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L&M Service Co.,Inc.

# INSIDER

Dedicated to Safe, Efficient and Comfortable Homes

In this issue:



## BEWARE - Silent Killer

### Is Your Family Safe?

Carbon monoxide (CO) is a highly poisonous, colorless, odorless, tasteless, deadly gas. It is produced from the incomplete burning of fuels commonly used to heat homes and businesses. According to the Consumer Product Safety Commission on average, about 170 people in the United States die every year from CO produced by non-automotive consumer products. The Centers for Disease Control and Prevention estimates that several thousand people go to hospital emergency rooms every year to be treated for CO poisoning. Normal household gas appliances like furnaces, water heaters, stoves, dryers and fireplaces can produce lethal levels of carbon monoxide if not properly inspected and maintained. Victims are usually unaware they are literally being smothered to death because CO is not detectable to the human senses. The initial symptoms of low to moderate CO poisoning are similar to the.....(over)

> "Several thousand people go to hospital emergency rooms every year to be treated for Carbon Monoxide poisoning."
>
> Center for Disease Control

## Harmful Effects of Low Humidity

The driest area of land in the United States is Death Valley, California, with a relative humidity of 25%. Relative humidity is the percentage of total moisture that the air is able to hold at a given temperature. Surprisingly, this is not the driest place in the United States. There are millions of heated homes and offices with humidity levels that drop into the single digits, making them much drier than even Death Valley. Why is the moisture level of your home so important? This is because most of the tissue in your body is composed of water, furnishings in your home contain moisture and even your home itself contains moisture. This moisture is on the move as air is always either giving moisture or taking it from its surroundings. When the air in your home is dry, due to the heating process, it will literally draw the moisture out of your body, furniture and home. The dryer the air is the more moisture it will remove. This loss of moisture has horrible effects on your health, comfort, investments, and energy use.

**Health**

The most noticeable place moisture is drawn from is your body. As warm dry air pulls moisture from your skin, mouth and nose you notice them becoming increasingly more irritated. Your skin becomes dry, itchy and even develops painful cracks. Your throat becomes scratchy and sore. Your nose becomes so dry that you may even notice the presence of blood. Low humidity is one of the reasons people stay sick during the winter months. This is because your body naturally filters the air you breathe by way of mucus membranes. Mucus membranes are located in your throat and ...(over)

***Beware - A Silent Killer (continued)***

flu, which include headache, fatigue, dizziness nausea, and shortness of breath.

High level CO poisoning results in progressively more severe symptoms including mental confusion, vomiting, loss of muscular coordination, loss of consciousness, and death.

The severity of CO poisoning is related to both CO levels and the amount of time exposed. In a slowly developing CO problem victims often mistake mild to moderate CO poisoning symptoms for a common cold or viral infection, which sometimes results in tragic deaths. For rapidly developing, high level CO exposures, victims can rapidly become mentally confused, and can lose muscle control without having first experienced milder symptoms; they will likely die if not rescued. This is why early detection is crucial.

## 5 Steps to Prevent Poisoning

1. Have your heating system professionally inspected and serviced to ensure proper operation. Never service fuel-burning appliances without proper knowledge, skill and tools.

2. Install a CO alarm that meets or exceeds the requirements of the current UL 2034 or CSA 6.19 safety standards. A CO alarm can provide some added protection, but it is not a substitute for proper use and upkeep of appliances that can produce CO. CO alarms can be purchased at most home goods stores. A CO alarm with a digital display is preferred.

3. Never burn charcoal inside a home, garage, vehicle, or tent.

4. Never use gas appliances such as ranges, ovens, or clothes dryers to heat your home.

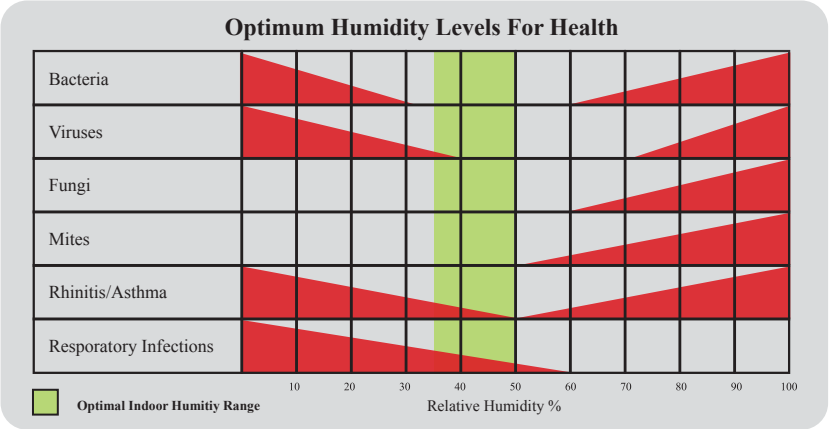
5. Never operate non-vented, fuel-burning appliances in any room where people are sleeping.

