

ADVANCING THE CONSTRUCTION INDUSTRY SINCE 1967

NWI UNION CONSTRUCTION

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Fall 2017



In This Issue:

**Focus on the Fundamentals and the
Results Will Take Care of Themselves**

Moving Forward



Kevin Comerford

Director of Professional
Development, Construction
Advancement Foundation

As 2017 comes to an end, there is a lot to be hopeful about in the construction industry. For starters, total construction man-hours are up about 10% across the board from last year. That is a sign that the local economy is starting to hum along like it did before the great recession, especially on the commercial side. Industrial construction investment is also starting to pick up. Both US Steel and ArcelorMittal plan to invest millions of dollars in capital improvement projects.

There is also positive news in public works sector. In November, voters in the communities of Hammond and Hobart recently passed school funding referendums. Both school districts can now move ahead with building new schools, renovating schools and maintaining their teaching staff.

In the legislative realm, 2017 saw two new laws that are favorable to the industry. House enrolled act 1002, which was authored by State Representative Ed Soliday of Valparaiso, provides sustainable transportation infrastructure funding. Quality road infrastructure is crucial to growing our state's economy and this new funding will definitely be a boom for construction. Another piece of legislation that was passed into law establishes a rail transit corridor in northwest Indiana. Authored by State Representative Hal Slager of Schererville, the law authorizes the RDA to use increment financing to develop areas near rail stations to maximize the economic benefits of extending service between Hammond and Dyer, as well as double-tracking the existing line between Gary and Michigan City.

There are many large scale projects currently underway such as the new Carpenter's training center in Hobart, a new training center for the Pipefitters in Crown Point, renovations at nearly all of the schools in Valparaiso, a brand new Franciscan Alliance Hospital in Michigan City, a new Bioscience building at Purdue Northwest, and a new Community Foundation Hospital in Crown Point.

Overall, I'm pretty optimistic about the future of the construction industry in Northwest Indiana. Not to mention, we have arguably the most skilled construction workforce in the United State. What's not to like?

Kevin Comerford

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Cover Photo: A member of the Indiana/Kentucky/Ohio Regional Council of Carpenters cutting down steel studs for the the new Carpenter's Training Center in Hobart, IN. Hasse Construction is the General Contractor on the project and Ron Holsclaw is the General Superintendent.

Columns

- 3** **Securing Your Financial Future in the Face of a Looming Pension Crisis**
by Kevin Comerford
- 6** **Preparing for 2018: What's Your Story?**
by Mark Breslin
- 8** **Focus on the Fundamentals**
by Jim Bain
- 10** **Occupational Safety and Health Administration (OSHA) Respirable Crystalline Silica Standard for Construction**
by Dr. James J. Arendas
- 11** **Carbon Monoxide Poisoning**
by Gary Hulbert
- 12** **CAF Hosts First Annual Construction and Skilled Trades Day**
by Kevin Comerford

Featured Project

- 15** **The Pangere Corporation: St. Catherine Hospital - ICU Remodel**

NWI Union Construction
is published quarterly by:



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Securing Your Financial Future in the Face of a Looming Pension Crisis



By Kevin Comerford, Director of Professional Development at the Construction Advancement Foundation

Most members of the northwest Indiana building trades are largely relying on their union pensions to provide financial security during their retirement years. Many of these workers have been told that their pension money will be there once they are eligible to withdraw benefits. You may have heard a quote attributed to Ben Franklin that the only two certainties in life are death and taxes. As you may have noticed, a guaranteed pension income did not make Mr. Franklin's short list. That is because your promised pension benefits are not guaranteed. In fact, the future does not look very promising for pensions. This is especially true of pension funds in the multiemployer pension system which includes all pensions in building and construction.

Now before you panic, you should know that all of the trade specific pension funds that I know about in northwest Indiana, are in the green zone status. This means that the funds in your plan are more than 80% funded and considered healthy according to the guidelines set forth in the Pension Protection Act (PPA) of 2006. The majority of the multiemployer pension plans in the U.S. fall into this category as well. While your plan might not be fully-funded, green zone status means that your retirement benefits are reasonably secure at this time. Moreover, the recent Multiemployer Pension Reform Act (MPRA) legislation put some additional tools in place that trustees can take utilize to help struggling plans get back

on the path to sustainability should a plan start failing.

What is concerning is the current state of the multiemployer pension system. Multiemployer pension plans were designed to allow employers of all sizes, from large general contractors to smaller specialized contractors, to pool their resources and help provide financial security for their workers in retirement. That is how it is possible to work for many different employers during your working years yet all of your retirement benefits are pooled into a single fund. For nearly 70 years, construction workers have relied on this system to secure their retirement, but outdated rules and regulations have kept these plans from modernizing to keep pace with changes in the economy. We are approaching a crisis that threatens the retirement future of millions of hardworking construction workers.

