



Minnesota Poison Control System

2012 Annual Report

Serving Minnesota since 1972
www.mnpoison.org



Hennepin County **Medical Center**

The Hennepin Regional Poison Center

has served the residents of Minnesota since 1972, and is designated by the state as the Minnesota Poison Control System. It is one of only 57 U.S. Poison Centers accredited by the American Association of Poison Control Centers (AAPCC), which sets stringent criteria to ensure quality service and care. Hennepin County Medical Center continues to generously provide a home for the Poison Center since its founding.



In 2012 we answered 54,373 calls from Minnesota residents and health care providers regarding patients who either were or were in danger of being poisoned. Calls to the Poison Center are answered 24/7 by pharmacists with specialized toxicology training. We continue to have an experienced and well-seasoned staff. One hundred percent of our pharmacists have been

certified by the AAPCC as Certified Specialists in Poison Information. This wealth of experience allows us to continue to keep 92% of all patients safely in their homes while offering up-to-date, cutting edge advice to the small number of patients who require specialized medical care. The vast majority of patients who remain at home save millions of dollars every year, preventing unnecessary use of ambulance services and emergency department visits. Studies conservatively estimate for every dollar spent on Poison Centers, \$13 is saved in unnecessary health care costs and lost productivity. We see this in our own callers; when surveyed, over 70% of them state that if the Poison Center were not available they would call 911 or seek physician care immediately. This means we prevented over 30,000 unnecessary emergency department visits in 2012. Funding for the Poison Center continues to be an issue; 2012 saw our Center aggressively pursue new avenues of funding to maintain our current high-level service.

Since the presidency of John F. Kennedy the third week of March every year is known as National Poison Prevention Week. Poison Prevention Week 2012 was kicked off by State Commissioner of Health Dr. Edward Ehlinger, who hosted a press conference from Hennepin County Medical Center that focused on the value of the Poison Center services for all Minnesotans. We appreciate Commissioner Ehlinger's support and look forward to continued collaboration with the Department of Health.



Deborah Anderson, PharmD, Director
Jon Cole, MD, Medical Director

Each year the epidemiology of poisonings changes in Minnesota. 2012 saw the emergence of concentrated soap in the form of laundry pods. These unique products, designed to concentrate laundry detergent, have proven to be a hazard to children. When children place them in their mouths, these pods are associated with airway swelling and altered mental status. Though the exact reason for these concerning effects is still uncertain, we continue to monitor this situation closely with real-time data and provide information and education to health professionals and parents alike.

The Hennepin Regional Poison Center is supported by consulting medical toxicologists – physicians with additional expertise in poisonings. While voluntarily taking calls, they assist clinicians across the state in treating critically ill poisoned patients. On behalf of our Associate Medical Directors Drs. Louis Ling, David Roberts, and Andrew Topliff, we would like to sincerely thank Beth Baker, MD; Elisabeth Bilden, MD; Carson Harris, MD; Michael Kinnan, MD; Samuel Stellpflug, MD; and Mathew Sztajnkrzyer, MD. We are also fortunate to have a relationship with the Minnesota Mycological Society. Their expert mycologists assist us with mushroom identification and provide expertise that contributes to effective patient care. We are grateful for their help.

Meet Our Staff

We also strive to prevent poisonings wherever possible via an active education program. In 2012 the Poison Center conducted 167 events attended by over 52,250 people to increase public awareness of our services and to provide poison prevention education. The Poison Center also participated in 136 professional education events. On site we educated 62 pharmacy and medical students and residents in multiple specialties including Emergency Medicine, Internal Medicine, Family Medicine, Occupational Medicine, and Pediatrics. We also continued our very successful collaboration with HealthPartners Institute for Graduate Medical Education as a major training site for Minnesota's only Medical Toxicology Fellowship. This specialized two-year program prepares physicians who have already completed a residency to become board certified in Medical Toxicology.

The Poison Center staff and consultants continued to remain active in research. Fourteen peer-reviewed abstracts were presented at the 2012 North American Congress of Clinical Toxicology in Las Vegas, Nevada. Numerous peer-reviewed, indexed publications were also authored in 2012.

The Poison Center continues its dedication to reducing the morbidity and mortality due to poisoning while simultaneously reducing unnecessary medical expenses. We look forward to serving Minnesota in 2013.

