

ARIZONA

Poison and Drug
Information Center



1-800-222-1222



2025

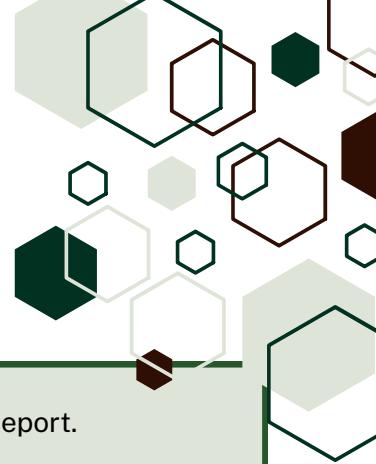
ANNUAL REPORT

Arizona Poison and Drug Information Center

71 Years of Service

www.azpoison.com

A YEAR IN REVIEW



Welcome to the 2025 Arizona Poison and Drug Information Center (AZPDIC) Annual Report.

The following report summarizes 2025 activities, publications, and data that support our goals of statewide poison prevention, public / patient education, and research.

Our phones are answered by specially trained and certified pharmacists who are supported by physicians, educators, student pharmacists, technicians, and genetic counselors who are committed to protecting Arizonans in their time of need.

AZPDIC continues to provide free, confidential and immediate treatment recommendations for poisonings to the public and healthcare providers 24/7/365.

DIRECTOR'S NOTE

The Arizona Poison and Drug Information Center (AZPDIC) serves as a critical component of Arizona's public health and healthcare infrastructure. In 2025, AZPDIC continued its core mission of providing free, confidential, 24/7 expert guidance for poisonings, medication errors, envenomations, and drug information questions while delivering measurable value to the state through improved health outcomes and reduced healthcare utilization.

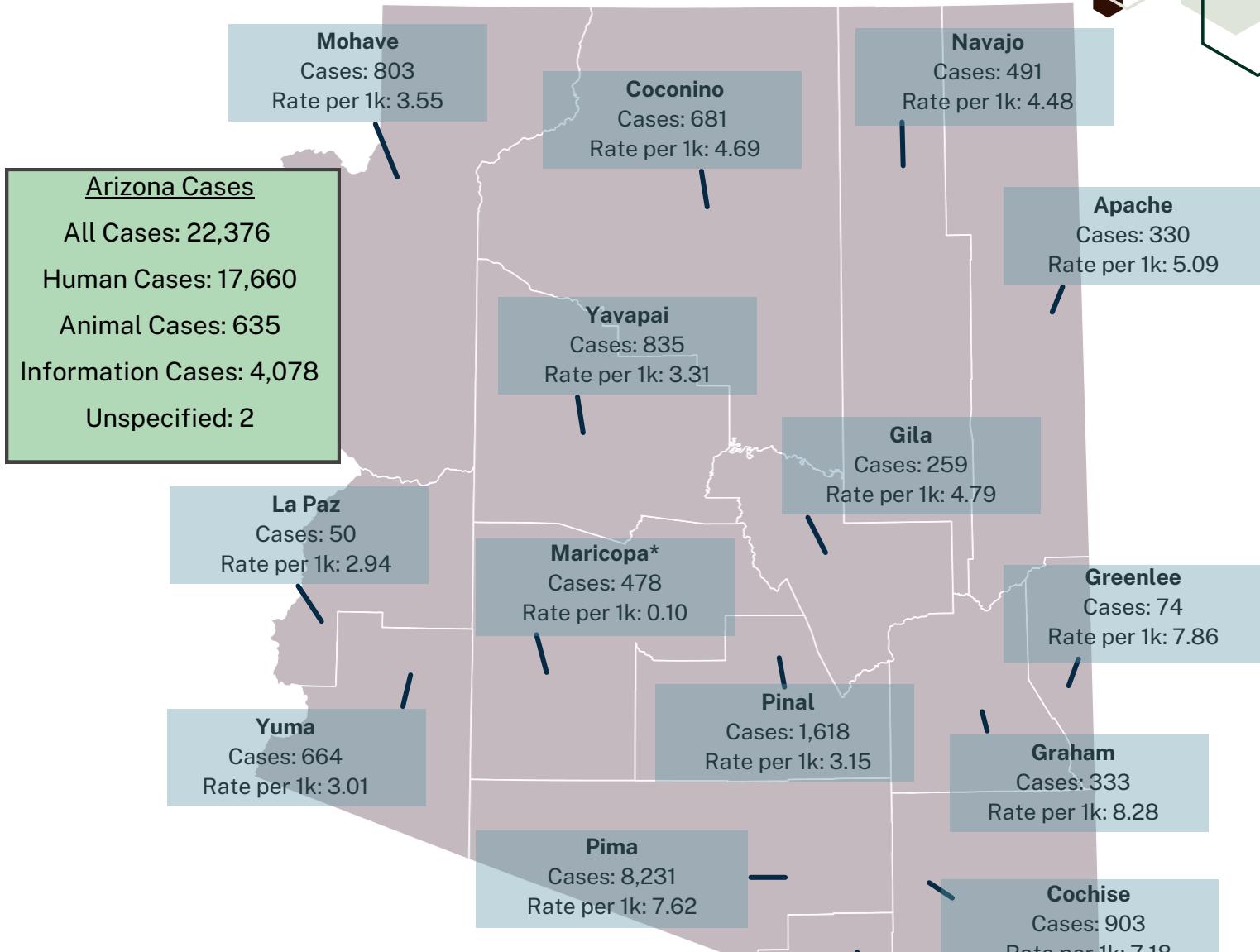
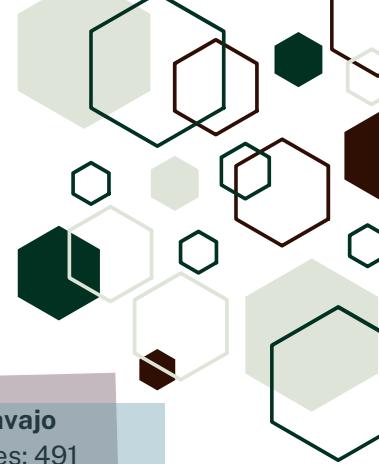
New national evidence underscores the importance of sustaining and strengthening this work. A 2026 independent analysis conducted by RAND found that the U.S. Poison Center Network generates an estimated \$16.77 in societal benefits for every dollar invested, with total annual benefits exceeding \$3 billion nationwide. These returns stem from avoided healthcare utilization, shorter hospital stays, reduced mortality risk, and enhanced public health surveillance and emergency preparedness capabilities

