

# Poison Control

## News

Helpful Information & Safety Hints from the New England Regional Poison Control Centers

The Poison Control News is an informative quarterly newsletter produced in collaboration by the four New England Regional Poison Control Centers. Working together through a grant from the Health Resources and Services Administration, this newsletter focuses on topics such as seasonal poi-

son prevention tips, access to poison centers and understanding the risks and avoidance of environmental poisons.

If you have any poisoning questions or concerns, call your poison center using the national toll-free number 1-800-222-1222. You will be connected to your designated

poison center: Connecticut Poison Control Center, Massachusetts/Rhode Island Regional Center for Poison Control and Prevention, New Hampshire Poison Information Center, and Northern New England Poison Center (Maine and Vermont).

**Spotlight on.....**

# Carbon Monoxide: The Silent Killer

By Vilma Rodriguez, MA/RI Regional Center for Poison Control and Prevention

**C**arbon monoxide is a poison of high risk that you cannot smell, see or taste, but it is deadly. Carbon monoxide enters the body through the lungs and is transported through the blood. The carbon monoxide keeps the blood from transporting the oxygen to the tissues of the body. Oxygen is essential to the functioning of the heart and the brain; lack of it can be fatal.

Unless a house is totally electric your family has a risk of carbon monoxide poisoning. Burning kerosene, oil, natural gas and wood can produce carbon monoxide. Carbon monoxide is only a problem if the appliances and equipment are not functioning properly. Worn parts and improper ventilation can cause carbon monoxide to be released in the home. The following products also can produce carbon monoxide:

(Carbon Monoxide article continued)

- Gas or oil heat
- Kerosene space heaters
- Gas stoves
- Wood stoves
- Gas grills or ovens
- Charcoal
- Automobiles
- Lawn mowers, generators or other gas powered equipment

The most important thing that you can do to prevent carbon monoxide poisoning is to buy and install CO detectors in your house or apartment. Detectors save the lives of many people each year. The detectors also make a perfect gift. If you have any questions call 1-800-222-1222. You can prevent carbon monoxide poisonings by doing the following:

- Hire a professional to install your heating
- Clean the chimney and heating equipment each winter before using it
- Inspect the ventilation of all appliances
- Install carbon monoxide detectors in your home and garage
- Check your vehicle regularly
- Never leave your car running in the garage
- Never sleep inside a running car
- Repair your lawn mower and other gas or oil powered equipment in the fresh air

When a person is poisoned with carbon monox-

ide he presents with symptoms similar to a common flu accompanied by headache, dizziness, weakness, nausea, vomiting, loss of muscle strength, chest pain, convulsions, wanting to sleep more, rapid heartbeat and confusion.

If you suspect that you or your family could have been exposed to carbon monoxide, you should:

- Evacuate everyone to fresh air
- Call the fire department at 911
- Call the poison center at 1-800-222-1222
- Call the gas or oil company that cares for your heating

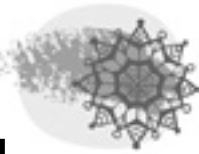
SPANISH TRANSLATION

## **Monóxido de Carbono: un veneno mortal silencioso**

Monóxido de Carbono es un veneno de alto riesgo que no se puede oler, ver, o saborear pero que es mortal. El monóxido de carbono entra al organismo a través de los pulmones y es transportado por todo el cuerpo a través de la sangre. El monóxido de carbono impide que la sangre transporte el oxígeno a los tejidos del cuerpo. El oxígeno es esencial para el funcionamiento del corazón y del cerebro, la falta de este puede ser mortal.

Todas las familias estamos expuesto al alto riesgo de envenenamiento con monóxido de

### **Seasonal Poison Prevention Tips**



# Holiday Hazards

Kelly Cota, RN  
Northern New England  
Poison Control Center

Many emergency calls come into the poison center during the holidays. Poisonings occur when there is a change in routine or a distraction. Visiting with friends and family, obtaining new items, party preparation and decoration can disrupt normal routines. Our major concerns are children's access to medications brought into the house by visitors and alcohol and

tobacco products that are left within easy reach. Here are some poison prevention tips to make the season safer.

