

2010 ANNUAL REPORT



Utah Poison Control Center



UNIVERSITY OF UTAH
COLLEGE OF PHARMACY



“You hear plenty of talk about high health care costs, so I’m glad the Utah Poison Control Center is there for Utah families—and at no cost! I can’t thank them enough for being my son’s advocate when no one else was.”

—Andrea

EASY TO SWALLOW

One Saturday, Sammy, our three-year-old, was playing with a large bobby pin. Suddenly, he started gagging. Within seconds, he had swallowed it. Of course this happened on the July 24th weekend, so I immediately thought to call the Utah Poison Control Center because I knew no one else would be open on the holiday.

The woman at poison control immediately calmed me down and recommended that I take Sammy to the emergency room to make sure the pin made it to his stomach and was not stuck somewhere in his throat. X-rays confirmed that the bobby pin was in Sammy's stomach. The doctor assured me it would pass in a couple of days. The poison control center called me two days later to check up on Sammy. I really appreciated their concern, and told them the pin hadn't made its way out, yet. They told me not to worry and to keep watching for a couple more days.

When the center called again, the pin still hadn't come out. They suggested I get another X-ray to find the location of the pin. I called the doctor to get his opinion, but he said that I probably just missed it and that it should be out of Sammy by now. I wasn't sure what to think, but poison control insisted that Sammy get another X-ray. We decided to heed that advice and sure enough, the pin was still inside him. The doctor gave us three days for it to pass or Sammy would have to go into surgery and have the pin removed. On the morning of the surgery, the pin came out.

Without the follow up calls and persistence of the poison center, I'm not sure what would have happened. Everyone else thought Sammy was fine. After the initial worries, we all kind of dismissed it, including the doctor. The pin was inside Sammy for a full two weeks. The Utah Poison Control Center was my advocate when they didn't have to be. They went above and beyond to make sure the situation was resolved.



ACTUAL SIZE

—Andrea

A MESSAGE FROM THE DIRECTOR

The phone rings. *It's a panic stricken mother whose son has just gotten into the medicine in her purse.*

The phone rings. *It's a state agency looking to collaborate on an "all hazards" emergency preparedness program.*

The phone rings. *It's an emergency department physician wanting assistance in the management of a complicated overdose patient.*

The phone rings. *It's a 911 dispatcher who is transferring a poisoning call to a specialist who can safely manage the patient without need for emergency medical services.*

The phone rings. *It's a principal who wants to provide poison prevention education training to all teachers in his or her school.*

Many people ask me to describe the typical day at the Utah Poison Control Center (UPCC), but the truth of the matter is—there is no typical day. Every time the phone rings, the center's highly talented and dedicated staff may be required to move in many different directions to serve Utah citizens.

First and foremost, the UPCC provides immediate evaluation and treatment recommendations for poison exposures, often for Utah's most vulnerable population, children under six-years-old. In addition to being a 24/7 resource for Utah families, the UPCC collaborates with multiple state agencies, providing expertise and guidance on issues ranging from pesticides to the disposal of unused medicines to accidents involving hazardous materials, and much more.

The UPCC works closely with hospitals, pediatricians, and emergency department doctors to answer questions and provide treatment recommendations based on the staff's expertise in clinical toxicology and the center's extensive resources on poisons.

Of course, the UPCC doesn't just sit around waiting for the phone to ring. The center is proactive in working with educators, state legislators, and community groups on dozens of issues involving poison prevention and protection for consumers. These efforts include developing customized training programs and presentations that help citizens across the state, from inner cities to remote rural areas. This is in addition to the over 50,000 calls handled annually by specialists in poison information.

In 2010, UPCC staff were involved in the development and delivery of training for Utah's prehospital providers throughout the state and the presentation of 10 research abstracts at national and international meetings. UPCC staff provided expertise and counsel to local, state and national organizations on a variety of issues including the next generation of telecommunications. We thank all the residents of Utah for the tremendous ongoing support so that every time the phone rings, the UPCC is prepared to answer the call.

—Barbara Insley Crouch, PharmD, MSPH



SAFETY FOR UTAH CITIZENS

A PROUD LEGACY

Did you know that the Utah Poison Control Center was one of the first poison centers established in the United States? Established in 1954, the UPCC has responded to over 1.4 million calls for assistance. The UPCC is nationally recognized as a certified regional poison control center by the American Association of Poison Control Centers (AAPCC), a status that was re-confirmed in 2009. Our proud legacy extends far. We were one of the first poison centers to achieve national accreditation status and have provided unwavering support and assistance for Utahns ever since.

MISSION

The mission of the UPCC is to prevent and minimize adverse health effects from a poison exposure through education, service, and research.

WHO WE SERVE

- The UPCC serves the entire state of Utah.
- Access to the UPCC is possible through a nationwide toll-free number: 1-800-222-1222 that routes callers in Utah to the Utah Poison Control Center.
- We provide service to the hearing impaired and individuals with limited or no English proficiency.
- While the majority of calls are from the general public, we are proud to serve Utah's healthcare professionals, pre-hospital providers, public health officials and law enforcement.

