



# Poison Control Center Data Snapshot – 2016

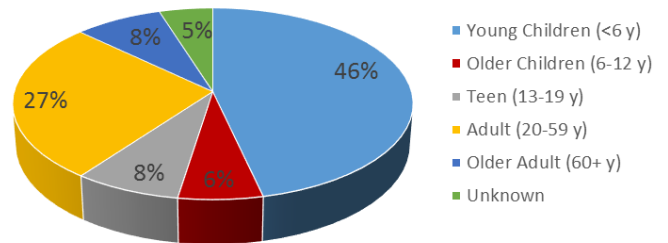
Overview of the 34th Annual Report of the American Association of Poison Control Centers' National Poison Data System<sup>1</sup>

Poisoning is the leading cause of injury death in the U.S.<sup>2</sup> In 2016, there were 55 poison control centers (PCCs) serving 323 million people, nationwide. PCCs managed 2.7 million cases via telephone, about 2.2 million of which were about people coming into contact with potentially dangerous substances. These types of cases are called exposures\*. Someone called a PCC about every 12 seconds in 2016.

## Who calls poison control centers?

Anyone can experience a poison emergency, because any substance can be harmful if used in the wrong way, wrong amount, or by the wrong person. PCCs take calls about people of all ages, and provide live help to callers in 150 languages. In 2016, children under 6 years accounted for almost half of all human exposures managed by PCCs. However, as in previous years, many of the more clinically serious cases occurred among adolescents and adults.

Age Distribution of Human Exposures, 2016



Data from Table 3A of the 2016 AAPCC NPDS Annual Report - Age and Gender Distribution of Human Exposures. N=2,159,032 human exposure cases.

## Who answers poison control center calls?

PCC cases are managed by *medical experts* – doctors, nurses, and pharmacists who have extensive, specialized training in poisoning prevention and treatment. Even emergency department physicians and pediatricians rely on the experts at poison control centers. In fact, in 2016 over 23% of human exposure calls came to PCCs from health care facilities.

## Why do people call poison control centers?

People call PCCs when they think someone may have been exposed to something that could hurt them. People also call PCCs for information. In 2016, 56% of human exposure cases managed by PCCs involved drugs and medications. Other exposures were to household and personal products, plants, mushrooms, pesticides, animal bites and stings, carbon monoxide, and many other non-pharmaceutical substances. The majority of exposure cases managed by PCCs involve only one substance, but cases that involve more than one substance tend to be more dangerous. In 2016, while only 12% of exposure cases involved more than one substance, multiple substance exposures represented over 58% of all fatal exposure cases.

Top Ten Human Exposure Substance Categories by Age Group - 2016

All Age Groups		Children <6y		Teens 13-19y		Adults >19y	
Substance Category	% of all case mentions	Substance Category	% of single substance exposures for this age group	Substance Category	% of single substance exposures for this age group	Substance Category	% of single substance exposures for this age group
Analgesics	11%	Cosmetics & Personal Care Products	14%	Analgesics	20%	Analgesics	10%
Household Cleaning Substances	8%	Household Cleaning Substances	11%	Antidepressants	10%	Household Cleaning Substances	7%
Cosmetics & Personal Care Products	7%	Analgesics	9%	Sedatives, Hypnotics, & Antipsychotics	6%	Sedatives, Hypnotics, & Antipsychotics	6%
Sedatives, Hypnotics, & Antipsychotics	6%	Foreign Bodies & Toys	7%	Antihistamines	6%	Pesticides	5%
Antidepressants	5%	Topical Preparations	5%	Household Cleaning Substances	6%	Bites and Envenomations	5%
Antihistamines	4%	Antihistamines	4%	Stimulants and Street Drugs	5%	Antidepressants	5%
Cardiovascular Drugs	4%	Vitamins	4%	Cosmetics & Personal Care Products	4%	Cardiovascular Drugs	4%
Foreign Bodies & Toys	4%	Pesticides	3%	Cold and Cough Preparations	4%	Cosmetics & Personal Care Products	4%
Pesticides	3%	Supplements, Herbs, & Homeopathic Remedies	3%	Bites and Envenomations	3%	Hormones and Hormone Antagonists	3%
Topical Preparations	3%	Plants	3%	Anticonvulsants	2%	Fumes, Gases, & Vapors	3%

Data from Table 22A&B. N=2,576,766 total case mentions; N=1,905,848 single substance exposures.

In 2016, 79% of exposures involved people who swallowed a substance. However, people were also exposed through the lungs, skin, eyes, and in other ways. Most poison exposures were unintentional (78%). Poison centers also received calls about medication side effects, substance abuse, malicious poisonings, and suicide attempts.

Opioid overdoses have quadrupled in the U.S. since 1999.<sup>3</sup> In 2016, PCCs managed over 67,000 opioid exposure cases. Analgesics (pain relievers) continue to be the #1 substance involved in exposures managed by PCCs.

### When do people call poison control centers?

Experts answer PCC calls 24 hours a day, 7 days a week, every day of the year. Similar to previous years, in 2016 higher call volumes were observed in the warmer months.