Director

Deborah Anderson, PharmD

Medical Director

Jon Cole, MD, ABMS

Senior Associate Medical Directors

David Roberts, MD, ABMT, ABMS

Louis Ling, MD, FACMT, ABMT, ABMS

Associate Medical Director

Andrew Topliff, MD, ABMS

Clinical Supervisor

Stacey Bangh, PharmD, DABAT

Educator

Kirk Hughes, RN, EMT-B, CSPI

Specialists in Poison Information

Rachel Brandt, PharmD, CSPI

Alisha Floan, PharmD, CSPI

Gregory Grande, RPh, CSPI

Ted Gray, RPh, CSPI

Shin Kwon, PharmD, CSPI

Chris Lintner, RPh, DABAT, CSPI

Kelsey Moser, PharmD, CSPI

Kevin Sell, RPh, CSPI

Steve Setzer, PRh, CSPI

Jill Topeff, PharmD, CSPI

Greg Wedin, PharmD, DABAT

Laurie Willhite, PharmD, CSPI

Poison Information Providers

Rachel Branstad

Gina Danielson

Sarah Derr

Calley Gruenhagen

Dustin Hadley

Jon Malepsy

Renee Petroski

Rana Shouman

Consultants

Beth Baker, MD, ABMS

Elisabeth Bilden, MD, ABMS

Carson Harris, MD

Mike Kinnan, MD, ABMS

Sam Stellpflug, MD, ABMS

Matthew Sztajnkrycer, MD, ABMS

Heather Ellsworth, MD,

Toxicology Fellow

Benjamin Orozco, MD,

Toxicology Fellow

JoAn Laes, MD,

Toxicology Fellow

Katherine Katzung, MD,

Toxicology Fellow

***ABMS American Board of Medical Specialties*

***DABAT Diplomat of the American Board of Applied Toxicology*

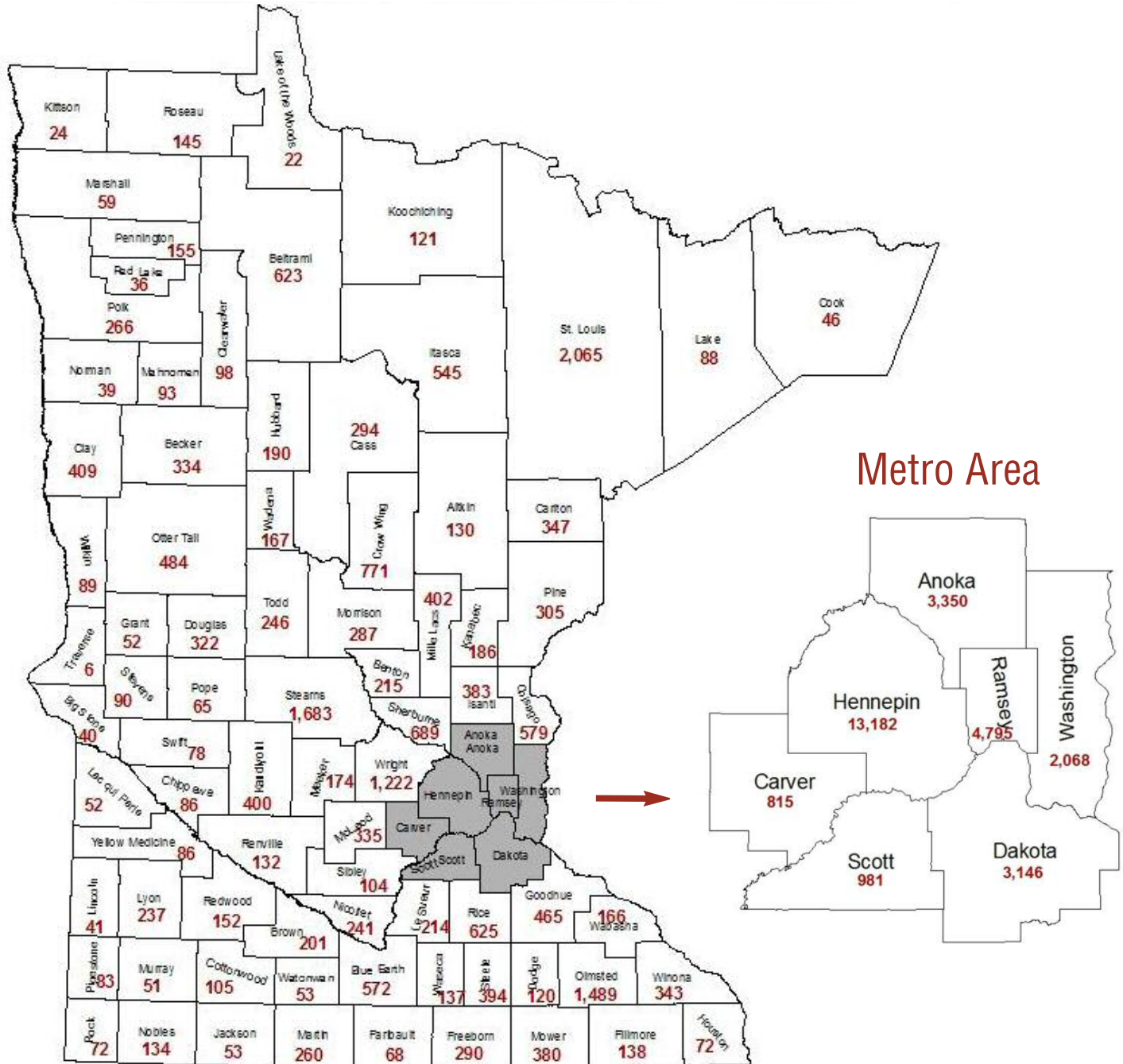
***CSPI Certified Specialist in Poison Information*