WHAT WE DO

- Instantly access information on over one million products to quickly assess poisoning risks.
- Efficiently and effectively triage poisoning exposures and refer the more critical cases to healthcare facilities for treatment. However, in the process, managed 78% of poison exposures at the site of the call in 2010.
- Foster and expand collaborative relationships with public health, pre-hospital and health care entities.
- Provide world-class customer service to all stakeholders.
- Utah's exclusive provider for poison information, clinical toxicology consultation and poison prevention education.

ACCREDITED BY THE AAPCC

Accreditation from the AAPCC means the UPCC meets high quality standards including:

- The infrastructure and resources to respond to calls 24-hours-a-day, 365 days a year.
- A comprehensive quality management program that ensures high quality patient care and high standards for patient safety.
- Appropriately qualified personnel to provide telephone consultation.
- Public and professional education programs.
- Collaboration with federal, state, and local public health entities to plan and manage resources and establish priorities, assistance in recognizing and reporting disease outbreaks, evaluation and implementation of prevention measures, and identification of trends in poisoning and emerging public health threats.

SPECIAL SERVICES

- Language line – immediate access to interpreters fluent in over 150 languages.
- HazMat – information and assistance on health hazards of toxic chemicals are provided to on-scene personnel during a spill or disaster.
- Public health surveillance – identify sentinel events and interface with public health authorities for situations including food poisoning, drug tampering, adverse drug reactions, and other public health threats
- Specialized training – develop toxicology specific training for allied health professionals in areas such as general poisoning awareness, hazardous materials response, pesticides.

SPECIALISTS IN POISON INFORMATION

The UPCC is staffed 24 hours a day with registered pharmacists, nurses, and physicians with additional training in clinical toxicology. Specialists in poison information undergo a minimum of 12 weeks of toxicology training prior to independently answering poison exposure calls. After working at least one year at the center and handling 2,000 exposure calls, staff members are required to pass the Specialists in Poison Information Proficiency Examination to become a certified specialist in poison information.

TOXICOLOGY EXPERTS

The UPCC has two board certified toxicologists. The medical director is a fellow of the American College of Medical Toxicology and the director is a diplomat of the American Board of Applied Toxicology.



“The Utah Poison Control Center is a valuable partner in our education training workshops for licensed pesticide applicators. They travel, at no cost, to multiple presentations across the state. It’s one of the highlights of the program to have their personnel get important information out to the public in a very educational and entertaining manner.”

—Clark Burgess

INDISPENSIBLE TO SAVING LIVES

As a pesticide program manager for the state of Utah, my duty is much the same as the Utah Poison Control Center—to protect the public. In the last few years, we've had several incidents involving deaths of individuals that have resulted in a higher sense of awareness of the hazards of pesticides used improperly.

This past year there was a high profile case involving pesticides and the death of two little girls in Layton. In this case, as with many others, we worked closely with the Utah Poison Control Center. The poison center provides us with a high level of expertise and professionalism that really helps us in our investigations about the potential misuse of pesticides.

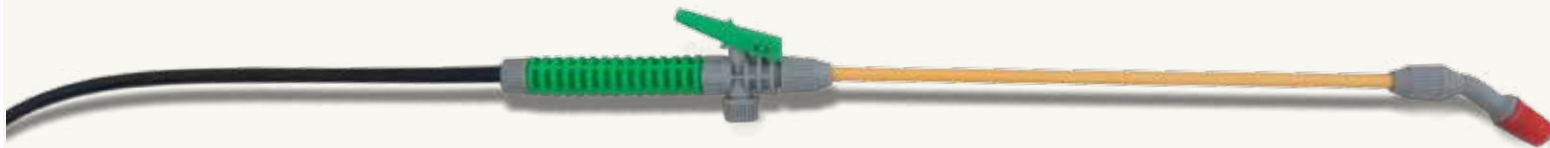
With the case in Layton, we had to determine what violations of federal, state, and local regulations, if any, occurred. I immediately called the poison center to find out what symptoms the girls were exhibiting. It was vital to know if the pesticide that had been administered around the house

was a product that could cause the reactions the girls were experiencing. There was some debate as to whether the pesticide was the cause of the reaction, so I needed to understand the toxicity of the product and if the symptoms matched an exposure to the chemicals in the pesticide.

When I call the poison center, I know I am going to get a quick response and knowledgeable information. Different state agencies rely on each other to support their programs. The relationships are important. Other states and federal agencies really admire Utah for the cooperative nature of the multiple agencies. Both the poison center and the pesticide division believe in getting things right. We want to help each other as much as possible. The Utah Poison Control Center is committed to helping protect Utah citizens on a very professional level—they are indispensable to saving lives!