The main threat for facing workers today has to do with the health of the Pension Benefit Guaranty Corporation (PBGC). The PBGC serves as a safety net for retirees in distressed multiemployer pension plans. The PBGC basically acts as an insurance policy for failing plans. Participating employers pay annual premiums to the PBGC and if a plan within the system ever goes belly-up, the PBGC steps in and provides retirees with a retirement benefit, albeit a drastically reduced benefit in most instances. By the time a plan requires PBGC assistance, it has already begun to fail its plan participants.

The problem is that the PBGC itself is on the verge of bankruptcy. That is because there are systemically important plans that are predicted to go insolvent in the next few years. Some of these plans are so big that they will wipe out all of the assets in the PBGC within a year or two. Unfortunately, these plans are too far gone and the trustees cannot use the recent MPRA changes to get them back on the path to sustainability.

So what happens when the PBGC become insolvent? The short answer is no one really knows. Any potential solutions are purely speculation at this point. PBGC Director Tom Reeder is calling for premium increases for participating employers to help strengthen. While this may sound good in theory, premiums are not economically viable given the size of PBGC's funding deficit. Nor are they a lasting or sustainable solution given the structural challenges affecting the system. Increasing PBGC premiums would also likely contribute to the bankruptcy of the system since the higher cost on employers may lead many of them to withdraw from the system altogether leaving fewer contributing companies. Others are suggesting that the government should step in and use taxpayer money to bailout the collapsing system. That is highly unlikely since most of congress has little incentive to vote for legislation that can be viewed as bailing out private unions.

The bottom line is that the future of the multiemployer pension system looks bleak, and every day Congress waits to act, the problems affecting multiemployer plans become harder to solve and the risk to workers, retirees, and their families ever greater. Immediate and decisive action to strengthen the multiemployer pensions system must happen soon. If nothing is done and then system is allowed to collapse, you can bet congress will likely end the multiemployer pension system as we know it.

As I mentioned, if you work in the trades in Northwest Indiana, your plan is unlikely at risk for failure in the near future. The wild card is still in the instability of the multiemployer system itself. Therefore, it would be wise to supplement your retirement savings and not rely solely on a pension and social security to get you through your retirement years.

One way to supplement and diversify your retirement savings is by opening either a Traditional or Roth IRA account. A Roth IRA allows you to make annual contributions with after-tax, which means there's no

initial tax benefit. But that money and your investment earnings grow tax-free, meaning there's no income tax on Roth IRA withdrawals in retirement. Contributions to Traditional IRAs lower your taxable income in the contribution year, but you'll still pay taxes on the distribution when you retire. Both the Traditional and Roth IRA have specific qualification rules so be sure that you talk to do some research or talk to a financial advisor to make sure you qualify.

The S&P 500, which measures the value of stocks of the 500 largest corporations by market capitalization listed on the New York Stock Exchange, has averaged 10.0% percent returns since its inception back in 1928.

Another way to supplement your retirement is through an annuity. An annuity is an insurance product that pays out an income at a future date much like a pension would. Many trades now offer an annuity plans to supplement your retirement. Each plan is an individual account to which employers and employees can make contributions. Typically, you may not access your account until you retire or have left the plan. You may also open up an annuity on your own. Annuities can be somewhat complex instruments to understand and I would suggest you do your homework to make sure an annuity is right for you.

Many find investing in the market daunting but it is really as simple as opening an account with a low cost reputable company like Vanguard or Fidelity. With a few clicks of a button, you can make automatic monthly contributions from your personal bank account. If you are unsure about what investment choices to make, you may want to consider a target date fund. A target

date fund, also known as a life cycle fund, is essentially an investment account with a diverse asset allocation mix that becomes more conservative as the target date (usually retirement) approaches. It's basically a low cost investment strategy that is professionally managed for you. I currently have my Roth IRA in Vanguard Target Retirement 2045 Fund (VTIVX). The 2045 date is the year that I aim to retire and the asset allocation mix today is 90% in stocks and 10% bonds. The expense ratio on the fund is only .16%. In other words, if you have \$1000 you have invested, the fund charges you \$1.60 per year. That is incredibly inexpensive and is 61% lower than the average expense ratio of funds with similar holdings. The fund has averaged 10.91% returns over the last 5 years and is currently up 19.85% year-to-date.

Remember that investing in the market has risk associated with it. However, if you just plan to buy and hold your investments until retirement, the market growth rates have been pretty stable and consistent. The S&P 500, which measures the value of stocks of the 500 largest corporations by market capitalization listed on the New York Stock Exchange, has averaged 10.0% percent

returns since its inception back in 1928. Stashing your money in a savings account at your local bank will yield you around 0.25%. When you consider inflation has been around 2.1%, you are essentially losing purchasing power by holding cash in a savings account.