\* Do not let alcohol be a tempting snack for little ones. Even small amounts of alcohol may affect a child causing them to pass out or vomit. Clean up immediately after parties.

\* Eating small amounts of tobacco products may cause

carbón aunque sea su casa equipada con un equipo eléctrico. El monóxido de carbono se puede producir al quemar petróleo de lámparas, aceite, gas natural y madera. Monóxido de carbono solo es un problema si los aparatos y los equipos no funcionan bien. Las piezas gastadas y la ventilación incorrecta puede causar monóxido de carbono. Los siguientes productos también pueden producir monóxido de carbono.

- Calefacción de gas o aceite
- Calentadores de petróleo
- Estufas de gas
- Chimenea de madera
- Asador/ horno de gas
- Carbón de leña
- Automóviles
- Cortadoras de grama, generadoras o cualquier equipo que funcione con gasolina

Lo más importante que uno se puede hacer para prevenir el envenenamiento de monóxido de carbono es comprar y instalar detectores en su casa o apartamento. Detectores salvan las vidas de muchas personas cada año. Los detectores hacen un regalo perfecto. Si tiene alguna pregunta LLAMAR AL 1-800-222-1222

Usted puede prevenir el envenenamiento con monóxido de carbono haciendo lo siguiente:

- Contrate un profesional para instalar sus calentadores

- Limpie la chimenea y el equipo de calentar cada invierno antes de usarlo
- Inspeccione la ventilación de todos los aparatos
- Instale en la casa y en el garaje detectores de monóxido de carbono
- Revise su vehículo regularmente
- Nunca deje su vehículo prendido en el garaje.
- Nunca duerma dentro de su auto prendido
- Repare su cortadora de grama y otros equipos de gasolina o aceite al aire libre

Cuando una persona está envenenada con monóxido de carbono presenta síntomas similares a los de una gripe común acompañado de dolor de cabeza, mareos, debilidad, náuseas, vómitos, pérdida de fuerza en los músculos, opresión en el pecho, convulsiones, deseos de dormir más, palpitaciones rápidas y confusión.

Si sospecha que usted o su familia pueden estar expuestos al envenenamiento con monóxido de carbono, usted debe:

- Evacuar a todas las personas al aire fresco
- Llamar al departamento de bomberos al 911
- Llamar al Centro de Envenenamiento y Prevención al 1-800-222-1222
- Llamar a la compañía de aceite o gas que cuida de su calefacción

**Llame al Centro de Envenenamiento  
1-800-222-1212**

nausea and vomiting. Large amounts may cause convulsions. Keep all tobacco out of the reach of children.

\* Many people keep medication in their travel bags. Keep pocketbooks, backpacks and other carryall bags up high and out of reach.

\* Poinsettia is not a poisonous plant, however mistletoe and holly may be toxic when eaten. A 50-lb. child would

have to eat more than one pound, about 500 leaves, of a poinsettia plant to experience symptoms such as an upset stomach, nausea and diarrhea.

\* Tree ornaments can be metal, plastic or ceramic and can pose a choking hazard if swallowed. Remind children to look at the tree, not touch it.

\* Bubble lights may contain methylene chloride or ethanol, which can be a problem if the

liquid is swallowed.

\* Be aware when visiting or having gatherings during the holidays. Greater parental supervision may be required during these times to prevent accidental poisonings.

\* Place the number to your poison center near the phone. The toll-free, nationwide number is 1-800-222-1222.



# Dosage Counts

By Jill Brooker BSN, RN, CSPI  
NH Poison Information Center

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**T**True or false: A poison in any amount will cause harm.

False. Many people believe that a poisonous substance will always cause illness or even death no matter what the amount, or dose. This is not the case. The truth is that a person may not become ill from an encounter with a toxic substance. Why is this? The dosage of the material is not high enough to cause symptoms.

What kinds of things determine a dose?