—Clark Burgess

State Pesticide Program Manager



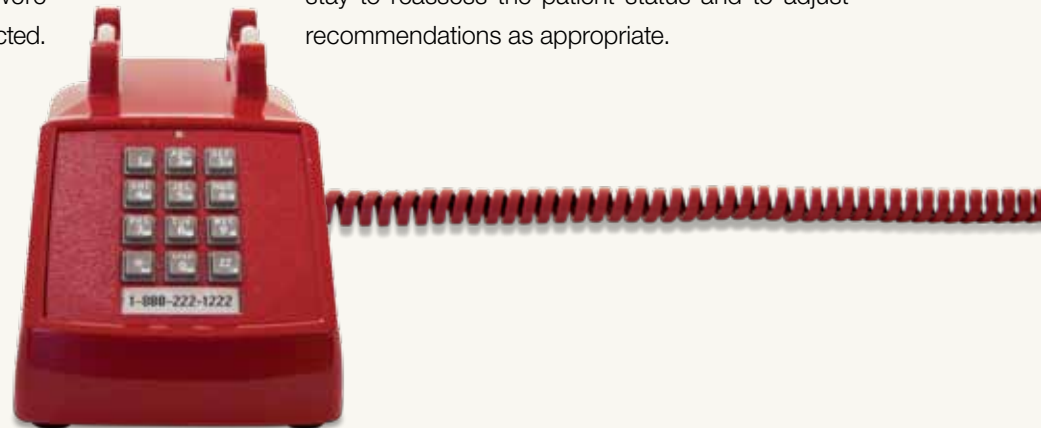
CALLING THE UTAH POISON CONTROL CENTER

The Utah Poison Control Center is an emergency service. The goal is to respond efficiently and effectively to each call for assistance. Every call is free and confidential. For each call received, the specialist rapidly takes a poisoning history. Based on the history of the exposure, circumstances of the exposure, and the known toxicity of the poison, a determination is made whether the situation can be safely managed on-site or whether the situation requires prompt medical attention.

In the majority of cases, the situation can be safely managed on-site with telephone follow-up. Specialists will follow many cases to ensure that first aid instructions were understood and the situation is resolving as expected.

If medical attention is needed, the specialist determines whether the patient should be transported via emergency medical services. The specialist calls the hospital and provides treatment recommendations to the health care professionals caring for the patient.

When consulted by health professionals, specialists take the same poison history and provide treatment recommendations to clinicians based on the patient history, circumstances of the exposure, and the known toxicity of the agent(s). Cases are followed throughout the hospital stay to reassess the patient status and to adjust recommendations as appropriate.



PROCESS OF A CALL

If someone has tasted, touched, or breathed something that may hurt them, call **1-800-222-1222** immediately.

Your call receives immediate attention. Tell the specialist what happened as best you can. Please be ready to provide the following information:

- **How the person is doing.**
- **Exact name of the product.**
- **Amount taken.**
- **When the poisoning happened.**
- **What treatment has already been provided.**
- **The age, weight, and general state of health of the poisoned person.**
- **Phone number where you can be reached.**



BIG NUMBERS

98.9%

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

99.2%

Rated the UPCC overall as good or excellent.

99.5%

Will call the UPCC again.



A TREMENDOUS VALUE

The Utah Poison Control Center provides tremendous value to Utah health care facilities in many ways, such as:

- Helps to decrease crowding in emergency departments.
- Minimizes needless EMS ambulance runs.
- Frees critical emergency medical staff to be able to handle true emergencies.
- Saves hospitals and health care institutions the costs of providing indigent care.



SAVING LIVES AND SAVING MONEY

Poison centers provide accessible and affordable health care. The Utah Poison Control Center's specialists in poison information assess, triage, manage, and continually monitor patients with a poison exposure at no direct charge to the patient, practitioner or health care institution. Poison centers save health care dollars by managing most poison exposures at home with telephone follow-up.

Utah Poison Control Center surveys have documented that up to 76% of callers to the poison center would seek treatment in an emergency department, urgent care clinic or doctor's office if the poison center were not available. The poison center helps to avoid these unnecessary health care costs, providing a substantial savings to participants across the entire health care spectrum. This cost savings benefits individuals – whether they have insurance or not; insurance companies;

and the government, which funds a significant portion of health care in the United States.

Poison centers also help reduce overall health care costs even when treatment in a hospital is necessary. When hospitalization is necessary, consultation with a poison center can significantly decrease the patient's length of stay by the more effective use of laboratory testing, more efficient use of antidotes, and appropriate monitoring practices.

In one study, patients managed with poison center assistance cut their average length of hospitalization from 6.5 days to 3.5 days, resulting in further savings of more than \$2,100 per patient. The annual cost savings attributable to poison center support for inpatient care of poisoned patients is more than 9 times greater than the total cost of running all American poison centers.

GETTING OUT THE MESSAGE

An important part of the Utah Poison Control Center's (UPCC) mission is education. Through education, the UPCC empowers Utah residents with information necessary to implement poison prevention strategies. Primary prevention efforts focus on how to prevent poisonings and secondary prevention efforts focus on raising awareness about the services of the poison control center. The UPCC's outreach efforts reach a broad audience and include caretakers of small children and Utah's underserved and high-risk populations. Education efforts include a variety of methods; such as presentations to diverse audiences, one-on-one education at health fairs, printed brochures, and electronic newsletters. The UPCC education efforts are provided by UPCC staff, pharmacy students, and through community safety advocates.

