



FIRE / RESCUE

February, 2020 Edition

THE FIRE LINE

Fond du Lac Fire/Rescue Monthly Newsletter

FROM THE BALCONY

A message from Chief Peter O'Leary



Building Your Team

Each year our members are allowed to bid shifts and stations and this year is no different. We have some movement upward in the ranks with the retirement of Lieutenant Pete "Duke" Dutkiewicz who retires on January 11th after serving the citizens of Fond du Lac for 30 years. We thank Duke for his dedicated service to the citizens of Fond du Lac and to our department.

With Duke's retirement new opportunities will be afforded to Engineer Keith Wendt who will be promoted to Lieutenant and to John Rolfe who will be promoted to Apparatus Engineer. We will welcome a new member and welcome back FF/PM Brett Hefty who has been on leave serving our country in the Wisconsin National Guard.

With new promotions, shift changes and new hires every leader in our organization has the opportunity to build their team or perhaps refine the one that they already have. We often hear about resolutions people make as they begin a new year. We can seize the same opportunity within our organization. As leaders develop teams where might you fit in? What strengths do you bring to the table and does your leader know what your capabilities are and what interests you have?

We have teams which are built on purpose so we don't have any one shift, or one member building a silo. Leaders have the responsibility to give direction, provide a vision and build confidence in their teams. Each member of FDLFR is a value added benefit to our organization. We work in a world of constant changes so our flexibility to the unknown has to be met by us with confidence and determination.



Our goal has to be to make each other better. We have opportunities to do just that. We have to be committed to our newest hires, our promoted engineer and our promoted lieutenant. Their success is our success. Please help them achieve excellence as they enter unchartered waters; they will be grateful for our collective assistance.

Until Next Month,

Be Safe and Be Well

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UPCOMING EVENTS

- Sturgeon Spectacular February 6 - 9
- Celebrate COMMUNITY February 15th
- Spring Primary Election February 18th
- 3rd Annual Recognition & Awards Banquet February 25th



FOND DU LAC FIRE RESCUE OPERATIONS

By: Assistant Chief Erick Gerritson



Modifiable risk: Firefighter cancer prevention

Modifiable risk: Firefighter cancer prevention...to reduce individual firefighter's relative risk of contracting cancer, they must limit risk factors on and off the fireground.

Can science tell you exactly how much being a firefighter increases your risk for cancer? In a word, no.

When Dr. Doug Daniels and his team at NIOSH investigated cancer diagnoses and death among firefighters in Chicago, Philadelphia and San Francisco, they found that firefighters were 9 percent more likely to contract cancer and at 14 percent higher risk of dying from cancer than the general population.

While these statistically significant findings are important, they only tell the start of the story. When you look at specific types of cancer, the size or magnitude of the relationships vary quite a bit between cancers and even between his study and others.

While Daniels found that firefighters were at a generally lower risk of contracting multiple myeloma compared to the general population, the risk of contracting mesothelioma was more than double that of the general population. While the overall risk estimates for contracting cancer and dying of cancer Daniels describes is across all cancers in general, risk of specific types of cancers vary significantly.

At the same time, different studies have different findings. A 2015 study by Dr. Rebecca Tsai and colleagues exploring the California cancer registry didn't agree with the findings of Daniels. Tsai found the risk of multiple myeloma to be 35 percent higher among firefighters, rather than lower.

PPE USE, HEALTH PRACTICES FACTOR INTO CANCER RISK

So what is your individual risk? No general scientific study can tell you that. It depends on your individual risk factors, genetics and the health choices you make on a daily basis.

For instance, the risk of liver cancer is estimated to be 20-30 percent higher among firefighters. Obesity, however, doubles the risk of developing the same type of cancer as well as similar increased risks of esophageal, gastric and kidney cancers. So firefighters who are overweight are likely even more at risk compared to healthy weight firefighters.

Consuming more than 3.5 servings of alcohol a day is linked to a 2-3 fold increased risk of developing head and neck cancer and a 50 percent higher risk of breast and colorectal cancers.

By comparison, heavy smokers are more than 100 times more likely to develop different types of lung cancer compared to non-smokers. Firefighters who smoke face both the exposure risks and the smoking risks.

The U.S. Surgeon General estimates that exposure to environmental tobacco smoke in the home increases a non-smokers chances of developing lung cancer by 20-30 percent.

FOND DU LAC FIRE RESCUE OPERATIONS

By: Assistant Chief Erick Gerritson



Modifiable risk: Firefighter cancer prevention, continued...

