

VINCENT'S NEWS

The 'Van-Go' Gallery



OWNER'S CORNER

64 Years of Excellence!



Best Residential HVAC Company
Best Plumbing Company

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Did you know...

...in extreme cold weather it's a good idea to leave the cabinet doors under your kitchen and bathroom sinks open if they are on an outside wall.

This will help prevent pipes from freezing by allowing heat into the cabinets.

THROUGH MY EYES

Near the end of last year, I developed our training plan for 2023. This includes both the curriculum and schools for our newer techs and the refresher classes and advanced training for our more experienced ones. Regular training is very important for us to keep current with changing trends and technology advances in the HVAC and plumbing industries so we can deliver the best service.

Some of the training has to do with refrigerants. Our techs need to be certified in order to safely handle refrigerants – both for their personal safety and to protect the environment. Plus, due to a 2021 U.S. Environmental Protection Agency (EPA) mandate, R410A – currently the standard refrigerant for most HVAC

"Wherever you see a 'Vincent's Van Go' you know the job will be a work of art."



Here is our technician, Michael, using his combustion analyzer to check the flue-gas carbon monoxide & oxygen levels on an annual furnace Combustion Optimization & Safety Inspection.

Continued Page 3

Carbon Monoxide Risks - Part 1

Recently we serviced a boiler that was producing a dangerously high level of carbon monoxide. When our technician sampled the boiler exhaust products using his combustion analyzer, **the CO level was over 400 ppm** (parts per million).

Most CO Alarms will warn you when carbon monoxide levels reach 70 ppm. To put this in perspective, this boiler was producing carbon monoxide levels

600% higher than the level your carbon monoxide alarm will warn that you are in danger and should get out of your house.

As I mentioned above, the sample containing this high CO level was drawn from the boiler exhaust, so there was no immediate threat to our tech or the family. However, this is still considered an extremely dangerous CO level. This high, the boiler must be considered unsafe if it can't be

Continued Page 2

CO Risks - Part 1... (Continued from Pg.1)

corrected. Thankfully, our tech was able to adjust the boiler combustion and bring the CO level down to a stable, safe level of around 50 ppm.

This was fortunate because according to national standards a furnace or boiler producing levels over 400 ppm cannot be allowed to operate – it must be red-tagged and condemned. (ANSI Z21.47). Over the years, I've had people question this, reasoning that because the high CO level is in the exhaust and venting outside that there is no danger.

However, the situation could quickly change should the chimney or exhaust become blocked, or if the exhaust vent or chimney were to be damaged or come apart. In either case, the lethal gas that had been exhausting outside would then be filling up the house. **At 400 ppm, a person will experience physical symptoms within 45 minutes, be unconscious in 2 hours and will die soon thereafter without intervention.**

Here is the issue: neither

Every national public safety organization urges you to have your furnace or boiler serviced every year to make certain it is operating safely.

furnaces or boilers are equipped with safeties to protect against such an occurrence. There is nothing to shut a furnace or boiler off when high levels of CO are produced. If the chimney is blocked or a vent pipe is disconnected, only someone physically shutting it off will stop a furnace or boiler from pumping deadly levels of carbon monoxide into the home.

This Is a Good Example of Why a Boiler or Furnace Should Be Professionally Serviced Every Year

The homeowner shared that potential safety risks never occurred to them – they had only thought about

their boiler in regard to the heat it makes. Yet because of carbon monoxide and other risks from a gas appliance every national public safety organization urges you to have your furnace or boiler serviced every year to make certain it is operating safely. This includes the **U.S. Fire Administration**, the **Consumer Product Safety Commission**, the **Centers for Disease Control**, and your heating equipment manufacturer.

Think about it: in your home is an appliance that burns an explosive gas to generate a very hot fire that as a byproduct creates a poisonous gas. What could possibly go wrong?!?

And while these all have the potential to be a safety risk, the common factor when this occurs is neglect – forgetting to provide your HVAC equipment the care it needs. Take advantage of the nearby offer to make sure you're safe from carbon monoxide risks..

– Daniel Squires

What Our Clients Are Saying...