Major outreach accomplishments in 2010 include:

- Collaborated closely with three rural health departments to provide poison prevention education in outlying communities.
- Launched a new Spanish version of our Emergency Action Card.
- Partnered with state and local agencies to support the national drug take-back event sponsored by the Drug Enforcement Administration.
- Developed and delivered toxicology training to emergency medical service providers statewide.
- Developed and delivered continuing education for pharmacists.

The UPCC's website, www.utahpoisoncontrol.org, has sections targeting health professionals, educators, parents, the media, and a searchable poisonous plant database.

Also available on the website:

- Access to poison prevention lesson plans for specific audiences.
- Download activity sheets for children.
- Sign up for newsletters.
- Access information on ordering educational materials.



EDUCATION MATERIALS

Printed materials are available in English, Spanish, Chinese, and Vietnamese. All materials are available at no cost. An order form is available on our website.



Each moment of learning provides an opportunity to prevent a poisoning incident.

REDUCING THE BURDEN OF POISONING THROUGH EDUCATION

The UPCC utilizes many partners throughout the state to provide outreach education to all 29 counties. A Train-the-Trainer program has allowed the UPCC to train safety advocates in Utah's 12 health districts. In 2009, the UPCC forged a formal relationship with two rural health districts to enhance outreach education efforts. Due to the incredible success, one more health district was added in 2010.

A variety of educational programs are available for download for our safety advocates including programs for caregivers of children, pre-school and elementary students, middle school children and seniors. Education programs include complete lesson plans with activities, worksheets, and presentation slides.

The Poison Antidote, an electronic newsletter available to all Utahns, highlights timely poisoning topics and is published three times a year. Topics covered in 2010 included: Plant and food poisoning, household cleaner safety, pediatric ED poison visits. This newsletter is available at www.utahpoisoncontrol.org.

The UPCC uses a variety of media to communicate vital information through television, radio, social media, and print news outlets. In 2010, the UPCC staff were featured in 77 news stories.

PROFESSIONAL EDUCATION

The UPCC participates in education of health professionals and health professional students throughout the state. As a program of the College of Pharmacy, University of Utah, the UPCC plays a pivotal role in the training of future pharmacists in the classroom and by providing a rich experiential learning setting. As a member of the University of Utah Health Sciences, the UPCC staff also plays a key role in the training of emergency medicine residents and pediatric emergency medicine fellows as well as participates in the training of a variety of health professional undergraduate and graduate students.

Professional Education is comprised of three main components:

1. Continuing education for staff – monthly CE sessions on current toxicology topic.
2. Toxicology training for U of U School of Medicine and College of Pharmacy – pharmacy and medical students, emergency medicine residents, and pediatric emergency medicine fellows.
3. Off-site education – presentations for community healthcare professionals.

In 2010, UPCC staff logged a total of 4,120 contact hours with doctor of pharmacy students and residents as well as 30 contact weeks with emergency medicine residents and fellows.

A newsletter “*Toxicology Today*” provides health professionals throughout the state access to timely clinical toxicology topics. UPCC education staff also teach an elective class to pharmacy students entitled “Outreach Poison Prevention Education” where students participate in community education activities. Since its initial offering in 2002, 191 students have taken the elective providing over 2,977 outreach education hours in a variety of community setting.

- In Utah, 72% of individuals prescribed prescription pain medicine had leftover medication, increasing the potential for misuse, abuse, unintentional poisoning, and environmental contamination.
- Since 2005, unintentional poisoning in Utah has surpassed motor vehicle crashes as the number one cause of unintentional injury deaths.
- Encourage safe use, safe storage, and safe disposal of all medicines. See www.useonlyasdirected.org for more information.
- The abuse of prescription painkillers among teens now ranks second-only to marijuana-as the nations' most prevalent illegal drug problem.

2010 Annual Report, Utah Division of Substance Abuse and Mental Health





"I want to say thanks to the Utah Poison Control Center for telling me what the plant could do to me, and for making me feel better by telling me the marks on my face were going to get better."

—Layla

THE NOT-SO-GREAT OUTDOORS

Layla: One day after school, I was playing in our front yard. A friend had told me about a plant that has this milky white stuff inside, so I found the plant and ripped it open.

Beth: The plant squirted sap onto her face and immediately her left eye started watering. She came inside and I washed her eye out. Then her nose started stinging. Dana and I thought it was an allergic reaction, so we gave her some Benedryl and figured it would go away. But in the morning, everything was much worse. Layla had spots and blisters that looked like burn marks everywhere the sap had touched her face. It looked like someone had thrown acid at her.

Dana: We took Layla to her pediatrician, Dr. Cox. She thought that Layla might have been exposed to a Euphorbia plant also known as Donkey's Tail. She told us to go home and get a sample of the plant and bring it to the Utah Poison Control Center for identification.

