Lifesavers on the Line

Whether you are a newcomer or a long-time resident of Southern Arizona, there is one number you should have programmed into your phones: the Arizona Poison and Drug Information Center (1-800-222-1222).

BY WENDY SWEET

The Arizona Poison and Drug Information Center (APDIC) is a Center of Excellence at the University of Arizona College of Pharmacy. The Tucson center serves all of Arizona, except for Maricopa County, which has its own poison center.

The information line is free, confidential and available 24 hours a day, seven days a week. If you think someone has been poisoned or taken too many drugs, or if you or a pet has been stung or bitten by a venomous creature, or if you have questions about any type of poison or drug, call the APDIC right away.

“We are primarily here to provide emergency toxicology consultation and drug information to the public and health care professionals,” says Keith Boesen, director of the APDIC. “Call us with any questions about poison, medications, bites or stings. If someone has been exposed to something toxic, we help them get through it, whether they are at home or are with professionals in the hospital. Everything around us can be a poison, depending on the dose,” notes Boesen. “We get involved when someone has too much of something or has a reaction.

“Because we are in the Southwest, we specialize in bites and stings,” says Boesen. “The only scorpion in the United States with any medical importance that can cause hospitalization or death is right here in Arizona.

“We also specialize in rattlesnake bites. Arizona has more rattlesnake bites per capita than any other state, and we do more rattlesnake consultations than anywhere in the country.”

“If you are bitten by a rattlesnake, call 911 and get to the hospital,” stresses Liz Barta, Poison Education Specialist at the APDIC. “Your first aid is your car keys and a cell phone. Do not cut the bite area. You need antivenom. The APDIC will be instrumental in your treatment, as we will be talking to your health care professional.”

Recommendations from The Arizona-Sonora Desert Museum

The mere mention of venomous animals can send people running for cover. However, venomous animals are rarely, if ever, aggressive. When humans blunder into their lives, humans are perceived as a threat and the animals can react defensively.

As dangerous as they can be, these creatures are preyed upon by other animals so they don’t usually sit out in the open waiting to be eaten. Instead they hide under logs, rocks, in corners, under leaves and plants. For safety, remember to stop, look and listen. Avoid getting too close. Back off and observe. You’ll be amazed at what you can learn. You may even develop a healthy respect for these creatures that you may have formerly thought had no place in your world.

Scorpions – Some people hate to find them while others find them fascinating. They are attracted to cool dry places and typically hide in small crevices, under bows and in corners of garages. Sweep dusty, forgotten places regularly.

Rattlesnakes – Remember, snakes are not aggressive but they can be highly defensive when confronted or provoked by humans. So be careful where you step and pay attention to where you are going. Keep your distance as rattlesnakes can typically strike up to 2/3 of their body length.

Gila Monsters – These shy lizards pose little danger if left alone. However, be cautious. They are venomous and have the ability to inflict painful and serious bites. Also, keep in mind they are a legally protected species.
Other Functions of the APDIC

The APDIC also provides educational services. “We teach as many health care professionals as we can,” Boesken relates. “Poison centers are really the only school you can go to for education on toxicology.” Currently, the APDIC trains more than 50 medical pharmacy residents/students a year, makes presentations to more than 10,000 Arizona residents annually, and distributes poison prevention material to more than 50,000 Arizona residents a year. Additionally, the APDIC is involved in research. “In the past year, our research has included clinical trials on Anascrest and Anapv (scorpion and rattlesnake anti-venoms),” says Boesken. “We also provide data used to track abuse patterns for controlled substances, as well as toxic surveillance and outbreak data at the state and national level.”

Who Answers Your Calls?

When you phone the poison center, your call is answered by a pharmacist with special training in toxicology. “They are specialists in poison information, or SPIs,” says Boesken. “They are highly trained and certified professionals. They have to re-certify every seven years.” The center itself earned recertification in April 2012 for the next five years from the American Association of Poison Control Centers. This certification ensures that every poison center in the nation (there are currently 57) adheres to the same high standards.

More than half of the APDIC staff has been with the organization over 20 years. “They are experts and have experience,” says Barta. “The APDIC is one of the most well-kept secrets in public health in the country. Many people think we are only for families with children — 50 percent of the calls are related to children under five — but we are for everyone.”

“Every call that comes into the APDIC is documented, so we can learn from the calls,” says Boesken. “But it is an anonymous system. We don’t want people to be afraid they’ll be turned in for something they have done — we want them to call.” Because the calls are confidential, no names are included, but other information from every case is uploaded onto a computer for trends and anomalies.

