MESSAGE FROM THE DIRECTOR

What do you get when you take a poison center with the longest-running national accreditation status and the highest utilization of any poison center in the United States, and you mix it with an operating budget of less than one dollar per resident? A tremendous value. The Utah Poison Control Center (UPCC) provides a great service and an incomparable value to the state of Utah, which is highlighted in our 2015 annual report.

The UPCC’s worth is, first and foremost, due to our talented and dedicated staff. Additionally, our poison center specialists, both nurses and pharmacists, staff the call center around the clock, with pharmacy-student poison-information providers assisting them during the busy evening hours. Five nationally certified specialists have collectively contributed 70-plus years of service to the UPCC. The Internet (including our website, www.utahpoisoncontrol.org) has a wealth of information, but, in a poisoning emergency, it is obtaining the right information from the experts that matters.

We are fortunate, as a result of our long relationship with the University of Utah’s College of Pharmacy, to be able to hire a number of students and recent graduates, assuring a high-quality and top-notch staff vital to responding to those poison emergencies. We have also hired a Health Promotion and Education student to assist in our statewide outreach efforts. Our outreach efforts to the public are focused on raising awareness of the poison center’s services and preventing poison exposures from occurring, while outreach education to health professionals is focused on emerging toxicology topics. Education is a core part of our mission, and we are grateful to our community partners for providing support, financial and otherwise, for outreach education. The Marriner S. Eccles Foundation has provided funding to support educational outreach in Utah’s newest health district, San Juan Public Health, as well as to print and distribute the UPCC’s new Bites and Stings brochure. The Rocky Mountain Pediatric Environmental Health Specialty Unit has provided support to conduct an assessment of pediatric environmental toxicity topics for future professional education and Intermountain Healthcare has funded the statewide distribution of an infographic that enhances awareness of the dangers of carbon monoxide poisoning.

Our outreach education efforts raise awareness for the UPCC and likely contribute to our high utilization rates; Utah has one of the highest utilizations of any poison center in the United States, consistently over twice the national average, as measured by the number of consults each year per 1,000 people in the state’s population. These efforts also provide guidance on how to prevent poisonings in the first place. It is impossible to know how many poison exposures we have prevented through our outreach education materials and programs, including our distribution of more than 150,000 prevention materials statewide and the nearly 200 community events in which we participated in 2015.

Another measure of the UPCC’s impact is the collaboration with our public health partners in discussions to keep Utah safe from public health threats, including opioid misuse and abuse, environmental health issues like food safety and water quality, and emerging safety issues like electronic cigarette liquid exposures in children and other substances of abuse. The UPCC’s success goes well beyond the number of telephone consultations each year.

Our highest priority is to provide world-class service for an outstanding value. Because of this, we underwent a critical strategic planning process in 2015 that explored operational efficiencies. Our primary goal was to develop a robust and sustainable poison center staffing model with the focus of taking care of the health and the well-being of the poison center staff and the populations we serve. We undertook a careful review of all UPCC positions with the help of the University of Utah’s Human Resources Department and were informed by a legislative audit. We identified the core positions necessary to sustain operations. We maximized students’ roles to enhance operational efficiencies and reduce personnel costs, and we made strategic decisions about the call center staff mix. This was a difficult and lengthy, but necessary process, and it ensured that we will continue to provide excellent service and remain financially and operationally efficient. The UPCC is well poised to move forward, stronger than ever.

Thank you for your ongoing support of the UPCC. We hope you will enjoy the 2015 annual report.

—Barbara Insley Crouch, PharmD, MSPH, DABAT
Executive Director, Utah Poison Control Center
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 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, including those who are deaf and those with limited or no English proficiency, 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 UPCC is the first, last, and best line of defense against poison exposures and remains a vital resource for public health in Utah. The poison center’s expert advice is faster and infinitely more reliable than internet searches. What’s more, the UPCC consults with health care providers and public health officials daily to help with exposure diagnoses and to provide treatment recommendations.