While the future of pension plans are uncertain, there is a currently a push for strengthening the multiemployer system. One such tool that is being floated before congress is allowing the authorization of composite plans. Composite plans will modernize traditional pension plans by combining key features of defined benefit and defined contribution plans. The great thing about composite plans is that they would provide workers with a secure benefit while giving employers predictable costs. The Fall 2016 edition of the NWI Union Construction has a lot more information regarding composite plans if you are interested in learning more. In the meantime, you may want to supplement your retirement savings to give you another income stream in retirement. Be sure to keep an eye on the multiemployer pension issue as it will certainly affect all union construction workers in the United States.



Preparing for 2018: What's Your Story?

By Mark Breslin
Breslin Business Strategies, Inc.



As 2017 winds down and we start looking ahead to 2018, chances are you're thinking in terms of budgets, new work opportunities, equipment purchases and a thousand other details involved in running a successful business. Manpower is probably right at the top of your list, too. How are you going to find a new crop of bright, qualified people eager to get after it and work their tails off?

Regardless of whether you are a contractor, labor organization, utility, oil company, manufacturer or service provider, if you want to attract real talent next year – and beyond -- you have to focus on one thing above all others: tell your story, and tell it well.

In today's business environment, having a great story to tell is essential. A 2016 Forbes article called storytelling "the new strategic imperative of business." People respond to a powerful, authentic story about what your organization does, why you do it, and your goals for the future. It motivates them and makes them want to be a part of what you're doing.

But here's the problem: right now, we are telling a terrible story to young people about the career path available in the union construction industry. Like it or not, we still are perceived as a career of last resort. Ask teachers, school counselors, or parents. We have been selling what people don't want. So it is time for our story to change.

There are really two parts to this: first, figuring out the story you want to tell, and then determining where and how you tell it. Let's start with the first part: defining our

industry story. Right now it sounds like this. "Good job, good wages." *Lame. Ugh.* This is a 1970s story. It's part of our Boomer heritage of "work hard to get ahead." It is dull, unimaginative and poorly conveyed.

Here is the new career story in 25 words: "A \$50-80,000, debt-free technical education – including, in most cases, college credits – leading to career path opportunities in leadership earning in excess of \$100,000 per year."

“Like it or not, we still are perceived as a career of last resort. Ask teachers, school counselors, or parents. We have been selling what people don't want. So it is time for our story to change”

If you don't think message matters, take a page from the military. The various branches offer the opportunity to serve your country, sure – but they sell education and financial assistance on the back end. Oh, and by the way, according to USA Today, the U.S. Army is spending \$300,000,000 to recruit 6,000 new members this year.

That is our competition.

The other part of our story has to involve demonstrating clear career path advancement opportunities. We have to sell what millennials are interested in, which is how to move forward in their chosen field. How do we do that? By clearly and simply laying out the steps involved in the advancement process – what they need to do, the skills they need to learn, and so on. Unions and employers both need to use this career path diagram when having discussions with them:

The other half of the issue is where and how we tell our story. And sadly for those of us who are a little grey and grumpy, that story is most often told online –by your or by someone else.

It was not that long ago that I laughed off Facebook. I made fun of it as a stupid, time-wasting social enterprise for undisciplined people with too much time on their hands. Then I got hit in the head with a two-by-four. A very heads-up young business agent in the Midwest showed me a construction Facebook group. It was made up of qualified, skilled craftworkers in construction and energy turn-around. They were connecting peer-to-peer, sharing information on where jobs are, how good certain employers are, what industry trends they are seeing and, in some instances, just screwing around with each other in a good-natured way).

Here's what changed my entire viewpoint: that Facebook group has 30,000 members.

I share this as one small example of how drastically the job-hunting and employment world has changed. It is the era of Yelp, Trip Advisor and Glass Door. People are used to evaluating products, services, companies and careers. You have to tell your story and tell it well, or you might get your ass handed to you.

Here are four items that we might want to consider implementing to tell your story more effectively:

1. Add high-quality video to your home or landing page on the web. Today the narrative of who you are, what you stand for, how your employees or members feel, and what opportunities exist can be told best in visual form. If I can go on Realtor.com and find ten fixer-uppers in three minutes, shouldn't I be able to find out all about you without searching a

bunch of pages or having to read a ton of narrative? Add video. Don't cheap out.

2. Create a high-quality LinkedIn presence.

This site is the number-one location for talent procurement in the country. Every one of your employees on LinkedIn is available to be recruited 24-7 -- and every prospect working for someone else that could be working for you is in the same arena. Having a company or organization page, as well as a group, is certainly not a bad way to tell your story, and it barely costs anything. Post cool project pictures. Recognize people via company awards. Tell your workplace safety story there, etc.