“Awesome Crew and Great Service! Vincent’s technicians were very professional, fast, friendly and quiet! They were right on time and very informative! Best experience having a furnace and a/c unit installed!” - *Thomas Nowacki, Marysville*

Through My Eyes (Continued from Pg.1)

residential systems – is being phased out and will be replaced with more “environmentally friendly” refrigerants. We need to stay on top of this subject - I will have more to say about this in future columns.

Some of our training requires out of state travel and requires up to two-week stays away from home. Some of this training is for newer techs to learn the basics. Other training is for our more experienced techs to learn advanced skills to help them continue to grow.

Several times a year, we also bring instructors and coaches in house for 1-day and half-day training sessions. This is both for technical training and for personal development for our entire team. This is a little tricky, because we still need to be able to provide service for you and our other clients, but we make it work.

One of our most important training disciplines has to do with carbon monoxide. **Since 2006, every single VHP technician has attended advanced training for carbon monoxide and heating combustion.** From this training, they can become certified as Carbon Monoxide & Combustion Analysts. All of our techs since 2006 have been certified. Plus, in order to maintain this certification - and to stay sharp - every two years each tech must attend a refresher course and be recertified.

Having this expertise is something we are proud of. With it, our techs have a greater understanding and knowledge about this deadly gas than techs from other companies without this training. This allows us to provide a higher - and safer - level of service. The nearby column relates a practical example: most HVAC techs are unaware of the risk it describes, let alone how to correct it. And since CO is an important aspect of the combustion process, our techs also have the

Here is a photo from an in house training we did last fall. Pictured is the instructor David Richardson from National Comfort Institute. Also pictured facing away are techs Marvin and Rob.



know-how needed to make heating equipment perform better in terms of comfort and efficiency.

The first time we received the CO & combustion training – back in 2006 – the training was so profound that every single tech approached me by the end of the class to make certain that we would implement the entire program and invest in the equipment needed to do so. We did, and over the last 17 years we have been able to provide a higher - and safer - level of service for our clients. It's a pretty exclusive group we are a part of as less than 1% of all HVAC companies have adopted these protocols. Vincent's Heating & Plumbing is the only company in this area that makes this investment in our people for our customers.

This – like all of our training - is a big investment. First, there's the cost of trainers, travel and accommodations. In addition, there are the wages we pay our techs to attend training. Finally, there's the lost revenue: when our people are in training they aren't working and generating income. But this reflects our commitment to you and our other clients and customers to provide you with the best possible service. It's another example of why ***“Vincent's Heating & Plumbing has the Most Reasons to be Your Best Choice.”***

– Daniel Squires



Hand Tools

V	Z	E	T	W	P	H	A	W	R	K	C	J	K	G	M	T	H	Q	C	Z	P	CenterPunch
Y	I	M	N	K	Y	E	Y	L	A	A	E	L	I	A	R	L	T	C	I	S		Chisel
D	D	S	H	A	N	D	S	A	W	E	B	D	N	R	L	W	T	E	P	A	O	Clamp
S	Q	M	E	T	O	H	N	B	A	H	V	Y	G	T	L	B	K	E	D	E	C	CrowBar
G	N	D	M	G	F	N	F	C	H	H	L	E	R	F	E	H	W	R	M	R	K	File
C	T	I	A	L	R	T	C	W	C	V	E	I	L	P	T	R	Y	F	E	B	E	HackSaw
H	Y	E	P	L	C	I	U	A	T	H	Y	L	F	R	E	L	P	M	E	S	T	Hammer
I	V	L	U	S	T	Z	P	S	A	J	L	H	I	N	F	N	M	U	Q	F	S	Handsaw
S	K	T	Y	B	N	M	T	K	R	K	Z	Z	C	F	X	A	Z	U	N	L	E	Level
E	S	R	E	I	L	P	S	C	C	D	W	H	L	N	H	V	A	P	T	C	T	Mallet
L	X	W	W	P	C	Q	A	A	S	O	U	V	V	C	E	R	W	Z	P	H	H	PipeWrench
P	K	S	R	V	P	P	R	H	E	W	R	B	L	D	E	R	L	H	E	E	L	Pliers
S	C	R	E	W	D	R	I	V	E	R	K	A	V	V	R	E	W	O	X	V	M	PryBar
E	R	U	S	A	E	M	E	P	A	T	M	R	A	B	W	O	R	C	Z	C	Z	ScratchAwl
T	Q	V	H	U	N	Y	C	X	H	P	S	R	E	T	T	U	C	E	R	I	W	Screwdriver
U	T	I	L	I	T	Y	K	N	I	F	E	X	F	Z	P	B	E	D	I	W	Z	Snips
																						SocketSet
																						Square
																						TapeMeasure
																						UtilityKnife
																						ViseGrip
																						WireCutters
																						Wrench