Even looking specifically at the risk of firefighting likely varies based on the practices, policies and actions of the department and individual. Relationships that were statistically significant overall in the Daniels study were not necessarily significant in each of the three departments. What firefighters are exposed to in a given area, how they decon their gear, how long they wear their bunker gear and SCBAs all can vary.

EFFECTIVE FIREFIGHTER CANCER PREVENTION

The fact that the relative risk of firefighting is lower than the threat of other risk factors doesn't mean the threat associated with firefighting isn't real. These numbers should not be used to downplay the cancer risk related to firefighting.

Even without knowing what any one firefighters' specific risk is, the data is clear that firefighting leads to increased rates of cancer. Instead, the relative risk of firefighting and other modifiable risk factors highlight the importance of changing the things that can be changed.

Given firefighters are already at risk, it is even more important to avoid tobacco, be proactive about fitness and nutrition, limit binge drinking and follow PPE best practices. For cancer prevention to be effective in the fire service, it has to include all aspects of modifiable risk factors on and off the fireground.

Source: Sara Jahnke of Fire Rescue 1

Until next Month...Stay Safe!



OPERATIONS BY THE NUMBERS

DECEMBER, 2019		THIS MONTH		YEAR-TO-DATE	
PREVENTION		Last Year	This Year	Last Year	This Year
Total Inspections		242	161	2,994	3,034
Total Defects		132	86	1,998	1,848
SUPPRESSION					
Alarms Involving Fire		12	7	135	112
Fire Mutual Aid Given		1	2	13	15
Fire Mutual Aid Received		0	0	0	1
Service/Good Intent Calls		38	38	556	528
False Alarms & False Calls		24	22	311	389
Other Calls		8	7	155	175
Total Fire Alarms & Calls		82	74	1,157	1,204
EMS					
Total Ambulance Calls		511	534	6,094	6,288
Total Fire & Ems Responses		593	608	7,251	7,492
Fire Property Loss	\$6,500.00	\$53,000.00	\$365,665.00	\$486,468.00	
Fire Contents Loss	\$1,500.00	\$2,000.00	\$145,760.00	\$221,906.00	
Engine Assisted EMS Calls	194	208	2,513	2,753	

Celebrating

January & February, 2020



MILESTONES IN SERVICE

Pete Dutkiewic ~ 30 years (1/18/90)

Jim Wamser ~ 25 years (2/6/95)

Don Salvaggio ~ 25 years (2/6/95)

Erick Gerritson ~ 20 years (1/17/00)

Keith Wendt ~ 20 years (2/14/00)

Edgar Ramirez-Tellez ~ 15 years (1/31/05)

Jack Prall ~ 15 years (1/31/05)

Happy Birthday
FEBRUARY

John Hicken ~ Erick Gerritson ~
Jack Prall ~ Duster Hilgendorf ~

Jake Vogds ~ Jed Rathke ~

Adam King

like us on
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at City of
Fond du Lac
Fire/Rescue

follow us on
twitter

at fdlfire



The Code Summary

*By: Todd Janquart
Assistant Chief of EMS*

The Dilemma of the Protocol: Why We Need to Change This Culture

I've always struggled with concept of being a "protocol circus animal" as a paramedic. The dynamics of patient care in the prehospital setting combined with the complexity of emergent medical conditions has never lent itself well to the typical algorithm that is associated with EMS protocols. This really is a great article that describes an attempt to validate and improve the status of paramedic level care from a professional aspect. Putting effort forth in honing assessment skills, combined with solid clinical judgment, and experience should allow paramedic providers the ability to approach patient treatment with the same modality as the hospital setting. The big picture is to identify and treat the main problem and not simply recognizing and treating the associated symptoms. We are smarter than that and I think there is potential for this unofficial flexibility on occasion. It all depends on the paramedic provider and online medical direction. If the big picture can be painted, a receptive physician should support the most appropriate treatment.

The Dilemma

Many years ago, prehospital providers would have needed to contact a physician before starting an IV, administering O₂, or performing other procedures (including defibrillation) that are considered standard practice today. To avoid delaying patient care and to take a load off the ED physicians, standing order protocols were developed. This was progress in the right direction. EMS providers could now treat patients quickly without all of the "red tape."

Fast forward a few decades and there is a different problem. Protocols have been developed for everything under the sun. Now the question we have to ask ourselves: "Was this effective? Or, was there just the creation of a culture of EMS zombies who operate under the 'if this, then that' algorithmic mindset?" Please do not misinterpret what I just said. The idea of an algorithmic approach to treating patients is not necessarily a bad thing in certain situations. It's just that critical thinking must also be promoted.

