

# UTAH POISON CONTROL CENTER

COLLEGE OF PHARMACY L.S. SKAGGS PHARMACY INSTITUTE

# **2019**ANNUAL REPORT





It's such a relief to know I can call someone and immediately get the answers I need, instead of having to call a doctor and wait for two hours for a response. -Lezley

Utah mother and caller



The UPCC has continued to evolve. There's a much greater focus on education and prevention now that we didn't have the resources or ability to focus on back in the beginning.

> —Anthony Temple Board Member, Utah Poison Control Center



I never felt like I was just another call. I could tell my situation was important to them. --Emily

Utah citizen and caller



Everybody at the poison center is really smart, the best of the best. But more than that, everyone is so invested in the work they're doing and they really care about the people that they help.

> —Amber Johnson Director, Utah Poison Control Center



The UPCC saves the community a lot more than they realize. As nurses, we rely on them all the time to help us provide the best possible care to our patients.

> —Michelle McCain Nurse, Emergency Department, Ogden Regional Medical Center



The UPCC gave me step-by-step instructions for how to care for the patient and we followed those recommendations exactly.

> —Mallory McLean Nurse, Emergency Department, Ogden Regional Medical Center

# MESSAGE FROM THE **DIRECTOR**



Happy Anniversary Utah Poison Control Center (UPCC)! The UPCC celebrated its 65th anniversary in 2019—only the second poison center to achieve this monumental milestone. To celebrate this anniversary, the UPCC in conjunction with the Hinckley Institute of Politics hosted a Hinckley Forum in October entitled "Poison and Policy: 65 Years of the Utah Poison Control Center." The forum featured a brief overview of the history and the important leadership role that Utah has played nationally in setting standards of excellence for poison centers and contributing to our body of knowledge in clinical toxicology. This presentation was followed by a panel discussion on the intersection of the poison center, public health, and policy with Senator Evan Vickers, Representative Steven Eliason, Dr. Angela Dunn, State Epidemiologist, and Dr. Michael Moss, UPCC medical director. The program was video archived and was also discussed during the KCPW Hinckley Radio Hour. We are pleased to share an interview with Dr. Anthony R. Temple, one of the first medical directors of the UPCC and more information about the event within this report. We were also

thrilled to get letters from Senators Lee and Romney congratulating the UPCC on its 65th anniversary.

The UPCC continues to be an essential part of the public health infrastructure in the state playing important roles in response to the opioid crisis, environmental health concerns, and more. The UPCC developed an online naloxone training in conjunction with the Utah Department of Health that has drawn nationwide interest. It provides an alternative to in-person training that hopefully helps to markedly increase the number of people who are prepared to use naloxone in an emergency. The training is available on a national public health training platform train.org and on the Utah Department of Health's naloxone website: naloxone.utah. gov. Video demonstrations of how to administer naloxone are imbedded in the training and also available on Utah Poison Control Center's YouTube channel. Also on UPCC's YouTube Channel is a newly released remake of a video entitled "Making the Right Call." The original video was created in the late 1980s by a pediatrician in Texas to increase knowledge about the poison center and to reduce barriers to calling the poison center. The UPCC was thrilled to receive a grant from the Sorenson Legacy Foundation, with the enthusiastic support from the pediatrician who originally produced the video, to remake the video in both English and Spanish.

This is my last annual report message. I retired December 31, 2019 after 29 years with the UPCC and 27 as its director. It has been an honor and a privilege to be a part of this great organization. The UPCC has stable funding, immense support from community partners statewide, and I leave behind an incredibly talented staff who will continue to provide exceptional service throughout the state. I am proud to introduce the new UPCC director, Dr. Amberly Johnson. The program has never been stronger and will flourish under her leadership.

Thank you for your ongoing support. I hope you enjoy the 2019 annual report.