Jon B. Cole, MD
Medical Director

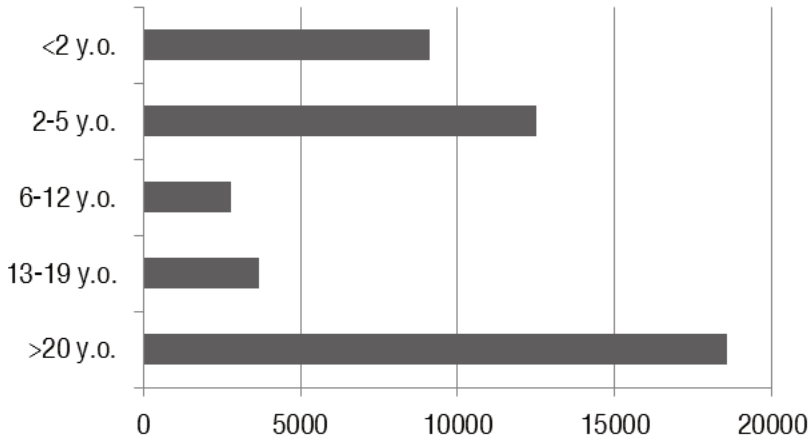
Deborah L. Anderson, PharmD
Managing Director



Calls per County

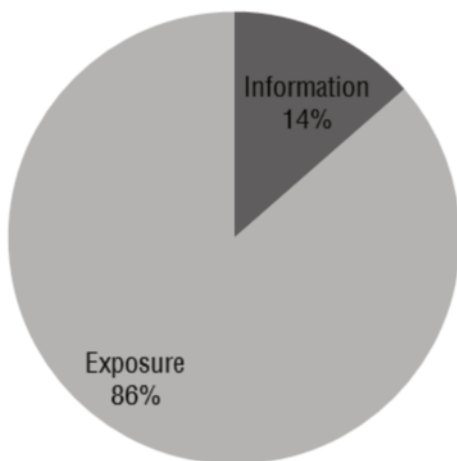


Age of Patients

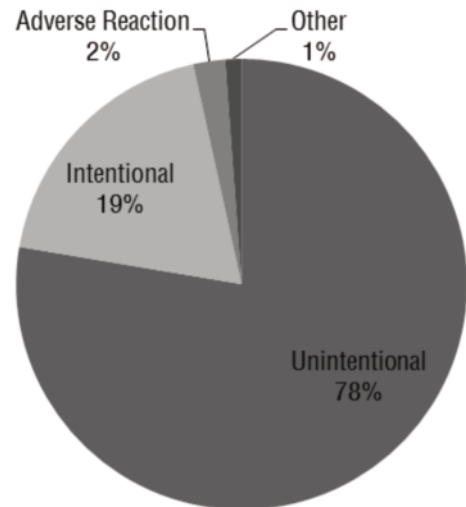


- Call 1-800-222-1222, 24/7, everyday
- Provided immediate help to 54,373 callers in 2012
- Calls are free of charge and confidential
- TTY and interpretive services available
- Staffed by specially trained pharmacists nationally certified as Specialists in Poison Information
- 46% of calls involved a child under the age of 6 years