The poison center is interested in following up with callers as to the outcome of their situation, but they do so only with the caller’s permission. “People rave about the callbacks,” notes Barta. “They find them so reassuring.”

The Beginning of the Poison Center

Shortly after arriving to teach at the University of Arizona College of Pharmacy in the 1980s, Albert Picciolo, Ph.D., developed a card file listing ingredients in household products as a public health service. “Pediatricians would call asking pharmacists for help about poisonings, because back then there was no regulation on laudanum. Products as far as toxicity,” explains Boesken.

Within a few years, symptoms of poisoning and available antidotes were added to the information pharmacists compiled on a volunteer basis. Emergency calls continued to the College of Pharmacy, and they have never stopped.

Today there are 12 pharmacists on staff at the APDIC. “We get more than 150 calls a day, which adds up to 60,000 incoming calls a year,” Boesken relates. “Plus we call back to the patient to see how our people are doing. The calls include 30,000 exposures to poisons, drugs and venom a year, 1,700 suicide attempts, 700 food borne illnesses, and 9,000 exposures resulting in a hospital visit.”

Top Reasons the APDIC is Called

Ten years ago, household poisonings were the number-one reason to contact the Arizona Poison and Drug Information Center, with calls about bleach topping that list.

Today, the primary reason is related to a reaction or exposure to prescription and over-the-counter medications. These calls include such things as:

• A bottle of medication was left out and a child got into it, or a child gained access to medication in another way.
• A parent gave a child the wrong medication, or gave the medication to the wrong child.
• An adult has taken the wrong medication or the wrong dose.
• An adult has taken their dog’s medication (it happens!)
• An adult is abusing drugs or attempting suicide.

If the person’s life is in imminent danger, i.e., they are not breathing, having trouble breathing or are unconscious, call 911. But even then, you want the APDIC involved.

Half of the calls received by the poison center are for information. “They are the ‘what if’s,’ says Boesken. “The other half are related to actual exposures and are the ‘now what’s.’ For example, someone calls and says, ‘I was bitten — now what do I do?’ The pharmacists triage the calls they receive by asking questions of the patient (or whoever placed the call). After getting enough information, the pharmacist will give their recommendation. ‘We are very effective at triaging patients and managing them at the highest level of care necessary,’ says Boesken.

Eighty percent of the calls received at the APDIC are from the general public. 20 percent are from health care professionals (primarily physicians, nurses and paramedics). Seventy percent of all the cases are managed at home; the other 30 percent are managed at a health care location, such as a hospital or urgent care center.

“Because we manage 70 percent of the cases at home, we save the health care system almost $1.5 million a year in unnecessary emergency room visits,” says Barta. In addition, you cannot put a dollar amount on the peace of mind you get from calling.

Studying how poison centers also save the health care system money by decreasing the length of hospital stay by one to three days. ‘Poison centers’ cost benefit to public health is second only to vaccines,’ says Boesken. ‘Every dollar a poison center spends saves seven to ten dollars in health care costs.’

Poisonous Plants

"Unknown plants" dominate the poisonous flora calls received by the center. “Calls about cleaners top the list of the plants we are able to identify,” says Boesken. “The majority of cleaner poisonings are human related.” These include such circumstances as a child eating an cleaner, an adult making a tea out of it, adding the flowers to a salad, or someone trying to commit suicide with the plant.

Boesken recommends you learn the names of all your plants and label them. If a person or pet eats a poisonous plant, call the APDIC. Remove any parts of the plant from their mouth and give them a small amount of water to drink. Wash any skin exposed to the plant with soap and water, and remove any clothing that was in contact with the plant.

The center also advises you to remove all mushrooms from your yard and teach children to not put any part of a plant in their mouths.

Dangerous Plants to Touch or Eat

CLOCKWISE FROM TOP LEFT: Mexican bird of paradise, lantana, foxglove, century plant, oleander.
Common Household Poisons

It is not just plants and animals that can poison you. Common products in your house or garage also can be poisonous. These can include:

- household cleaners, personal care products and cosmetics
- medicines
- outdoor products, such as pesticides, gasoline, paint thinner and antifreeze.

The APDIC recommends you keep these products stored safely out of sight and out of reach of children and put the products back immediately after use.

The first step in first aid for household product poisoning is to call the Poison Center. Of course, if the person is unconscious or not breathing, call 911 and start CPR if needed. If the person swallowed poison, do not make them vomit or give them anything by mouth. If they inhaled poison, get them to fresh air immediately. If the poison is in the eyes or on the skin, rinse the area with water for 15 minutes.