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The Most Reasons to be Your Best Choice

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Humor Section

The efficiency expert ends his lecture with a warning: "Don't try these techniques at home."

"Why not?" asks someone from the audience.

"I watched my wife's routine at breakfast for years," the expert explains. "She made lots of trips between the fridge, stove, table and cabinets, often carrying a single item at a time."

"One day I told her, 'You're wasting too much time. Why don't you try carrying several things at once?'"

"Did it save time?" the guy in the audience asks.

"Actually, yes," replies the expert. "It used to take her 20 minutes to make breakfast. Now I do it in ten."



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THE #1 REASON PEOPLE DON'T HAVE THEIR FURNACE CHECKED EVERY YEAR FOR SAFE & EFFICIENT OPERATION

It may surprise you...plus a terrific money-saving offer to have your furnace serviced!

There are a lot of important reasons **why you should** have your furnace or boiler checked every year for safe and efficient operation, so it's surprising that some people don't. Here are five of them:

- 5) Your furnace (or boiler) is **the single biggest user** of natural gas in your home. Checking your furnace combustion can make sure you're not paying the gas company more than you need to.
- 4) Your furnace **produces deadly carbon monoxide gas** as it is making heat. A furnace inspection can make certain only low-levels of carbon monoxide are produced and that it is not escaping into your home.
- 3) Your furnace combustion makes heat by **creating a fire by burning an explosive gas**. Keeping the burners clean from rusty debris and spider's nests that can plug burners and interfere with combustion is important. Knowing that the pilot safety will prevent the gas from flowing if there is no flame and knowing that the high limit safety is functioning to prevent your furnace from overheating and causing a fire is also important.
- 2) You live in a climate where **temperatures of extreme cold** can quickly freeze a house and cause pipes to burst should your furnace fail - and even put you and your family in peril. Having your furnace checked over to make certain there are no obvious problems and if there are problems discovered to take care of them in advance is also a great reason to have it done.

The CDC (Centers for Disease Control) echoes concern for your safety regarding your furnace or boiler in its list of Do's & Don'ts on "**How You Can Prevent Carbon Monoxide Exposure**" where it urges:

"Do have your heating system, water heater and any other gas, oil, or coal burning appliances serviced by a qualified technician every year." <http://www.cdc.gov/co/guidelines.htm>

The #1 Reason People Don't Have Their Furnace Checked for Safe and Efficient Operation Every Year:

The #1 reason is neglect: people forget about their furnace or boiler and take it for granted. In warm weather, who thinks about their furnace? In cold weather - when a furnace is keeping us warm - it's out of sight and out of mind. So when do we remember it? When we pay the gas bill or when it doesn't work and we're cold. Plus, life is so hectic, making sure the furnace gets checked isn't a high priority. Until it doesn't work ... or if something goes wrong...

How To Avoid 'Furnace Neglect' To Keep Your System Safe, Efficient & Running Smoothly in 3 Easy Steps:

- 1) Change your furnace filter frequently!
- 2) Keep your system operating safely and performing well with annual maintenance.



...and finally...

3) **Enroll in our Enhanced Service Plan and Never Forget Your Annual Service Again!**

Our premier program makes certain your system gets the attention that it needs like clockwork without you having to worry about anything. We keep track of when maintenance is due, automatically schedule it, and notify you when a tech is coming. In addition to automatic scheduling and annual maintenance, you will also enjoy priority service, exclusive access to extended service hours (*not available to the general public*), discounted pricing and peace of mind!