3. In the Careers Section of your website, make sure to have testimonials, especially from Millennials.

This group uses third-party validation as their number-one reference when making decisions. And if you can combine this with the video idea, you have doubled your impact.

4. Put up a Facebook page.

Yes, it really is important. Think of your organization like a big extended family unit. They want to know what's going on with the other family members. These can be crews, divisions or simply those working far away. Maximize the engagement and connection of what everyone is doing in this centralized way. This is a place for positive personal engagement to occur. This is a place to show camaraderie. This is an informal place to tell your story not only to prospective employees, but to your own people as well. I know you aren't going to create the Facebook page yourself, so find a couple of Millennials who will.

Telling our story matters. Telling it well matters more. Let's get with the program and retire outdated stereotypes of our industry and career opportunities. The war for talent is on...and we need to be more interested in winning it.



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Focus on the Fundamentals

By Jim Bain

Falcon Performance Institute



Focus on the fundamentals and the results will take care of themselves. Every successful contractor, management executive, and athlete understands this concept. The best of the best not only understand it, they embrace it. If you do the fundamental things better than your competition, profit, engaged people, and victories will come. But what does that mean?

In football, if your players understand and practice the most effective ways to block, tackle, run, read the defenses and offenses, and analyze the situation, they are very likely to be successful, in both the short term and the long term. In other words, they are likely to win. The same is true of managers in business and the superintendents on construction jobs. If we understand, embrace, and practice the fundamentals, we can make a profit – sometimes a substantial one! It is those fundamentals that we teach in the four day Superintendents Academy offered annually at the Construction Advancement Foundation.

Simply stated, the fundamentals of construction are: Leadership, Safety, Productivity, Quality, Planning, Cost Control, and the Contract. Each of these topics is covered in a 3-6 hour block and taught by various experts in the field. Counting both the CAF Academies and those produced for individual contractors, nearly 200 superintendents and foremen have benefitted from the instruction and hands-on exercises included in each segment.

As an example, leadership is not about getting people to do what you want them to do. It's about getting people to want to do what you want them to do. Team building, motivating, a positive attitude, and communications are critical to success on the job site. Last summer, one graduate of the Academy was leading a struggling crew. They were struggling to meet production. They were struggling to meet the quality expectations. They were struggling to work as a team. And they were losing money on the job. In his own words, the superintendent "had lost sight of the fundamentals." He had gotten so wrapped up in worrying about the results of the job that he "forgot to lead." A quick review of the materials he had learned in the Superintendents Academy got him and his team back on track. The team recovered and so did the job.

The fundamentals of safety are equally important. Taught by CAF's own Dr. Jim Arendas, the discussion focuses not on implementing a safety program, but on instilling a safety culture. Safety "programs" have been around since the 1970's, most of which find their homes in three ring binders, collecting dust in the job trailer. While certainly useful from a reference perspective, these programs are simply not enough. Our superintendents must adopt and project a culture that says, "we will do it as safely as is humanly possible or it will not get done." The days of lost limbs and/or lives are no longer acceptable. Construction must be made safer and it starts with the

culture established by the superintendents.

Let's face it. Every construction company must be profitable to survive and thrive. In order to thrive, every job, every crew, and every worker needs to be productive. Planning, scheduling, and cost control are all fundamental to delivering a project productively. Planning, of course, is deciding what tasks need to be done in order to move the project along toward completion. Scheduling is deciding when, and in what order, those tasks need to be done. If you are reading this, you already know that in construction these two fundamental exercises are much easier said than done. In the Academy sections on Planning and Scheduling, specific tools and techniques are shared with the participants to help them understand and embrace the process. Individual and group exercises are used to cement the concepts. A few years ago, I asked one of the graduates what he learned from the program that was most important to him. His response was classic when he said, "I know it will help me on the job, but the most important thing is that for the first time ever, I am able to plan and schedule my work and my life so that I get to my son's football games before kick-off instead of after the first quarter is over." As you might suspect, his jobs were much better organized and more profitable as well.

Cost control is also critical to job success. Our superintendents can get so caught up in driving productive results that they forget the basics of controlling costs. Idle equipment is expensive. Idle trucks are expensive. Idle people are wildly expensive. When we begin to understand and appreciate just how expensive all these things are, we begin to manage those costs more effectively. Cost control starts with awareness. Appropriately, superintendents think we build things. We do, but what we really do is move money and resources that cost money. We trade in dollars. So, like everything else on our jobs, costs in the form of resources such as people, materials, and equipment, must be planned, scheduled, organized, and accounted for. In this section, class participants engage in a complex job costing exercise and analysis. Often in the realm of the project manager, cost control happens at the job-site. It is not critical that the superintendents do complex cost analyses, but it is critical that they understand the concepts and reasoning behind them. It starts with the awareness they gain in this session.