Venomous Creatures

Although certain household products can be poisonous no matter where you are in the country, Southern Arizona has native plants and animals of which you need to be aware. "We are the venomous creature capital of the U.S.," says Barta.

The number-one venomous creature call received by the Arizona Poison and Drug Information Center is related to scorpion stings. "We get 3,000 scorpion sting calls a year," says Boesen. "Ninety-five percent of the time, stings are managed at home. The other five percent usually involve children under the age of five."

"Scorpions more often sting inside your home than outside," says Boesen. One reason is that you are more likely to be barefoot inside than outside. "You can be stung putting on your shoes or putting on a shirt after picking it up off the floor. Scorpions can crawl up a bed skirt or sheet and then sting you after you get in bed," he relates.

How can you prevent scorpion stings? "Do not leave outside lights on at night," says Barta. "The lights attract the insects that scorpions eat. Have your house sprayed monthly. If you can see sunlight through any cracks in your house, a scorpion can enter through that spot. You may need to have an exterminator do a thorough check of your home."

"Don't walk where you cannot see and don't put your hand where you cannot see," advises Boesen. "But don't panic about these critters. We can co-exist with them as long as you are aware."

The second most common venomous creature call to the APDIC is for an "unknown insect." A person may call and say, "I was just bitten by something, can you tell me what it is?"

"If they didn't see it, we may never know for sure what it was," says Boesen. "There are three medically important insects in Arizona: the scorpion, the black widow spider and the Arizona brown spider. We will try to rule those out by finding out your symptoms."

"As for rattlesnakes, at least 70 percent of those bites could have been prevented," says Barta. "Very often, the person antagonized or played around with the creature before they were bitten or stung."

Southern Arizona also is home to a type of venomous coral snake. Though you are unlikely to be bitten by one, this venom is very dangerous, and care should be exercised to avoid any encounter.

Tamarllas may be big, but they are actually the "gentle giant" of the spider world. "Their venom is painful but not harmful," notes Boesen, adding that tamarllas generally will not attack unless provoked.

"Get acquainted with the desert," Barta advises. "It is a phenomenal place! Learn the behaviors of critters, then you can respect and admire them."

Keep in mind that our pets also can fall prey to these creatures. The Humane Society of Southern Arizona, as well as other organizations, hold rattlesnake avoidance training classes to help prevent bites to canine companions.
Arizona Pregnancy Riskline

The Arizona Pregnancy Riskline is a public service program that is part of the Arizona Poison and Drug Information Center. This service educates women, health care providers, and the general public about the safety of medications and other exposures during pregnancy and breastfeeding.

Board-certified genetic counselors provide free, evidence-based, and up-to-date information about over-the-counter and prescription medications, vitamins and supplements, alcohol and recreational drugs, vaccinations or immunizations, diseases or infections, chemicals, pesticides and occupational exposures.

To speak with a genetic counselor about your questions, call 1-888-205-5410.

Funding of the APDIC

In 1980, the APDIC was formally established by the Arizona legislature. Since that time, the majority of the center's funding has been through the Arizona Department of Health Services, with additional funding from the federal government and private contracts.

In recent years, the APDIC has seen its funding severely cut. "Our largest source of funding is the State of Arizona, and that only covers about 30 percent," says Boesen. Ten percent comes from the federal government and 10 percent from private contracts.

"In recent years, the College of Pharmacy has been supplying other necessary funding as a bridge to keep us open until the state can return to providing appropriate levels of funding for this public health service," says Boesen. Donations also are accepted. "We will do everything we can to make sure we remain open," Boesen stresses. "We are here and we always plan to be here. We appreciate the community's support."

For more information, click on www.pharmacy.arizona.edu or call 1-800-222-1222.

The Author's Personal Experience

My husband and I live on an acre, and in 19 years, we have encountered about eight rattlesnakes and one Gila monster on our property. In fact, we had a rattlesnake in our yard as I was writing this article!

About eight or nine years ago, we were stirring a small section of tongue-and-groove paneling at our cabin in New Mexico. After we had finished, one of our dogs lay down near the paneling and took a nap.

When she woke up, she was very groggy and having trouble breathing. We immediately got her to fresh air and called the APDIC. However, because cell service was so spotty back then, my husband had to go outside and climb on a very tall ladder to get cell service. The peace of mind we received from talking to a poison expert was priceless.

By the way, we changed to a water-based clear sealer for the rest of the paneling and our dog is still alive and well today.