The application and enforcement of these protocols is the culprit. During a QA process, the QA officer asks the question to a provider: "Why did you give Labetalol to this patient?" Their response? "Because her blood pressure was greater than 185/110."

The QA officer shakes his head in dismay and thinks to himself: "Where did we go wrong?" The provider documented the patient's complaint was flank pain due to kidney stones and had a blood pressure of 190/110 with a pain scale of 9/10. Of course, the pain was the cause of the hypertension. But the provider didn't choose to manage this patient's pain. Instead they chose to treat the high blood pressure. Why? Because the protocol said that they should. It sounds ludicrous, but situations like this are seen all the time. Again, we ask why?

This happens because some EMS providers have stopped learning and stopped thinking due to becoming reliant on protocols. Their knowledge base is restricted to within the walls of their agency's protocols. Throw in a supervisor, QA officer, or training officer who sends chastising messages to them if a protocol was not followed to the "T" and now a recipe for disaster is created. When this happens, providers fear negative action and will treat patients according to a protocol despite the factors of the particular case. They may suspect something does or does not need to be done, but they follow through with the incorrect decision anyway. They do this because of this method of inappropriate and overly rigid protocol enforcement.

How many agencies out there enforce the concept that their providers must follow an exact protocol? It is seen all the time. It is manifested with questions such as: "Why didn't you give this medication? Why didn't you perform this procedure? Why did you do this? Why didn't you do that?" If these questions are to stimulate critical thinking, then the interaction is on the right track. If the intent of these questions is to ask why a protocol was not strictly followed, everyone involved may be missing the point.





The Code Summary

*By: Todd Janquart
Assistant Chief of EMS*

The Dilemma of the Protocol: Why We Need to Change This Culture, cont...

Providers should be taught the benefit of certain assessments. EMS Educators need to dive deep with their providers and discuss anatomy, physiology and pathophysiology to help them better understand the reasons why they perform certain assessments and render certain treatments. The concept is not to just do something because it is required to be done according to a protocol. We must strive to understand when medications should or should not be given and what valuable information can be gained from certain assessments such as 12 lead ECG, etCO₂ reading or a vital signs trend. For example, when paramedics are adequately educated and they understand all the capabilities of a 12-lead ECG, it should not be necessary to tell them to acquire one in certain situations. The paramedic will do it on their own because they understand the benefits of the information they are acquiring and how to apply it.

Our Approach to a Solution

In August 2018, East Baton Rouge Parish EMS rolled out new clinical guidelines. We changed the name of East Baton Rouge Parish "protocols" to "clinical guidelines" as a representation of the new culture that is being promoted. We taught our providers the concept of treatment goals for each type of patient and that the "clinical guidelines" are your tools to achieve those goals. The clinical guidelines are not necessarily an exact process that must be followed every single time. This runs contrary to the concept of a protocol. We understand that every patient is different and sometimes a set protocol may not be in the best interest of every patient encounter. Critical thinking is necessary to know when to do or not to do something.

In today's age of communications technology, personal devices can store everyone you talk to as either a contact or in a call log that eliminates the need to memorize phone numbers. While this is a great feature, making that same phone call without the device or access to its contacts would be a monumental task. The same concept can be applied to today's protocols by crippling our clinician's ability to critically think. It is time to look at guidelines that require a little more thought than a "see this, do that" mentality. We just cannot have an "easy button" for everything. This is especially true in the complex-dynamic prehospital clinical care environment.

Our new clinical guidelines have completely redesigned our approach to taking care of our patients. Instead of having a restrictive protocol that limits our critical thinking abilities, we have clinical guidelines that allow the provider to utilize critical thinking and includes multiple treatment options to manage patients. The guidelines are provided in algorithmic form, but our providers understand that they have the autonomy (within the confinements of their scope of practice and medical direction) to apply the standing orders in a manner that is appropriate for their particular patient. We have seen that this method has promoted a culture of providers who now want to learn about prehospital medicine and not to limit themselves to merely remembering a protocol. Incorporating this concept of getting away from the strict protocol mindset and promoting critical thinking with the implementation of evidence-based practices ensures we are on the right path to changing the culture of how our patients are treated.