-Barbara Insley Crouch, PharmD, MSPH, DABAT, FAACT Executive Director, Utah Poison Control Center COLLEGE OF PHARMACY L.S. SKAGGS PHARMACY INSTITUTE



# NEW DIRECTOR. SAME GOALS.

Amber Johnson took over as Director of the Utah Poison Control Center (UPCC) in December of 2019 following the retirement of Dr. Barbara Crouch. Knowing she has big shoes to fill, Amber is excited about her new position and confident that the UPCC will continue to provide crucial services for the people of Utah.

I grew up in Payson, Utah and attended both Dixie State College and Southern Utah University (SUU) as an undergraduate, where I was on the soccer team at both schools. I entered college as an art major, which is probably not the most common starting part for a career in toxicology, but I loved to draw.

Right about the time I began to question how I'd make a living in art, I took a life drawing class where I had to draw the skeletal structure and muscles from memory. This got me interested in anatomy and physiology, and I began to think that medicine seemed like a better career path for me than art, so I switched my major to biology.

After I received my bachelor's degree from SUU, I started working at ARUP laboratories in the mass spectrometry and clinical toxicology lab sections. I really enjoyed the work and found myself interested in the drugs we were testing. I worked at ARUP for seven years and decided that pharmacy was a great fit for me. I decided to go back to school and was accepted into the Doctor of Pharmacy program at the University of Utah.

I had a lot of great experiences while in pharmacy school, but my favorite was my fourth year rotation at the UPCC. I enjoyed it so much so that I did a two-year toxicology fellowship at the UPCC upon graduation and have been here ever since.

I've worked as a poison specialist answering calls, as a trainer and staff development coordinator, and as the supervisor over the poison specialists. I've also been an adjunct instructor at the University of Utah College of Pharmacy and I love finding new ways to get students excited about toxicology.

My different job responsibilities have allowed me to work with both the administrative and clinical staff within the UPCC, so I know that everyone who works here is awesome. You will not find a smarter or more caring group of people anywhere. Everyone is so invested in the work they're doing and they truly care about the callers and all the people that we help.

Trying to follow in the footsteps of Dr. Crouch feels daunting. She did such great things for the Poison

Center—and not just here in Utah. She has positively impacted so many people, it would be impossible to count. I just want to continue her legacy and make sure the UPCC continues to remain a vital part of Utah.

We do so much more than answer calls from the public. That part of our service is critical for sure, but we also assist medical professionals on a daily basis with diagnoses and treatment recommendations. And the role we play with public health issues is extremely important, especially in times of crisis. So along with continuing Dr. Crouch's legacy, I want to make sure we never get complacent—that we keep on learning and expanding our knowledge.

Our outreach education does a great job of getting the word out. I think the job they do is the reason we get so many calls. I think it is especially important that we keep evolving with technology and the growing needs of Utah citizens. We must make sure that we communicate with the public in ways they are comfortable with, whether that be phone, text, online, or whatever comes next.

Whatever the future holds, you can be sure that Amber Johnson and the UPCC will be ready for it.

# MAKING UTAH A SAFER PLACE

## MISSION

Our mission is to prevent and minimize adverse health effects from a poison exposure through education, service, and research.

In a poison emergency, every second counts. Free, expert, and confidential help is only a call away.



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

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 citizens from all 29 counties, including those who are deaf or hard of hearing and those who speak languages other than English, 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 65 years, the UPCC has provided more than 1.89 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 money and unnecessary visits to emergency departments.

# **DID YOU KNOW?**

The Utah Poison Control Center (UPCC) receives calls from a wide array of people on a broad spectrum of topics. From concerned parents calling about a child who has been exposed to a dangerous substance, to medical professionals seeking advice on a diagnosis, to public health officials concerned about environmental hazards, to law enforcement personnel looking to discuss potentially fatal drug combinations, the UPCC is available 24/7 to provide expert advice, fast and free of charge to people in all corners of the state.



# THE UTAH POISON CONTROL CENTER BENEFITS THE PEOPLE OF UTAH IN MANY WAYS

## HEALTH CARE PROVIDERS

Because the poison experts at the UPCC are able to manage the majority of poison cases outside of healthcare facilities, 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 minimal health care resources.