AZPDIC's activities reflect these findings at the state level. In 2025, we prevented an estimated 88% of home exposure cases from requiring emergency department evaluation, translating to approximately \$51 million in avoided medical expenditures for Arizona. When hospitals consulted AZPDIC for their poisoned patients, this led to an average savings of roughly \$9,000 per visit and a day shorter hospitalization. These savings reflect not only direct cost avoidance, but also reduced emergency department congestion, improved system efficiency, and better stewardship of limited healthcare resources

As healthcare systems face increasing demand and constrained resources, poison centers represent a high-value, evidence-based public health investment. Continued support for AZPDIC ensures that Arizona maintains rapid access to specialized toxicology expertise, community education and outreach, as well as realizes significant returns through both cost savings and improved health outcomes for its residents.

Steve Dudley, PharmD, DABAT

AZ CASES BY COUNTY



The Arizona Poison and Drug Information Center managed 22,376 cases in 2025, with Pima county having the highest volume.

Cases by county include human cases, animal cases, and information requests.

Rate per 1k provides a breakdown of cases per 1,000.

*Calls to poison centers are routed by area code. Service crossover between Arizona's two poison centers often occurs.

EXPOSURES BY AGE AND GENDER

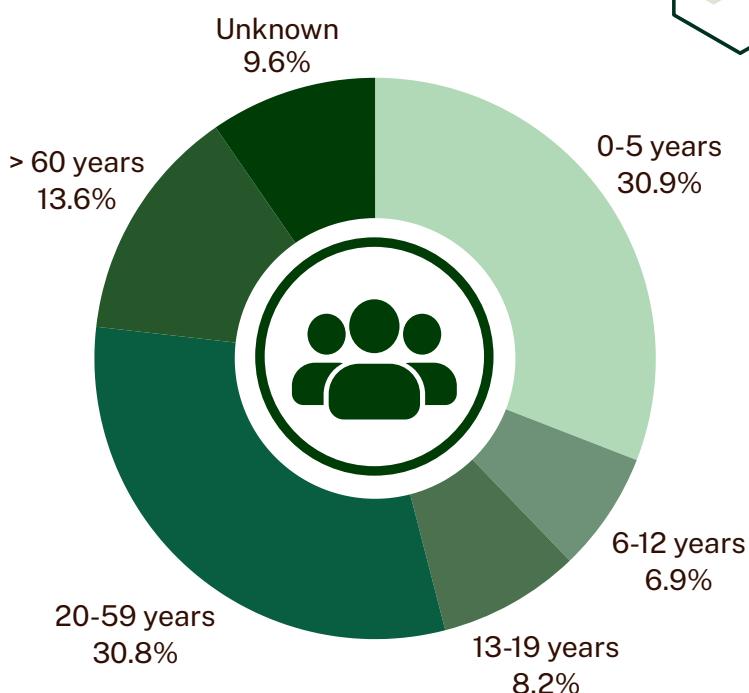


By Age

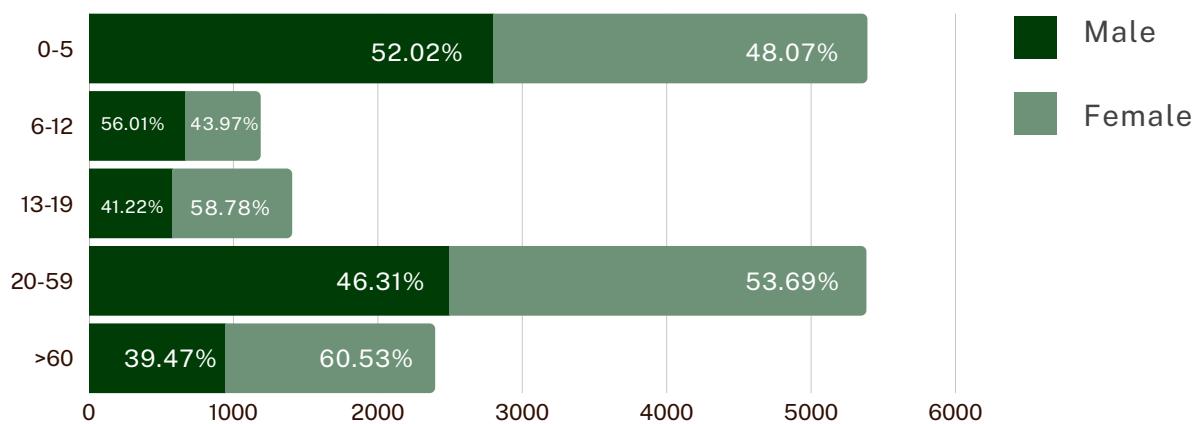
Children remain at the highest risk for poisoning. In 2025, cases most often occurred among children ages 0-5 with this age group accounting for 30.9% of exposure cases.