Quality on our jobs does not just happen, any more than productivity, safety, or cost control. Like the

other fundamentals, quality control is accomplished by establishing a culture that asks, "would you sign your name to this work?" It is a culture that is about caring. And, as with the other fundamentals addressed in the Academy, the culture on a job-site starts with the superintendent. The superintendent must comprehend the specifics of the quality requirements, integrate those requirements into the planning and scheduling, and communicate the requirements and quality plans to the people who are putting in the work – in terms that they understand. It's a tough task, but the superintendent has to do it. Doing it right the first time is fundamental to completing the job on time and within budget. It is fundamental to the success of the job. Our session on QC introduces tools and techniques that can help a superintendent build a project that you, he, and all of his/her crew would be willing to put their signature on.

Finally, we take a practical look at construction contracts. These are the basis of our work and our business, describing in excruciating detail the specifications, expectations, and risks involved with the project. The leaders of our jobs must understand the fundamentals of how all of the "legaleze" sifts down to the job itself. Presented in a very practical Q&A format, our construction attorney specialists deliver a hard hitting and job-specific review of the tricks and traps of construction contracts. Without exception, each class has termed this session as both scary and eye-opening.

If you are looking for better results on your jobs and in your business, focus on the fundamentals. It has been said that the superintendent has his hand on your wallet. Doesn't it make sense to be sure he or she fully understands the fundamentals of their work?



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To hire Jim or find out more about the Falcon Performance Institute, please

visit www.fpiteam.com and/or www.jimbainspeaks.com or call 352-854-4015.



Occupational Safety and Health Administration (OSHA) Respirable Crystalline Silica standard for Construction

**By Dr. James J. Arendas
Environmental Safety and Health Director,
Construction Advancement Foundation**

OSHA established a new regulation (29 CFR 1926.1153) for Silica exposures in the construction industry. Workers exposed to respirable crystalline silica are at increased risk of developing serious adverse health effects including silicosis, lung cancer, chronic obstructive pulmonary disease, and kidney disease. OSHA describes the steps that employers are required to take to protect employees in construction from the hazards associated with exposure to respirable crystalline silica.

The first step for an employer is to determine if the standard applies to the work being performed. The silica standard applies to all occupational exposures to respirable crystalline silica in construction work, except where employee exposure are below 25 µg/m³ as an 8-hour TWA under any foreseeable conditions. Exposures to respirable crystalline silica occur when the following tools are used on concrete, brick, block, stone, mortar, and other materials that contain crystalline silica. If the contractor's work is covered by the standard, an employer has two options for limiting employee exposure to respirable crystalline silica:

- Specified exposure control methods; or
- Alternative exposure control methods. Employers who choose the specified exposure controls option must fully and properly implement protections for the tasks or equipment listed in Table 1 of the standard. Employers who fully and properly implement the controls in Table 1 do not have to assess employees' silica exposure levels or keep employee exposures at or below the permissible exposure limit (PEL).

Employers who follow alternative exposure control methods must:

- Determine the levels of respirable crystalline silica that employees are exposed to;
- Limit employee exposures to a PEL of 50 micrograms per cubic meter of air (50 µg/m³) as an 8-hour time-weighted average (TWA);
- Use engineering and work practice controls, to the extent feasible, to limit employee exposures to the PEL, and supplement the controls with respiratory protection when necessary.
- Keep records of employee exposure to respirable crystalline silica.

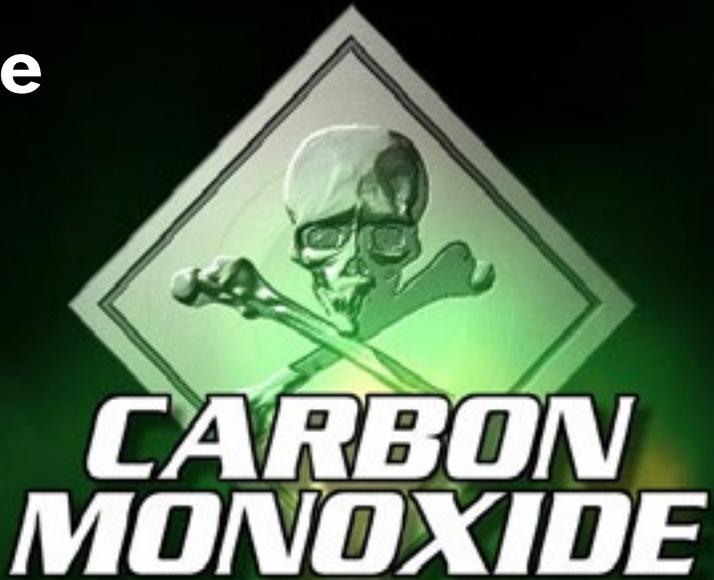
Employers covered by the standard must:

- Provide respiratory protection when required;
- Restrict housekeeping practices that expose employees to respirable crystalline silica where feasible alternatives are available;
- Establish and implement a written exposure control plan, including designating a competent person;
- Offer medical exams to employees who will be required to wear a respirator under the standard for 30 or more days a year;
- Communicate hazards and train employees; and
- Keep records of medical examinations.

