

UTAH POISON CONTROL CENTER

2016
ANNUAL REPORT

MESSAGE FROM THE DIRECTOR



It is with great pride that I share the Utah Poison Control Center (UPCC) 2016 annual report. In this report we highlight the value the UPCC brings to Utah through our service, outreach, and partnerships.

Poison centers provide a tremendous return on investment to funders. This is especially true in Utah where the UPCC has the highest utilization of any poison center in the United States—more than twice the national average. In 2012, the Lewin Group estimated that poison centers nationwide provide a return on investment of \$13.39. Savings were calculated not only on avoidance of unnecessary healthcare costs but also included estimates for reduction in hospital length of stay, positive impact of poison prevention education, and reduced loss of work days. In Utah we found an even greater cost savings based on avoidance of unnecessary healthcare costs alone of approximately \$20 saved for every \$1 invested in the poison control center. The UPCC recently completed a study entitled “The value of a poison control center in preventing unnecessary emergency department visits and hospital charges: A multi-year analysis” published in the American Journal of Emergency Medicine that highlights the value to Utah.

In 2016, the UPCC was part of a multi-agency response to a large algal bloom that shut down Utah Lake and also affected the Jordan River canal system. The UPCC was available 24/7 to respond to questions and concerns about adverse health effects not only in people but animals as well. In total, we documented 677 cases—one third of which had adverse health effects. In the first 24 hours that Utah Lake was closed the UPCC responded to 246 concerns about the algal bloom in addition to the more than 120 usual cases the poison center handles daily. We were able to respond quickly based on our existing disaster preparedness plan. The UPCC regularly coordinates toxicology issues of environmental public health importance with the Utah Department of Environmental Quality and the Utah Department of Health. This ongoing coordination and collaboration allowed the UPCC to quickly assist in responding to the 2016 algal blooms.

Speaking of collaboration, in our 2015 annual report we highlighted our work with the Utah Department of Health as part of Utah Coalition for Opioid Overdose Prevention and with Intermountain Healthcare’s Opioid Community Collaborative. These groups are working hard to address the opioid crisis through a multi-prong and collaborative approach. The Opioid Community Collaborative and each of its members, including the UPCC, received the 2016 Governor’s Award in recognition of its leadership and exceptional public service as a partner in the Opioid Community Collaborative.

UPCC is an important partner in monitoring trends in substance abuse as well as other trends of public health significance. UPCC provides regular updates on trends in substance abuse to the Statewide Information and Analysis Center as well as the Controlled Substance Advisory Board. We regularly provide updates on trends in e-cigarette exposures in children as well as other poisoning data to state and local health partners. Check out the new Toxic Trends page on our website (and see page 3).

I am proud of the hard work and dedication of each of our employees to continue to bring world-class service for an outstanding value in Utah. Thank you for your ongoing support and I hope you enjoy the 2016 annual report.

—Barbara Insley Crouch, PharmD, MSPH, DABAT, FAACT
Executive Director, Utah Poison Control Center



COLLEGE OF PHARMACY
L.S. SKAGGS PHARMACY INSTITUTE

MEETING THE NEEDS OF **UTAH**

As one of the first poison centers established in the United States, the Utah Poison Control Center (UPCC) has been helping to make Utah a safer place since 1954. Staffed by toxicology experts—including pharmacists, nurses, and physicians, the center is the first, last, and best line of defense against poison exposures and remains a vital resource for public health in Utah.

The UPCC manages an average of 125 cases per day, providing free consultations 24 hours a day, seven days a week, 365 days per year!

The UPCC provides Utah residents from all 29 counties with instant answers about possible poison exposures, bug bites and stings, prescription drug reactions, contact with toxic plants and hazardous chemicals, and many other topics. The poison center's expert advice is faster and infinitely more reliable than internet searches. What's more, the UPCC consults with emergency department physicians, health care providers, and public health officials several times daily to help with exposure diagnoses and to provide treatment recommendations.

Over the past 62 years, the UPCC has provided more than 1.76 million consultations, reducing the burden on healthcare providers and saving countless lives in the process. And, since the majority of consultations can be managed over the phone, the poison center saves Utah families time, money, and unnecessary visits to emergency departments.

The UPCC saves Utah families over \$50 million in medical costs each year.

MISSION

To prevent and minimize adverse health effects from a poison exposure through education, service and research

Save this number to your phone.
One day it may save you back.

