Background:
A poison is any substance, including medications, that is harmful to your body if too much is eaten, inhaled, injected, or absorbed through the skin. Any substance can be poisonous if too much is taken. http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/poisoning-factsheet.htm

Abuse and misuse of narcotics and hallucinogens are the most common substances that cause poisoning deaths.

New Hampshire Prevention Efforts:
The Northern New England Poison Center (NNEPC) is New Hampshire’s resource for all things poison. The NNEPC operates a 24/7 hotline for anyone who thinks he or she has been poisoned or who has questions. The hotline’s number is 1-800-222-1222. The NNEPC also provides outreach education and has an educator specific to New Hampshire. For more information, please visit www.nnepc.org.

Overall, in 2012, the number of poisoning cases NNEPC handled for NH was down 8% compared with 2011 (10,354, down from 11,195 in 2011), despite a 14% increase in substance abuse calls (395, up from 347 in 2011) and a 16% increase in poisoning calls involving older adults (837, up from 719 in 2011). This increase in calls from seniors, both for exposures and for information, may be due in part to the outreach and education effort we have been conducting in that specific population.

What can you do?
> Keep all medications, including over-the-counter medications in a locked medicine chest.
> Educate children and teens on the dangers of taking medications that are not prescribed to them.
> Read and follow instructions on the label before using any product or medicine.
> Keep products and medicine in their original containers. Never put non-food products in food or drink containers.

Poisoning in NH and the US:
> In 2009, there were 1,207 inpatient hospital discharges due to poisoning in NH at an average cost of $15,126 per case, and 2,438 emergency department visits at a cost of $2,728 per visit.

> Between 2001 and 2009 there has been a significant increase in inpatient hospitalization rates for poisoning in NH, 73.0 to 91.2 per 100,000 NH residents.

If you think a poisoning has occurred, call the Northern New England Poison Center at 1-800-222-1222
Poisoning Fatalities
In 2009, the fatality rate for poisoning in New Hampshire was 12.9 (11.0-14.9) per 100,000 residents in 2009. The United States rate for fatal poisoning in 2009 was 13.6 per 100,000. The Healthy People 2020 national target rate is 13.1. There are no statistically significant differences in these rates.

Males are more likely to suffer a fatal poisoning than females. There are no statistically significant changes in fatal poisoning rates between 2001 and 2009. The age group most likely to die from poisoning is between 25 and 54 years old with 35 to 44 at 21.9 deaths per 100,000 residents.

NH Resident Poisoning Death by Intent 2001-2009, n=1377

Source: New Hampshire Bureau of Vital Records, Death Certificate Data

Forty-six percent of fatal poisoning deaths between 2001 and 2009 were due to narcotics.

Fatal Poisoning Substances 2001-2009

Source: New Hampshire Bureau of Vital Records, Death Certificate Data
Poisoning Hospitalizations and Emergency Department Discharges

More females than males are seen at the hospital for non-fatal poisoning. New Hampshire residents ages 0 to 4 and ages 15 to 24 have the highest rates for emergency department discharges for poisoning. The age groups for inpatient discharges for poisoning mirror that for fatal poisonings. Most emergency department discharges due to poisoning were accidental (52%). Most inpatient discharges due to poisoning were self-inflicted or suicide attempts.

In 2009, the emergency department discharge rate for poisoning was 195.0 (CI 197.1-202.8). The inpatient discharge rate in 2009 was 91.2 (CI 85.9-96.4) per 100,000 population. The maps below show the rate of poisoning in each public health region between 2005 and 2009. Emergency department discharge rates are higher than the State rate of 191.8 per 100,000 in the North Country, Laconia/Meredith, and Greater Sullivan County Regions. Inpatient discharge rates are higher than the State rate of 83.9 per 100,000 in Carroll County, Strafford County, Franklin/Bristol, and Greater Manchester regions.

Emergency Department Discharges for Poisoning, NH Residents, by Intent, 2001-2009, n=22,054

Inpatient Discharges for Poisoning, NH Residents, by Intent, 2001-2009, n=9,416

Source: NH DPHS Emergency Department Hospital Discharge Data

Source: NH DPHS Inpatient Hospital Discharge Data
Carbon Monoxide Poisoning:
Each year in America, more than 150 people die from accidental non-fire related Carbon Monoxide (CO) poisoning associated with consumer products. These products include faulty, improperly used or incorrectly vented fuel-burning appliances such as furnaces, stoves, water heaters, and fireplaces. Source: Consumer Product Safety Commission, http://www.usfa.fema.gov/citizens/co/index.shtm.

CO is a toxic gas that is invisible and odorless. Initial symptoms of CO poisoning include: headache, dizziness, and nausea. If CO levels are high enough, loss of consciousness or sudden death may occur.

Breathing high levels of CO can cause severe illness or death in a matter of minutes. Survivors of severe poisoning may suffer long-term neurological problems.

Unintentional CO poisoning can almost always be prevented. The New Hampshire Carbon Monoxide Working group reports that several deaths occur in the State every year due to carbon monoxide poisoning caused by malfunctioning or improperly used fuel-burning furnaces, stoves, or appliances. For more information, go to www.nh.gov/co.

In New Hampshire there are, on average, 128 emergency department plus inpatient hospital discharges per year and 11 deaths due to CO poisoning.

More information about CO poisoning can be found on the NH Environmental Public Health website’s EHDIN data analysis tool: http://www.nh.gov/epht/topics/carbon_monoxide.htm.

Lead Poisoning:
A confirmed venous blood lead level ( BLL) that meets or exceeds 10 micrograms per deciliter of blood (mcg/dL) for children six years of age or younger is defined as an elevated BLL. In 2010, 119 New Hampshire children six years of age or younger were newly identified with elevated BLLs, or 0.8% of the 14,793 children screened in the State. For more information about childhood lead poisoning, see the New Hampshire Healthy Homes and Lead Poisoning Prevention Program 2010 Childhood Blood Lead Surveillance Data, full report, which can be found at: http://www.dhhs.nh.gov/dphs/bchs/clpp/documents/2010childlead.pdf.

Occupational Poisoning:
Each year, the NNEPC receives over 150 calls pertaining to work-related poisoning exposures in NH. Data from 2005 to 2011 were analyzed (n=1,213 cases) to determine the top five substances contributing to these incidents. A particular concern is the increase in exposures to cleaning substances. While cleaning is necessary in all industrial sectors, specific cleaning chemicals may not be essential for the job at hand. Thus, prioritizing the cleaning processes to reduce the use of toxins in the work place helps support the targeted prevention efforts designed to reduce work related exposures to harmful substances. For more information on work-related poisonings, go to: http://www.dhhs.nh.gov/dphs/hsdm/ohs/publications.htm

Top 5 Occupational Poisoning Chemical Groups by Year, 2005-2011

Injury Surveillance and Prevention Programs
NH Department of Health & Human Services
29 Hazen Drive, Concord, NH 03301
http://www.dhhs.nh.gov/dphs/bchs/mch/injury.htm

In cooperation with the Northern New England Poison Center, http://www.nnepc.org/