Questions like, how intense was the exposure, how long did the exposure last and at what concentration was the toxin during contact, help solve this problem. Did the exposure occur all at one time in just a few minutes, or has this problem been happening for months? While some toxins can cause significant health risks to people following long-term low intensity exposures this is not a common occurrence.

The concept of dosage is easy to understand with medicines. For instance, we all know that taking one teaspoon of cough medicine stops coughs. We also know that drinking 4 ounces, a much larger dose, will cause serious side effects. In these instances, the doses of the medication are the direct causes of both the desired effect and the hazardous effect.

Try to imagine this. There are two glasses filled with the same amount of water. Now add a drop of red food coloring to one glass but to the second glass add 10 drops. The intensity of color in this case is similar to the intensity of a possible exposure. One drop of food coloring in

one glass only turns the water a light pink while the water in the other glass, signifying an intense exposure, now has a deep red color to it. Now think of the water as a person, the food coloring as a poison. The person who had the higher intensity exposure is more likely to have ill effects than the person who had only a minimal exposure from the same.

Let's look at another example. Carbon monoxide (CO) is a well-known poison. A high dose exposure, whether short or long, is likely to cause serious health effects, while low levels, even following a long-term exposure, are not likely to cause serious symptoms. For instance, people who smoke cigarettes expose themselves to low levels of CO routinely but do not show signs of toxicity from the CO in their bodies. The low levels that they frequently expose themselves to do not cause the lethal effects of CO poisoning that the public fears.

Dosage is a key factor in determining the severity of poisonings therefore it is one that is important to understand. Following contact with a poison, a person should call their local poison control center. By sharing accurate information specialists can determine if the contact was severe or mild and what the likelihood is of a person developing side effects from the exposure. From anywhere in the country dial 1 (800) 222-1222 to talk to a specialist in poison information.

In the News...

# Team Response to Mass Poisoning

By Becky Miller RN  
Northern New England  
Poison Control Center

Last April, the Northern New England Poison Center (NNEPC) responded to a group poisoning incident that caused death in one and severe injury in fifteen others. The poisoning was caused by arsenic-laced coffee at a church social in New Sweden, Maine. The NNEPC played a key role in the identification of the poison and the provision of information. This information guided the hospitals in the care of the patients, and explained arsenic poisoning as well as treatment to the patients.

The hospital staffs' description of the signs and symptoms noted in the patients led the NNEPC to suspect arsenic poisoning almost immediately. The Center facilitated processing of the necessary lab tests with the Maine Bureau of Health and the medical facilities to confirm the cause of poisoning. They also located and mobilized antidotes from the Maine Hospital Pharmaceutical Stockpile

(MHPS), which was created in response to the heightened concerns about terrorism after September 11th, 2001. The NNEPC developed the MHPS to store antidotes for the treatment of illness and injuries caused by weapons of mass destruction or other large-scale disasters and it included the antidote for arsenic poisoning, making it readily available to treat the patients. The NNEPC facilitated transport of the antidotes to the treating hospitals from five different locations in the State of Maine. These quick actions saved lives.

Several of the patients were critically ill. In most cases, after the initial illness, long-term effects of arsenic poisoning affect the nervous system, including painful tingling, numbness and weakness in hands, feet, arms and legs. In severe cases, other parts of the body are affected and paralysis can occur. Fortunately, thanks to the quick work of hospital staff and the NNEPC, it appears that the patients were treated quickly enough to prevent these devastating long-term effects.

Poison Centers are also involved in national efforts to observe trends in poisoning across the country. The NNEPC logs all calls in a confidential local database. These data are sent to a national surveillance program that monitors poisonings around the country within minutes. The arsenic calls that were logged last April were uploaded to and spotted by the national surveillance team in Washington, DC within minutes of entry into the local database. The national surveillance team then notified the Centers for Disease Control and Homeland Security. This system is one of many monitoring the nation for potential terrorist activities.

The NNEPC continues to consult with the arsenic-poisoned patients and their physicians to monitor recovery. Although this case was not the result of terrorism, it clearly shows that agencies are effectively working together to monitor suspicious activity. Poison centers are an important part of the healthcare team and play a key role in saving lives.