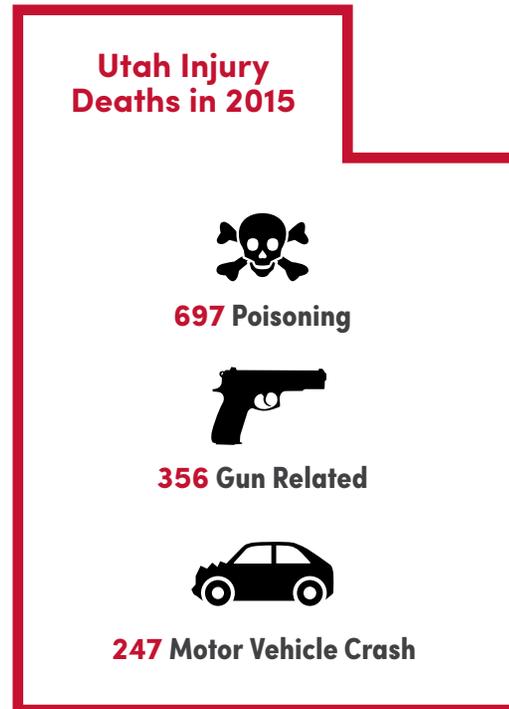
1-800-222-1222

MAKING A DIFFERENCE **ACROSS UTAH**

In 2016, the Utah Poison Control Center (UPCC) participated in over 200 education events, provided over 700 hours of in-person education through presentations and health fairs and distributed over 200,000 educational materials across the state of Utah, covering urban centers, suburbs, and rural communities.

A vital part of the UPCC's mission is education and prevention. Outreach education efforts focus on ways to prevent poisoning as well as generate awareness to the poison center services. Poisoning remains the most common cause of unintentional injury death, well ahead of firearms deaths and motor vehicle crashes.

Outreach education efforts to local health districts, schools, and communities are critical to reducing this trend. Understanding community needs and poisoning trends—both nationally and locally—are key to the UPCC's successful education programs. The UPCC constantly updates efforts to combat current poisoning trends, providing vital prevention information to local health districts when and where they need it.



THE POISON CENTER IS SOMETHING YOU NEVER OUTGROW

Every day, the UPCC helps people of all ages in a wide range of circumstances. While many of the calls received by the UPCC are related to young children, our 24-hour emergency telephone service is available to everyone, every day of the year, no matter his or her age. And every call to the UPCC is free, confidential, and answered by a toxicology expert. On a typical day, we receive calls about potential exposures in people of all ages. Here are some examples:

BIRTH-12 YEARS

- *"I keep bleach in a spray bottle for laundry and my 2-year-old just sprayed herself in the face and eyes."*
- *"I just gave my 4-year-old his 10-year-old sister's medication."*
- *"My child came back from a hike with a rash on his arms and hands."*

13-19 YEARS

- *"My daughter has a headache and took double the amount of Tylenol® she was supposed to."*
- *"I drank from a sports drink bottle in the garage—turns out it was windshield wiper fluid!"*
- *"My teenage son drank four energy drinks and now his heart is racing."*

20-59 YEARS

- *"My husband was spraying a pesticide outside and now has a rash on his hands and legs."*
- *"I was using a drain cleaner and some splashed on my hands, and now they're burning."*
- *"My family barbecued chicken last night and now we're all sick."*

60+ YEARS

- *"I took one of my medicines, forgot, and then took a second dose 30 minutes later."*
- *"How do my prescription medicines interact with my over-the-counter medicines?"*
- *"I accidentally used my ear drops in my eyes. What should I do?"*

AN ONLINE RESOURCE utahpoisoncontrol.org

The UPCC is active online and on social media, providing comprehensive poison prevention resources, a searchable poisonous plant database, and timely posts for parents and caregivers about current poisoning concerns. Please like us on  Facebook and follow us on  Twitter @UtahPoison.

Toxic Trends



We recently added a Toxic Trends tab to our site, which provides detailed information on current trends that are affecting Utah communities. Recent topics include:

- E-cigarettes
- Marijuana
- Opioids

WHEN THERE'S A PILL, **THERE'S A WAY**

It was a typical busy morning at our house. The kids and I were rushing around getting ready for school. I had placed my oldest son's backpack on the table and then set my diaper bag next to it while I ran to the restroom. I came back a couple of minutes later and saw my 19-month-old son Ethan sitting on the floor holding a pill bottle he had taken from the diaper bag. There were pills scattered on the floor all around him.

Ethan is a super-smart kid, always watching and learning. He had either figured out how to open the pill bottle or it had not been shut properly. To make matters worse, the bottle did not have the original pills in it. I had combined Tylenol® pills and ibuprofen tablets into one bottle.