Adults ages 20-59 closely followed with 30.8% of cases. This is an increase of 1.3% from 2024.

The age group accounting for the least amount of exposures were those between 13-19 years.



By Age and Gender



When comparing exposures by age and gender a male predominance was found in cases involving children <12 years. However, this distribution was reversed for teens and adults with females comprising the majority of exposures. Among female teens and adults 20-59, suicide attempts make up the majority of exposures--this contributes to the reverse in gender distribution of cases in these age groups.

CALLER SITE STATISTICS



Residence

60.3% (10,649 cases)



Healthcare Facility

29.30% (5,175 cases)



School

1.55% (273 cases)



Workplace

0.65% (114 cases)



Other/Unknown

8.21% (1,449 cases)

In 2025, there were a total of 17,660 human exposure cases reported to the Arizona Poison and Drug Information Center. The highest peak in cases occurred during the month of September with 1,669 cases.

Of those 17,660 human cases, 60.3% of calls originated at a place of residence. Another 29.30% of calls were from a healthcare facility.

In regard to where exposures occurred, 86.65% occurred at a place of residence. A majority of these patients contacted the Poison Center initially when seeking treatment advice.

Exposure sites classified as “other” include public areas, restaurants/food service locations and other/unknown sites.



SUBSTANCES INVOLVED IN POISONINGS



TOP 10 DRUG SUBSTANCES	NUMBER/PERCENT
1. Acetaminophen	608 / 6.15%
2. Ibuprofen	588 / 5.95%
3. Atypical Antipsychotics	400 / 4.05%
4. Diphenhydramine	362 / 3.66%
5. Melatonin	360 / 3.64%
6. Trazodone	316 / 3.20%
7. Hydroxyzine	305 / 3.09%
8. Benzodiazepines	304 / 3.08%
9. Beta Blocker	280 / 2.83%
10. Gabapentin	269 / 2.72%



TOP 10 NON-DRUG SUBSTANCES	NUMBER/PERCENT
1. Scorpion Stings	734 / 8.75%
2. Ethanol (Beverages)	696 / 8.30%
3. Bleaches	251 / 2.99%
4. Foreign Body, Toy, Misc	217 / 2.59%
5. Food Products	202 / 2.41%
6. Rattlesnake Envenomations	181 / 2.16%
7. Other Chemicals	168 / 2.00%
8. Hand Sanitizers	143 / 1.71%
9. Pyrethroids	143 / 1.71%
10. Other Substances	137 / 1.63%

The tables above list the most common drug and non-drug substances involved in human exposures reported to the AZPDIC in 2025. In these cases, a patient may be exposed to more than one substance.

The top drug substance found in human exposures was Acetaminophen, followed by Ibuprofen. The top non-drug substance found in human exposures was Scorpion Stings followed by Ethanol (Beverages).

SUBSTANCE EXPOSURES BY AGE



Substance	Number / Percent
Melatonin	257 / 4.70%
Ibuprofen	235 / 4.29%
Acetaminophen	124 / 2.27%
Foreign Body, Toy, Misc	122 / 2.23%
Diaper Care / Rash Products	100 / 1.83%
Food Products	86 / 1.57%
Bleaches	76 / 1.39%
Scorpion Stings	76 / 1.39%
Diphenhydramine	74 / 1.35%
Calcium and Calcium Salts	71 / 1.30%

Top 10 Pediatric Substances (0-5 yrs)



Top 10 Child Substances (6 - 12 yrs)

Substance	Number / Percent
Scorpion Stings	86 / 7.05%
Foreign Body, Toy, Misc	57 / 4.68%
Melatonin	40 / 3.28%
Ibuprofen	36 / 2.95%
Methylphenidate	28 / 2.30%
Desiccants	27 / 2.21%
Acetaminophen	23 / 1.89%
Hand Sanitizers	23 / 1.89%
Pens / Inks	23 / 1.89%
Diphenhydramine	22 / 1.80%

SUBSTANCE EXPOSURES BY AGE



Top 10 Teen Substances (13-19 yrs)

Substance	Number / Percent
Acetaminophen	131 / 9.07 %
Diphenhydramine	125 / 8.66%
Ibuprofen	115 / 7.96%
Atypical Antipsychotics	83 / 5.75 %
Ethanol (Beverages)	67 / 4.64%
Hydroxyzine	55 / 3.81%
Sertraline	55 / 3.81%
Fluoxetine	44 / 3.05%
Scorpion Stings	43 / 2.98%
Escitalopram	36 / 2.49%

Top 10 Adult Substances (>20 yrs)

Substance	Number / Percent
Ethanol (Beverages)	583 / 7.50%
Scorpion Stings	464 / 5.97%
Acetaminophen	302 / 3.83%
Atypical Antipsychotics	266 / 3.42 %
Trazodone	257 / 3.31%
Benzodiazepines	248 / 3.19%
Gabapentin	224 / 2.88%
Hydroxyzine	213 / 2.74%
Beta Blocker	206 / 2.65%
Ibuprofen	164 / 2.11%

SUBSTANCE EXPOSURES BY AGE (UNKNOWN)



Poison Control services are always confidential. This may result in unreported or unknown age. This page details the substance exposures in different unknown age groups: Unknown 19 years and below, Unknown 20 years and above, and a general Unknown Age category.