Number of Calls

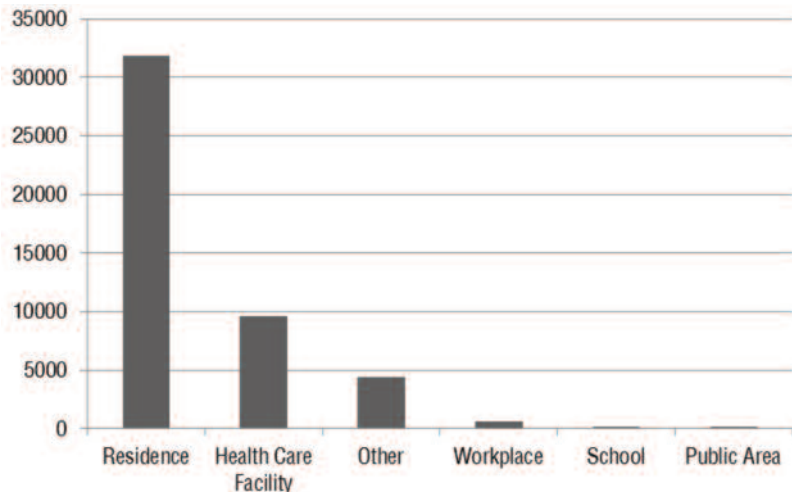


Reason for Exposure

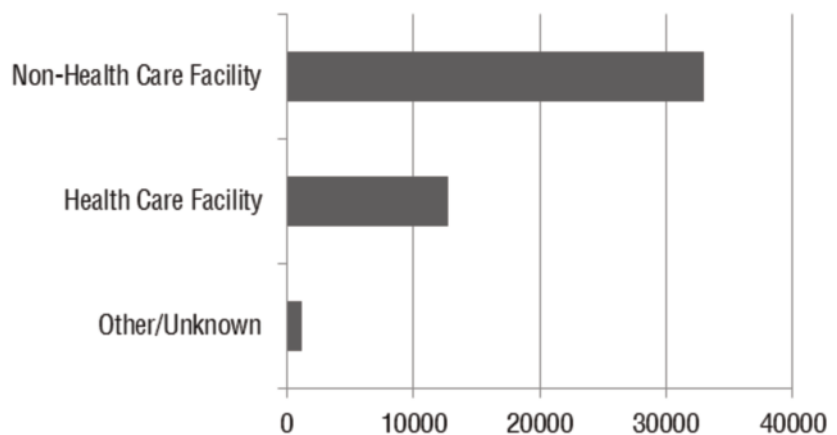


- 92% of exposures occurring in a residential setting were safely managed at home with Poison Center assistance
- 70% of callers would have sought emergency medical attention if the Poison Center was not available
- 21% of calls received are from health care providers seeking patient treatment recommendations
- 86% of calls transferred from nurse lines were managed at home
- 60% of exposures involve prescription and/or over-the-counter medications