When I looked at Ethan, I could see the brown coating of the pills all around his mouth. That's when I started freaking out. My older kids have never done anything like that. I am so glad I have the Utah Poison Control Center's phone number programmed into my phone, because, in that moment, I wouldn't have been able to figure out how to call them. They have an easy phone number to remember, but my mind just went blank with worry. I couldn't even find my phone. I looked around for it in a panic before remembering it was in my back pocket.

The woman who answered the phone was so nice and she had so much knowledge. Her demeanor immediately helped to calm my nerves. That was important, so I could focus on taking care of Ethan's needs in that moment. She asked me information about

the pills and what dosage Ethan had taken. Both questions were not easy to answer, but she walked me through the process of looking at the pills to provide her with the information she needed to figure out what dosage would make Ethan sick and if his situation could be deadly.

The ibuprofen wasn't the problem, but the Tylenol® could be harmful to him. Without knowing for sure how much he had taken, the poison specialist recommended I take him to the emergency room. She assured me I didn't have to rush—that I could take my oldest son to school first. So, after a quick stop at the school, I took Ethan to the ER. The poison center had called ahead, which meant I didn't have to wait or worry about forms or tell the story all over again. The poison center had provided the ER with everything they needed to know about Ethan's situation. Two minutes after we arrived, we were meeting with a doctor.

It turns out Ethan hadn't ingested any of the Tylenol®. He was going to be just fine, but I learned a lot. I don't combine pills into the same bottles anymore and I try to do a better job of keeping medication out of my kids' reach. I also made my husband program the poison center's phone number into his cell phone and I make sure everyone who watches my kids does as well.

I'm so glad I thought to call the poison center instead of 911. The poison specialist I talked to was so knowledgeable and kind. She knew exactly what to do and how to help me.

A woman with long brown hair, wearing a purple top, is smiling and holding a young child on a swing set. The child is wearing a blue and white striped shirt and brown pants. The background is a blurred green field with trees.

"Kids will get into anything, so it's vital to have a resource like the Utah Poison Control Center that can provide immediate and accurate information to parents."

Ethan & Joey, Woods Cross, Utah

A SMART SERVICE THAT WON'T COST YOU **AN ARM AND A LEG**

The Utah Poison Control Center (UPCC) assesses, triages, manages, and continually monitors patients with a poison exposure with no charge to the patient, practitioner or health care institution, providing a substantial savings to participants across the entire healthcare spectrum.

Because 85% of the cases that the UPCC consults on that originate outside of a healthcare facility can be managed on-site (without a trip to the emergency room), **the UPCC saves Utah residents over \$50 million in unnecessary health care spending each year.** And with approximately 20% of UPCC's callers participating in Medicaid, CHIP, or other state insurance, the UPCC creates more than \$10 million in direct savings to the state.

WHAT WOULD UTAHNS DO IF THE UPCC WAS NOT AVAILABLE?



30%

would visit the emergency department
Costing **\$18.3 million** annually



22%

would call 911
Costing **\$22.7 million** annually



27%

would call a physician
Costing **\$10.5 million** annually

HOW THE UPCC PROVIDES VALUE TO UTAH HEALTHCARE FACILITIES



Helps decrease crowding in emergency departments



Minimizes unnecessary EMS ambulance transport



Frees critical emergency medical staff for true emergencies



Provides cost-effective treatment recommendations for hospitalized patients

REDUCING THE BURDEN ON HEALTH CARE PROVIDERS

Because the poison experts at the UPCC are able to manage the majority of poison exposures outside of a healthcare facility, the time and resources of 911 dispatchers, emergency department staff, EMS staff, and other health care providers are freed up to focus on the critically ill. This is especially important in Utah's rural communities that have limited health care resources.

A VITAL PART OF UTAH'S PUBLIC HEALTH

In addition to providing poison prevention and education services, the UPCC plays a critical role in disease surveillance, disaster readiness and response, and prescription drug epidemic response. Public health officials rely on the UPCC for its expertise and state-of-the-art resources when responding to public safety issues, including hazardous chemical spills, contaminated water supplies, and product tampering.

Disaster Preparedness & Response

Disease Surveillance

Poison Prevention & Education

Response to Prescription Drug Epidemic

Public Safety

HELPING TO CALM TROUBLED WATERS

During the summer of 2016, low water levels, abundant sunlight, high nutrient levels, warm water temperatures, and calm waters led to the formation of a large algal bloom on Utah Lake. To protect the health of the people and animals that use the lake, public health officials made the decision to temporarily close the lake on July 15, 2016.