Over the past 61 years, the UPCC has provided more than 1.7 million consultations, reducing the burden on healthcare providers and saving countless lives in the process, with the majority of consultations managed over the phone. The poison center saves Utah families over $50 million in medical costs each year and thousands of unnecessary visits to emergency departments.
MAKING A DIFFERENCE ACROSS UTAH

In 2015, the Utah Poison Control Center (UPCC) participated in over 190 education events, provided over 650 hours of in-person education through presentations and health fairs and distributed over 150,000 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 firearm deaths and motor vehicle crash deaths.

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.

Current Trends

Prescription Drug Epidemic
Over half of the calls to the UPCC relate to medications, and one in four of those calls are regarding pain relievers. Pain relievers are the most common cause of unintentional poisoning deaths in Utah. When used properly, prescription pain medications are an important and necessary component of pain management. However, these medications can be very dangerous and misuse can lead to serious personal consequences, including death. Every month in Utah, 24 individuals die from prescription drug overdose. Utah ranks fifth in the U.S. for drug poisoning deaths, which have significantly outpaced deaths due to firearms and motor vehicle crashes.

The UPCC is on the front lines of combat against the prescription drug epidemic: first, by taking calls to answer questions about medications and medication safety, second, by compiling valuable data about prescription drug use and abuse, third, by creating and delivering outreach education programs to promote awareness and provide information about the issue, and fourth, by providing toxicity expertise and treatment recommendations to healthcare providers across the state.
**E-cigarettes**

E-cigarettes use liquid nicotine that comes in a variety of flavors, scents, and colors that are attractive to small children. The risk for accidental exposure in young children increases significantly with products that smell and look appealing. Liquid nicotine also comes in a variety of concentrations, which vary by product, with as little as one drop of the most concentrated liquid containing a potentially toxic amount of nicotine for a small child. The most common adverse effects for children who are exposed to liquid nicotine are nausea and vomiting. Toxic effects are initially stimulatory in nature and include agitation, seizures, elevated heart rate, and heart rhythm disturbances. In severe cases, the initial symptoms can be followed by shallow breathing and coma. In the U.S., at least one child has died after ingesting e-cigarette liquid.

In Utah, the UPCC led the charge to set standards for proper labeling and requirements for child resistant closures for e-cigarettes by providing expert advice on the toxicity of liquid nicotine and by offering recommendations on ways to minimize the risk for adverse effects on unintended victims, such as curious toddlers who orally explore their environment. With the strong endorsement of the UPCC, the state legislature passed a statute in 2014 authorizing the Utah Department of Health (UDOH) to set standards for e-cigarette labeling, nicotine content, packaging, and product quality. A year later, the “Child Nicotine Poisoning Prevention Act” was enacted on a national level.

**You Can Count On Us!**

The UPCC is also active online and on social media, providing comprehensive poison prevention resources, a poisonous plant database, and timely posts for parents and caregivers about current poisoning concerns.

[utahpoisoncontrol.org]
I worked for Intermountain Health Care for nearly 20 years, including three years as the Director of Mental Health Programs, where we work closely with substance abuse issues, particularly with low-income populations. I was familiar with the Utah Poison Control Center (UPCC), but thought the services were primarily for exposure issues with children getting into detergent packets, household cleaners, or plants. So I was surprised when the director of the poison center, Dr. Crouch, approached me about joining the center’s advisory board. I soon learned that the Utah Poison Control Center offers much more diverse and comprehensive services that cover a wide range of issues, including drug overdose.

A large percentage of callers to the UPCC are calling about medication issues, and many of those calls are about opioids. Opioid abuse has become an epidemic in Utah, starting around 2010, when overdose deaths due to opioids began to rise rapidly. There are now more deaths in Utah due to opioid overdose than to traffic accidents.

One reason the UPCC receives so many opioid calls is that callers know that the center is a safe place to call, where they will get sound recommendations and appropriate referrals. That’s why the UPCC plays such a key role in fighting the opioid epidemic. They are often the first contact with opioid users and are extremely well-qualified to make recommendations and provide opioid abusers with referrals to health care facilities and treatment centers. Because the UPCC has clinical toxicologists on staff, they are uniquely situated to help. Their ties and proximity to the University of Utah College of Pharmacy gives them access to even more research, resources, and expertise on this critical issue.