The poison center identified the plant immediately. I figured they would have to look it up and that we wouldn't get

any real answers for a few days, but it was instantaneous. My biggest fear was that no one would know what to do, but the poison center knew exactly how to take care of the problem and communicated treatment recommendations to Layla's doctor. The center even knew the history of the plant and how it got to Utah. Turns out, Euphorbia is much more potent than a chili pepper.

Beth: Before we went to the poison center, I had started to panic that the blistering would just continue to get worse and worse. The Utah Poison Control Center helped alleviate our fears. Through their knowledge, we learned that Layla's condition was as bad as it was going to get and they knew what needed to happen so that Layla could start to heal.

Dana: After a week or two when she was feeling better, Layla did a report for her class on Donkey's Tail and advised kids to avoid this dangerous plant at all costs.

—Layla, Beth, and Dana

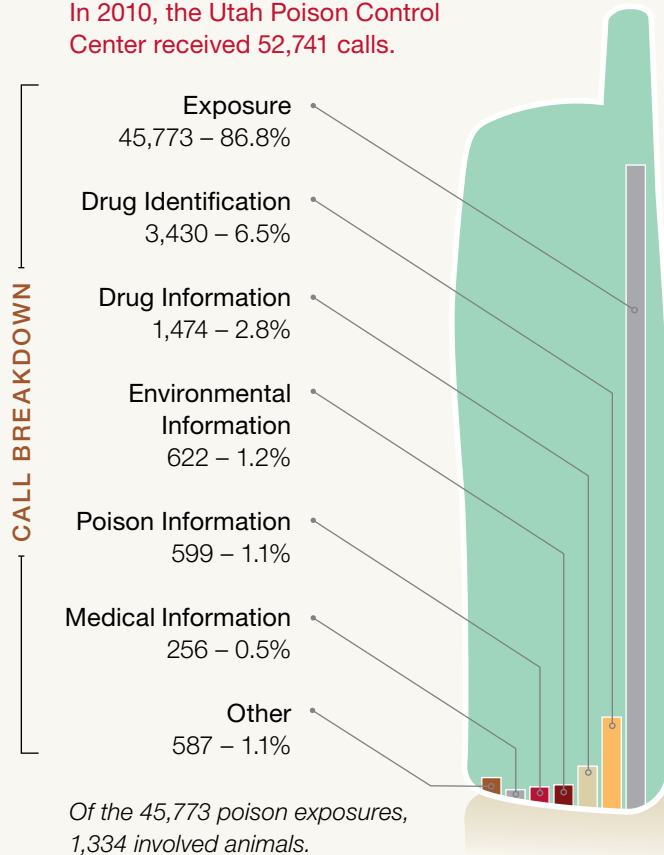
See the pediatrician's story on pg. 16.



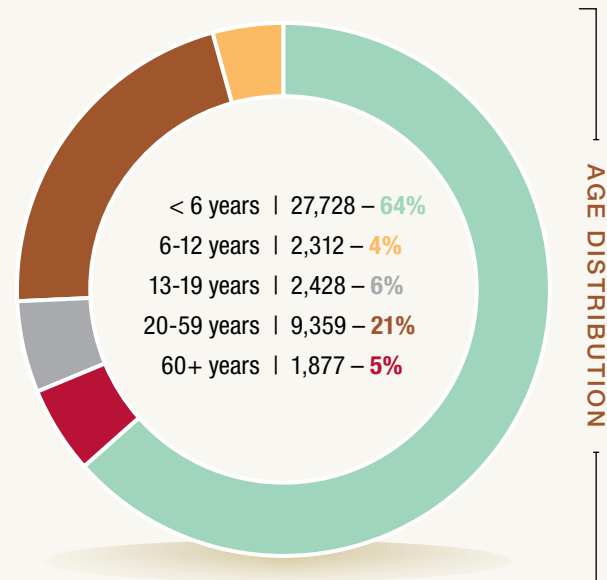
2010 HIGHLIGHTS & STATISTICS

The Utah Poison Control Center receives an average of 145 calls per day. Some are from callers seeking information about the proper use, storage, and precautions regarding drugs and chemicals, but most of the calls are from concerned Utahns and health professionals regarding a poison exposure.

In 2010, the Utah Poison Control Center received 52,741 calls.



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 six (especially 12 months through two years) are particularly at risk for poison exposure.



**This method does not include the following human exposures:
 unknown age: 61 | unknown child: 50 | unknown adult: 624

SUBSTANCE CATEGORIES

The types of substances involved in poison exposures are comprised of products available in the home, workplace, and the environment.

Because children under six represent such a large percentage of poison exposures, it is important to note which substances are most common in exposures in this group.