Please refer to the entire OSHA rule (29 CFR 1926.1153) when establishing your program and compliance plans. If you have any questions or need assistance with regards to the silica standard please call Dr. James J. Arendas at 219-764-2883.

Carbon Monoxide Poisoning

Gary Hulbert
INSafe Health Consultant



An odorless, colorless gas, carbon monoxide is created when fossil fuels are burned. When high levels of carbon monoxide are breathed in, it enters the bloodstream and replaces the oxygen in the red blood cells with carbon monoxide. Carbon monoxide combines with hemoglobin which combines to form carboxyhemoglobin. The formation of carboxyhemoglobin prevents the normal transfer of carbon dioxide and oxygen during the circulation of blood, increasing levels of carboxyhemoglobin result in various degrees of asphyxiation, up to and including death. Symptoms of carbon monoxide poisoning include dull headache, weakness, dizziness, shortness of breath, nausea, confusion, blurred vision, and loss of consciousness.

According to the Center for Disease Control, Morbidity and Mortality Weekly Report, during the period of 1999 to 2010, a total of 5,149 deaths from unintentional, non-fire related, carbon monoxide poisoning occurred in the United States, an average of 430 deaths per year.

Sources of Carbon Monoxide Vehicles are one of the most prominent producers of carbon monoxide. In the workplace, propane and gasoline powered forklifts, floor scrubbers, and sweepers produce carbon monoxide as the fuel is burned. Gasoline and propane heaters and power washers produce carbon monoxide and are frequently used in areas where ventilation may not be adequate to lower carbon monoxide to acceptable levels. Semi-trucks typically use diesel fuel, which produces carbon monoxide. The air intake for a company using supplied air compressors for respiratory protection may be located

too close to a carbon monoxide source, such as gasoline powered vehicles and diesel powered semi-trucks.

Carbon monoxide exposures don't just occur in the workplace. Each year, people die due to exposures to carbon monoxide in the home. Leaving a vehicle running in a garage or other enclosure or heating a home with a stove, charcoal grill, or faulty heater all could prove fatal when the carbon monoxide levels exceed the immediately dangerous to life and health levels (IDLH).

Standard Exposure Limits The OSHA permissible exposure limit (PEL) for carbon monoxide is 50 parts per million (PPM). The National Institute of Occupational Safety and Health (NIOSH) recommended exposure limit (REL) is 35 PPM, while the American Conference for Governmental Industrial Hygienists (ACGIH) is 25 PPM. All exposure levels are for an eight hour time weighted average. The IDLH level for carbon monoxide is 1200 PPM.

Detecting the Danger Prompt and accurate detection is critical when there is risk of exposure to dangerous and undetected carbon monoxide. There are several methods that could be used.

A multi-gas detector is a direct reading instrument that will give accurate and immediate results. It is highly recommended for occupations with potential carbon monoxide dangers.

Colorimetric detector tubes with hand pumps can be

used to sample over a time period of about two to 12 minutes, with an error factor of plus or minus 25 percent.

Tailpipe exhaust gas analyzers work well for facilities with forklifts and other vehicles.

Residential carbon monoxide alarms are typically used in the home, but shouldn't be used in the workplace. Employees may be exposed above acceptable levels due to inconsistent monitoring levels by different alarm manufacturers.

Preventing Carbon Monoxide Buildup Proper ventilation is key to preventing carbon monoxide from reaching dangerous levels. In the workplace, colder months present a challenge for ensuring that adequate ventilation is provided. Many facilities open overhead doors to increase ventilation during the warmer months and close doors in the fall and winter. Companies that repair vehicles and need to have the vehicles running to diagnose issues should have a ventilation system in place to vent the vehicle exhaust outside of the building. Gasoline or propane powered equipment should never be used in enclosed areas without proper ventilation. A program that ensures regular monitoring of air quality in areas where carbon monoxide producing equipment is being used should be implemented.

Maintenance of vehicles, especially forklifts and floor scrubbers, is critical to maintaining safe levels of carbon monoxide. It is recommended that the forklift exhaust be checked at least annually to ensure that the vehicle is burning the fuel efficiently. Air intakes for compressors supplying air should be located away from areas where vehicles or other carbon monoxide producing equipment

is located.