*Ben Holcomb, Cindy Burnett, Erica Gaddis, Jodi Gardberg, & Chris Bittner,
Utah Division of Water Quality and Utah Department of Health*



Ben Holcomb, Harmful Algal Bloom Coordinator, Division of Water Quality:

The Utah Lake State Park received a call from a recreational visitor about the algal bloom in mid-July. The State Park then contacted us at the Division of Water Quality to research the situation. Algal Blooms can be serious health hazards because the harmful type of algae can release neurotoxins and hepatotoxins that can affect brain, nervous system, and liver function. Once this bloom was reported, we worked with the Utah County Health Department to initially issue an advisory warning.

Erica Gaddis, Assistant Director, Division of Water Quality:

Many algal blooms are not toxic, so before we have actual toxin numbers, we're dealing with uncertainty. Toxicity is also hard to predict because a single species of algae can have both toxic and nontoxic strains, and a bloom that tests nontoxic one day can be toxic the next.

However, because the bloom on Utah Lake was so large, we knew that if it were found to be toxic, it would be serious. Aerial photos showed that the algal bloom not only covered about 90 percent of the lake, but that the bloom had also started extending through the canals and down the Jordan River.

BH:

Utah Lake water typically will have some cyanobacteria as found in algal blooms, but generally less than 20,000 cells per milliliter of water. When we went out and collected data on this bloom, the samples indicated the water had 45 million cells per milliliter! Needless to say, we became very concerned about the health risks the lake posed to humans and animals. Because of the data, the Utah Department of Health and the Utah County Health Department determined that Utah Lake needed to be closed.

In addition to posting closure signs at the lake, a news release was sent out explaining the situation. The release directed those concerned about human exposure to call the Utah Poison Control Center (UPCC). Within 24 hours, the UPCC had received over 100 calls. A number of callers reported symptoms consistent with cyanotoxin exposure, including vomiting, diarrhea, fever, skin and eye irritation, and rashes.

Chris Bittner, Environmental Toxicologist, Division of Water Quality:

The Division of Water Quality already had a great relationship with the UPCC from working together on past algal blooms and other public health issues, so the poison center was prepared to field calls the moment word got out about this emergency. We specifically asked the UPCC to collect location data on all the callers who had been exposed to the bloom. We wanted to know where people were on or around the lake and what they were doing. The UPCC did an amazing job compiling the data, which allowed us to get a broad picture of the scope of the bloom's impact.

EG:

We were able to learn how the water moves through the system—from the lake to the canals and into sprinkling systems for lawns and gardens. The net of exposures, based on the calls received by the UPCC, widened beyond what we thought would be the scope of the impact.

Jodi Gardberg, Manager of Standards and Technical Services Section, Division of Water Quality:

And the risks go beyond human exposure. Animals are even more susceptible than humans to algal blooms. Dogs wade in streams, and fish, birds, and livestock are affected as the water moves through the system.

As experts in gathering information about exposures, the UPCC has proven to be invaluable in helping both the State of Utah and the nation understand the health impacts of algal blooms.

Cindy Burnett, Epidemiologist, Utah Department of Health:

In June of 2016, the Centers for Disease Control and Prevention (CDC) launched the One Health Harmful Algal Bloom System, a voluntary reporting system designed to collect national data on human and animal cases of illnesses from harmful algal bloom exposures. The timing was fortuitous because the July algal bloom at Utah Lake had the highest number of exposure cases out of any algal bloom in the nation in 2016.

We know this because of the data collected by the UPCC. Without their work, collecting and reporting this exposure data to the CDC would have been impossible. The Utah Department of Health has such a strong relationship with the UPCC that we had their poison control specialists input caller data about the algal bloom exposures directly into our database, which goes straight to the CDC. The CDC then uses this data to develop strategies to prevent harmful algal bloom illnesses.





The Environmental Protection Agency is also pumping up their interest in algal blooms. There has always been a concern that the number of illnesses caused by algal blooms has gone underreported because people may not even realize that they have been exposed. The data collected by the UPCC is helping to address this concern.

CB:

On a state level, we were aware of many of the exposure risks and potential problems caused by algal blooms, but the data provided by the UPCC really brought it home, showing the broad-reaching effects the bloom had on people's health. Often, the health effects from a toxin come on slowly, so making quick decisions on issuing warnings or shutting down lakes are tough calls. Closing a lake has a huge impact on thousands of residents, farmers, and secondary water users. But, when we have real-time data from the UPCC showing us that people are experiencing ill effects, we know we need to act fast.