## HOW THE UPCC PROVIDES VALUE TO UTAH HEALTHCARE FACILITIES

- Helps decrease crowding in emergency departments
- Minimizes unnecessary EMS ambulance runs
- Frees critical emergency medical staff for true emergencies
- Provides cost-effective treatment recommendations for hospitalized patients

## PUBLIC HEALTH

In addition to providing poison prevention and education services, the UPCC responds to public health emergencies and 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.

# THANKS TO THE UTAH POISON CONTROL CENTER 14,400 unnecessary ED -TOvisits are prevented 16,800 each year in Utah. THAT NUMBER JUMPS TO when averted 20,000 -TO---visits to physicians 24,200 are included. THIS MEANS UTAH CITIZENS SAVE \$16.6 Million each year in unneeded **\$24.4** Million medical charges!

This doesn't include physician charges, ambulance charges, or account for other potential health care savings, such as decreased length of stay. So actual savings are likely much greater.

Michelle McCain and Mallory McLean Registered Nurses, Intermediate Care Unit Ogden Regional Medical Center

# BETTER TOGETHER

On a typically busy morning at the Emergency Department at Ogden Regional Medical Center, an ambulance pulled up with a female patient who had intentionally ingested an entire bottle of aspirin. What happened next exemplifies the strong partnership between medical facilities and the Utah Poison Control Center (UPCC).

Michelle McCain: The patient had been found in a bathroom with all sorts of pill bottles—a little bit of everything—but it was the amount of aspirin she ingested that was the biggest concern.

Mallory McLean: I was on shift when the patient was admitted. Even though I've been here for four years, I had never encountered an aspirin overdose. We deal with TYLENOL® and recreational drug overdoses on a regular basis, so we know those treatment protocols like the back of our hands, but not aspirin.

Thankfully, the UPCC called right as the patient arrived. The paramedics had been in contact with them from the moment they got to the patient and had told them which hospital they were going to.

Michelle: We knew, of course, that the concern with aspirin is that it's a blood thinner, but we didn't know specifically what things to watch out for to make sure the patient was medically stable.

Mallory: The specialist at the UPCC gave me step-by-step instructions on how to care for the patient and we followed those recommendations exactly.

Michelle: I took over for Mallory that afternoon. When I came on shift, I saw that the treatment protocol had been all set up and I just ran with it. The UPCC had told us the

information we needed to report to the doctors, as well as all the things we should be looking for to relay to them when they called back to check in on the patient.

Mallory: We work with the UPCC at least three or four times a month and they're always nice and helpful, but in this case, the specialist went above and beyond. She faxed over all this information so we could start a protocol binder. Now we'll always know what to do with aspirin overdoses because we can reference back to the binder.

Michelle: The UPCC made this all possible—made it possible for us to take such good care of the patient.

Mallory: They save us all the time. Without them, this patient would have had a much rougher experience. She would have ended up in the ICU and been tubed until all the toxins got out of her system, which probably would have taken four or five days.

Michelle: The UPCC saves the community a lot more than they realize. Poison exposures are their specialty. You're not going to send a kid with a broken leg to cardiologist, and you're not going to send someone with heart damage to an orthopedic surgeon. The UPCC specializes in exposures and drug interactions. As nurses, we rely on them all the time to help us provide the best possible care to our patients.

# OUTREACH EDUCATION

Outreach education efforts to local health districts, schools, and communities are critical to reducing poison exposures. 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 prevention information to local health districts when and where they need it.

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 poison center services. **Poisoning remains the most common cause of unintentional injury death, well ahead of deaths from firearms or motor vehicle crashes.**  In 2019, the Utah Poison Control Center (UPCC) participated in **285** education events, provided over **1,000** hours of in-person education through presentations and health fairs and distributed **230,400** educational materials across the state of Utah, covering urban centers, suburbs, and rural communities.

## 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, caregivers, and healthcare professionals about current poisoning concerns.





## YouTube Channel

In 2019, the UPCC launched a YouTube channel with videos that provide information about the poison center, poison prevention tips, demonstrations on how to administer naloxone, and more.