Respirators should never be the first line of defense for exposures to high levels of carbon monoxide but may be used in areas where the carbon monoxide levels approach IDLH levels. Full facepiece pressuredemand self-contained breathing apparatus (SCBA) certified by NIOSH, or a combination full facepiece pressure demand supplied-air respirator with auxiliary self-contained air supply would be appropriate for high concentrations of carbon monoxide.

LESSONS LEARNED

How can we reduce or eliminate the risk for similar events?

- Ensure heaters and other onsite equipment have adequate ventilation to limit the risk for overexposure to dangerous gases.
- When determining hazardous gas risks, factor in the accumulation of combustion gases from small engines or other equipment, and prepare accordingly.
- Local exhaust ventilation is important with equipment that produces large quantities of combustion gases. Otherwise, the room must have additional ventilation, such as open windows, open doors, fans, etc.
- Carbon monoxide detectors and/or air monitoring are highly recommended proactively protect workers from overexposure.

For more information about preventing overexposure to carbon monoxide, contact INSafe to speak with a health consultant by calling (317) 232-2688 or emailing insafe@dol.in.gov.



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CAF Hosts First Annual Construction and Skilled Trades Day

By Kevin Comerford

On November 28th, 2017, the Construction Advancement Foundation of Northwest Indiana, the Northwest Indiana Workforce Board, and the many of Northwest Indiana's Building and Construction Joint Apprenticeship Training Centers came together to hold Northwest Indiana's first first annual Construction and Skilled Trades Day. The event was held in the Industrial Building at the Lake County Fairgrounds in Crown Point, Indiana.



Nearly 1000 high school students from over 26 schools across Northwest Indiana had the opportunity to work



with construction apprentices and training instructors from 15 different Joint Apprenticeship Training Centers and learn about careers in the building and construction trade unions. The thing that made this event unique from an ordinary career day event is the fact that students had the opportunity to perform hands-on training activities with construction workers.

The Ironworkers set up a simulation where students would tie-off to a stanchion and walk I-beams while wearing tool belts loaded with hammers, wrenches, bolts, and nuts. The students would then straddle the beam and install bolts to connect the iron on the structure. The Pipefitters brought a welding simulator. The Plumbers had set up several stations where students would sweat cooper pipe fittings. The Sheet Metal Workers had the students assemble sheet metal toolboxes and also had a simulator for testing and balancing air. The Electricians taught the students how to bend conduit and safely use connect wire and create a circuit that turned on a light bulb. The Roofers taught the students how to hot air weld PVC membrane together and also install asphalt shingles. Other trade that participated includes the Carpenters, Teamsters, Bricklayers, Laborers, Insulators, Operating Engineers, Tech Engineers, Painters, and Glaziers.

Throughout most of U.S. history, American high school students were routinely taught vocational and job-ready skills. However, over the last few decades, there has been a push to prepare the vast majority of students for college

and many of the vocational offerings have disappeared from the curriculum at local high schools. Preparing students for college may seem like a good thing, but fact



remains that most of high school graduates don't pursue a four-year degree after graduation. According to the Bureau of Labor Statistics, only 30.0% of high school graduates that were born between 1980 -1984 completed a bachelor's degree by the time they reach age 29. When you remove females from the equation, only 25.9% of all men earned a bachelor's degree.

The demise of vocational education at the high school level along with the retiring of baby boomers has bred a skills shortage in construction today, and with it a wealth

of career opportunities for both under-employed college grads and high school students looking for direct pathways to a lucrative career. This was the main reason to hold the construction and skilled trades day – to show students that there are viable careers that exist outside of the college career path. Moreover, many of the apprenticeship programs are struggling to attract quality applicants so the more students we can expose to construction career paths, the stronger our industry becomes.