BH:

The data the UPCC provided on the Utah Lake algal bloom is helping to shape our response planning for future emergencies. Through the situation last July, we were able to get a glimpse of what would have happened if the lake hadn't been closed—how widespread the exposures would have been.

The data is also helping us to raise public awareness about exposure to algal blooms. The more people understand the health risks, the more they will report exposures. And the more data we can compile via the UPCC, the more resources we will be able to generate to help alleviate future emergencies.

IN 2016, THE UTAH POISON CONTROL CENTER HANDLED **45,564 CASES**

The Utah Poison Control Center (UPCC) manages an average of 125 cases per day. Some are from individuals seeking information about the proper use, storage, and precautions regarding drugs and chemicals. But most of the cases are from concerned Utahns and health professionals regarding a poison exposure.

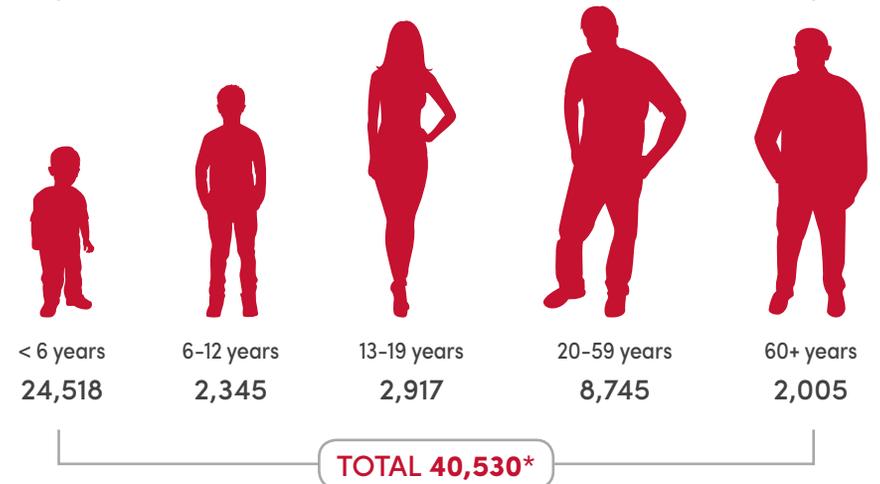
CASE BREAKDOWN

Exposure	Number	Percent
Human Exposures	41,508	91.1
Animal Exposures	859	1.9
Drug Information	976	2.1
Drug Identification	504	1.1
Poison Information	405	0.9
Environmental Information	350	0.8
Medical Information	136	0.3
Confirmed Non-Exposure	45	0.1
Other	781	1.7

AGE DISTRIBUTION

The danger of poison exposure is greatest among Utah's children. Children are naturally curious and orally explore their environment. This means that children less than age six (especially 12 months through two years) are particularly at risk for poison exposure.

POISON EXPOSURES



*This total number does not include the following human exposures:
 Unknown age: 199 | Unknown child: 165 | Unknown adult: 614

SUBSTANCE CATEGORIES

The types of substances involved in poison exposures include products available in the home, workplace, and the natural environment. Because children under six represent such a large proportion of poison exposures, it is important to note the substances most common in this group.

RANKING OF TOP 10 SUBSTANCE CATEGORIES

CHILDREN UNDER AGE SIX			
	TYPE OF SUBSTANCE	#	%
1.	Cosmetics and Personal Care Products	3,440	13.4%
2.	Household Cleaning Substances	3,214	12.5%
3.	Analgesics	2,701	10.5%
4.	Vitamins and Minerals	1,757	6.8%
5.	Foreign Bodies, Toys, Misc.	1,505	5.9%
6.	Topical Preparations	1,258	4.9%
7.	Dietary Supplements/Herbals/Homeopathic	1,111	4.3%
8.	Antihistamines	1,091	4.3%
9.	Gastrointestinal Preparations	698	2.7%
10.	Pesticides	686	2.7%

ALL AGES			
	TYPE OF SUBSTANCE	#	%
1.	Analgesics	5,696	11.8%
2.	Household Cleaning Substances	4,218	8.7%
3.	Cosmetics and Personal Care Products	4,014	8.3%
4.	Antidepressants	2,238	4.6%
5.	Vitamins and Minerals	2,199	4.6%
6.	Sedatives, Hypnotics, and Antipsychotics	2,091	4.3%
7.	Antihistamines	2,008	4.2%
8.	Dietary Supplements/Herbals/Homeopathic	1,980	4.1%
9.	Foreign Bodies, Toys, Misc.	1,902	3.9%
10.	Topical Preparations	1,465	3.0%

REASON FOR EXPOSURE

The majority of poison exposures reported to the Utah Poison Control Center (UPCC) were unintentional and involved children orally exploring their environment. 99% of exposures in children less than six years of age were unintentional compared to only 35% in the age group of 13-19 years. The majority of exposures in adults were unintentional (62%). Adult unintentional exposures involved therapeutic errors (taking the wrong dose or wrong medication) as well as eye and skin exposures to household chemicals, pesticides, and automotive products.