ALL AGES

TOP 10 SUBSTANCES

CHILDREN UNDER SIX

TYPE OF SUBSTANCE	# of Calls	Percentage		Percentage	# of Calls	TYPE OF SUBSTANCE
Analgesics	6,167	12.2%	01	12.6%	3,657	Cosmetics & Personal Care Products
Household Cleaning Substances	4,304	8.5%	02	11.4%	3,318	Household Cleaning Substances
Cosmetics and Personal Care Products	4,178	8.3%	03	10.8%	3,138	Analgesics
Vitamins and Minerals	2,507	5.0%	04	7.1%	2,049	Vitamins and Minerals
Topical Preparations	2,287	4.5%	05	6.7%	1,954	Topical Preparations
Sedatives, Hypnotics and Antipsychotics	2,282	4.5%	06	5.7%	1,645	Foreign Bodies, Toys, Misc.
Foreign Bodies, Toys, Misc.	2,075	4.1%	07	3.5%	1,007	Gastrointestinal Preparations
Antihistamines	1,685	3.3%	08	3.3%	968	Antihistamines
Cold and Cough Preparations	1,581	3.1%	09	3.0%	870	Cold and Cough Preparations
Antidepressants	1,568	3.1%	10	3.0%	863	Pesticides

A DOCTOR'S POINT OF VIEW

I have always referred phone calls to the Utah Poison Control Center. In fact, when my kids were little, I had to call them a couple of times. I've always been impressed by their responsiveness and the fact that they never fail to follow up. So when Layla came in with her parents, I immediately thought it was best to get the poison center involved.

The family had figured out the blisters on Layla's face were related to a plant exposure. I immediately was concerned because my mother-in-law had an incident with a Euphorbia plant some 20 years ago where she had gotten sap in both eyes and was taken to the ER. The doctor there gave her a quick irrigation and was going to send her home. Luckily, my husband had the foresight to bring the plant. He took the plant to the poison control center, where they identified the plant as Euphorbia and knew the sap could be extremely damaging to my mother-in-law's vision and even cause blindness. Because of the center's knowledge about the dangers of the plant, my mother-in-law was sent to an ophthalmologist and was treated for weeks.

This incident with my mother-in-law made me cautious with Layla as she, too, had gotten some of the plant's sap in her eye. I wanted to make sure that we were dealing with an exposure to Euphorbia, so I recommended that Layla's parents take the plant to the Utah Poison Control Center.

The center instantly identified the plant as Euphorbia and then helped to calm Layla and her parents. They also immediately consulted with me on the best course of action, which was to treat the burns on Layla's face with topical creams and have her visit an eye specialist to make sure there wasn't long-term damage done to her eyes.

The poison control center helps people get immediate access to accurate information regarding exposures of any kind. It helps me in my practice by saving me time. If I needed to track down exposure information on my own, there would be delays in treatment. I also know the poison center cares deeply about the cases they are involved with, and in Layla's case, they really went above and beyond to help.

—Dr. Jennifer Cox, Pediatrician



"The Utah Poison Control Center is a great resource for the community. I recently discovered their website and it's just terrific. It's so helpful for people looking for information about exposures that I set a link to it from my Facebook page."

—Dr. Jennifer Cox

EXPOSURE SITE

The majority of poison exposures occur in the home. Use of child-resistant closures and other safety precautions help, but even in the best poison-proofed homes, exposures occur because the majority of exposures occur when the product is in use.

TOTAL HUMAN EXPOSURES – 44,439

Own Residence	Other Residence	Workplace	Public Area	School	Health Care Facility	Restaurant/ Food Service	Unknown/ Other
39,354	2,489	744	606	221	133	118	774
88.6%	5.6%	1.7%	1.3%	0.5%	0.3%	0.2%	1.8%

REASON FOR EXPOSURE

The majority of poison exposures reported to the Utah Poison Control Center were unintentional and involved children orally exploring their environment. Ninety-nine percent of exposures in children less than six years of age were unintentional compared to only 39% in the age group of 13-19 years. The majority of exposures in adults were unintentional (61%). Adult unintentional exposures involved therapeutic errors (taking the wrong dose or wrong medication) as well as ocular and dermal exposures to household chemicals, pesticides and automotive products.

UNINTENTIONAL	Unintentional General	26,688	60.06%
	Therapeutic Error	4,422	9.95%
	Unintentional Misuse	2,893	6.51%
	Environmental	1,376	3.10%
	Bite/Sting	903	2.03%
	Occupational	627	1.41%
	Food Poisoning	545	1.23%
	Unintentional Unknown	17	0.04%
Total Unintentional	37,471	84.33%	
INTENTIONAL	Suicide Intentional	2,619	5.89%
	Intentional Misuse	1,435	3.23%
	Abuse	959	2.16%
	Unknown	82	0.18%
Total Intentional	5,095	11.46%	
REACTION	Drug Reaction	853	1.92%
	Food Reaction	135	0.30%
	Other Reaction	129	0.29%
	Total Adverse Reaction	1,117	2.51%
OTHER	Tampering	323	0.73%
	Malicious	174	0.39%
	Withdrawal	42	0.09%
	Total Other	539	1.21%
Unknown Reason	217	0.49%	
Total	44,439	100%	