In addition to transitioning from a strict order of providing care to a critical thinking approach, we also had to ensure our staff was given the tools necessary to provide the best care possible. This change for us was not just an update but a complete overhaul of our entire clinical care approach. Two-to-three years were spent reviewing literature and researching evidence-based practices to design our new clinical guidelines. In addition to reviewing our own data, published data, position statements, PHTLS guidelines, AHA guidelines, and National Model Guidelines, we consulted with experts in our service area that included emergency medicine physicians (adult and pediatric), trauma surgeons, neurologists, cardiologists, pharmacists, and obstetrician-gynecologists to aid in the process of guideline development.

This was instrumental in order to ensure we were working to improve our whole system of care and not just the pre-hospital aspect of care. The use of evidence-based medicine has allowed our agency to feel confident in adopting many new procedures and medications. Some of the medications we added include Ketorolac, Ketamine, Norepinephrine, Dobutamine, IV Nitroglycerin, Neuromuscular Blocking agents, TXA, Nicardipine, Heparin, and Pepcid. New procedures include medication assisted intubation, apneic oxygenation, a modified Valsalva maneuver, heads up CPR, double sequential defibrillation, surgical cricothyrotomy, simple thoracostomy and pericardiocentesis.



The Code Summary

*By: Todd Janquart
Assistant Chief of EMS*

The Dilemma of the Protocol: Why We Need to Change This Culture, cont...

New equipment included the Handtevy System, additional pediatric specific equipment, pelvic binders, cooling collars and fluid warmers. Although they are culturally accepted, certain medications, procedures, and equipment were eliminated due to evidence suggesting they may be harmful.

In November 2018, our department was invited to present cases treated under the new guidelines for review with a panel of experts at the annual McSwain EMS Trauma Symposium in New Orleans. During this conference we were able to share some of our data on improved outcomes with this panel. As we continue compiling data, we hope to analyze what is and is not working. We anticipate authoring future publications to share our findings with the EMS industry.

Next Step

The next step to ensure that we allowed for growth was the adoption of just culture concepts. If a treatment or a procedure does not go as expected or a Clinical Guideline was applied inappropriately, our employees know they can reach out to us without fear of disciplinary action. This adjustment to our culture has allowed the staff to feel comfortable asking questions and reporting errors. This has allowed us to grow as a department.

How to Continue Progress

EMS leaders, educators and physicians need to continue moving prehospital medicine forward to ensure that we are treating patients to the best of our abilities. Complacency will lead to poor patient care. As a profession, we need to keep up with the latest evidence-based practices and train our providers regularly. Finally, we need to ensure that we are creating an environment for our clinicians to think critically. Protocols and guidelines should not be written in an effort to force providers to follow specific steps in every situation.

They also should not be written to the level of your bottom performers, thus restricting your top performers. Many agencies do this because of liability. Our goal should be to set the bar high and bring everyone up to the highest level possible. Give your employees the tools they need to provide high-quality care to your community. The right set of clinical guidelines and the way they are utilized will be the key factor in achieving this goal.

Authors Dan C. Godbee MD, NRP, Jon Brazzel, NRP, FP-C, and Justin Arnone, BS, NRP, NCEE, TP/FP-C from October 22nd, 2019 online edition of the Journal of Emergency Medical Services.

*You build on failure. You use it as a stepping stone. Close the door on the past.
You don't try to forget the mistakes, but you don't dwell on it.
You don't let it have any of your energy, or any of your time, or any of your space.*

Johnny Cash

News from the Station



Congratulations to Engineer John Rolfe!

John was recently sworn in by City Clerk Maggie Hefter at a ceremony held at FDL Fire/Rescue. John's wife, Lisa pinned "ENG" collar brass on John's uniform.

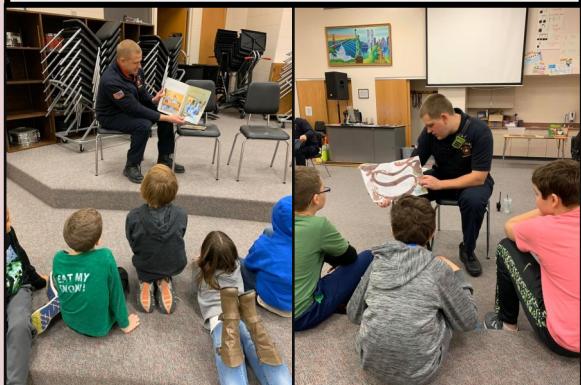


Congratulations to Lieutenant Keith Wendt!

Keith's wife Stephanie pinned the lieutenant badge on Keith's uniform after being sworn in to his new position by City Clerk Maggie Hefter.