Reason for Exposure	Number	Percent
Unintentional General	23,568	56.8%
Therapeutic Error	4,588	11.1%
Unintentional Misuse	2,916	7.0%
Environmental	1,836	4.4%
Bite/Sting	555	1.3%
Food Poisoning	505	1.2%
Occupational	494	1.2%
Unintentional Unknown	32	0.1%
Total Unintentional	34,494	83.1%
Suicide	3,446	8.3%
Intentional Misuse	1,172	2.8%
Abuse	626	1.5%
Intentional Unknown	194	0.5%
Total Intentional	5,438	13.1%
Drug Reaction	667	1.6%
Food Reaction	93	0.2%
Other Reaction	116	0.3%
Total Adverse Reaction	876	2.1%
Tampering	299	0.7%
Malicious	151	0.4%
Withdrawal	62	0.1%
Total Other	512	1.2%
Unknown Reason	188	0.5%
TOTAL	41,508	100%

EXPOSURE **SITE**

The UPCC reports 41,508 poison exposures in 2016, the majority of which occurred in homes. Use of child-resistant closures and other safety precautions help, but even in the best safety-minded homes, the majority of exposures occur when the product is in use.

	Own Residence	35,932		86.6%
	Other Residence	2,097		5.0%
	Public Area	1,150		2.8%
	Workplace	630		1.5%
	School	301		0.7%
	Health Care Facility	127		0.3%
	Restaurant/Food Services	78		0.2%
	Unknown/Other	1,193		2.9%
TOTAL		41,508		100%

CUSTOMER SATISFACTION
GUARANTEED

99.8%

Rated the UPCC overall
as good or excellent

99.7%

Rated the specialists as good or excellent
in terms of courtesy, knowledge,
understanding, and helpfulness