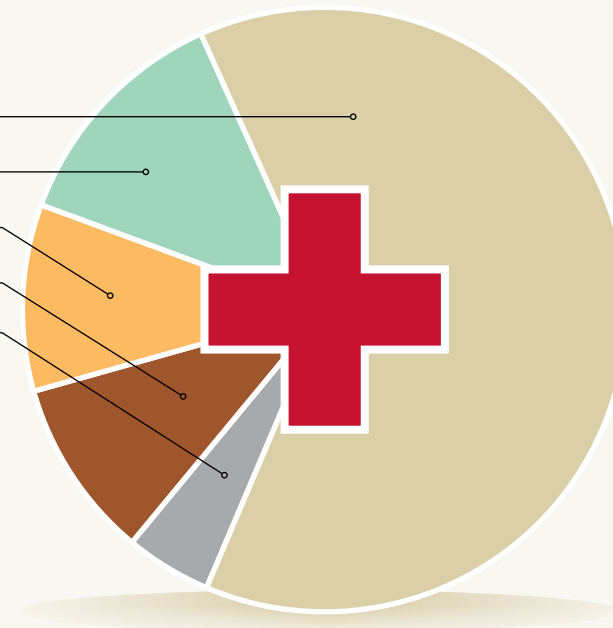
EXPOSURE MANAGEMENT AND TREATMENT

Due to the expertise and efficiency of the UPCC call center, the majority of poison exposures (78%) 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 (90%). Treatment in a health care facility was provided in 19% of the exposures and recommended in another 2% of patients who refused the referral.

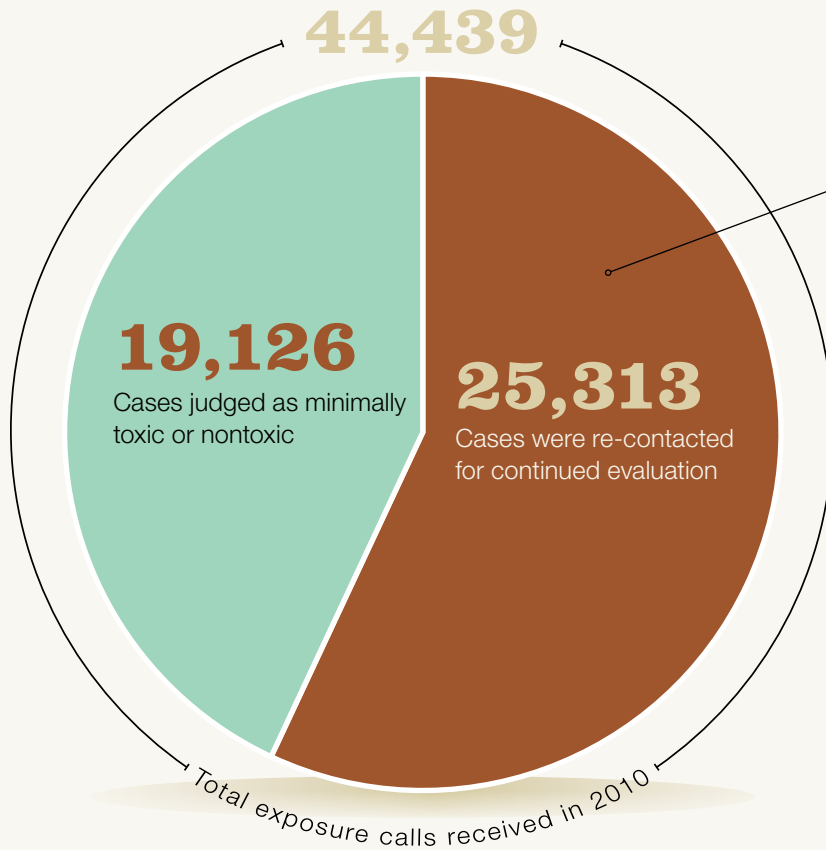
The UPCC was involved in the care of more than 8,400 poison exposures cases that were managed in a health care facility. The health care facilities include all acute care hospitals throughout the state as well as urgent care clinics and doctor's offices.

BREAKDOWN OF THE 8,448 CASES MANAGED IN A HEALTH CARE FACILITY

Treated and released from emergency department	5,331
Lost to follow-up and/or left against medical advice	1,069
Admitted to a non-critical care unit	844
Admitted to a critical care unit	814
Admitted to psychiatric facility	390
Total	8,448



MEDICAL OUTCOME



Of these **25,313** cases:

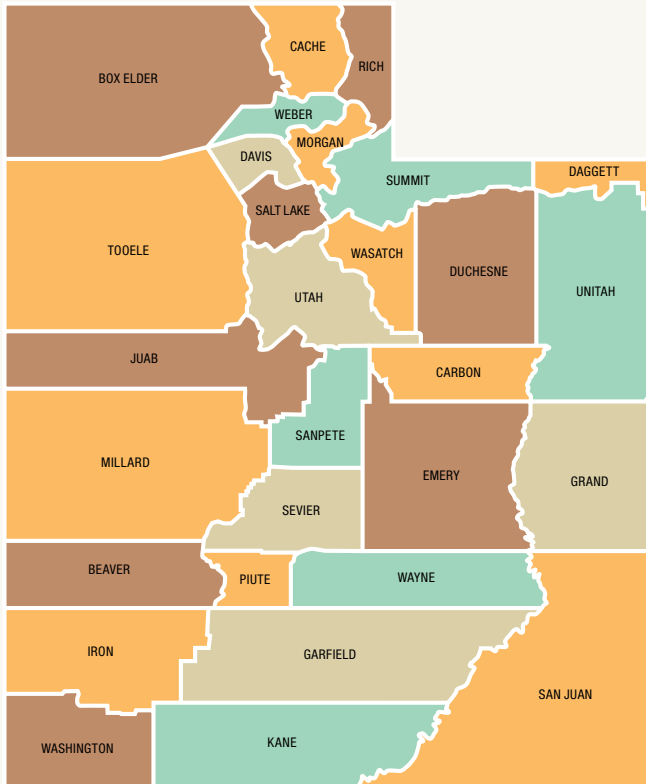
- 23,478 had minimal or no effect
- 1,809 had a moderate to major effect that usually required treatment in a health care facility
- 26 resulted in death, 10 of these were reported by the state medical examiner or law enforcement