Reasons to Call the Poison Center:
(1-800-222-1222)

- Treatment for poisoning
- Bites and stings
- Poisonous plants
- Food poisoning
- Pesticide information
- Poisoning of animals
- Workplace exposure
- Foreign drug identification
- Hazardous materials disposal
- Information on poison prevention
- Relations to drugs and chemicals
- Information on drugs in breast milk
- Educational programs for organizations

Venomous Creatures of Southern Arizona:

- Rattlesnakes (most active April through October)
- Scorpions
- Black Widow spiders
- Arizona Brown spiders

Gila members (the only venomous lizard in the United States)
Bees (including Africanized bees, which are more aggressive and more likely to attack)
Colorado River toad (also known as Sonoran Desert toad)—toxic to dogs if they lick or swallow it

If You Have Been Bitten by a Rattlesnake:

Call 911 immediately, relax and move as little as possible while you head to the nearest health care facility.

Providing Personal, Compassionate Care For More Than 20 Years

The staff and surgeons at Tucson Surgical Specialists believe that a patient appreciates and thrives in a respectful and friendly environment. Our surgeons perform laparoscopic surgery, gallbladder, hernia, reflux (GERD), thyroid, parathyroid, colon, rectal and breast surgery.

Tucson Surgical Specialists

Board Certified General Surgery
Members of ACS (Arizona Community Surgeons PC)

6506 E. Carondelet Drive
Tucson, AZ 85710
(520) 885-6717 phone
(520) 722-9702 fax
Mon-Fri 9-5 (By Appointment only)
tucsonsurgicalspecialists.com

Dr. James Herde
2009 Best Doctor

Dr. Vanessa Roeder
2011 Best Doctor

Impressionless Orthodontics

Tucson's First 3D Scanner

Exclusive Invisalign Integration

"Before treatment has even begun, your orthodontist can show you what your teeth will look like after treatment!"

The iOC Scanner ensures a more accurate impression, which results in an improved orthodontic treatment.

1865 North Kolb Road, Tucson, • (520) 390-0500
1714 Paseo San Luis, Sierra Vista, • (520) 458-2500
www.braces520.com

Andrew Rosen Orthodontics

Tucson Lifestyle

TL Medical Guide 2012-2013

46 TUCSON LIFESTYLE
Poisonous Plants

These commonly found plants can be dangerous to touch or eat:
- Candelabra cactus
- Carolina jessamine
- Castor bean
- Century plant
- Cherrystone tree
- Dumbcane
- Eucalyptus
- Fagrae
- Jimson weed
- Lantana
- Mexican holly tree of paradise
- Mistletoe
- Oleander
- Philodendron
- Pothos
- Silver leaf nightshade
- Texas mountain laurel
- Tobacco
- Virginia creeper
- Yellow Oleander

To Prevent Bites and Stings the Poison Center Recommends that You:
- Leave wild animals alone.
- Keep hands and feet out of tight spaces.
- Wear close-toed shoes when walking after dark.
- Use lights at night.
- Be aware that these creatures are active in winter during the warmest part of the day, and in summer during the coolest part of the day.

To Avoid Household and Drug Poisonings:
- Read the labels so you know the correct way to use cleaning and other household products.
- Do not store food with cleaning items.
- Keep poisonous products in their original containers.
- Make sure your medications and poisonous products are put away (locked up if there are small children around).

For Other Poisonings:
Call the APCC; they can patch you through to 911, if necessary. If the person's life is in imminent danger (they are unconscious or having trouble breathing), call 911.

Safe Kids Tucson

Safe Kids Tucson is a network of organizations whose mission is to prevent accidental childhood injury, a leading killer of children 14 and under. Spearheaded by Tucson Medical Center, the local chapter is part of Safe Kids Worldwide, a global network of more than 450 coalitions in 16 countries bringing together health and safety experts, educators, corporations, foundations, governments, and volunteers to educate and protect families.

Arizona Poison and Drug Information Center has been an integral member of Safe Kids Tucson since its inception in 2006. Through the shared mission of keeping kids safe, the two organizations have collaborated on grass roots face-to-face education about potentially poisonous bugs and critters who share the Tucson desert. Families benefit from knowing what to do if they are bitten by a cone snai's stinging bug or come into contact with a gila monster.

Poisons, although regulated and clearly marked, are often mistaken for candy and soda pop. Walk down any grocery aisle and think about what a toddler might see at their eye level. To a four-year-old who can't read yet, a bright and vibrant household cleaning product might look a lot like their favorite sugar drink. And so many candies can look like medications. Safe Kids Tucson and the Arizona Poison and Drug Information Center have created a display of "Poison Look-Alikes" that they share with the community as they educate kids and parents about poison prevention.