Putting the pieces together...

...to save lives

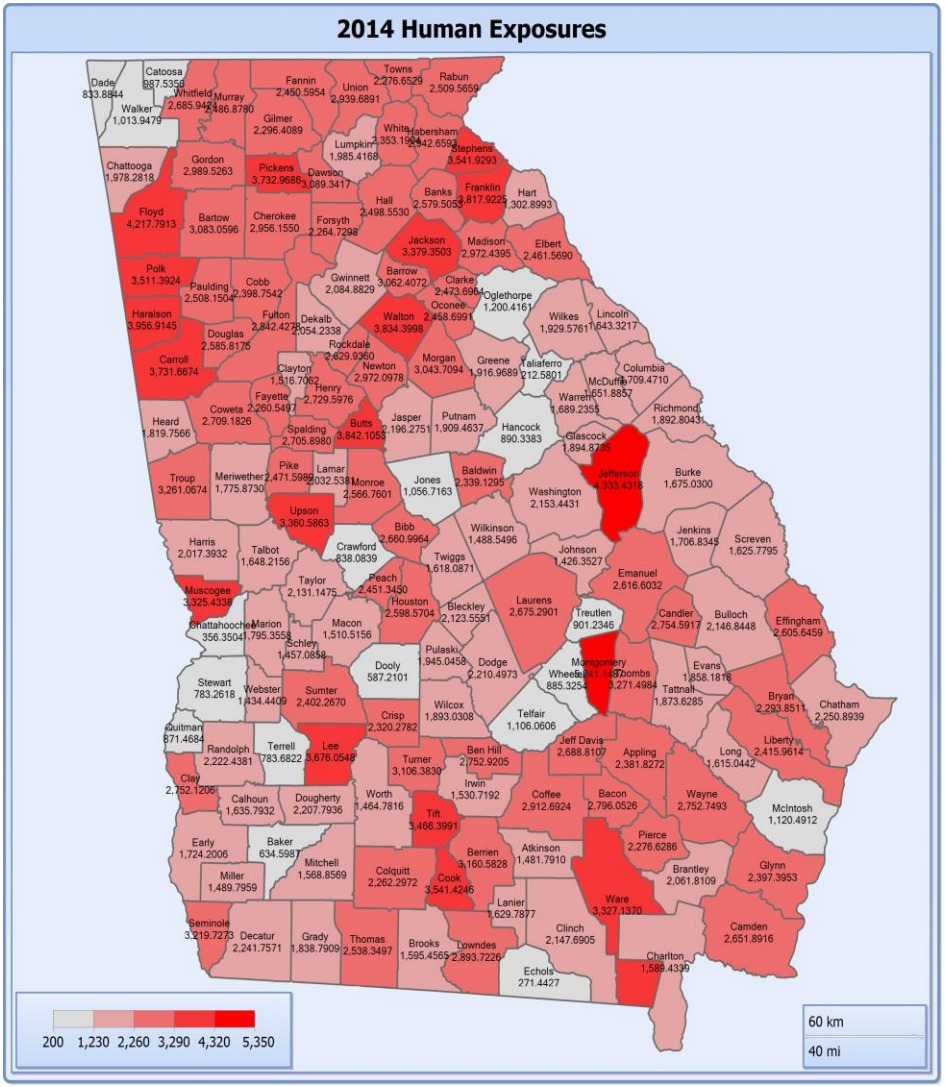
Georgia Poison Control
2014 Annual Report

Our mission is to provide high quality poison control center services to healthcare professionals and residents of Georgia. It is our goal to deliver prompt and accurate poison information to those who access our services.

We continuously strive to:

- Educate residents of Georgia in the areas of poison prevention and first-aid
- Educate health-care professionals in the areas of clinical toxicology, poisoning epidemiology, poison prevention, toxicological diagnosis and care
- Provide stable and continuous delivery of quality poison control center services to Georgians