Carbon monoxide poisoning can happen to anyone at anytime, so it is important to be aware of the danger, and how to protect yourself and your family. For more information about carbon monoxide and its dangers please visit the following sites:

www.cdc.gov
www.epa.gov
www.cpsc.gov
www.carbon-monoxide-poisoning.com

## Humidity Facts:

- Household humidity levels are commonly below desert conditions during the winter months.
- Low humidity is a breeding ground for viruses and bacteria.
- Dry air can cause nose, throat, and other physical aggravations.
- Dry air will cause wood, glue and caulk to shrink, warp and even split.
- Dry air causes separation of wood in floors, trim and furniture and can cause wall and ceiling cracks.
- Dry air causes annoying static shocks, which can actually ruin electronic devices in the home.
- Higher humidity in the winter means lower thermostat settings which can save you money.




***Harmful Effects of Low Humidity (Continued)***

nasal passages. When these membranes become dry they lose their elasticity and crack. Once cracked they bleed giving a direct path for germs and bacteria to enter your bloodstream. The result is illness within a few days. Furthermore, low humidity provides the perfect breeding ground for germs and bacteria within your home, making the chances of becoming infected that much greater. The experts at the Association of Heating, Refrigeration, and Air Conditioning Engineers in Atlanta say medical studies indicate that maintaining your home's humidity between 30% and 55% inhibits the survival of many viruses, including influenza, measles, polio, and herpes. Controlling the amount of moisture in your home is necessary for your family's health.

**Comfort**

Indoor humidity also affects your comfort because you are very sensitive to humidity. When humidity is low you feel colder. This feeling of being colder occurs because the moisture evaporating from your skin has a cooling effect. Dry air is like a sponge; it soaks up moisture from wherever it can. The drier the sponge the faster it will soak up moisture and the colder you will feel regardless of the actual temperature in your home. For example, 69°F temperature at 35% relative humidity feels just as warm as a 72°F setting at 19% relative humidity. The easiest way to feel to the most comfortable is to add humidity to the air in your home.

**Investments**

Maintaining the proper relative humidity in your home can help protect your investments. Dry heated air results in warping and splitting of furniture, woodwork and hardwood floors. It will cause glue and sealant like caulk to shrink, warp and eventually split. When the wood and caulk around doors and window frames shrink and crack the resulting gaps allow the cold outside air to infiltrate increasing your heating costs. Many times the glue that holds furniture and hardwood floors together completely fail due to the lack of proper humidity. Cracks can even develop in the ceilings and walls of your home. Wooden instruments, such as Woodwinds, Strings and Pianos, lose pitch and can be prone to cracking and warping, sometimes permanently disabling the instrument. A properly humidified environment can help diminish the chance of permanently damaging your precious woodwork and instruments over the long term. Another result of dry air is static electricity. Do you often get zapped when you touch a light switch, or touch another person? Not only are these shocks aggravating but they are also capable of being harmful to expensive electronics like computers and stereo systems. Proper humidity levels will help reduce these effects.

**Energy**

Proper humidity levels have a positive effect on your energy bills. With fuel energy prices soaring, consumers are paying more to heat their homes this heating season than they did last, according to the U.S. Energy Information Administration. In order to keep heating bills manageable, many homeowners will setback their thermostats to lower temperatures, resulting in cold uncomfortable living conditions. A better solution is to maintain the proper humidity levels with a whole-house humidifier. A whole-house humidifier allows you to reduce the thermostat setting two to three degrees without noticeably feeling the difference. Lowering the thermostat by just three degrees can reduce annual heating bills by as much as 5 percent.

Often when the effects of low humidity occur people are unaware the problem has anything to do with their heating system. They make countless trips to the doctor because of repeated illness and discomfort. They spend hundreds of dollars needlessly trying to keep their homes comfortable, doing excessive maintenance or even replacing household furniture and woodwork. If you or your family members are experiencing any of these problems it is likely due to low humidity. Thankfully the problem is an easy one to correct with the addition of a whole-house humidifier.

## Thank you for your business!

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