



Think Safety!

A Publication Of The West Virginia Propane Gas Association

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Duty-To-Warn, How Can I Truly Warn My Customers?

In this Think Safety, we are going to discuss Duty-to-Warn. I can hear the groans now, but please don't discount the importance of this topic as it may save someone's life and potentially save you a large sum of money to be paid in a large lawsuit.

For many, an annual mailing and perhaps the augmentation of adding an occasional bill stuffer satisfy the idea of Duty-to-Warn. You might even be less hands-on and completely turn the task over to a third party to complete the mailing and provide documentation of the completed task. Perhaps, you give new customers welcome packets that include safety information

along with company policy. You may even include safety information on your company website.

All of those things are good ideas, but what is the difference between fulfilling the bare minimum of a required task and actually extending that task to the point where it could make a significant difference in safety as well as truly reduce company liability? True Duty-to-Warn satisfaction requires involvement from all employees and a much wider comprehensive look at consumer safety.

What are the safety pitfalls that could potentially affect propane consumers and what can the industry do to help

minimize the likelihood of those pitfalls occurring? Who can aid in those actions?

I must emphasize that no matter what is said in these pages it is in

no way intended to undermine or usurp company policy. Always refer to company policy as well as local, state and federal code in carrying out any workplace actions.



Typical Duty-To-Warn:

Annual mailings and bill stuffers don't completely satisfy duty-to-warn but they are important pieces of the complete campaign. This doesn't even have to be done in house. There are several companies that will complete an annual duty-to-warn for you and even certify that the customer has received the information.

You may be using a pre-published pamphlet obtained from the national PERC office.

Some include a scratch and sniff to help the consumer identify the smell of propane. In any event, a mailing should at least include the following

information:

Course of action if you smell propane

Eliminate flames or sparks such as smoking materials and open flames.

Do not operate light switches, appliances, and phones of any kind including cell phones.

Leave the Area Immediately
Shut off the gas supply

Turn off the propane supply valve at the tank if this can be safely done.

Report the leak

This should be done from

Inside . . .

Customer Contact Page 3

Warning Against CO..... Page 3

Symptoms of CO Poisoning..... Page 3

Allowable CO Rates..... Page 3

Continued on Next Page

Typical Duty-To-Warn:

Continued from Page One

a safe point off the premises. The propane company should be called or the local fire department if the customer is unable to reach you for some reason.

Stay out of the building with the leak

No one should return to the building until a designated representative of your company or an emergency responder has given them the all clear.

The system should be checked for leaks

A qualified service technician should do this before the customer uses any of their propane appliances.

Smell Education

This can be one of the greatest single factors in eliminating propane accidents. A

scratch-and-sniff mailer can be very helpful, but at least propane can be described in terms of a rotten egg, dead animal, or skunk spray.

Odor Fade

Of course a customer should be educated on the possibility that odor fade can occur due to several factors such as presence of air, water, or rust in a tank. It can also lose its odor when passing through soil.

Information about gas detectors

Gas detectors can be especially invaluable in cases of odor fade. They also can be more effective in waking a customer when asleep because

of their alarm sound. The customer should be made known of their availability and what they should look for when purchasing one.

Appliance Maintenance

This is a good opportunity to stress the importance of allowing only qualified service technicians to install or repair propane burning appliances or equipment as well as a pre-heating season system inspection.

Carbon Monoxide

Unlike propane, carbon monoxide has no odor or any non-mechanical means of identifying it. We will talk more about carbon monoxide later in this newsletter. But

the customer should be made aware of its dangers, detection means, and reactionary precautions in the event it is detected.

Out-of-Gas

The customer should be made aware of the safety dangers of running out of gas, a reasonable ordering level, and company procedures for out-of-gas calls including any related fees associated with the mandatory leak test brought about by running out of gas.

Pilot Lights

Stress the importance of following the manufacturers instructions and that habitual outages could result in an unsafe situation. The problem should bring about a service call to a qualified service technician. The consumer should not repair it.



Customer Contact:

As we go about our daily activities working with and among our customers, several opportunities often present themselves for increasing a customer's safety awareness. In fact, each contact with a customer presents an opportunity to expound their propane knowledge.

For instance, when a will-call customer calls in for an out-of-gas call, an explanation of why it is important to perform a leak check could accompany the acknowledgement of fees the customer can expect to incur.

Once a new tank is installed, a service tech should show the customer the proper procedure to turn off the tank.

In fact, it wouldn't be a bad idea to repeat this information upon occasion. Also, when filling the tank, it is a good opportunity to allow the customer to experience the odorant added to propane. That could potentially save the customer's life and those of his or her household if a leak was to develop. The odorant added to propane is an excellent safety tool but only if it is recognized.

After all, an electrical short may not be detected until well after it has started a life-threatening fire, while we deal with a product that can be detected and the fire prevented before it occurs.

Gascheck, or similar type



system inspection, is a good way to prevent future problems. During this inspection, small leaks, venting problems, and appliance problems can be detected. It is important to educate the customer that the benefits of this service

far outweigh in the cost or inconvenience they may incur.

Make sure that any conversation pertaining to duty-to-warn, or any other safety information, is noted on the work order. The customer should sign the work order.

Warning Against Carbon Monoxide:

Propane professionals can help avoid carbon monoxide accidents with a little care and advice.