FDL Fire/Rescue recently spent a morning reading holiday stories to the students in grades K-5 at Riverside Elementary.



FDLFR Crews spent a Saturday afternoon at the Winterfest at Hamilton Park celebration. The crew members enjoyed helping the children roast marshmallows and make s'mores.

Well trained people
are the best defense
against fire.

By: James Knowles III
Assistant Chief Training/Safety

Company Officer Leadership

In today's fire service, we have never had better access to training and learning materials, but so often this access doesn't translate into better prepared officers. Like the excellent finish carpenter that leaves a company and strikes out on his own and fails, a company officer that was a great fireman may not have the skills to manage people. Just as the carpenter didn't have the business skills to run a company.

Many of these new officers are ill equipped for leading their men and women into "battle". They lack some of the basic skills in leadership and how to form a team. Unit cohesion is vitally important in any organization. That cohesion begins with relationships and trust. It is developed through training and company activities like meals, fundraisers, family get togethers. This job is about people, the ones we serve and those we serve with. There are many ways to achieve this goal and many of our officers don't know a few simple things to make it happen because they taught them. Too often new officers pass a test, are handed a badge and sent on their way. While there is certainly some personal learning and commitment to get that far, many are not afforded a structured training program that correlates with the values and mission of the department. Often other officers are appointed or elected. While these may be qualified individuals, the same system applies, and they are often placed in the right front seat with little or no guidance.



Getting promoted is a personal goal. While most do it with a view of making the department better, it is usually about money, status or success at some level. And that isn't a bad thing. Sometimes it's viewed as an escape from an assignment. Many excellent leaders promoted because they realized that it was good for their family. However, once you are promoted, it is no longer about you. Once you are promoted it is about the organization, its mission and your people. You come last.

Too often good aspiring officers get off track chasing "fame" and acceptance. They become so focused on making a name for themselves that they forget why they wanted to become officers in the first place. They forget where they came from and their role in the organization. Often getting promoted has more to do with being in the right place at the right time, compared to any other factor. Lots of qualified firemen don't ever get promoted. Letting your success inflate your ego is often a fatal mistake made by new officers. These officers tend to forget the things they stand for, the people they supervise and the placing operational gain over personal gain or acknowledgement.

One critical tool that all new officers can rely on is their senior man. Now this may differ for department to department and your "senior man" may not be the longest serving. But every company has that go to guy, and as a new officer he should be your biggest asset. Now not all senior men offer a positive influence and a new company officer that is a huge challenge to overcome. But in the case of having a reliable senior man, the officer needs to develop that relationship. Like a new platoon leader must rely on the platoon sergeant to learn about the platoon, and determine the capabilities and needs are; the new company officer needs to listen to his senior man, to find out about the crew, their needs, abilities, strengths and weaknesses.

While the new officer cannot abdicate his responsibility or authority, he should listen and observe before instituting his plan. Some expectations must be laid down up front. Timeliness, preparedness, honesty....but other changes can happen over time, with the assistance and support of your senior man.



Well trained people
are the best defense
against fire.

By: James Knowles III
Assistant Chief Training/Safety

Company Officer Leadership, continued...

For the Senior Man:

Remember your role and with the right support from your officers you can help lead the company or department to succeed. You may be asking how can a back-step fireman can effect such change? Quite simply by building trust with your officers. You have to be squared away in your skills and abilities, and you have to be the fireman that offers solutions and fixes problems. You must posses many of the same qualities as those that get promoted, your rewards will just be different.

Loyalty up and loyalty down must be the rule with your new officer. They must be able to know they can trust you and that you will deliver their orders as if they were your own, and they must have you back while you do so. This isn't blind loyalty where things are covered up to prevent discipline. This is loyalty built on trust that the mission comes first and that you both have the best interest of the department and your people in mind.

Be prepared to do your job should enable the officer to allow you to help run the crew. This doesn't mean you get a voice in everything that happens, as ultimately the officer is in charge and it is his responsibility. But by developing a positive relationship and earning trust, you will have a lot more influence on how things run.

In some departments the senior man is the law of the land, the officers run the company, but the senior fireman runs the people. In others the senior man is just the fireman that has been there the longest. Whichever the case, you must adapt to the role as expected. In places where there is no real expectation for the senior people, it will be up to the officer as to whether to involve the senior fireman in running the shift.

