Poisoning is a leading cause of injury hospitalization and injury death in the U.S.\(^1\) In 2016, the Blue Ridge Poison Center (BRPC) at the University of Virginia Health System handled nearly 20,000 calls about people coming into contact with harmful substances. This contact is called an exposure. An additional 4,000 people reached out to the BRPC to ask a question or get more information about poisons or poisoning prevention. All of them were helped by our team of experts—nurses and doctors with extensive training in treating poisonings—who manage the PoisonHelp Hotline 24 hours a day, every single day. Calls are free and confidential. Program the number into your phone today! 1-800-222-1222.

**AGE DISTRIBUTION OF EXPOSURES**

*Half of all calls—51%—were about children ages 12 and under.* Most of those calls were about toddlers under age 6. Young children are at risk for poisoning because they don’t know the difference between things that are safe to eat or drink and things that are harmful. Their natural curiosity may lead them to touch or swallow substances which can hurt them.

However, most of the more serious poisoning cases involved adolescents and adults. In fact, *93% of all poisoning deaths happened to adults over age 20...not children.* Many of these deaths were the result of accidental overdoses of medicine.

### What Substances Were Involved?

_Sixty percent of poisoning exposure calls were about medicines:_ prescription, over-the-counter (OTC), or supplements. Medicine poisoning can happen when someone takes too much, takes the wrong product by mistake, takes medicine not prescribed for them, or takes the wrong combination of products. The remaining 40% of exposure calls were about non-pharmaceutical substances. Most of these substances were products commonly found in and around our homes such as pesticides, cleaning products, alcohol, automotive products, etc. Nearly 4% of exposure calls were about poisons found in nature, including plants, berries, mushrooms, snakes, and spiders.

The #1 source of exposures for children under age 6 was cosmetics and personal care products. Examples include mouthwash, soaps, creams, hair products, perfume, etc. Adults may unintentionally leave these products on bathroom counters, kitchen tables, in diaper bags or purses, under cabinets, or other places easily accessible by children.
**WHO CALLED THE BLUE RIDGE POISON CENTER?**

The BRPC’s coverage area is comprised of 54 counties in Virginia: roughly the western half of the state’s geographic space and about a third of its population. Most calls — 67% — came from the home of someone living within our region. However our region also contains 48 hospitals and numerous other health care facilities; 26% of our calls came from health care providers seeking our expert advice on managing their own poisoned patients. A small fraction of our calls (7%) came from a school, workplace, or other location.

**OUTCOMES: WHAT HAPPENED TO ALL THOSE CALLERS?**

Sometimes our experts determine that a poisoning needs medical attention, and will advise a trip to the emergency room or other facility. Much of the time, however, callers are guided to treat the poisoning exposure at home, under the guidance of the BRPC experts.

In 2016, 88% of calls originating from a residence, school, workplace, or other non-healthcare facility were treated on site. We estimate this prevented thousands of unnecessary visits to a healthcare facility and unnecessary EMS transports, saving Virginians time, worry, and money. [Photo: Scott Wiley, BSN, CSPI, helping a caller at the Blue Ridge Poison Center.]

Half of the exposure calls in 2016 resulted in minor health effects. Thirteen percent of exposures resulted in moderate health effects, and 2.5% resulted in major health effects. Almost 30% of all callers suffered no health effects as a result of their exposure.

**EDUCATION AND OUTREACH**

Poisoning is preventable! The Blue Ridge Poison Center has a full time health educator who provides public education materials and programs to teach poisoning prevention for people of all ages in the BRPC region. Examples of our public education accomplishments in 2016 include:

- Routinely tweeted poisoning prevention news and tips (follow us #blueridgepoison).
- Released 4 issues of The Antidote, our newsletter.
- Gave 34 presentations.
- Supplied materials for 33 health fairs.
- Distributed over 222,300 educational items including magnets, wallet cards, and posters.

The BRPC also helped teach more than 150 medical personnel-in-training about managing poisoning exposures.

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