## Naloxone for Opiod Overdose 101 Training

Naloxone is a medication designed to rapidly reverse opioid overdose. It can quickly restore normal respiration to a person whose breathing has slowed or stopped as a result of overdosing with heroin or prescription opioid pain medications.

The UPCC worked with the Utah Department of Health to create a naloxone training for the general public, first responders, and law enforcement. It is available at naloxone.utah.gov/n-training

Videos showing each of the four different methods to administer naloxone were also produced and are available at naloxone.utah. gov/resources and on the UPCC's YouTube channel.





## Making the Right Call Video

Two new videos—one in English and one in Spanish—were produced this year that feature stories based on real-life scenarios from Utah callers. The videos show what happens behind the scenes at the poison center when someone calls and how the process works to ensure every caller gets the exact help they need to manage the poison exposure or situation they are calling about. Both videos are available on the UPCC's YouTube Channel.







# 65 YEARS OLD AND STRONGER THAN EVER

On October 21, the Utah Poison Control Center (UPCC) celebrated its 65th anniversary with a forum at the Hinckley Institute of Politics titled **Poison & Policy: 65 Years of the Utah Poison Control Center**. The event was moderated by Salt Lake Tribune Editor Jennifer Napier Pearce and featured Dr. Anthony Temple presenting a history of the poison center and a panel discussion featuring Utah State Senator Evan Vickers, Utah State Representative Steve Eliason, State Epidemiologist Dr. Angela Dunn, and UPCC Medical Director Dr. Michael Moss.

The panelists highlighted the intersection of public health, public policy, and the poison center and featured robust discussion on a variety of topics, including vaping, medical marijuana, suicide, and opioids. Dr. Barbara Crouch, Executive Director of the UPCC for the past 27 years, closed the event by thanking the participants and the UPCC's tremendous public and private partners.

The UPCC has grown exponentially since its inception 65 years ago. The center now handles nearly 125 cases every day, providing free consultations 24 hours a day, seven days a week, 365 days per year! What's more, the center assists medical professionals across the state and is engaged in public health initiatives and prevention efforts throughout Utah.





# A GUIDING FORCE

Poison centers have played a vital role in providing families across the United States with lifesaving information since the first center opened in Chicago in 1953. Utah's center opened the following year, making it the second poison center in the country. Our proud history includes a few visionaries, several trailblazers, and numerous advocates, but no one has been more influential in shaping the center into the indispensable institution it has become today than Anthony Temple, MD.

Born and raised in Salt Lake City, Tony received his undergraduate degree from Stanford and his medical degree from the University of Utah. In 1971, after training in pediatrics and medical toxicology, he joined the faculty of the University of Utah College of Medicine and soon after was tapped to serve as the Director of the Intermountain Regional Poison Control Center.

Tony's guiding presence began a new chapter for the center, which included expanding the scope of services offered and enhancing the quality of care provided to the public. We caught up with Tony during the Utah Poison Control Center's (UPCC) 65th Anniversary Celebration to discuss his thoughts on the UPCC's past, present, and future. Before I arrived, the center was still a consulting service with card files and no full-time phone staff. My first order of business was to get funds to train pharmacists to staff the center, so I worked to create a partnership between the Medical School and the Pharmacy School. The training program that we came up with was incredible. Most of the early trainees eventually became directors of poison centers across the country. But most importantly, having trained pharmacists working at the center led to a massive shift in our quality and offerings. The poison center became a truly lifesaving resource for the public.

Another thing we focused on in the early days was an effort to expand and catalogue data collection. A center is only as good as the information it has on hand, so improving and expanding our research and data collection was vital.

In 1979, Tony left the poison center and took a job at McNeil Consumer Products Company, the makers of TYLENOL<sup>®</sup>, but his work with poison centers never stopped. At McNeil, he fostered seed money grants for the development of 21 regional poison control centers and provided clinical toxicology fellowship grants for seven academic centers. And his unparalleled insight into the importance of research and data collection was invaluable during the TYLENOL<sup>®</sup> scare of the 1980s. Tony and his team at McNeil worked with regional poison centers to determine the cause of the problem and to write the rules for the response to the crisis.