Georgia Poison Control

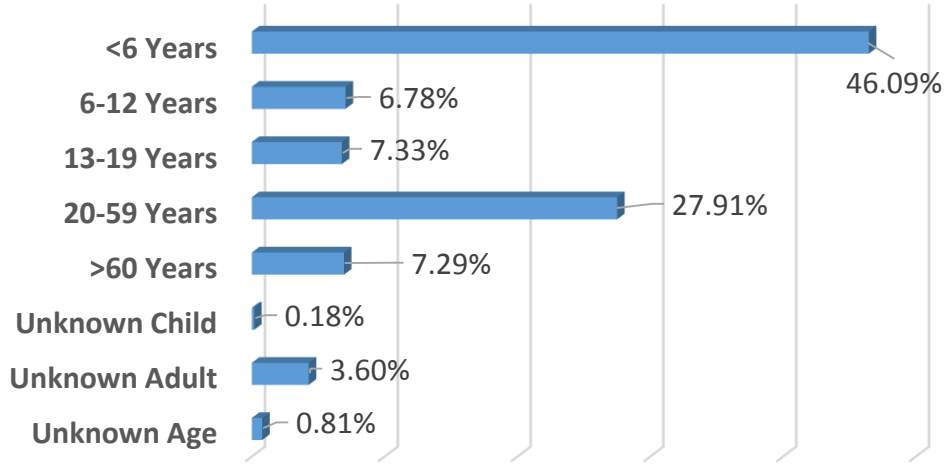


The Georgia Poison Center received calls from all 159 Georgia counties. The chart to the left demonstrates utilization from each county on a calls-per-capita basis.

The counties with the most frequently reported human exposures were Fulton, Cobb, Gwinnett, DeKalb, Muscogee, Chatham, Cherokee, and Henry.

According to national data, in 2013 America's 55 poison centers received over 3.1 million calls. Of those, about 2.2 million were calls about human poison exposures.

AGE



Of our 71,391 human exposure calls, nearly half of them involved children less than 6 years of age. Pediatric accidental poisonings continue to represent a significant proportion of calls to the GPC. Children ranging from one to two years of age make up nearly 30% of all exposure calls.

Pediatric exposures usually involve substances that are readily accessible and commonly found at home. In young children particularly, personal care products (such as cosmetics, dental products, shampoo, and perfume) are the most frequent sources of exposure, while analgesics (pain killers) fall in second place (even though analgesics are reported most commonly in adults).

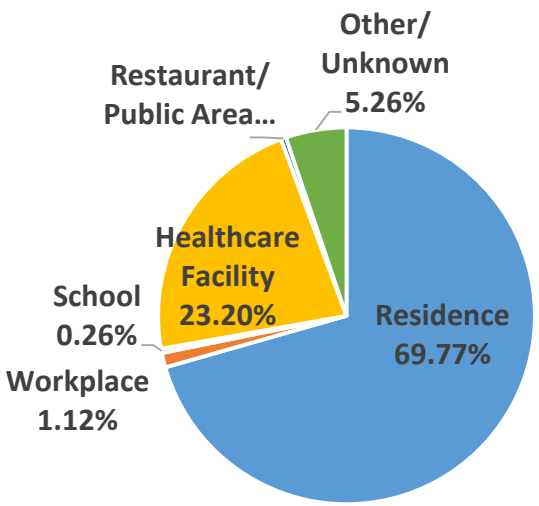
INTERESTING FACTS

Poisonings can happen to anyone. Did you know...

-Every 30 seconds, children are exposed to a potential poison!

- In Georgia, the situation where adults take a double dose of the same medicine has been increasing each of the past 3 years.

SITE OF CALLER



The majority of calls to the Georgia Poison Center come from either the home or from health care facilities. Parents call the GPC when they believe their child was exposed to a toxic substance. Seniors call us when they fear they may have made an error in taking their medication. Doctors, nurses, and pharmacists from all practice settings call us for treatment advice on drug or poison related cases.

GPC MANAGES PATIENTS SAFELY AT HOME

A call to the Poison Center provides a rapid, individualized, cost-effective answer to poison exposures, and often avoids expensive trips to the Emergency Department or doctor's office. The operating costs of the Poison Center are paid by State and Federal dollars, in recognition of the utility of the Poison Center.

Most of the cases handled at the GPC can be effectively managed at home with treatment advice and instruction regarding symptoms of concern. All of our calls are handled by highly trained, experienced, and dedicated health professionals (such as doctors, nurses, pharmacists. And other poison specialists).

SITE OF EXPOSURE	NUMBER	PERCENT
Managed At Home	45,569	63.8%
Managed in Healthcare Facility	23,266	32.5%
Other/Unknown	1,733	2.4%
Refused Referral	823	1.2%
TOTAL	71,391	100%