Each year, according to the Consumer Product Safety Commission (CPSC), there are more than 200 carbon monoxide deaths related to the use of all types of combustion appliances in the home. Exposure to carbon monoxide reduces the blood's ability to carry oxygen. Often a person or an entire family may not recognize that carbon monoxide is poisoning them. The chemical is odorless and some of the symptoms are similar to common illnesses. This is particularly dangerous because carbon monoxide's deadly effects will not be recognized until it is too late to take action against them.

Carbon monoxide exposures especially affect unborn babies, infants, and people with anemia or a history of heart disease. Breathing low levels of the chemical can cause fatigue and increase chest pain in people with chronic heart disease. Breathing higher levels of carbon monoxide causes symptoms such as headaches, dizziness, and weakness in healthy people. Carbon monoxide also causes sleepiness, nausea, vomiting, confusion, and disorientation. At very high levels it causes loss of consciousness and death.

Carbon monoxide (CO) is produced because of the incomplete burning of a combustible material. A properly burning ventfree heater produces an acceptable amount

of CO because the fuel and air ratio is designed to mix at a rate that during the burn to consume 99 percent of the fuel.

However, certain factors can lead the heater to function improperly and produce a higher amount of CO. A dirty pilot can change or a faulty valve can change the air-to-fuel ratio and reduce the percentage of fuel consumed and therefore produce a higher amount of CO.

The oxygen depletion safety (ODS) pilot on a heater is designed to shut the heater off if the the oxygen level in a room drops below a designated level. While this is not technically a CO shutoff, it has been found to be an important safety mechanism in guarding against CO poisoning, as low oxygen levels tend to exist in environments of high CO output. The customer should be instructed to never tamper with the ODS. Doing so could put him or her in danger by affecting the shutoff level of the heater.

Other common sense measures should be conveyed such as not using outdoor propane appliances such as grills indoors for heat in the event of a power failure. Many people have died from carbon monoxide poisoning during extended power outages because of the use of propane grills indoors. Grills are not equipped with an ODS. Any propane appliance period that is not equipped with an ODS should not be indoors. This

Continued on Next Page

Symptoms of CO Poisoning

- **Lethargy, headache, etc. of long duration**
- **Long-standing "illness" intractable to medical solutions**
- **Multiple cases of similar illness at one location**
- **"Illness" that may suddenly improve when leaving site**
- **"Illness" that improves when combustion device(s) is turned off or taken away**
- **Morbidity / mortality of pets**
- **CO alarm sounding, once or repeatedly**
- **Presence of malfunctioning furnace, water heater, etc.**
- **Measurement of CO by fireman, service personnel, etc. at the presumed site of poisoning.**

Allowable (Legal) Limits for CO

American Gas Association - Indoor air (leakage at a heat register) - 15 ppm

American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE) -

Indoor air (leakage at a heat register) - 9 ppm

Warning Against Carbon Monoxide:

Continued From Page Three

applies to tank-top heaters designed to be used in open areas.

Gas ranges should not be used as a heat source. These ranges have open burners that are often dirty and produce an unclean burn. Again, they do not have an ODS.

Carbon monoxide is so dangerous because of its difficulty to detect. There are several

quality CO detectors on the market. A properly functioning CO detector can prevent carbon monoxide poisoning by providing an early warning when CO levels begin to reach dangerous levels. Customers should be made aware of the importance of their use. Please adhere to company policy when it comes to their recommendation.



Carbon Monoxide Characteristics

- Often goes long undetected
- Masquerades as flu, fatigue, etc.
- Often many people "sick" simultaneously
- May go away upon leaving poisoning site (to work, on vacation, etc.)
- Nearly always misdiagnosed by physicians
- May involve pets "sick", dead at same time
- Rarely involves sinus congestion, cough (when present, it may be due to other compounds {eg. NO_x, SO₂} in exhaust gases)

Articles in this publication are for information only. Nothing in this publication is to be construed as setting standards or requirements. Please consult with appropriate regulatory and rulemaking bodies for all legal requirements.



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Training Quiz

Name _____ Social Security Number _____

1. An annual duty-to-warn mailing should include information on the following _____.
A. Smell of Propane B. Odor Fade C. Out-of-Gas D. A,B, and C
2. Which factors can cause odor fade?
A. Air in a tank B. Water in a tank C. Passing through soil D. A,B, and C
3. Gas detectors can be more effective in giving alert to a gas leak during sleep than odorant.
A. True B. False
4. Carbon monoxide has no odor or any non-mechanical means of identifying it.
A. True B. False
5. Each contact with a customer is an opportunity to increase his or her awareness of propane safety precautions.
A. True B. False
6. Once the customer has been shown how to turn off the tank, it isn't important to ever show them again.
A. True B. False
7. It is a good idea to allow a customer to experience the smell of propane odorant when filling the tank.
A. True B. False
8. A propane system inspection can be a preemptive way to prevent an accident by revealing which problems,
A. Leaks B. Venting Problems C. Appliance problems D. A, B, and C
9. Make sure that any conversation pertaining to duty-to-warn, or any other safety information, is noted on the work order.
A. True B. False
10. Always have the customer sign the work order after sharing any duty-to-warn information.
A. True B. False
11. Each year there are more than ____ carbon monoxide deaths related to the use of all types of combustion appliances in the home.
A. 20 B. 200 C. 2,000 D. 200,000
12. Carbon monoxide is odorless.
A. True B. False
13. Some symptoms of CO poisoning include:
A. Lethargy B. Long headache C. Long standing illness D. A,B, and C
14. Carbon monoxide also causes _____.
A. Sleepiness B. Vomiting C. Confusion D. A,B, and C

Training Quiz Answers

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