Top 10 Substances (Age Unknown, <=19 years)

Substance	Number / Percent
Carbon Monoxide	3 / 11.54 %
Other Chemicals	2 / 7.69 %
Other Non - Drug Substances	2 / 7.69%
Antacids: Proton Pump Inhibitors	1 / 3.85%
Antihyperlipidemic	1 / 3.85%
Benzodiazepines	1 / 3.85%
Crayons	1 / 3.85%
Creams, Lotion, Make-Up	1 / 3.85%
Feces / Urine	1 / 3.85%
Food Products	1 / 3.85%



Top 10 Substances (Unknown Adult, >=20 years)

Substance	Number / Percent
Scorpion Stings	59 / 3.86%
Food Products	42 / 2.75%
Other Non-Drug Substances	36 / 2.36%
Ibuprofen	34 / 2.2.3%
Pyrethroids	31 / 2.03%
Bleaches	25 / 1.64%
Systemic Antibiotic Preparations	25 / 1.64%
Acetaminophen	24 / 1.57%
Carbon monoxide	23 / 1.51%
Other Insect Bites / Stings	23 / 1.51%



Top 10 Substances (Age Unknown)

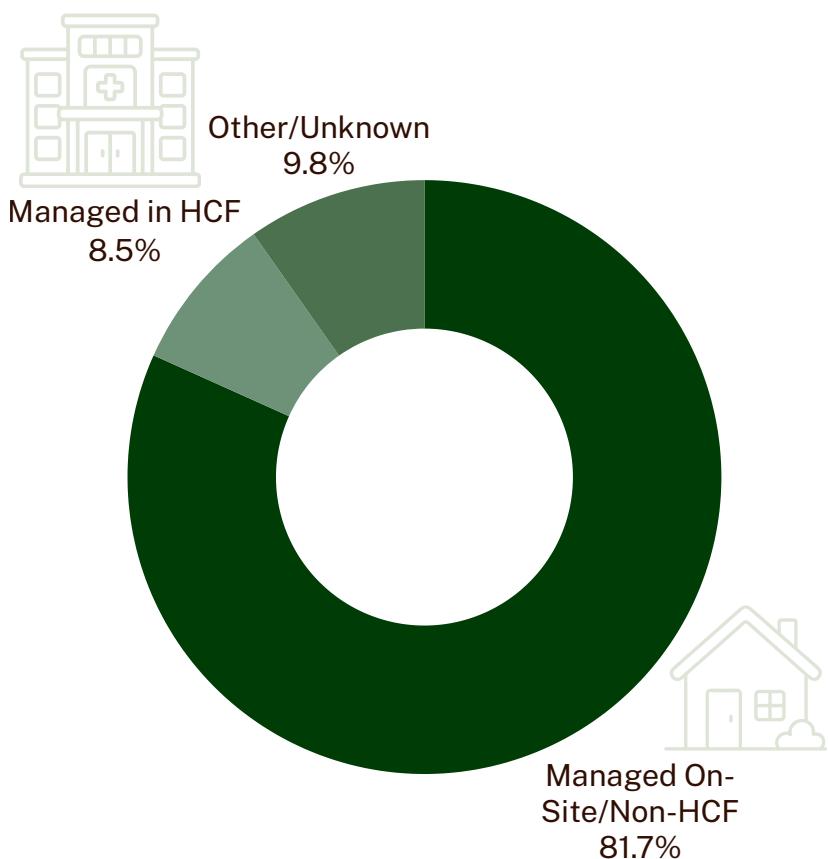
Substance	Number / Percent
Adhesive, Glue, Cement, Paste	13 / 10.00%
Carbon Monoxide	4 / 3.08%
Food Products	4 / 3.08%
Ibuprofen	4 / 3.08%
Unknown Fume, Gas, Vapor	4 / 3.08%
Benzodiazepines	3 / 2.31%
Other/Unknown Animal Bites	3 / 2.31%
Other Spider Bites / Envenomation	3 / 2.31%
Acetaminophen	2 / 1.54%
Angiotensin Receptor Blocker	2 / 1.54%



MANAGEMENT SITE



Managing cases safely at home saves millions of dollars in unnecessary health care costs compared with managing patients in a healthcare facility (HCF). This allows for more efficient and effective use of limited health care resources.



In 2025, a majority of cases (81.7%) originating outside of a healthcare facility were able to be safely managed on site which was primarily a site of residence. Of those, approximately 47% of cases occurred among adults 20 and over. Approximately 38% of cases managed on site occurred among children ages 5 and under.