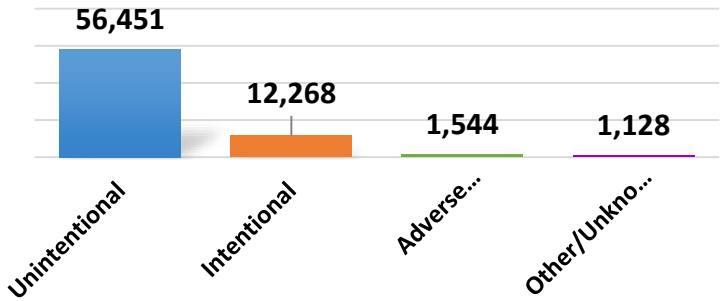
ROUTE OF EXPOSURE

ROUTE	NUMBER	PERCENT
Ingestion	57,412	75.92%
Dermal	5,211	6.89%
Inhalation	4,699	6.21%
Bite/Sting	3,692	4.88%
Ocular	2,859	3.78%
Other/Unknown	889	1.18%

There are several different ways poisons can enter the body. How a person is exposed to a poison is called the "route of exposure." The most common route of exposure to poison substances is through eating or drinking (ingestion).

Did you know that an injection is a possible route of exposure? Biological or chemical substances can be injected into the body by accidentally puncturing the skin with a contaminated needle or other sharp device.

CIRCUMSTANCES



- Unintentional exposures account for 80 percent of all human exposures. These exposures include occupational or environment exposures, bites/stings, therapeutic errors, misuse of products, and food poisoning.
- Intentional exposures, due to misuse, abuse, or suicide attempts, accounted for 17 percent of our total exposures.
    - Prescription and over the counter medicines are used everyday by teens and adults to "get high". Studies show that a large percentage of abused prescription drugs are obtained without permission from family and friends. Medicines are easily accessible in home medicine cabinets, closets, pantries, purses, luggage, and etc. and are highly susceptible to misuse and/or abuse.

SUBSTANCES INVOLVED IN POISONINGS

The most common products involved in poisoning exposures were categorized as drugs or non-drugs. A patient may be exposed to more than one substance. Of all exposures reported to the GPC, 79 percent of the cases involved drugs and 14 percent were non-drug related. For the remaining 7 percent, we were unable to determine what substance they were exposed to.

	EXAMPLES	NUMBER	PERCENT
Analgesics (pain killers)	MOTRIN® , TYLENOL®	9,750	11.42%
Sedative/Hypnotics/Antipsychotics	PROLIXIN®, AMBIEN®	4,886	5.72%
Antihistamines (allergy relief)	ALLEGRA®, BENADRYL®	3,793	4.44%
Antidepressants	WELLBUTRIN®, CYMBALTA®	3,571	4.19%
Cardiovascular Drugs	LIPITOR®, NIASPAN®	3,477	4.07%
Topical Preparations	BENGAY®, NEOSPORIN®	2,666	3.12%
Cold and Cough Preparations	MUCINEX®, DELSYM®	2,351	2.75%
Stimulants and Street Drugs	ADDERALL®, RITALIN®	1,988	2.33%
Antimicrobials (antibiotics)	PENCILLIN	2,112	2.47%
Anticonvulsants (antiseizure drugs)	PHENYTOIN®, GABAPENTIN®	1,807	2.12%

	NUMBER	PERCENT
Cleaning Substances (Household)	6,107	7.17%
Cosmetics/Personal Care Products	5,565	6.54%
Bites and Envenomations	3,976	4.67%
Foreign Bodies/Toys/Miscellaneous	2,976	3.50%
Pesticides	2,915	3.42%
Vitamins	2,207	2.59%
Alcohols	1,933	2.27%
Chemicals	1,365	1.60%
Fumes/Gases/Vapors	1,360	1.60%
Plants	1,210	1.42%

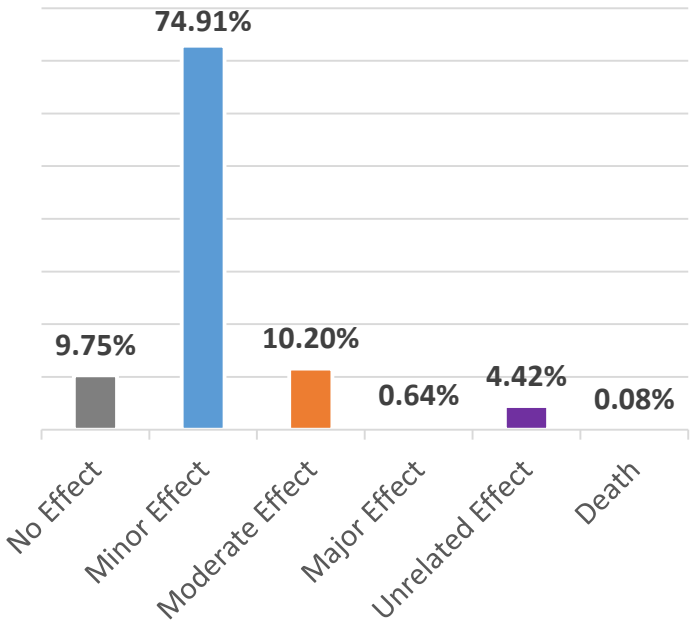
TREATMENTS INVOLVED IN POISONINGS

The two tables below list decontamination techniques (methods to reduce contact with the poison) and other therapies for poisonings recommended by the GPC during 2014. Most patients were managed with dilution, irrigation, or washing.

