

In 2020, the Blue Ridge Poison Center (BRPC) handled **over 21,000 calls** about people with known or suspected overdoses or exposures to harmful substances. Most calls (65%) were because of unintentional exposures. Nearly 20% of calls were because of intentional exposures including suicide gestures and the misuse or abuse of substances. An additional **2,500 people called the BRPC to ask a question** about poisons or medicine, or to order free materials. All callers were helped by our team of experts: nurses and doctors with extensive knowledge about treating poisonings. The BRPC provided this free, confidential service 24 hours a day all year long; even during the pandemic.

### What Ages Were Affected by Poisoning?

Children under age 6 were responsible for the most calls--39% (figure 1). Why so many? Young children are at risk for poisoning for many reasons. Even with coaching, they cannot reliably tell the difference between what is safe and what is dangerous. They put everything into the mouth. Their natural curiosity leads them handle or swallow substances which can harm them.

However, most of the serious poisoning cases involved teens and adults. In fact, *9 out of every 10 poisoning deaths in the U.S. happened to adults...not to children.* Many of these deaths were the result of accidental overdoses of medicine.

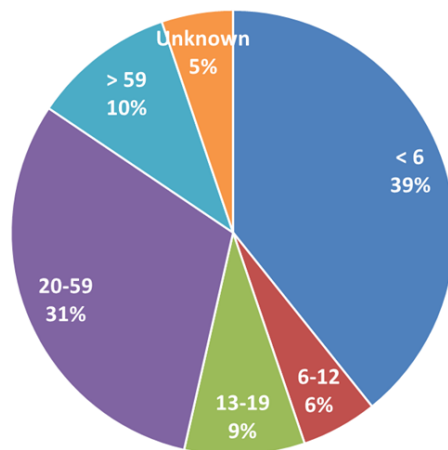


Figure 1: 2020 Age of Patient

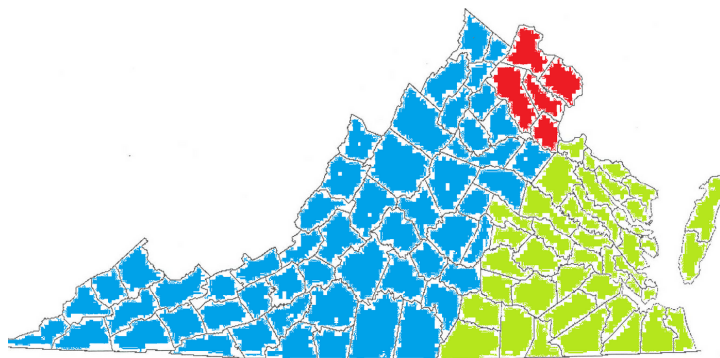
Table 1: 2020 Top 20 Substances

Top 20 Substances	Cases
Analgesics	2,290
Cleaning Substances (Household)	1,540
Antidepressants	1,528
Cosmetics/Personal Care Products	1,324
Sedative/Hypnotics/Antipsychotics	1,270
Cardiovascular Drugs	1,148
Alcohols	1,107
Antihistamines	979
Stimulants and Street Drugs	741
Foreign Bodies/Toys/Miscellaneous	691
Anticonvulsants	687
Pesticides	627
Hormones and Hormone Antagonists	512
Topical Preparations	473
Plants	466
Chemicals	417
Bites and Envenomations	411
Cold and Cough Preparations	351
Hydrocarbons	292
Arts/Crafts/Office Supplies	221

### What Substances Were Involved?

Sixty percent of poisoning calls were about medicines (table 1). This includes prescription medication, over-the-counter products, and supplements such as herbals and vitamins. Medicine poisoning happens when someone takes too much, takes the wrong product, takes medicine not prescribed to them, or takes the wrong combination of products. Ten percent of all cases involved analgesics (pain relievers), particularly prescription opioids.

Thirty-one percent of calls were about substances commonly found in and around our homes such as cleaning products, pesticides, alcohol, automotive products, and more. Nearly 2% of calls were about bites or stings from venomous snakes, spiders, bees, etc.



**Figure 2. Poison Center Service Area**

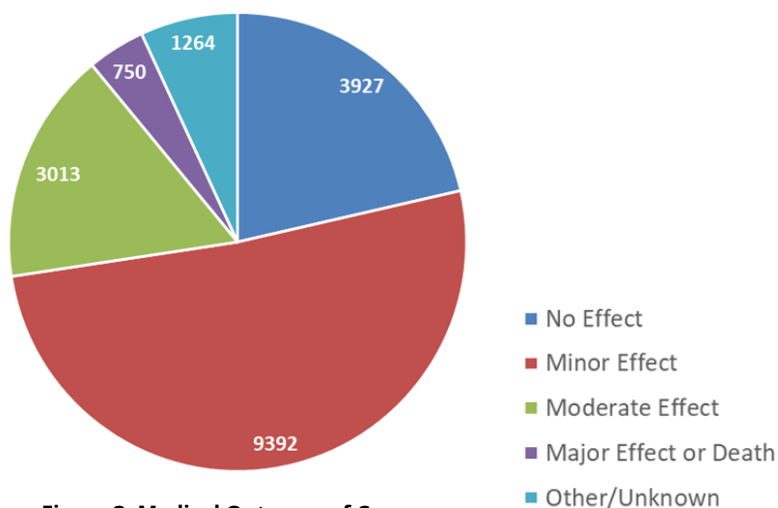
### Who Called the BRPC?

The BRPC is located in Charlottesville, VA and is affiliated with University of Virginia Health. It is certified as a regional poison center by the American Association of Poison Control Centers ([www.aapcc.org](http://www.aapcc.org)). Most calls--65%--came from the home of someone living within the BRPC service area, shown in blue in figure 2.

Twenty-nine percent of calls came from a hospital, clinic, first responder, pharmacy, or other healthcare provider seeking expert advice in helping their own patients and clients.

### Medical Outcomes

With guidance from our experts, almost 73% of callers experienced no or minor health effects as a result of their exposure (Fig. 3). *Helping callers treat their exposure on site saves time, worry, and money by preventing unnecessary trips to a healthcare facility.* Twenty percent of callers experienced moderate or major health effects. In 2020, 17 cases resulted in a death.



**Figure 3: Medical Outcome of Cases**

### Education and Outreach

In 2020 the BRPC's public education program distributed 174,000 materials, developed new videos and other virtual resources, published 3 newsletters, and maintained a robust website and social media presence. All resources are free: visit [www.brpc.virginia.edu](http://www.brpc.virginia.edu).

BRPC clinicians educated numerous healthcare professionals and students through the UVA School of Medicine's Medical Toxicology Rotation and the two-year Medical Toxicology Fellowship program. Additionally, monthly newsletters for healthcare providers were distributed. For more information visit the [UVA Division of Medical Toxicology](http://www.uva.edu/division-of-medical-toxicology).