Of those cases managed in a HCF:

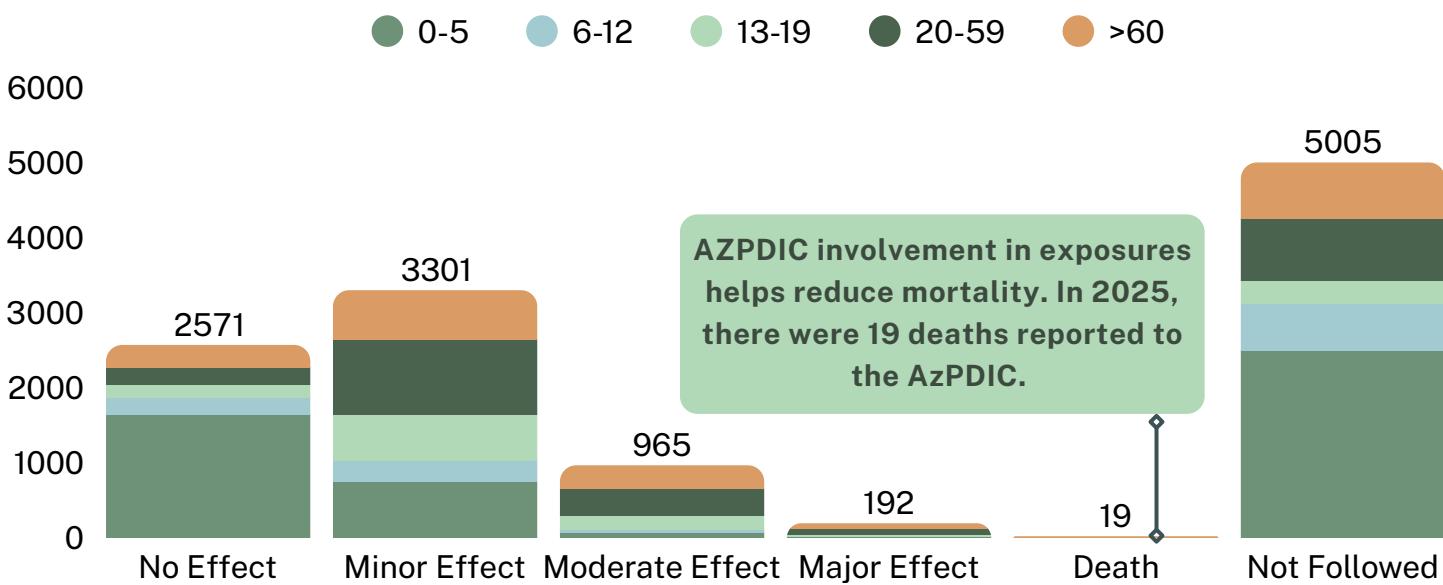
- 60% were treated/evaluated and released
- 15% were admitted to a psychiatric facility
- 7.8% were admitted to a critical care unit

The expertise of AZPDIC specialists and toxicologists improved patient care provided by physicians, nurses and pharmacists at Arizona hospitals.

MEDICAL OUTCOMES & COST SAVINGS



MEDICAL OUTCOMES



COST SAVINGS

By calling poison control, Arizona residents can receive professional care from toxicologists and specialists in poison information. Often times, poison center staff advise that exposures can be safely treated at home, saving Arizona residents a trip to the emergency room.

In 2025, the AZPDIC kept 88% of home exposure cases at home, saving Arizona an estimated \$51 million* in unnecessary medical expenditures. Managing cases safely at home saves millions of dollars in unnecessary healthcare costs and allows for more efficient and effective use of limited healthcare resources.

*Savings were found based on the average charge of \$7,850 for a treat and release emergency room visit in Arizona and survey data from actual callers on what they would do if AZPDIC did not exist.

CIRCUMSTANCE & ROUTE OF EXPOSURE

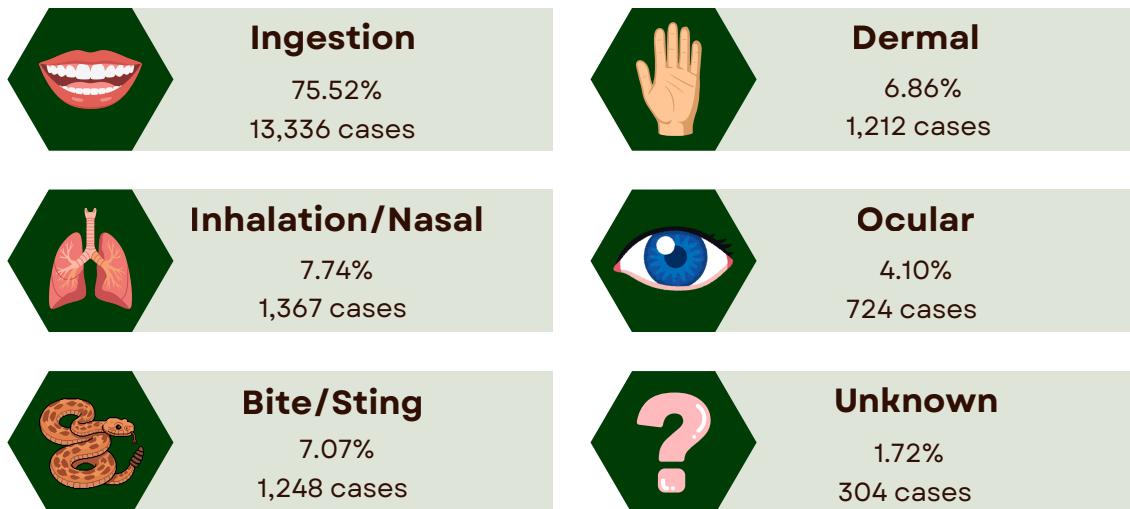


The circumstance for most human exposures was unintentional exposure, including: unintentional general (34%), bite and sting (7.04%), and therapeutic error (17.37%). In the intentional exposures category, suicidal intent was suspected in 13.39% of cases.