Tony worked at McNeil for 30 years, all the while maintaining close contact with poison centers across the country, including here in Utah. The base of support we have at the University of Utah is so great. There's just something special about the feeling here. That's why I came back. When Barbara Crouch asked me to be a part of the advisory board, I accepted—and then I just stayed.

I think the partnership between the UPCC and the College of Pharmacy is incredible. Having problems solved by experts makes a huge difference in effectiveness as opposed to an untrained person trying to look up the right card, like how things worked in the early days. But what I am most impressed with is how the UPCC has continued to evolve. They do so much more today than ever. This includes proactive community outreach. The Poison Center has branched out in several new areas across the state. There's a much greater focus on education and prevention now that we didn't have the resources or ability to focus on back in the beginning.

The UPCC continues to provide a service that helps those when they are in a crisis—to offer the best possible care and information. This information saves Utah families tons of agony and money and trips to the emergency room. There's no other place that you can call and get an answer in seconds, minutes at the most. And while there will always be new challenges and new kinds of exposures, I have no doubt that the UPCC will continue to adapt and be there to provide care when people need it most.

# IN 2019, THE UTAH POISON CONTROL CENTER HANDLED **45,498 CASES**

The Utah Poison Control Center (UPCC) manages an average of 125 new 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           | 40,977 | 90.1    |
| Animal Exposures          | 1,255  | 2.8     |
| Drug Information          | 1,040  | 2.3     |
| Poison Information        | 414    | 0.9     |
| Environmental Information | 325    | 0.7     |
| Drug Identification       | 207    | 0.4     |
| Medical Information       | 153    | 0.3     |
| Confirmed Non-Exposure    | 36     | 0.1     |
| Other                     | 1,091  | 2.4     |

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



\*This total number includes the following human exposures: Unknown age: **373** | Unknown child: **140** | Unknown adult: **879** 

# 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.

|     | CHILDREN UNDER AGE S                | XIX        |       |
|-----|-------------------------------------|------------|-------|
|     | TYPE OF SUBSTANCE                   | #          | %     |
| 1.  | Cosmetics and Personal Care Produc  | ts 2,762:  | 12.7% |
| 2.  | Household Cleaning Substances       | 2,760      | 12.7% |
| 3.  | Analgesics (Pain Medications)       | 2,250      | 10.3% |
| 4.  | Vitamins and Minerals               | 1,463      | 6.7%  |
| 5.  | Dietary Supplements/Herbals/Homeopa | 1,454 thic | 6.7%  |
| 6.  | Foreign Bodies, Toys, Misc.         | 1,448      | 6.6%  |
| 7.  | Topical Preparations                | 1,059      | 4.9%  |
| 8.  | Antihistamines                      | 948        | 4.4%  |
| 9.  | Gastrointestinal Preparations       | 680        | 3.1%  |
| 10. | Pesticides                          | 544        | 2.5%  |

## RANKING OF TOP 10 SUBSTANCE CATEGORIES

|     | ALL AGES*                                |       |       |
|-----|--|-------|-------|
|     | TYPE OF SUBSTANCE                        | #     | %     |
| 1.  | Analgesics (Pain Medications)            | 5,597 | 13.7% |
| 2.  | Household Cleaning Substances            | 3,796 | 9.3%  |
| 3.  | Cosmetics and Personal Care Products     | 3,406 | 8.3%  |
| 4.  | Antidepressants                          | 2,676 | 6.5%  |
| 5.  | Sedatives, Hypnotics, and Antipsychotics | 2,173 | 5.3%  |
| 6.  | Antihistamines                           | 2,027 | 5.0%  |
| 7.  | Vitamins and Minerals                    | 1,988 | 4.9%  |
| 8.  | Foreign Bodies, Toys, Misc.              | 1,924 | 4.7%  |
| 9.  | Dietary Supplements/Herbals/Homeopathic  | 1,887 | 4.6%  |
| 10. | Cardiovascular Drugs                     | 1,477 | 3.6%  |

\*More than one substance was involved in 10.6% of ALL human exposures.

