eye and kidney problems, aneurysm, and type 2 diabetes.²

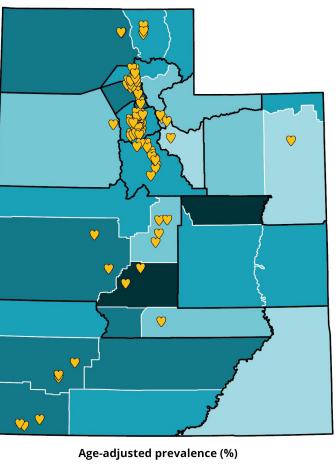
The Utah Million Hearts Coalition, together with the Centers for Disease Control and Prevention Million Hearts® initiative, works to improve blood pressure measurement and control. This is done through education, encouragement, and recognition of excellence in hypertension and/or high cholesterol management in primary care clinics in Utah.³

The 2024 Utah Million Hearts Award acknowledged successes in hypertension and high cholesterol control, implementing team-based care, addressing social drivers of health, and self-measured blood pressure (SMBP) best practices. There were 103 clinics who applied for and received an award status of bronze, silver, gold, or platinum; of those, 76 clinics are in urban counties, 24 clinics are in rural counties, and 3 clinics are in frontier counties.

Million Hearts clinics in Utah counties by high blood pressure and high cholesterol prevalence, 2024High blood pressureHigh cholesterol



Million Hearts clinics*



26.4% - 27.5% 27.6% - 29.0% 29.1% - 30.0% 30.1% - 31.1% 31.2% - 32.3% Local Health District (LHD) boundaries

*Primary care clinics in Utah that were awarded the Utah Million Hearts Award Source: CDC Places, 2023



Overall, awardees had an average hypertension control rate of 62.4%. More than 86% of clinics reviewed electronic health record (EHR) reports on hypertension control rates and developed an action plan, and 78.6% of clinics reviewed reports on hypertension control rates to identify gaps and developed an action plan. Almost all awardees (99.0%) use multidisciplinary care teams when they treat patients with hypertension and/or high cholesterol, and more than 97% currently have an active policy/protocol to use multidisciplinary care teams that adhere to evidence-based guidelines.

Approximately 97% of clinics who received the award refer patients to social services and support needs resources, while 82.5% refer patients to lifestyle change programs. More than 86% of clinics have an active policy or workflow to screen for social services and support needs, yet only 68% partner with social services and support programs.

While the Utah Million Hearts Award is used to recognize successes in hypertension and/or high cholesterol management and control, it can also be a tool to help local health departments work with clinics to improve the quality of care for patients with hypertension. The award data can be used to identify and address gaps within clinics and communities with a high prevalence of high blood pressure and/or high cholesterol.

- 1. Utah Public Health Indicator Based Information System (IBIS). *Health indicator report of blood pressure: doctor-diagnosed hypertension*, 2021. <u>https://ibis.utah.gov/ibisph-view/indicator/view/HypAwa.html</u>
- 2. Mayo Clinic. (2024). High blood pressure (hypertension).
- https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/symptoms-causes/syc-20373410
- 3. Comagine Health. (2023). Utah Million Hearts Coalition. https://comagine.org/program/utah-million-hearts-coalition