Beyond taking the calls and providing, in many cases, life-saving recommendations and referrals, the poison center is able to compile valuable statistics about opioid use and abuse that helps the state to understand the scope of the issue, to identify current trends, and to devise the best strategies to combat the problem. What’s more, the Utah Poison Control Center is able to provide outreach education and information on their website and at health fairs and conferences around the state. The UPCC even held a symposium in 2014 on the prescription drug epidemic, which was attended by over 130 participants, including physicians, pharmacists, social workers, health educators, nurses, and other interested parties.
“Community collaboration between multiple entities is vital to help combat the opioid epidemic. It will take a multi-faceted approach to solve this problem and the UPCC is a fantastic partner and collaborator in fighting the state’s opioid epidemic.”

—Delia Rochon
Former Director of Mental Health Programs Intermountain Health Care
SAVING LIVES AND SAVING MONEY

The Utah Poison Control Center 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 annually 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
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 call takers/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

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
I’ve worked for the Utah Department of Health for 22 years in a variety of positions and have long understood that the Utah Poison Control Center (UPCC) plays a vital role when there is a public health crisis or scare. The poison center is the first to know when people are getting into trouble with a particular substance because they receive the calls about it. But more than just warning us of dangerous trends, the UPCC, with their well-trained staff and toxicology expertise, are also an incredible source of information for callers and medical providers across the state.

There have been many public health concerns over the years that have seen the poison center at the front lines combating the problem. Currently we are working with two hospitals where a health care worker exposed patients to Hepatitis C through improper use of needles to administer medications. The poison center helped take calls from people who feared they might have been exposed—and then the UPCC used their expertise to thoroughly explain the situation and to make recommendations on the steps people should take. The UPCC also played a similar role as a public resource during the measles outbreak a couple of years ago.

More recently, the poison center has been a leader in working to address Utah’s prescription drug epidemic and in helping the Department of Health, medical providers, and the state’s citizens with problems stemming from e-cigarettes and “spice.” These potentially hazardous substances are being abused by a growing segment of the population. We know this in part because of all the calls the poison center receives regarding these substances. Such calls enable the UPCC to pick up on early trends in substance abuse. This is, of course, a much better way to learn about a problem than waiting to hear about it from medical examiners. Once we realize there is a problem trending, we can work on ways to fight the problem and keep Utah’s citizens as safe as possible.

When we know there is a problem on the horizon or when we are in the midst of a crisis, the UPCC is also an effective resource for helping to disseminate information. The center often proactively sends out alerts to emergency departments and medical providers about certain issues to look for and what to do if cases start coming in.

For e-cigarettes, the state has been working to ensure proper labeling and determining the best ways to regulate nicotine content. The UPCC has been a tremendous ally, educating Department of Health staff and our stakeholders on toxicity issues and helping us understand the risks.

“Spice” has been a particularly challenging concern. Because of the nature of the product, there are many different toxicity levels and at least 80 different configurations of synthetic THC. Emergency physicians can’t keep up with all the variations, so the UPCC has been an invaluable resource for their expertise on dealing with this issue.
“The Utah Department of Health relies on experts in particular fields to address public health issues and there is no better resource on poisoning and exposure issues than the specialists at the Utah Poison Control Center.”

—Robert T Rolfs, MD, MPH
Deputy Director, State of Utah Department of Health
IN 2015, THE UTAH POISON CONTROL CENTER HANDLED 45,513 CASES