# 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. Nearly all (99%) of exposures in children less than six years of age were unintentional compared to only 31% in the age group of 13–19 years. The majority of exposures in adults were unintentional (59%). 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  | 20,379 | 49.7%   |
| Therapeutic Error      | 5,279  | 12.9%   |
| Unintentional Misuse   | 3,007  | 7.3%    |
| Environmental          | 1,995  | 4.9%    |
| Occupational           | 638    | 1.5%    |
| Food Poisoning         | 528    | 1.3%    |
| Bite/Sting             | 460    | 1.1%    |
| Unintentional Unknown  | 25     | 0.1%    |
| Total Unintentional    | 32,311 | 78.8%   |
| Suicide                | 4,307  | 10.5%   |
| Intentional Misuse     | 1,406  | 3.4%    |
| Abuse                  | 682    | 1.7%    |
| Intentional Unknown    | 189    | 0.5%    |
| Total Intentional      | 6,584  | 16.1%   |
| Drug Reaction          | 869    | 2.1%    |
| Food Reaction          | 149    | 0.4%    |
| Other Reaction         | 150    | 0.4%    |
| Total Adverse Reaction | 1,168  | 2.9%    |
| Tampering              | 477    | 1.2%    |
| Malicious              | 170    | 0.4%    |
| Withdrawal             | 81     | 0.2%    |
| Total Other            | 728    | 1.8%    |
| Unknown Reason         | 186    | 0.4%    |
| TOTAL                  | 40,977 | 100%    |

# EXPOSURE **SITE**

The UPCC reports 40,977 human poison exposures in 2019, the majority of which occurred in homes. Use of child-resistant closures and other safety precautions help, but even in the best poisonproofed homes, the majority of exposures occur when the product is in use.

|   | Own Residence        | 35,445   | 86.5% |
|---|----------------------|----------|-------|
|   | Other Residence      | 1,731    | 4.2%  |
|   | Public Area          | 1,017    | 2.5%  |
|   | Workplace            | 779      | 1.9%  |
|   | School               | 349      | 0.9%  |
|   | Health Care Facility | 129      | 0.3%  |
|   | Restaurant/Food Serv | vices 99 | 0.2%  |
| ? | Unknown/Other        | 1,428    | 3.5%  |
|   | TOTAL                | 40,977   | 100%  |



# COUNTY **DISTRIBUTION**

With **40,977** human exposure cases in 2019, 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 12.7 is about twice the national average. The high utilization likely translates to more cost-effective, quality care for Utah residents.

Human ExposuresPercentagePenetrance

# 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 (74%) 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 (92%). Treatment in a health care facility was provided in 23% of the exposures and recommended in another 1.4% of patients who refused the referral.

The UPCC was involved in the care of 9,227 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.

| Management Site                      | Number | % of All Exposures |  |
|--------------------------------------|--------|--------------------|--|
| Treated and released from ED         | 5,097  | 12.4%              |  |
| Admitted to a psychiatric facility   | 1,222  | 3.0%               |  |
| Admitted to a non-critical care unit | 1,177  | 2.9%               |  |
| Admitted to a critical care unit     | 1,138  | 2.8%               |  |
| Lost to follow-up and/or left AMA    | 593    | 1.4%               |  |
| Total                                | 9,227  | 22.5%              |  |

Breakdown of 9.227 cases managed in a health care facility

# MEDICAL OUTCOME



# A NETWORK OF PARTNERSHIPS

The UPCC boasts partnerships with both public and private entities and organizations across the state to reach Utah citizens where they live and work. From the University of Utah College of Pharmacy to the Utah Department of Health and local health departments, to city and county law enforcement agencies, health care providers, hospitals, and medical personnel, the UPCC continues to broaden its reach by partnering with those who share the goal of keeping Utah safe.



## CUSTOMER SATISFACTION GUARANTEED

# 99.5%

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

99.9%

Rated the UPCC overall as good or excellent.