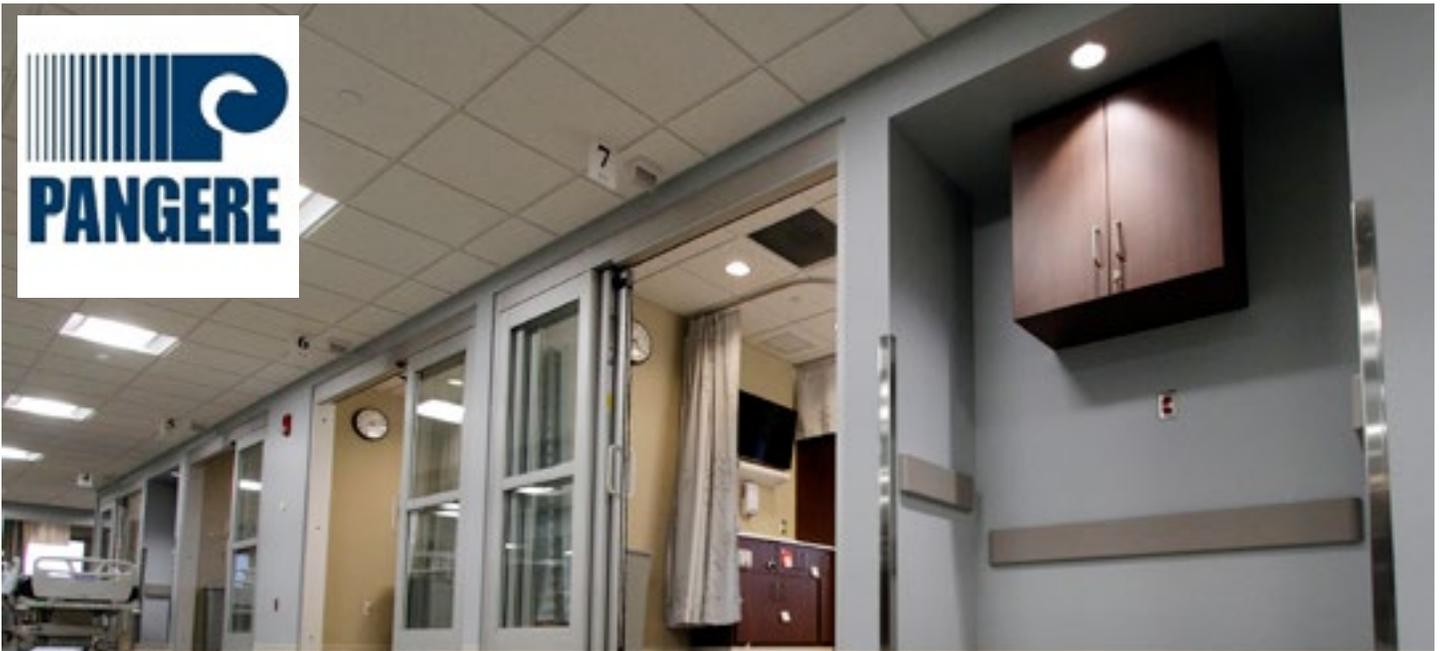


The Construction Advancement Foundation has already scheduled the next Construction and Skilled Trades Day for November 27th, 2018 which will once again be held at the Industrial Building at the Lake County Fairgrounds.

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Featured Project

Saint Catherine Hospital - ICU Remodel Pangere Corporation

In November 2016, The Pangere Corporation, Inc. completed construction on the Intensive Care Unit Remodel at Saint Catherine Hospital in East Chicago, Indiana. The new state-of-the-art ICU remodel includes over 6,000 square feet of interior space that was completely demolished and reconstructed. There are now over 14 ICU patient rooms along with 2 patient isolation rooms.

The new ICU unit now has a centrally located nurse's station that has a 360 degree view of all of the patient rooms. Energy efficient LED lighting and lighting control systems with dimming capabilities were installed. Skylights were also added to all of the patient rooms to provide natural lighting. The patient rooms now contain retractable sliding glass doors which allows for easy transport of hospital beds. Patient lifts were also added to help transfer patients. The complete remodel also has increased storage space. The Pangere Corporation were able to relocate medical gases from the center of the room to the inside of the wall which allows for more efficient use of space. Finally, anti-microbial curtains and casework hardware were installed to help reduce bacterial and germs.

The Pangere Corporation started the project on July

15th and was able to complete the entire remodel project in only 89 days. They were able to get the certificate of occupancy by November 11th, 2016.

The Pangere Corporation required all of its tradesmen, management staff, and subcontractors to be trained with the Carpenter's Infectious Control Risk Assessment (ICRA): Nest Practices in Health Care Construction. This training is a minimum 8 hour awareness class for management and subcontractors. Pangere required the more extensive 24 hour ICRA training program for all carpenters working in the field. The ICRA training outlines protection methods and safe work practices for the workers and hospital staff who are working in occupied healthcare facilities. The course discusses the unique environment of the healthcare facility and the potential hazards in a hospital environment.

During the construction phase, The Pangere Corporation was responsible for coordinating over 50 union trade professionals. One unique aspect of the project utilized "Smart Tap" technology. This allowed Pangere to tie into the owner's existing gas system "live" without having to shut down the hospital's remaining systems. The project was awarded 2017 CAF Commercial Project of the Year.

Featured Project

Saint Catherine Hospital

ICU Remodel

Project Participants

General Contractor:

- The Pangere Corporation - Steve Pangere
- Project Manager - Jim Vermillion
- Site Superintendent - Scot Camacho

Major Subcontractors:

- Electrical - Hyre Electric
- Mechanical - Gatlin Plumbing
- Glazing - Trout Glass and Mirror
- Flooring - Interior Finishes
- Painting - Merritt Painting

- Fire Sprinkler - F.E. Moran

Owners/Project Representatives:

- Community Foundation of Northwest Indiana

Architect:

- Design Alliance Architects

Engineer:

- North Star Engineering