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

**CASE BREAKDOWN**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Exposures</td>
<td>41,210</td>
<td>90.6</td>
</tr>
<tr>
<td>Animal Exposures</td>
<td>826</td>
<td>1.8</td>
</tr>
<tr>
<td>Drug Information</td>
<td>966</td>
<td>2.1</td>
</tr>
<tr>
<td>Drug Identification</td>
<td>591</td>
<td>1.3</td>
</tr>
<tr>
<td>Poison Information</td>
<td>414</td>
<td>0.9</td>
</tr>
<tr>
<td>Environmental Information</td>
<td>303</td>
<td>0.7</td>
</tr>
<tr>
<td>Medical Information</td>
<td>186</td>
<td>0.4</td>
</tr>
<tr>
<td>Confirmed Non-Exposure</td>
<td>44</td>
<td>0.1</td>
</tr>
<tr>
<td>Other</td>
<td>973</td>
<td>2.1</td>
</tr>
</tbody>
</table>

**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**

- < 6 years: 24,522
- 6-12 years: 2,362
- 13-19 years: 2,752
- 20-59 years: 8,182
- 60+ years: 1,987

*This total number does not include the following human exposures: Unknown age: 670 | Unknown child: 77 | Unknown adult: 658*
SUBSTANCE CATEGORIES

The types of substances involved in poison exposures include products available in the home, workplace, and the environment. Because children under age 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

<table>
<thead>
<tr>
<th>CHILDREN UNDER AGE SIX</th>
<th>TYPE OF SUBSTANCE</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cosmetics and Personal Care Products</td>
<td>3,518</td>
<td>13.6%</td>
</tr>
<tr>
<td>2.</td>
<td>Household Cleaning Substances</td>
<td>3,263</td>
<td>12.6%</td>
</tr>
<tr>
<td>3.</td>
<td>Analgesics</td>
<td>2,748</td>
<td>10.7%</td>
</tr>
<tr>
<td>4.</td>
<td>Vitamins and Minerals</td>
<td>1,836</td>
<td>7.1%</td>
</tr>
<tr>
<td>5.</td>
<td>Foreign Bodies, Toys, Misc.</td>
<td>1,458</td>
<td>5.7%</td>
</tr>
<tr>
<td>6.</td>
<td>Topical Preparations</td>
<td>1,394</td>
<td>5.4%</td>
</tr>
<tr>
<td>7.</td>
<td>Dietary Supplements/Herbals/Homeopathic</td>
<td>1,038</td>
<td>4.0%</td>
</tr>
<tr>
<td>8.</td>
<td>Antihistamines</td>
<td>962</td>
<td>3.7%</td>
</tr>
<tr>
<td>9.</td>
<td>Gastrointestinal Preparations</td>
<td>761</td>
<td>3.0%</td>
</tr>
<tr>
<td>10.</td>
<td>Pesticides</td>
<td>688</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ALL AGES</th>
<th>TYPE OF SUBSTANCE</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Analgesics</td>
<td>5,585</td>
<td>11.6%</td>
</tr>
<tr>
<td>2.</td>
<td>Household Cleaning Substances</td>
<td>4,289</td>
<td>9.0%</td>
</tr>
<tr>
<td>3.</td>
<td>Cosmetics and Personal Care Products</td>
<td>4,140</td>
<td>8.6%</td>
</tr>
<tr>
<td>4.</td>
<td>Vitamins and Minerals</td>
<td>2,270</td>
<td>4.7%</td>
</tr>
<tr>
<td>5.</td>
<td>Sedatives, Hypnotics, and Antipsychotics</td>
<td>1,967</td>
<td>4.1%</td>
</tr>
<tr>
<td>6.</td>
<td>Antidepressants</td>
<td>1,936</td>
<td>4.0%</td>
</tr>
<tr>
<td>7.</td>
<td>Foreign Bodies, Toys, Misc.</td>
<td>1,905</td>
<td>4.0%</td>
</tr>
<tr>
<td>8.</td>
<td>Antihistamines</td>
<td>1,819</td>
<td>3.8%</td>
</tr>
<tr>
<td>9.</td>
<td>Topical Preparations</td>
<td>1,663</td>
<td>3.5%</td>
</tr>
<tr>
<td>10.</td>
<td>Dietary Supplements/Herbals/Homeopathic</td>
<td>1,389</td>
<td>2.9%</td>
</tr>
</tbody>
</table>
Poison exposures are 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 Utah Poison Control Center’s penetrance of 14.0 is more than twice the national average. The high utilization likely translates to more cost-effective, quality care for Utah residents.