With your furnace or boiler in the Enhanced Service Plan (ESP) you will have peace of mind knowing that it is operating safely and efficiently, too. But that's not all:

- In addition to the included annual furnace maintenance you'll also get **priority status** should you need service - especially important in extreme cold.
- With the **Enhanced Service Plan** you'll have **exclusive access** to extended service hours for emergency service - also important in extreme cold.
- **Enhanced Service Plan benefits include discounts and special savings:** save 10% off the price of a heating repair, save 10% off consumable maintenance items such as filters, humidifier pads, replacement U.V. bulbs, etc.
- In addition, each year on your ESP anniversary you'll be credited \$50 in your ESP bank toward the eventual replacement of your furnace or air conditioner. And more...

Your investment for all this value is only \$12.45 per month to make certain your furnace is taken care of and checked for safety - a small price for the peace of mind it provides.

Call Today & Take Advantage of Enhanced Service Plan Savings:

Call **(810) 985-7103**. Set up a maintenance visit for your furnace or boiler and **ask for the "ESP Trial Offer"**. The cost is \$149.40 (*a \$49.80 savings off the regular \$199.20 standard tune-up price.*) After your initial trial visit, the ongoing cost to remain in the ESP (*which includes next year's visit and all the other benefits*) is only \$12.45 per month (*\$149.40 per year*) per furnace or air conditioner you want to have maintained. *There are no long-term contracts - you may cancel at any time!*

BONUS: SEMCO ENERGY GAS CUSTOMERS ARE ELIGIBLE FOR A \$50 TUNE-UP REBATE!

PLUS: GET AN AIR QUALITY TEST (reg \$99) INCLUDED FREE WHEN WE PERFORM THE MAINTENANCE (you must ask for a test when you set the appointment.)

Call VincentsHeatingPlumbing.com (810) 985-7103

"THE VHP CLUB IS A GREAT VALUE!"

5 STARS "Michael from VHP has done the maintenance on my AC for years. I am sure this is why my AC has lasted and is in its 19th year. The VHP Club is a great value."

- Sally Smith, St Clair

"IT GIVES ME PEACE OF MIND!"

5 STARS "Annual maintenance provides peace of mind. I have the annual heating and A/C tune-up done every year. It gives me peace of mind that both units are running at top efficiency saving me on my monthly gas and electric bills." Douglas Cole, Port Huron

Is Your Carbon Monoxide Alarm As Useful As A 60-foot Bungee Cord For A 50-foot Bungee Jump?



As crazy as this sounds, most Carbon Monoxide home monitors are not made to warn you even when the CO levels in your home exceed the allowable safe levels set by leading government and health agencies. Consider these levels (parts per million):

Carbon Monoxide Dangers Below 70 ppm

-source National Comfort Institute

The typical a store-bought alarm (Kidde, First Alert, etc.) from a hardware store will only sound the alarm after 70 ppm (parts-per-million) has been sensed and then it can take up to 4 hours before the alarm is required to sound.

In regard to CO you are safer sleeping in a public parking garage, which has a 25 ppm maximum allowable limit!

CO LEVEL	CARBON MONOXIDE RISK OBSERVED OR ALLOWABLE LIMIT
3-7 ppm	6% increase in the rate of admission in hospitals of non-elderly for asthma. (Sheppard-1999)
5-6 ppm	Significant risk of low birth rate if exposed during last trimester (Ritz & Yu - 1999)
10 ppm	Outdoor level of CO found associated with a significant increase in heart disease deaths and hospital admissions for congestive heart failure.
15 - 20 ppm	First level World Health Organization (WHO) lists as causing impaired performance.
25 ppm	Maximum allowable in a parking garage (International Mechanical Code)
27 ppm	21% increase in cardio respiratory complaints. (Kurt-1978)
35 ppm	EPA standard for outdoors for 1-hour and a maximum of 1-time per year.
50 ppm	US OSHA recommended 8-hour maximum workplace exposure.
70 ppm	First alarm level for a <u>store bought</u> - UL 2034 approved - CO alarm.