### Where do poison exposures occur?

In 2016, 93% of human exposures reported to PCCs occurred at a residence, but they can also occur in the workplace, schools, outdoors, and anywhere else. About 67% of the 2.2 million exposures reported to PCCs were treated at the exposure site, saving millions of dollars in medical expenses. In fact, poison centers save Americans more than \$1.8 billion every year in medical costs and lost productivity.<sup>4</sup>

### Text POISON to 797979 to save the Poison Help™ number in your smartphone.

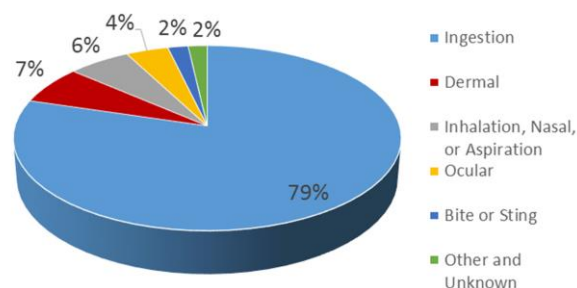
The American Association of Poison Control Centers (AAPCC) maintains the National Poison Data System (NPDS). Developed in 1983, NPDS contains more than 60 million poison exposures managed over the telephone by U.S. PCCs. NPDS is the only comprehensive, near real-time poisoning surveillance database in the U.S.

*\*DISCLAIMER: The term "exposure" means someone has had contact with the substance in some way; for example, ingested, inhaled, or absorbed a substance by the skin or eyes, etc. Exposures do not necessarily represent poisonings or overdoses. The American Association of Poison Control Centers (AAPCC; <http://www.aapcc.org>) maintains the National Poison Data System (NPDS), the national database of information logged by the country's regional Poison Control Centers (PCCs) serving all 50 United States, Puerto Rico, the District of Columbia, and territories. Case records in this database are from self-reported calls: they reflect only information provided when the public or healthcare professionals report an actual or potential exposure to a substance, or request information or educational materials. AAPCC is not able to completely verify the accuracy of every report made to member centers. Additional exposures may go unreported to PCs and data referenced from the AAPCC should not be construed to represent the complete incidence of national exposures to any substance(s).*

#### References

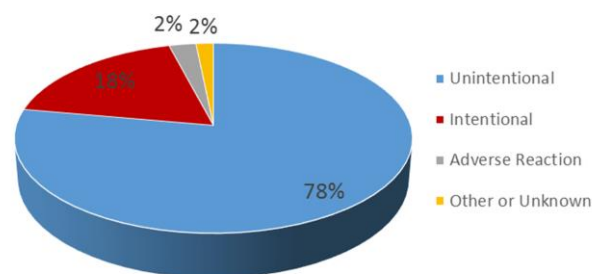
- 1) [2016 Annual Report of the American Association of Poison Control Centers' National Poison Data System \(NPDS\): 34th Annual Report. Clin Toxicol \(Phila\). 2017](#)
- 2) [National Center for Health Statistics, National Vital Statistics System](#)
- 3) [The Centers for Disease Control and Prevention](#)
- 4) [The Lewin Group, Inc. Final Report on the Value of the Poison Center System. 2012.](#)

### 2016 Route of Exposure for Human Exposure Cases



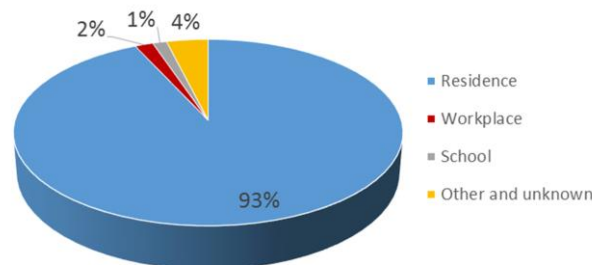
Data from Table 9. Route of Exposure for Human Exposure Cases. N=2,272,976 routes coded.

### 2016 Reason for Human Exposure Cases



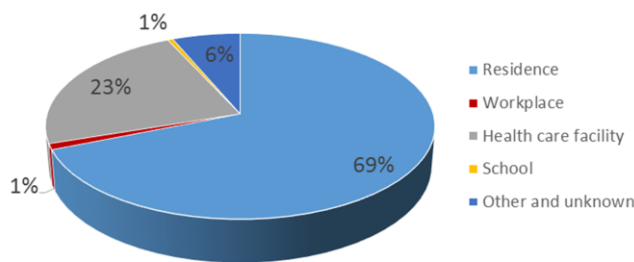
Data from Table 6A. Reason for Human Exposure Cases. N= 2,159,032 human exposure cases

### Site of Exposure for Human Exposure Cases - 2016



Data from Table 2 of the 2016 AAPCC NPDS Annual Report - Site of Call and Site of Exposure, Human Exposure Cases. N=2,159,032 human exposure cases.

### Site of Caller for Human Exposure Cases - 2016



Data from Table 2 of the 2016 AAPCC NPDS Annual Report - Site of Call and Site of Exposure Human Exposure Cases. N=2,159,032 human exposure cases.