<table>
<thead>
<tr>
<th>County</th>
<th>Human Exposures</th>
<th>Percent</th>
<th>Penetrance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver</td>
<td>75</td>
<td>0.2%</td>
<td>11.6</td>
</tr>
<tr>
<td>Box Elder</td>
<td>564</td>
<td>1.4%</td>
<td>11.0</td>
</tr>
<tr>
<td>Cache</td>
<td>1,506</td>
<td>3.7%</td>
<td>13.0</td>
</tr>
<tr>
<td>Carbon</td>
<td>254</td>
<td>0.6%</td>
<td>12.3</td>
</tr>
<tr>
<td>Daggett</td>
<td>6</td>
<td>0.0%</td>
<td>5.4</td>
</tr>
<tr>
<td>Davis</td>
<td>4,370</td>
<td>10.6%</td>
<td>13.3</td>
</tr>
<tr>
<td>Duchesne</td>
<td>355</td>
<td>0.9%</td>
<td>17.4</td>
</tr>
<tr>
<td>Emery</td>
<td>131</td>
<td>0.3%</td>
<td>12.3</td>
</tr>
<tr>
<td>Garfield</td>
<td>56</td>
<td>0.1%</td>
<td>11.2</td>
</tr>
<tr>
<td>Grand</td>
<td>79</td>
<td>0.2%</td>
<td>8.4</td>
</tr>
<tr>
<td>Iron</td>
<td>539</td>
<td>1.3%</td>
<td>11.4</td>
</tr>
<tr>
<td>Juab</td>
<td>121</td>
<td>0.3%</td>
<td>11.5</td>
</tr>
<tr>
<td>Kane</td>
<td>89</td>
<td>0.2%</td>
<td>12.3</td>
</tr>
<tr>
<td>Millard</td>
<td>162</td>
<td>0.4%</td>
<td>13.0</td>
</tr>
<tr>
<td>Morgan</td>
<td>125</td>
<td>0.3%</td>
<td>11.8</td>
</tr>
<tr>
<td>Piute</td>
<td>8</td>
<td>0.0%</td>
<td>5.4</td>
</tr>
<tr>
<td>Rich</td>
<td>44</td>
<td>0.1%</td>
<td>19.2</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>14,476</td>
<td>35.1%</td>
<td>13.3</td>
</tr>
<tr>
<td>San Juan</td>
<td>112</td>
<td>0.3%</td>
<td>7.3</td>
</tr>
<tr>
<td>Sanpete</td>
<td>337</td>
<td>0.8%</td>
<td>12.0</td>
</tr>
<tr>
<td>Sevier</td>
<td>220</td>
<td>0.5%</td>
<td>11.0</td>
</tr>
<tr>
<td>Summit</td>
<td>370</td>
<td>0.9%</td>
<td>9.5</td>
</tr>
<tr>
<td>Tooele</td>
<td>914</td>
<td>2.2%</td>
<td>15.0</td>
</tr>
<tr>
<td>Uintah</td>
<td>424</td>
<td>1.0%</td>
<td>11.5</td>
</tr>
<tr>
<td>Utah</td>
<td>7,781</td>
<td>18.9%</td>
<td>14.0</td>
</tr>
<tr>
<td>Wasatch</td>
<td>289</td>
<td>0.7%</td>
<td>10.4</td>
</tr>
<tr>
<td>Washington</td>
<td>1,514</td>
<td>3.7%</td>
<td>10.0</td>
</tr>
<tr>
<td>Wayne</td>
<td>32</td>
<td>0.1%</td>
<td>12.0</td>
</tr>
<tr>
<td>Weber</td>
<td>2,908</td>
<td>7.1%</td>
<td>12.1</td>
</tr>
<tr>
<td>Out of State</td>
<td>3,349</td>
<td>8.1%</td>
<td></td>
</tr>
</tbody>
</table>

Total        | 41,210          | 100%    | 14.0       |
**REASON FOR EXPOSURE**

The majority of poison exposures reported to the Utah Poison Control Center were unintentional and involved children orally exploring their environment. 99% of exposures in children less than six years of age were unintentional compared with only 36% 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.