99.8%

Will consult the UPCC again



# HELP FOR A STICKY SITUATION

I was getting ready for an event and putting on acrylic nails. As I was putting them on, some of the glue spat up into my eye. Luckily most of it was caught by my contact and I was able to take that out, but I thought I could still feel some glue in there.

I quickly read the instructions on the packaging, which said to rinse out your eyes with water—pretty standard advice. But after I rinsed out my eye, I didn't feel like I had gotten it all out. I couldn't tell if it was because the glue had scratched my eye or if there was actually still some irritant in there.

My mom advised that I call the poison center. She said they deal with all sorts of issues, so they would have information on what I should do. I knew about the Utah Poison Control Center (UPCC) because when I was growing up, we always had the magnet on our fridge with their phone number on it, but I wouldn't have thought to call them about glue in my eye until my mom suggested it.

It was kind of embarrassing to call and tell them what happened, but there was never any judgment. The first person I talked to hadn't really seen a situation like mine before, but she took the time to really look into it and made sure she was giving me the proper recommendation. She told me to flush my eye with warm water continually for 15 minutes. Because continual flushing is hard to do at a sink, she suggested I hop in the shower and just keep my eyes open.

I did what she recommended and felt a little better, but I could still feel something in my eye, so I followed her next suggestion and went to see a doctor. He determined that I had scratched my eye and gave me a prescription gel that I took for five days. I followed that up with eye drops to keep my eye moist, so it could heal itself naturally.

I was so impressed with the way the UPCC handled the whole situation, especially because they said my case was quite unusual. They even called me back a couple of times to check up on me and wanted to make sure the treatment worked like it was supposed to work. Everyone was so thoughtful throughout my entire ordeal, I know that when someone else gets glue in their eye, the UPCC will help them every step of the way.

I now know the UPCC is full of caring people who have knowledge on common to obscure situations, like what happened to me. Everyone there was friendly and attentive. Great listeners. I never felt like I was just another call. I could tell my situation was important to them.

# ANYTIME ANYWHERE

My four-year-old Taigan has always had issues with allergies. Skin allergies, food allergies, you name it. Even things like mosquito bites give him a fever and he swells up. When he was younger, my doctor didn't want me to give him allergy medication, but creams didn't help and Taigan wouldn't take a steroid. So I looked up the dosage of allergy medication that's okay to give a child of Taigan's age and weight, and then gave him some. But being a mom, I started to get nervous, so I called the Utah Poison Control Center (UPCC). They confirmed to me that the dosage I had given him was fine and I could even give him a little more. They also told me I didn't have to wait for an emergency to call. I could call anytime I had a question. People think the poison center is just for life or death situations, but you can call for just about anything.

I did call them this past year when Taigan was sick. I had given him a homeopathic cold medicine because I thought it would be less toxic and better for him. Twenty minutes later, he was lying on the couch and not breathing well. I could see that hives had started to pop out on his skin, so I knew he was having an allergic reaction to something. He needed his allergy medication, but I wasn't sure if I could give it to him safely on top of the cold medicine. When I called the UPCC, I explained Taigan's condition and provided them with information about both medicines. They reassured me that it was okay to give him the allergy medication. It's such a relief to know I can call someone and immediately get the answers I need, instead of having to call a doctor and wait for two hours for a response or having to pack up my kids because the doctor wants me to come in.

Over the years, I have called the poison center many times, mostly to get clarification on the correct dosage of medicines, but also because Taigan once ingested some of the powder in the dishwasher packets. Everyone I've ever spoken to at the poison center has been super helpful and nonjudgmental. And they always call back to follow up on the issue. It's nice to know someone else truly cares about your child.

As a mom, you have what I call mom anxiety. You never realize how much dangerous stuff is in your house until you have kids. So while some people may think I'm overreacting when I worry about my kids and call the poison center, I don't care. Why not take advantage of free expert medical advice? It's definitely better to have peace of mind that your child is going to be safe.



# 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:

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<sup>†</sup> DABAT denotes Diplomat of American Board of Applied Toxicology

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