For Real Protection You Need an NSI 3000 Low-Level Carbon Monoxide Monitor



The National Safety Institute professional grade low-level monitor senses CO levels as low as 5 ppm. Infants, children, elderly, persons with respiratory or heart ailments receive little or no protection from deadly carbon monoxide with standard alarms. At \$199, the NSI 3000 costs more than carbon monoxide monitors bought from retail stores, but when you and your family's safety is on the line, isn't quality more important than price? Accurate, low-level CO detection requires more expensive components and quality control. The full-featured NSI 3000 Low Level CO monitor uses the same technology and sensors as in professional-grade CO analyzers used by carbon monoxide professionals, fire departments, and utilities.

The NSI 3000 Low-Level CO Monitor is Available at Vincent's Heating & Plumbing

Save \$40 When You Purchase An NSI 3000 Low-Level CO Monitor

Must present coupon at time of purchase - Expires 3/31/2023
VINCENT'S HEATING & PLUMBING, INC.

NSI 3000 FEATURES:

- **Continuous Scan™** mode indicates monitor is operating 24/7
- Digital display shows CO levels of **5 ppm+ (parts per million)**
- **Low Alarm** - 15 ppm-audible & visual every 8 seconds
- **High Alarm** - 35 ppm-audible & visual every 4 seconds
- **Crisis Alarm** - 70+ ppm-audible & visual every 2 seconds
- 5-min. "Hush" button for levels below 70 ppm
- Designed for wall installation or tabletop use
- Operates on replaceable 9-volt battery
- 2-year limited warranty

VHP Club Member / ESP Price after 10% Discount is \$179 less \$40 Coupon = \$139

Test Your Knowledge About Carbon Monoxide Alarms

1) The best place to put a CO Monitor is by the furnace.

False. The best place to put a CO Monitor is in the bedroom at eye level. It is the coldest after midnight when people are typically in bed sleeping. The colder it is, the more a furnace will run and this is when carbon monoxide can be the greatest amount.

2) A 120v plug-in model CO Alarm is better than a battery only model.

False. Since CO is lighter than air, it is not very safe to plug a CO Alarm into the typical electrical outlet near the floor. Unfortunately this is where most people plug them. Assuming the batteries are replaced annually, a battery model is potentially better from a safety standpoint.

3) The best way to test a CO Alarm is to press the test button.

False. This only tells you the battery is good, the button works, and whether the alarm works. Unfortunately, it does not tell you whether the Alarm will work when it senses carbon monoxide. The best way to test a CO Alarm is with carbon monoxide gas.

4) A CO Alarm should be replaced in 2 to 5 years.

True. A CO Alarm senses carbon monoxide using an electro-chemical sensor. Eventually it loses its ability to sense carbon monoxide - even though the alarm can still sound off when the test button is pressed. Some models only last 2 years. Annual testing with carbon monoxide should be used to know when to replace it. Write a date on the Alarm using a Sharpie when you purchase it.

5) Having a CO Alarm is the most important thing you can do to protect yourself from a furnace producing carbon monoxide.

False. The Center for Disease Control (CDC), the Consumer Product Safety Commission (CPSC), and the U.S. Fire Administration all urge homeowners to have their furnace professionally serviced every year as the first line of defense and second to have a CO Alarm.

6) Children, the elderly, and pets can be harmed by carbon monoxide before a CO Alarm that satisfies the requirements of UL 2034 - the standard CO Alarms are tested with.

True: A CO Alarm meeting standard UL 2034 does not set off the alarm 4 hours after 70 parts per million (ppm) is reached. Children, the elderly, and pets are susceptible to CO at much lower levels.

7) You are safer from carbon monoxide sleeping in a public garage than you are in your bed protected by a UL 2034 CO Alarm.

True. The maximum allowable carbon monoxide level in a parking garage is 25 ppm compared to 70 ppm under UL 2034.

8) The best protection for everyone is a CO Alarm that monitors all levels of carbon monoxide.

True. See the reverse side for a special offer.

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