**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, the majority of exposures occur when the product is in use.

<table>
<thead>
<tr>
<th>Exposure Site</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Residence</td>
<td>35,372</td>
<td>85.8%</td>
</tr>
<tr>
<td>Other Residence</td>
<td>2,166</td>
<td>5.3%</td>
</tr>
<tr>
<td>Workplace</td>
<td>711</td>
<td>1.7%</td>
</tr>
<tr>
<td>Restaurant/Food Services</td>
<td>659</td>
<td>1.6%</td>
</tr>
<tr>
<td>Public Area</td>
<td>658</td>
<td>1.6%</td>
</tr>
<tr>
<td>School</td>
<td>301</td>
<td>0.7%</td>
</tr>
<tr>
<td>Health Care Facility</td>
<td>111</td>
<td>0.3%</td>
</tr>
<tr>
<td>Unknown/Other</td>
<td>1,232</td>
<td>3.0%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41,210</td>
<td>100%</td>
</tr>
</tbody>
</table>
EXPOSURE MANAGEMENT AND TREATMENT

Due to the expertise and efficiency of the UPCC call center, the majority of poison exposures (75%) 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 2% of patients who refused the referral.

In 2015, the UPCC was involved in the care of 8,478 poison exposures 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 8,478 cases managed in a health care facility.

<table>
<thead>
<tr>
<th>Management Site</th>
<th>Number</th>
<th>Percent of All Exposures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated and released from ED</td>
<td>5,198</td>
<td>12.6%</td>
</tr>
<tr>
<td>Admitted to a non-critical care unit</td>
<td>966</td>
<td>2.3%</td>
</tr>
<tr>
<td>Admitted to a critical care unit</td>
<td>857</td>
<td>2.1%</td>
</tr>
<tr>
<td>Lost to follow-up and/or left AMA</td>
<td>833</td>
<td>2.0%</td>
</tr>
<tr>
<td>Admitted to a psychiatric facility</td>
<td>624</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Total 8,478 20.5%

MEDICAL OUTCOME

41,210 Total Exposure Cases in 2015

25,979 Re-contacted for evaluation

12,609 Judged as minimally toxic or non-toxic

2,622 Not followed-up or unrelated effect

23,867 No or minimum effect

2,090 Moderate or major effect

22 Death

Of the 25,979 cases re-contacted for evaluation
A DYNAMIC PARTNERSHIP

The UPCC is housed in the same building as the University of Utah College of Pharmacy. This close proximity creates a myriad of opportunities for collaboration, which greatly benefits both entities and ultimately serves the best interests of Utah residents.

Of course, the UPCC has always played an important role in training the next generation of poison specialists and health care professionals. Each year, the UPCC trains pharmacy students, emergency medical residents, family practice residents, and pediatric emergency medicine fellows. The UPCC also teaches clinical toxicology to pharmacy, medicine, and physician assistant students at the University of Utah.

The poison control center has immediate access to the cutting-edge research and clinical references of the College of Pharmacy. This access allows the poison specialists to have the most up-to-date information, so they can better respond to calls regarding exposures, drug interactions, and other poison-related issues.
I think that every new parent who leaves the hospital with a new baby should know about the Utah Poison Control Center.

—Amy
My husband, Adam, was taking our twins on a run, so I took the opportunity to go to the grocery store. My shopping cart was just about full when I got a panicked call from Adam, telling me that our toddler, Katelyn, had ingested some of my Neutrogena face treatment gel.

Katelyn has always been curious and loves twisting caps and taking off lids, so we have put child protectors on everything, but she had somehow managed to get ahold of the small tube of gel and had taken it in the stroller without Adam knowing about it. He felt awful and wasn’t sure what to do.

I dropped everything, left the store, and called the Utah Poison Control Center on my way home. The specialist who answered the phone was super-comforting. He asked me several questions about how Katelyn was doing and what she had ingested. I had limited information and told him I was almost home, where I could better assess the situation and give him more complete answers. He kept me calm and focused.

