# **Injury - Household Poisonings**

#### DESCRIPTION

A poison is anything that can harm someone if it is 1) used in the wrong way, 2) used by the wrong person, or 3) used in the wrong amount. Poisons come in various forms (solids, liquids, sprays and vapors); some may be harmful if they come into direct contact with the eyes or skin while others may be toxic if breathed or swallowed. Examples of household poisons include: alcohols (including alcoholic beverages as well as mouthwash, facial cleaners and hair tonics), pesticides and insect repellents, paint and paint strippers, laundry and cleaning products, pharmaceutical substances (prescription and over-the-counter medications), batteries, fertilizers, adhesives and glues, chemicals and deodorizers.<sup>1</sup>

#### HOW WE ARE DOING

Of the approximately 4,200 calls to Minnesota Poison Control from Ramsey County residents every year, about 60 percent are related to pharmaceutical exposures. Approximately 20 percent are related to other household chemicals, with the top three categories of concern being cleaning products, alcohols and pesticides.<sup>2</sup>

While chemical poisoning follows a seasonal pattern (i.e., they increase in the summer and fall, probably due in part to the increased use of pesticides for pest management),<sup>1</sup> the annual rates of hospitalizations and emergency department visits for nonfatal unintentional poisonings in Ramsey County has stayed fairly consistent from 2006-2014, with rates appearing higher for 2015 and 2016.

Children age 4 and under have a higher rate of unintentional nonfatal poisonings than other age groups; fatalities due to unintentional poisonings are less common, and more likely to be seen in young adults and those over 65.<sup>3</sup> The Ramsey County rate of non-fatal unintentional poisonings was 166.8 per 100,000, and the rate of fatal unintentional poisonings was 1.4 in 2016.<sup>4</sup> Both of these rates meet/exceed the Healthy People target.<sup>5</sup>

Ramsey County's household hazardous waste collection program receives an average of 700 tons of potentially poisonous materials from homes annually. More than half of these materials are recycled, nearly 40 percent are reused or otherwise recovered, and less than 0.5 percent are ultimately landfilled.<sup>2</sup> Since 2012, Ramsey County's medicine collection program has removed more than 22 tons of unwanted, unused or expired medicines. Both programs help reduce in-home exposures to poisons.

#### BENCHMARK INDICATOR

Healthy People 2020<sup>5</sup>:
1)Prevent an increase in nonfatal poisonings
U.S. Target: 304.8 per 100,000 population
2) Prevent an increase in poisoning deaths among all persons
U.S. Target: 13.2 deaths per 100,000 population

### **RISK FACTORS**

Young children are especially vulnerable to chemical poisoning, because childhood is a time of rapid growth and development, children have increased exposures compared to adults, and because children often put things they can see and reach into their mouths.

### WHAT RAMSEY COUNTY GOVERNMENT IS DOING

The following household items are accepted for free at Ramsey County hazardous

<sup>4</sup> Source: Minnesota Department of Health, MIDAS. Accessed February 24, 2018.

<sup>5</sup> Healthy People 2020. https://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/ objectives. Accessed March 14, 2018.



#### Information to note

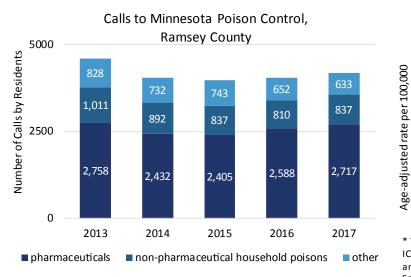
- 20% of the calls that Minnesota Poison Control receives each year from Ramsey County residents are related to household chemical exposures; 60% are related to pharmaceutical exposures.
- Children age 4 and under have a higher rate of poisonings than other age groups.
- Ramsey County collects 700 tons of potentially poisonous materials from homes annually, with more than 90% of it being reused, recycled or otherwise recovered.

<sup>&</sup>lt;sup>1</sup>Poison Info. Health Resources & Services Administration Web site. https://poisonhelp.hrsa.gov/poison-info/index.html. Accessed September 18, 2017.

<sup>&</sup>lt;sup>2</sup> Saint Paul – Ramsey County Public Health Department Environmental Health Division.

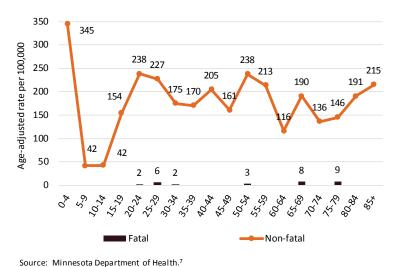
<sup>&</sup>lt;sup>3</sup> Pesticide poisoning. Minnesota Department of Health Web site. https://apps.health.state.mn.us/mndata/pest\_ed#byregion. Accessed September 18, 2017.

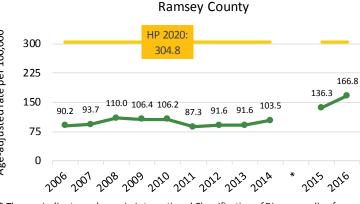
waste collection sites: automotive products, cleaning products, acids and other corrosive products (such as drain opener, oven cleaner, bathroom cleaner, rust remover, etc.), cords and string lights, paint, thinners, solvents, adhesives, sealants, wood stains, lead paint chips, aerosol cans, weed killer, pesticides, fever thermometers, thermostats, fluorescent lights, rechargeable and button batteries, pool chemicals, propane tanks and gas cylinders. In 2016 and 2017, the county's household hazardous waste sites logged over 28,000 visits per year. Through its medicine collection program, Ramsey County accepts (at no charge to the resident): prescription medications, over-the-counter pharmaceuticals, vitamins, supplements and pet medicines. From 2012-2017, nearly 25,000 residents have participated in the program.



Source: Minnesota Poison Control System.<sup>6</sup>

#### Poisonings by Age Group, Ramsey County, 2016



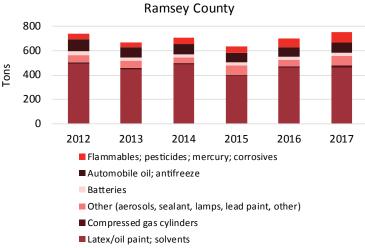


Non-Fatal Unintentional Poisonings,

\* The gap indicates a change in International Classification of Disease coding from ICD9 to ICD10. Rates from 2014 and earlier should not be compared to rates for 2015 and later.

Household Hazardous Waste Collected,

Source: Minnesota Department of Health.7



## Source: Saint Paul – Ramsey County Public Health Environmental Health Division

<sup>6</sup> Minnesota Poison Control System

<sup>7</sup> Minnesota Department of Health, MIDAS. Accessed February 24, 2018.

RAMSEY COUNTY Saint Paul – Ramsey County Public Health