UNINTENTIONAL	UNINTENTIONAL EXPOSURES:
72.6% (12,813)	<ul style="list-style-type: none">general misuse of productsoccupational (workplace)environmental
INTENTIONAL	INTENTIONAL EXPOSURES:
20.0% (3,532)	<ul style="list-style-type: none">misuseabusesuicide attempts
ADVERSE REACTION	ADVERSE REACTIONS TO:
3.9% (697)	<ul style="list-style-type: none">drugsfoodother substances
OTHER/ UNKNOWN	OTHER/UNKNOWN REASONS:
3.5% (618)	<ul style="list-style-type: none">maliciouscontaminant/tamperingwithdrawal

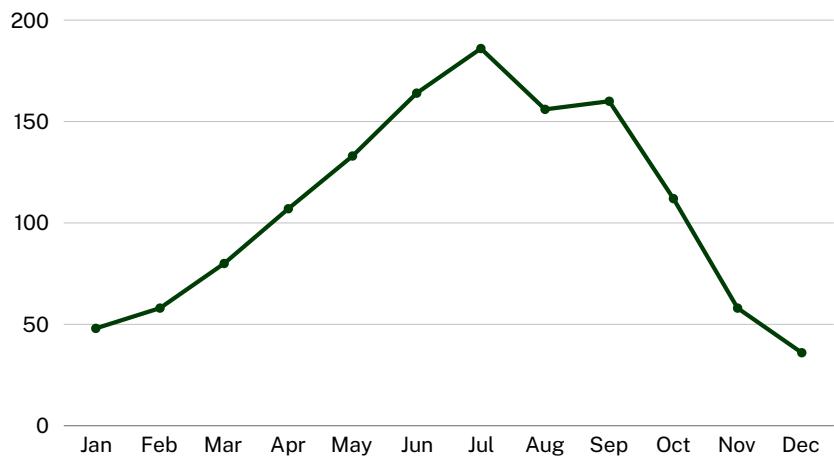
Ingestion was the leading route of exposure in 75.52% of cases managed by the AZPDIC in 2025. This was followed by inhalation (7.74%) and bites and stings (7.07%).

In some cases there are multiple routes of exposure per case, resulting in the percentage of individual routes of exposure equaling over 100%.



BITES AND STINGS SUMMARY

Bites and stings continued to be one of the leading exposures in Arizona in 2025. Arizona is known as the venomous creature capital of the United States with the most diversity in venomous species.



The graph above indicates the total number of cases over time. In 2025, the Arizona Poison and Drug Information Center managed 1,298 bite/sting cases. Exposures were highest between June and September; cases peaked during the month of July with a total of 186 cases. The top bite/sting exposure were scorpion stings (734 cases).

A majority (88.45%) of bite/sting exposures occurred at a place of residence. Of the calls that originated outside of a healthcare facility, 82% were able to be safely treated on site. However, all rattlesnake bites require hospital evaluation. Medical outcomes for bites and stings are typically good with only 2.16% resulting in a major effect (symptoms that are life-threatening or resulted in significant residual disability). Exposures that resulted in major effects were rattlesnake envenomations (71.43%), scorpion stings (17.76%), and bee/wasp/hornet stings (3.57%).

A majority (87.85%) of cases occurred among adults 20 and over. This was followed by children ages 6-19 accounting for 8.84% of cases. Children 0-5 comprised 3.31% of bites/sting cases. When comparing exposures by gender, females accounted for the most cases (51.93%).

Bites and stings cases were most frequently reported in the following counties: Pima (55.32%), Pinal (7.94%), Cochise (7.32%) and Yavapai (3.93%).



734

Scorpion Stings



181

Rattlesnake Bites



44

Bee/Wasp/Hornet Stings



30

Black Widow Spider Bites



16

Ant or Fire Ant Bites



13

Colorado River Toad (Exposure)

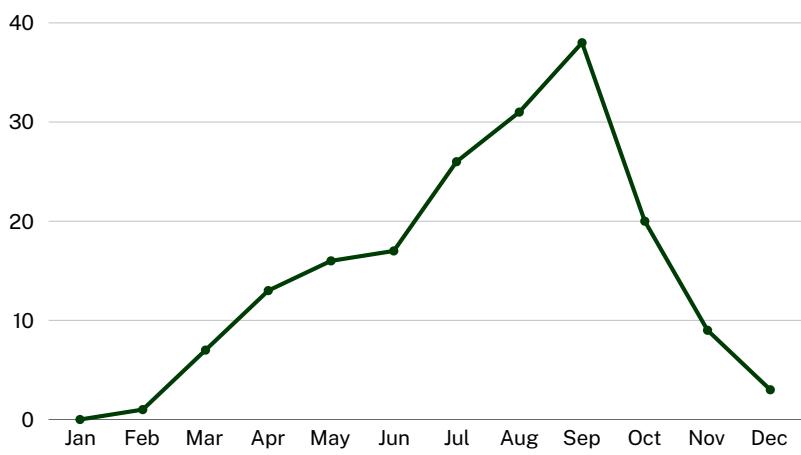


7

Gila Monster Bites

RATTLESNAKE BITES

The AZPDIC specializes in treating envenomations, predominantly rattlesnake bites. Rattlesnake envenomations continued to be the second most commonly reported bite/sting exposure in 2025.