99.8%

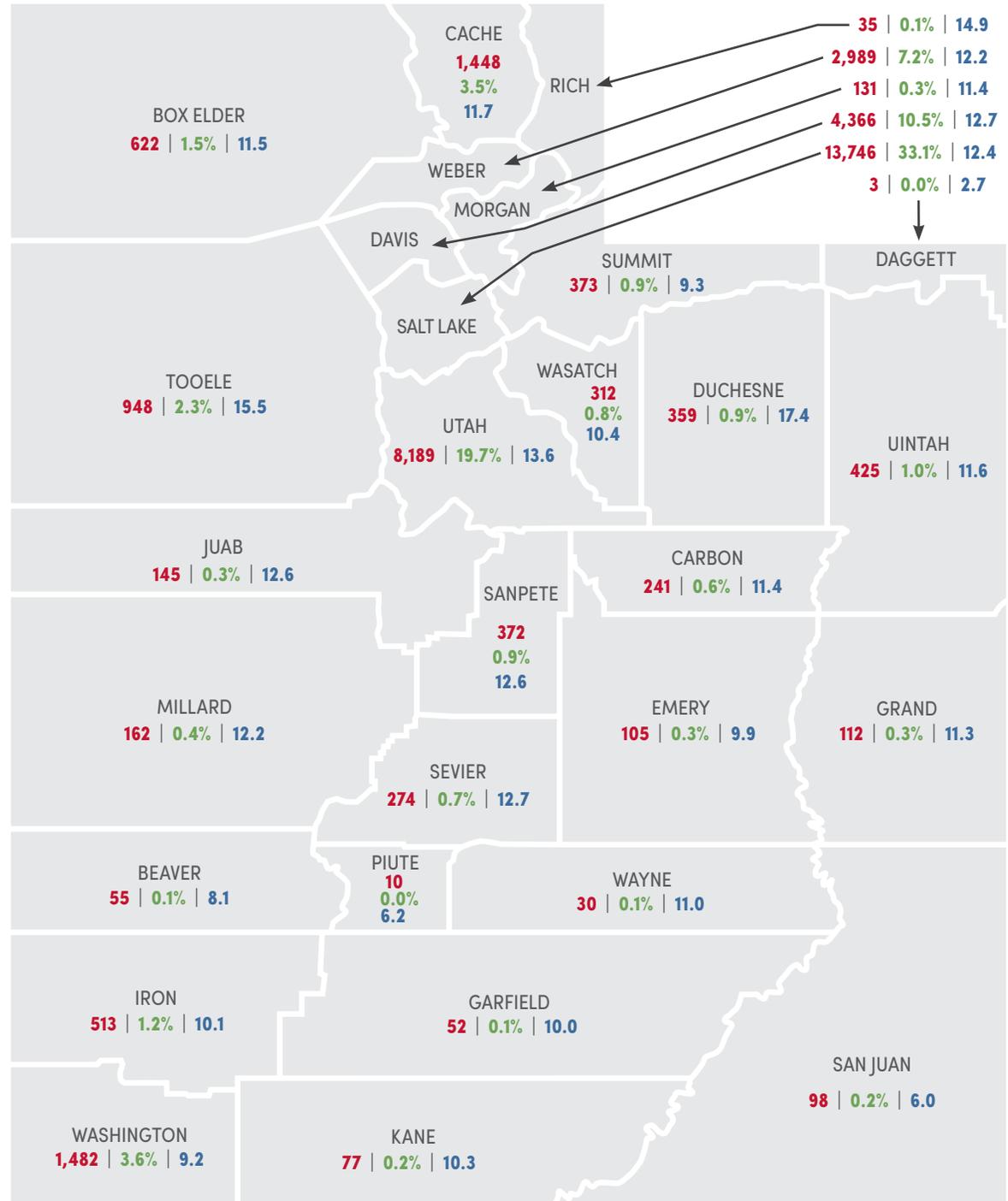
Will call the
UPCC again

COUNTY DISTRIBUTION

With **41,508** human exposure cases in 2016, poison exposures are clearly a statewide concern.

The poison center was consulted on cases that originated from all 29 counties. Penetrance is the rate of reporting based on the population of each county (rate is per 1,000 population). The Utah Poison Control Center's penetrance of 13.6 is more than twice the national average. The high utilization likely translates to more cost-effective, quality care for Utah residents.

- Human Exposures
- Percentage
- Penetrance



EXPOSURE MANAGEMENT AND TREATMENT

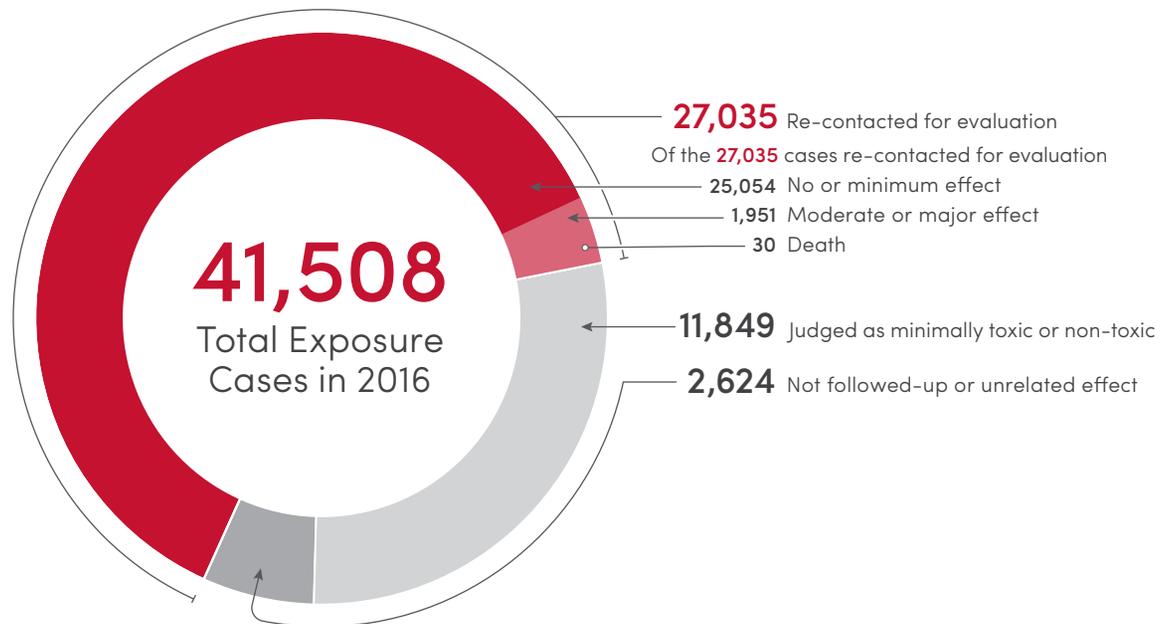
Due to the expertise and efficiency of the Utah Poison Control Center (UPCC) call center staff, the majority of poison exposures (76%) were managed on site with telephone follow-up. Children less than six years old are even more likely than older children or adults to be managed on site (91%). Treatment in a health care facility was provided in 21% of the exposures and recommended in another 1% of patients who refused the referral.