When I got home, I was able to relay the information he needed to know about the product and Katelyn’s condition. He did some calculations and told us what to do. He gave such positive reinforcement and didn’t make us feel bad at all, which was great because we were feeling like such horrible parents. He even called back the next day to see how Katelyn was doing. The poison center also sent us a packet of information that included refrigerator magnets and tips that every parent should know about poison exposure risks around the home.

I am so glad that I knew to call the poison center. Instead of rushing to the emergency room or going to an Instacare and waiting an hour or more to see a doctor, we were able to quickly call the Utah Poison Control Center and get immediate answers for free! For a new family familiar with a budget, it was nice to not have to wonder how much the medical bill would be.

Our little ones are the most important things in the universe and when accidents happen or they get into something they shouldn’t, we want to do whatever we can to quickly minimize their pain and suffering. We are indeed grateful for the immediate assistance, comfort, and answers provided to us during one of these moments by the Utah Poison Control Center. We acknowledge their concern for our little ones and applaud their efforts and careful preparations to help ensure that parents get the most accurate information and immediate direction when the precious life of a child might be at risk.
The UPCC offers poison information, clinical toxicology consultation, and poison prevention education 24 hours a day, 7 days a week, 365 days a year. The center is staffed by highly trained poison specialists who have undergone a minimum of 12 weeks of toxicology training prior to independently responding to poison emergencies. The majority of specialists are Certified Specialists in Poison Information. The poison center staff also includes two certified health education specialists and two board-certified toxicologists.

All of this expertise benefits callers with prompt, accurate assessments and recommendations for a vast array of poison exposure situations. In fact, there is no greater source of knowledge regarding poison exposures available. It’s lightning fast, expert advice at your fingertips, all completely free!
99.4%
Rated the specialists as good or excellent in terms of courtesy, knowledge, understanding, and helpfulness.

99.3%
Rated the UPCC overall as good or excellent.

99.7%
Will consult the UPCC again.

WHAT CALLERS ARE SAYING

“I trust you guys. You gave me lots of information that helped me know exactly what to expect and that I didn’t need to rush to the hospital.”

“I really appreciated that I wasn’t made to feel stupid or like I hadn’t watched my child closely enough.”

“You guys are fantastic! You followed up three times. That was above and beyond the call.”

“The specialist who helped me was kind, compassionate, and helpful. It may have been a routine call for him, but he didn’t treat it as such.”
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:

**Specialists In Poison Information**
- Kathleen T. Anderson, PharmD, CSPI*
- Michael Q. Andrus, PharmD, CSPI*
- Christian Clark, PharmD
- Bradley D. Dahl, PharmD, CSPI*
- Thomas J. Davies, PharmD, CSPI*
- Mike Donnelly, RN, BSN, CSPI*
- Brittanie Hatch, PharmD, MS, CSPI*
- Paul Hinckley, PharmD
- Christy Hunter, RN, BSN, CSPI*
- Amberly Johnson, PharmD, DABAT
- Kevin McFarland, PharmD, CSPI*
- Sandee Oliver, RN, BSN, CSPI*
- Brittani Petersen, PharmD
- Cathie Smith, RN, BSN, CSPI*
- Devin Stock, AS, PharmD
- John R. Stromness, BS, RPh, CSPI*
*CSPI denotes Certified Specialist in Poison Information

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- Chad Adamovich, BS
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- Ben Davies, BS
- Diana Fischer, BS, PharmD
- Jina Kim, BA
- Rachael Morley, BS
- Taylor Rhein, BS
- Simón Rodriguez, BS
- Andy Tominaga, BS

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**Health Educator**
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- David Craig
- Stephanie Keller, BA
- Sophie Luckett-Cole
- Kelly Teemant, BS, CHES

**Clinical Toxicology Fellows**
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- Kaitlyn Brown, PharmD, SPI

**Additional Medical Toxicology On-Call**
- E. Martin Caravati, MD, MPH, FACMT

Oregon Health and Sciences University Medical Toxicologists
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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.

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