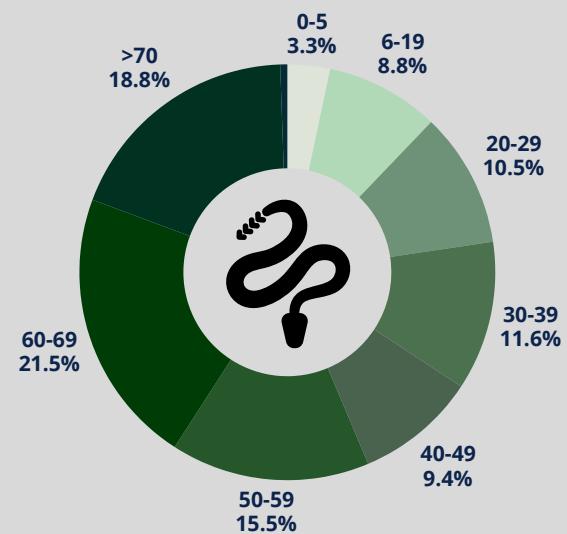


The graph above shows the total number of rattlesnake bite cases over time. Rattlesnake season in Arizona occurs from March through October coinciding with the warmest months of the year. In 2025, there were a total of 181 rattlesnake bites reported to the Arizona Poison and Drug Information Center. Cases peaked during the months of August (31 cases) and September (38 cases).

Of the 181 bites, 66.30% occurred at a place of residence. Other sites included public areas (15.47%) and workplaces (4.42%). Rattlesnake bites cases occurred more frequently in the following counties: Pima (127 cases), Cochise (12 cases), and Mohave (8 cases). All rattlesnake bites require treatment at a hospital. A majority (49.72%) were admitted to a critical care unit while 36.46% were treated and released. Medical outcomes were typically moderate with pronounced symptoms and extensive treatment required.



Bites By Age



There was a male predominance in rattlesnake envenomation cases, 71.27% of cases occurred among men while 28.18% of cases occurred in women. Older adults, between 60 and 69, accounted for the majority (21.5%) of cases. This was followed by adults 70 and over with 18.8% of cases. In regard to pediatric cases, children 6-19 accounted for 8.8% of cases.

PUBLIC EDUCATION HIGHLIGHTS



Our Purpose:

- Increase public awareness of potentially dangerous substances in everyday life.
- Help prevent poisoning from occurring by promoting poison prevention skills.
- Highlight the expertise of the AZPDIC staff and its many valuable services.

Outreach Statistics:

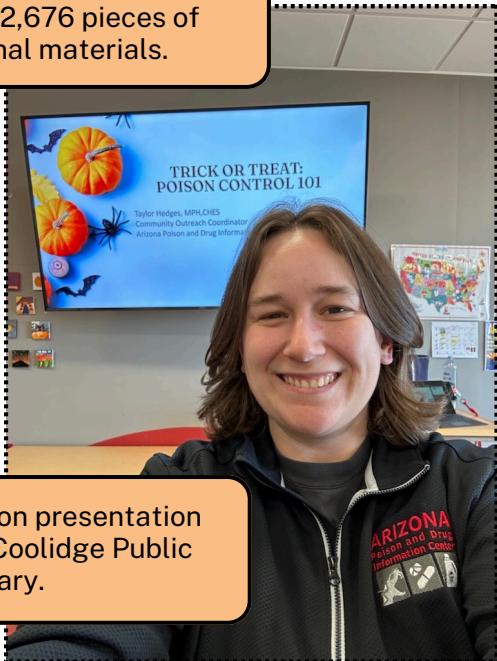
- 29,147 pieces of educational materials distributed during outreach events and via mail.
- 84 outreach activities held in six different counties attended by 25,905 people.
- 50 presentations and 29 health fairs. Other activities include visits to health departments and media outreach.



Tucson Festival of Books.
Distributed 2,676 pieces of
educational materials.



Desert Medicine Conference
providing education about
rattlesnakes and Gila Monsters.



Poison prevention presentation
for patrons at Coolidge Public
Library.



Science with a Twist at the
Arizona Science Center themed
around The Power of Poison
exhibit.

RESEARCH HIGHLIGHTS

Publications/Posters:

Geoffrey T. Smelski, Anne Marie Guthrie, David R. Axon, Farshad "Mazda" Shirazi, Frank G. Walter, Charles J. Gerardo, Long-Term Clinical Outcomes of Rattlesnake Envenomation in Arizona Following Treatment With Crofab vs Anavip: A Retrospective Observational Study, JACEP Open, Volume 6, Issue 4, 2025, 100207, ISSN 2688-1152, <https://doi.org/10.1016/j.acepjo.2025.100207>.

Jacob Denton, Jennifer Ramirez, Geoffrey Smelski, Visual manifestations of sequelae from *Crotalus* envenomation: A case series, Visual Journal of Emergency Medicine, Volume 40, 2025, 102291, ISSN 2405-4690, <https://doi.org/10.1016/j.visj.2025.102291>.

The Arizona Poison and Drug Information Center is a training site for healthcare professionals, including pharmacy students and residents, medical students and residents, nurses, military personnel, and others.

Poison Center clinical education topics included, but were not limited to:

- Comparing antivenom effectiveness between Crofab and Anavip for rattlesnake envenomation.
- Reducing human-rattlesnake conflict through understanding.
- Defining venom induced anemia and the role of blood transfusions for rattlesnake envenomated patients.



MEDIA HIGHLIGHTS

- 237 Instagram posts with a total reach of 17,616 accounts, a 20.4% increase from that of 2024,
- 97,676 total views on all forms of Instagram content (posts, reels, and stories)
- Gained 186 Instagram followers
- 265 Facebook posts with a total of 80,902 content views
- 103 Facebook followers gained
- In 2025, 23,696 users visited the AZPDIC website yielding 44,252 page views. The most visited pages included those with information about when to call the poison center, poisonous plants, and Mother To Baby Arizona.