The UPCC was involved in the care of 8,827 poison exposures that were managed in a health care facility. The health care facilities included all acute care hospitals throughout the state as well as urgent care clinics and doctor's offices.

Breakdown of **8,827** cases managed in a health care facility

Management Site	Number	% of All Exposures
Treated and released from ED	5,139	12.4%
Admitted to a critical care unit	1,003	2.4%
Admitted to a non-critical care unit	1,002	2.4%
Lost to follow-up and/or left AMA	860	2.1%
Admitted to a psychiatric facility	823	2.0%
Total	8,827	21.3%

MEDICAL OUTCOME



PEACE OF MIND

I had knee surgery in August and was taking glucosamine every morning and 800 milligrams of ibuprofen, as needed. I was also taking the hormonal medications Provera® and Estrace® daily. One morning as I woke up, my knee was unusually painful and I took an ibuprofen right away and then went downstairs to eat so my stomach would not be empty. After breakfast, I went upstairs to take the rest of my medications. I took the two hormonal pills and as I emptied my daily pill container, the remaining two glucosamine tablets fell onto the counter. I picked them up and took them without a thought. A minute later I saw a glucosamine pill on the counter and suddenly remembered that I had left an ibuprofen tablet on the counter the morning before. With a bit of panic, I realized I just had picked up and swallowed the wrong pill. Instead of the glucosamine, I had taken a second ibuprofen, meaning I had just ingested 1600 milligrams.

I was not scared for my life or anything, but I didn't know how the mistaken drug combination would affect me. Should I go to work? Should I be driving? Maybe I should just lie down? Maybe I shouldn't? I do know that when you mix different amounts of drugs, it will affect your body in different ways—sometimes in bad ways.

I decided to call the Utah Poison Control Center. I figured they could tell me exactly what I should do. I'm not sure why I thought to call them, but I'm glad I did. I guess it's because when my kids were little, I used to have the poison control phone number posted where I could find it quickly if they got into something dangerous. I didn't have the number readily accessible, but I did a quick search and made the call.

The woman who answered the phone immediately calmed me down. I know that I could have researched my concerns online, but I wouldn't have received such a quick answer from an expert source. I have two sons in college studying medicine and they tell me all the time not to look up symptoms on the internet. It's too unreliable.

The poison center addressed my concern directly and told me exactly what I needed to do. They even followed up with a phone call the next day to make sure I was okay.

Some people may think that the poison center is only for parents with young kids. Older people may be hesitant to call, but I would call again in an instant. In fact, I have once again posted the poison center's phone number in a place where I can find it quickly.



A state poison center is vital to Utah. Having an expert resource to call and get an immediate answer can literally save lives. Or, as in my case, the center provided a peace of mind and helped me through my emergency.

Carol, Salt Lake City, Utah

THANK YOU

The Utah Poison Control Center (UPCC) is only as good as its staff and supporters. Fortunately, we have the best and brightest in both categories. A sincere thanks to the following:

Specialists In Poison Information

Kathleen T. Anderson, PharmD, CSPI*

Michael Q. Andrus, PharmD, CSPI*

Christian R. Clark, PharmD

Candice S. Colby, PharmD

Brad D. Dahl, PharmD, CSPI*

Mike L. Donnelly, RN, BSN, CSPI*

Paul M. Hinckley, PharmD

Amberly R. Johnson, PharmD, DABAT†

Brittani J. Petersen, PharmD

Taylor J. Rhien, PharmD

Cathie L. Smith, RN, BSN, CSPI*

Devin H. Stock, PharmD, CSPI*

John R. Stromness, BS, RPh, CSPI*

*CSPI denotes Certified Specialist in Poison Information

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Angela Cheung, BS

Ben T. Davies, BS

Jina Kim, BA

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Kaitlyn M. Brown, PharmD, SPI

Additional Medical Toxicology On-Call

E. Martin Caravati, MD, MPH, FACMT

Oregon Health and Sciences University Medical Toxicologists

† DABAT denotes Diplomate of American Board of Applied Toxicology

ADVISORY BOARD

A UPCC Advisory Board was established in 1998 and continues to represent the interests of the public, university, and state, and to provide fiscal oversight.

Chair

Lance D. Madigan, BA
Media Relations Manager
Intermountain Healthcare

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