DECONTAMINATION TECHNIQUES	NUMBER
Dilute/Irrigate/Wash	20,107
Food/Snack	3,469
Fresh Air	2,171
Charcoal, single dose	1,876
Cathartic (substance that accelerates elimination of feces)	1,416
Other Emetic (induce vomiting)	781
Whole Bowel Irrigation (flushing out the stomach and intestines)	63
Lavage (cleansing of a hollow organ)	36
Charcoal, multiple dose	31
Ipecac (medicine that causes vomiting)	3

OTHER THERAPIES	NUMBER
Fluids, IV	4,006
Other	2,924
Oxygen	1,426
Antibiotics	1,101
Benzodiazepines	909
Naloxone	710
Ventilator	626
Antiemetics	516
NAC, IV	478
Antihistamines	446

OUTCOMES



Patient outcomes are graphically illustrated above. Over 84 percent of our cases resulted (or were expected to result) in no effect or minor effects for the poison victim. These findings are consistent with what other centers are reporting in their data. Additionally, there were 60 cases reported to the GPC that resulted in death (0.08 percent of all cases) in 2014.

PUBLIC AND PROFESSIONAL EDUCATION

The Georgia Poison Control is known for being an emergency telephone service that helps those who have been poisoned. It is also known for the education efforts that are put forth to the entire state of Georgia. Our public education efforts are intended to help increase the awareness of poison prevention and to communicate how to reach us for a poison emergency or poison information.

The Georgia Poison Control and partner organizations provided speakers and/or materials for over 150 programs, reaching more than 8,000 people during 2014. During the third week in March, the Georgia Poison Center celebrates National Poison Prevention Week (NPPW) and coordinates poison prevention activities throughout the state in collaboration with pharmacies, hospitals, schools, child care providers, and other agencies concerned with the health and safety of their communities.

In 2014, the GPC provided 15 emergency preparedness classes to over 300 participants across the state with a targeted audience of physicians, nurses, paramedics, pharmacists, and other health care professionals who are first responders to hazardous incidents. Classes offered included: Advanced Hazmat Life Support (AHLS); Explosion and Blast Injuries; Chemical, Biological, Radiological, Nuclear and Explosive Fundamentals (CBRNE); Nuclear Plant Emergency Response (NPER); and Radiological Preparedness and Emergency Response (RPER).

The Georgia Poison Control is also a training site for health care professionals. Emergency medicine and pediatric residents from Emory University School of Medicine train at the GPC on an ongoing basis. During their training, these residents have the opportunity to see how a poison center operates, become familiar with the resources that are available in the center, and assist in consulting on poisoned patients admitted to local health care facilities. Fourth year pharmacy students from PCOM, Mercer University, and the University of the South are also trained here. Students are introduced to the topic of clinical toxicology through one-on-one tutorials and hands-on activities with the guidance of toxicologists and certified specialists in poison information.

RESEARCH PRESENTATIONS AND PUBLICATIONS

- A buzz for a buck anyone?
- Fatal leukoencephalopathy associated with chronic borate ingestion
- Pediatric exposures to topical preparations containing methyl salicylate
- Pediatric ingestions of duloxetine – what is a “safe” dose?
- Measuring increasing complexity of cases of a regional poison center
- Neurologic complication of a massive acetaminophen overdose in a toddler
- Parachuting a compounded transdermal analgesic cream: A leap of faith
- Massive lacosamide overdose treated with continuous renal replacement therapy
- Pentobarbital toxicity after somnasol exposure
- Succimer vs. CaNa2 EDTA for lead encephalopathy in two individuals exposed to lead-contaminated moonshine
- Inappropriate fomepizole administration results in unnecessary cost, easily avoidable
- Severe hyperkalemia caused by salt substitute ingestion in a child

GEORGIA POISON CONTROL STAFF 2014

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Specialists in Poison Information (SPIs)
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Grady Health System

EMORY UNIVERSITY

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

DPH
Georgia Department of Public Health

POISON Help 1-800-222-1222