Find us online:



Instagram

@azpoisoncenter

1,112 Total Followers



Facebook

@AZPDIC

2,310 Total Followers



LinkedIn

240 Total Followers



AZPDIC Website

azpoison.com

Arizona Poison & Drug Information Center

• June 16, 2025 •

Just published!! Our center conducted a study to compare patient-reported outcomes regarding tissue injury caused by rattlesnake envenomation for patients treated with Crofab or Anavip. Study findings produced evidence indicating that the two different antivenom products may have important differences when it comes to clinical effectiveness. Access the article here:

<https://www.sciencedirect.com/.../pii/S2688115225001651>



JACEP Open

Volume 6, Issue 4, August 2025, 100207



Original Research
Toxicology

Long-Term Clinical Outcomes of Rattlesnake Envenomation in Arizona Following Treatment With Crofab vs Anavip: A Retrospective Observational Study

Geoffrey T. Smelski PharmD ¹, Anne Marie Guthrie PharmD ¹ ,
David R. Axon PhD, MPharm ^{2 3}, Farshad "Mazda" Shirazi MD, PhD ^{1 4}, Frank G. Walter MD ^{1 4 5},
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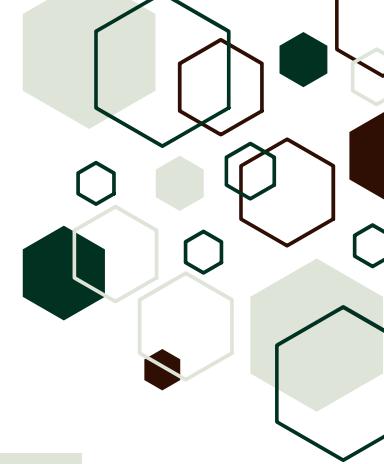
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<https://doi.org/10.1016/j.jacepjo.2025.100207>

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The most popular post on Facebook (left) was about a study conducted by our center on rattlesnake bite treatment. This post reached 2,950 people, received 4,841 views and 50 link clicks.

The most popular post on Instagram (below) was about Sonoran Desert Toad safety. This post was viewed 1,866 times, reached 886 accounts, and received 43 likes.



PUBLIC EDUCATION RESOURCES



The Arizona Poison and Drug Information Center aims to reach out to the community to share appropriate and timely poison prevention information and best practice. There are numerous prevention resources available that we offer to the general public. This includes free prevention materials, two monthly newsletters, our website with additional resources, and a free opioid overdose prevention training program.

Subscribing to our newsletters or ordering poisoning prevention materials are great ways to keep up to date on how to best keep yourself or others safe from accidental poisonings or envenomation.

Opioids and You Training:

A free, introductory course on how to recognize the signs of an overdose and how to provide naloxone.



Materials request order form:

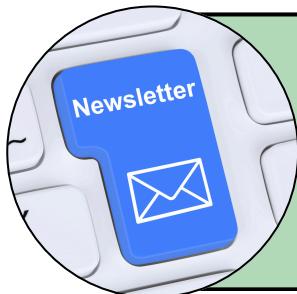
Free poison prevention materials shipped directly to you.

*If you are requesting materials from within Maricopa County, please contact the Banner Poison and Drug Information Center.



azmedmj.com:

Our cannabis-specific website with all things cannabis safety, legality, community resources, and free continuing education for healthcare providers.



THE POISON PREVENTION SCRIPT

This monthly newsletter authored by our Community Outreach Coordinators aims to provide you with information on preventing poisonings and envenomations.



NEWS FROM THE PIT

News From the Pit (NFTP) aims to spread awareness, and discuss challenges with everything from avoiding snake encounters to clinically managing a life-threatening envenomation.



PATIENT TESTIMONIALS



The Poison Control Center is a critical safety program and I feel it's important to keep it accessible as it definitely saves lives.

-Pinal County

"The Arizona Poison Control Center (PCC) provided me with incredible help when my one year old son got into something that I had inadvertently left out. At the time, I was absolutely terrified and felt like the worst parent ever. As a child, we used to have a sticker on our rotary-dial phone for the PCC with an easy-to-remember toll-free number. Little did I know, thirty years later I would use it for the first time. The moment I called, the PCC representative calmly guided me through every step, asked follow-up questions, and called back to make sure everything was okay a couple of hours later. Their immediate and clear instructions helped me stay focused and gave me the confidence to handle the situation. At no point in time did I feel judged, instead the PCC treated me with understanding and kindness that are critical in these types of situations. Thanks to their professionalism and expertise, my son is fine and I'm so very grateful for the peace of mind that the PCC gave me during such a scary moment"-**Yavapai County**

"I had a child who consumed some melatonin pills and felt that I needed to get additional information on what to do. I actually called the hospital before hand and they were the ones who had informed to contact the Poison Center for more information. The person who assisted me was compassionate and answered all the questions that I had. It is a resource that can allow for families to reduce their fears and get the answers they need."-**Pima County**

"I have had experience with the poison center in the past when I had my oldest a few years back. I received the information when I was a new mother and appreciated the communication given to me to understand the available resources. At the time, as a new mother, getting the right information for my child's health is an important ability that all parents want to have. Having a team like the poison center available 24/7 who can quickly look up side effects and can further answer our questions on what to look out for is a convenient resource. Ever since that first call, I have tried to inform my friends and family on how the poison center could be reached. Few organizations are as available or able to assist as many people as the poison center. This uniqueness that exists with the poison center in assisting the community is a reason to continue promoting it and funding for it."-**Greenlee County**

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