# Cold Medicine Abuse



By: Jill Griffin, MPH, MA/RI Regional Center for Poison Control and Prevention

**D**uring the fall and winter months, it is not uncommon to see people carrying around bottles of cough medicine or taking cold pills on their break. It's the time of year for cold and flu, and many people choose to self-medicate to alleviate their symptoms. This includes adolescents, who can easily purchase these products at local stores. However, an increasing trend among young people is the abuse of over-the-counter (OTC) cold medications. Of particular concern is dextromethorphan or DXM, which is used in a variety of over-the-counter cough and cold medications, particularly those whose name includes "DM" or "Tuss". DXM is a narcotic related to opium and is a cough suppressant that suppresses an area in your brain that causes you to cough. When used according to directions, the drug will alleviate

cough, and is particularly helpful with night-time coughing that keeps you awake.

However, when abused in higher doses, it creates a euphoric and hallucinogenic effect, similar to ecstasy and LSD. It alters perception of reality. People report having creative dreamlike experiences and a dissociative experience while using the drug. Increased media coverage of "Pharming" or intentional misuse of over-the-counter medicines, reveal that this practice is becoming more popular and potentially more deadly. It is cheap, legal, and readily available, and most parents won't question their children for having cold medicine in their bags or rooms.

That is why teens turn to dextromethorphan (DXM), to get high. But misuse of DXM is potentially deadly. Experts believe abuse of DXM is rising among adolescents, particularly on the rave and club scene. However, reported cases are sporadic often because parents are unaware of DXM abuse, or it is being mixed with other substances that mask the drug's effects. In 2002, the Regional

Center for Poison Control and Prevention serving Massachusetts and Rhode Island recorded 1048 calls for misuse of DXM, up from 870 the year before.

## Street Names For DXM include:

- Dex**
- DM**
- Drex**
- Robo**
- Rojo**
- Skittles**
- Triple C**
- Velvet**

Symptoms of DXM misuse include loss of balance, increased pulse, hypothermia, severe high blood pressure, loss of consciousness, mania, loss of muscle control, permanent brain damage, coma, seizures, cerebral hemorrhages and stroke. Decreased ability to regulate body temperature, because of reduced sweating can cause increased body tem-

peratures. When taken in a dance-club setting, accompanied by vigorous physical activity (dancing, etc.) and poor air circulation, the result can be heat stroke. This phenomenon is sometimes called "rave-related heat stroke."

In addition, to the problems from Dextromethorphan itself, many DXM containing products also contain acetaminophen or antihistamines. DXM also interacts with many prescription medicines. These co-ingestions or interactions can result in life threatening symptoms.

These drugs are deadly when abused and can create permanent damage. If parents and teachers notice young people frequently carrying cough and cold medicines, particularly when they do not have cold symptoms, it is very important to respond. If you suspect an overdose, call your local Poison Control Center at 1-800-222-1222.

## RESOURCES:

National Poison Control  
Hotline:  
1-800-222-1222

Partnership of Awareness  
- DXM  
<http://www.partnership-forawareness.org/dxm.htm>

US Department of Justice  
DXM Fast Facts:  
<http://www.usdoj.gov/ndic/pubs6/6095/>

Indiana Prevention  
Resource Center  
Fact Line on Non-  
Medical use of  
Dextromethorphan aka  
"DXM"  
<http://www.drugs.indiana.edu/publications/iprc/factline/dxm.html>

NIDA: Research Report  
Series - Hallucinogens  
and Dissociative Drugs  
<http://www.drugabuse.gov/ResearchReports/hallucinogens/halluc4.html>

Substance Abuse and  
Mental Health Services  
Administration (SAMHSA)  
Substance Abuse  
Treatment Facility  
Locator  
<http://www.findtreatment.samhsa.gov/facility-locator/doc.htm>



For poison emergencies anywhere in the U.S.A. call 1 (800) 222-1222

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