A small percentage of cases were judged potentially toxic, but lost to follow up due to inaccurate contact information.

COUNTY DISTRIBUTION

Poison exposure is a statewide concern. Human exposure calls originated in all 29 Utah counties as shown in the table to the right. Penetrance is the rate of reporting based on the population of each county (rate is per 1,000 population).

The UPCC's penetrance of 15.9 is nearly double the national average. This means that Utah has a high awareness of the poison center, thus affording more cost-effective, quality care for Utah residents.



County	Human Exposures	Percent of Calls	Penetrance
Beaver	69	0.2%	10.5
Box Elder	710	1.6%	14.4
Cache	1,756	4.0%	15.4
Carbon	322	0.7%	16.3
Daggett	11	0.0%	11.1
Davis	4,972	11.2%	16.2
Duchesne	480	1.1%	27.6
Emery	179	0.4%	16.5
Garfield	67	0.2%	13.0
Grand	94	0.2%	9.9
Iron	574	1.3%	12.3
Juab	181	0.4%	17.8
Kane	83	0.2%	12.3
Millard	203	0.5%	14.8
Morgan	127	0.3%	12.8
Piute	112	0.0%	8.1
Rich	42	0.1%	18.0
Salt Lake	15,387	34.6%	14.8
San Juan	136	0.3%	8.7
Sanpete	398	0.9%	14.4
Sevier	296	0.7%	14.2
Summit	412	0.9%	10.2
Tooele	1,030	2.3%	17.4
Uintah	539	1.2%	17.2
Utah	9,005	20.3%	16.9
Wasatch	300	0.7%	12.8
Washington	1,760	4.0%	12.1
Wayne	25	0.1%	9.3
Weber	3,386	7.6%	14.9
Out of State	1,883	4.2%	-
Total	44,439	100%	15.9



"I can't thank the Utah Poison Control Center enough. I'm a nurse, so I'm supposed to know what to do in an emergency, but in this case I didn't. I am so glad I thought to call the poison center. They have specialized knowledge and resources when it comes to poisons to give the best possible advice."

—Beverly

THANKFUL FOR UTAH POISON CONTROL

My husband, Gary, was planning an extended trip to South Africa, so he needed to be immunized for malaria, hepatitis, and typhoid. For the typhoid immunization, Gary was supposed to take a series of four capsules, the first of which he took the night before Thanksgiving. The next morning, he woke up short of breath. I felt it might be serious, so I said we'd better get the turkey in the oven quick. As the day progressed, Gary wasn't getting any better, so I finally took him to the emergency room.

Seeing a 64-year-old man come into the emergency room complaining of shortness of breath, the doctor immediately thought Gary must be having cardiac or respiratory problems. She conducted a battery of tests, but Gary's heart and lungs seemed fine. Finally, the doctor asked if there had been anything different in Gary's routine. He said he had just been immunized for typhoid. The doctor told us that one possible side effect of taking the typhoid capsules is shortness of breath.

We went home thinking Gary would be okay and tried to enjoy Thanksgiving dinner. Later that night, Gary got deathly sick with a headache and fever. I started to wonder if he was poisoned by

the typhoid medicine. The word, "poison" stuck in my brain and suddenly I knew I needed to call the Utah Poison Control Center.

I've been a nurse for 42 years, so I don't panic. But at that moment, I was at the end of my wits. The woman at the poison control center seemed as concerned as me and really listened. After hearing the details, she and her colleagues decided that Gary's condition was either an adverse reaction to the typhoid capsule, which was a problem because he had three more capsules to go, or that his immune system was having a strong reaction to the capsule, which was good because it was his body's way to build resistance to typhoid. The woman at the center was so empathetic and full of knowledge. She gave us the information and said we'd have to decide if Gary should continue with the immunization capsules. She assured me that she would follow up, so I knew that the poison center was going to be there for us, which was very comforting.

In the morning, Gary felt fine. He knew he didn't want to get typhoid in South Africa, so he decided to take the second capsule and follow the immunization schedule. Everything worked out just fine and Gary didn't get sick again.

—Beverly

THANK YOU

The Utah Poison Control Center 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:

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