Caller Site



Management Site



Top 5 Substances Involved in Poisoning

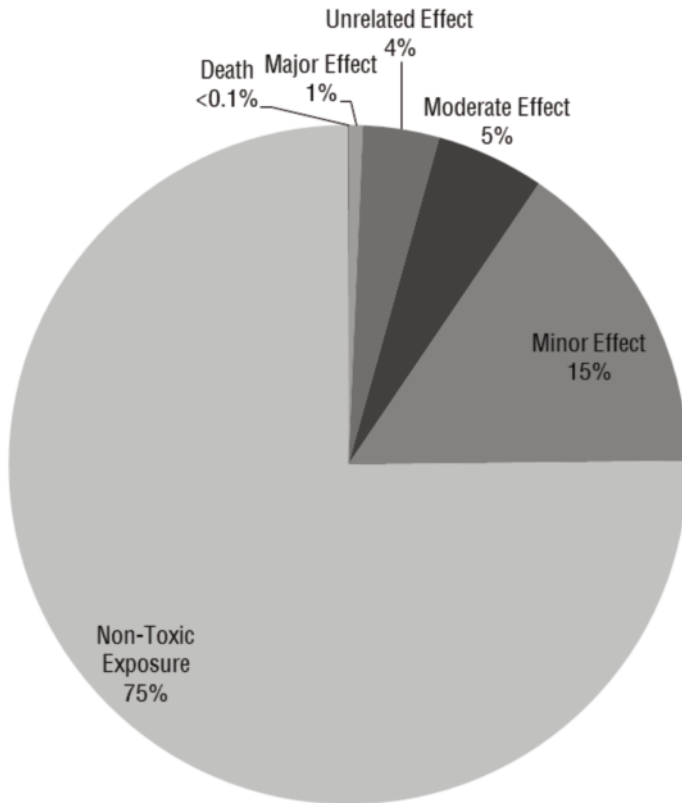
Non-Drug

1. Cosmetics, personal care items
2. Household cleaners
3. Foreign bodies, toys, silica gel packets
4. Alcohols
5. Pesticides

Drug

1. Analgesics
2. Sedatives
3. Antidepressants
4. Cardiovascular drugs
5. Antihistamines

Medical Outcomes



- Patients admitted to hospitals with poisonings who receive Poison Center assistance have measurable reductions in average hospital stays
- Total annual expenses \$2,162,137
- 82% of budget are personnel expenses
- Every \$1 spent on Poison Center services saves an estimated \$13 on unnecessary health care costs
- \$28 million in costs avoided annually through use of the Poison Center

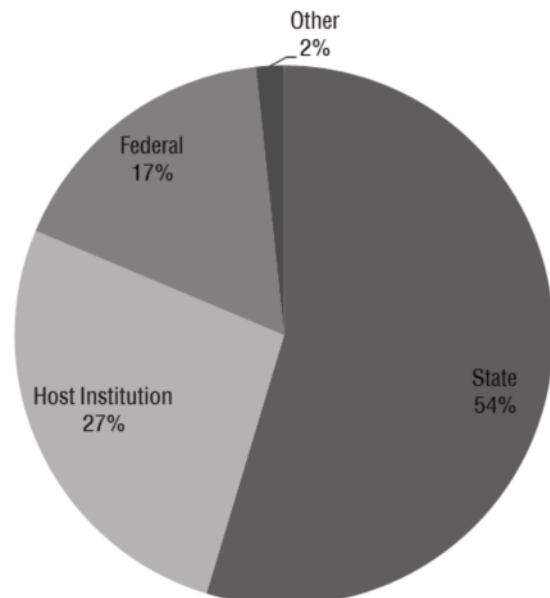
Statewide Public & Professional Education Outreach

- Distributed 132,326 pieces of poison prevention materials
- Participated in 167 public poison prevention events to over 52,250 Minnesotans
- Conducted 136 professional training events to public safety and health care professionals

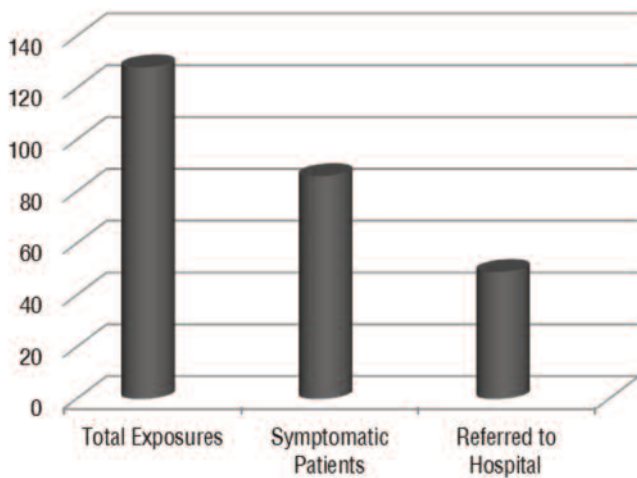
On-site Health Care Professional Education

- 26 medical residents (emergency medicine, family medicine, pediatrics)
- 3 physician medical toxicology fellows
- 19 pharmacy residents and students
- 14 medical students

Funding Sources



Laundry Detergent Pod Poisonings



- Laundry detergent unit of use “pods” were introduced in early 2012.
- When ingested, irritant effects are common. Some children develop breathing difficulty and altered mental status.
- Ocular exposure can cause significant eye irritation and injury.
- Forty-four percent of pediatric exposures became symptomatic.
- Poison Center monitors data related to these products and educates patients and health care providers.



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