For the Company Officer:

The make or break of all leadership positions is people. No amount of money or equipment will make any sort of impact without firemen to be there when the rubber meets the road. One of the most important tools any leader can use is communication. Listening is far more important than speaking, yet in studies it is documented that less than 10% listen effectively. Far too often we listen to reply, versus listening to understand. Steven Covey, in his book "The 7 Habits of Highly Effective People" states the following, "seek first to understand, then to be understood." We all must overcome personal bias when listening. So often what is said is not what is heard.

As the new officer or senior man, it is critical that you communicate effectively. Often to ensure understanding, asking the other person to repeat back what you just said is necessary, especially with issues where complete understanding is critical. But if you are not on the same page then misunderstandings will occur, and you will be less effective as a team.

A mutual trust must be developed, and success is found in outcomes; both in the station and on the fire-ground. After every fire don't be afraid to discuss the good and the bad. One of the strongest ways to build unit cohesion is to create an environment where there is enough trust that where everyone can admit negatives and positives of themselves and the crew without judgement.

Well trained people
are the best defense
against fire.

By: James Knowles III
Assistant Chief Training/Safety

Company Officer Leadership, continued...

You will make mistakes. On the fireground and in the firehouse. Acknowledging them is the first step in correcting them. Admitting you were wrong, and then correcting your actions will go a long way in building trust. No one is perfect, and no one expects perfection from everyone. Being honest and humble will make you a much better leader.

When in charge be in charge. Far too often new officers are reluctant to step up. They are more concerned with how they will be perceived and less focused on their responsibility. You cannot be everyone's friend, and that should not be expected. Most firemen will prefer an honest, fair leader than one that caters to their personal needs.

History often only remembers the act, not who achieved it. And while some legends exist it usually isn't because of self-promotion. A focus on the mission, while developing competence and confidence in your crew will go a lot farther in establishing your reputation than any other single act. So, put your head down and keep pressing on. Stop worrying about who is receiving recognition and focus on the results. Fire-fighting is a team sport and we are only as good as the worst player. Making sure your crew isn't the worst player is the most important function of the company officer. The true measure of our effectiveness will be the legacy we leave behind and the fact that we left our department better than we found it.

Source: LeBlanc & Lemmons (2019). *Company officer leadership*. Firefighter Nation.
Retrieved: <https://www.firefighternation.com/2019/05/03/company-officer-leadership/>



FIRE PREVENTION

That's what it's all about!

By: Troy Haase
Division Chief of Fire Prevention



Current Status of New Construction

- ◆ Carew Concrete at 244 West Pioneer- Building is under construction.
- ◆ Mercury Marine Plant 98 Addition at 545 W. Pioneer Road- Building is under construction.
- ◆ Lenz Truck Center at 536 Seymour Street- Building is under construction.
- ◆ Eilertson Electric at 920 Willow Lawn Road- Buildings are under construction.
- ◆ Fairfield Inn at 935 S. Rolling Meadows Drive- Building is under construction.
- ◆ Riviera Maya at 609 West Johnson Street- Building is under construction.
- ◆ Ducharme Cottages at 100-400 Ducharme Parkway- Buildings are under construction.
- ◆ River Hills Mixed Use Development on S. Main Street- Buildings 1, 2, 3, 4, 5, 6 & 8 are complete and 7 & 9 are under construction.



FIRE PREVENTION

That's what it's all about!

**By: Troy Haase
Division Chief of Fire Prevention**



How to Comply with Your Annual Fire Inspection

Annual inspections by the fire department are performed to assess and mitigate potential fire and life-safety hazards in buildings. The fire department provides you with a written report of any corrections that are necessary. These inspections vary in type and frequency, depending on the occupancy.

The type of inspection performed is related to several issues. It's important to have some understanding of codes, standards, and ordinances in the jurisdiction, and how they may affect your inspection. Codes tell you what requirements need to be met, and what features of fire protection (e.g. fire-sprinkler system, fire-alarm system, etc.) need to be installed.

The Fond du Lac Fire Department is regulated by the City of Fond du Lac Fire Protection Code, Department of Safety and Professional Services, Safety, Buildings, and Environment Uniform Dwelling Code, the International Building & Fire Code, and the National Fire Protection Association.

Generally, codes are promulgated by consensus groups made up of industry representatives, such as code officials, manufacturers, system installers, special experts, etc. Standards tell you how to properly install equipment or systems required in the code.

Different types of occupancies may have different requirements. The processes or products used in a building may also require different systems or protection. If the building is a special use, such as a school, there are additional code requirements.

While many people look at the fire and life-safety inspection process negatively, these inspections benefit the building/business owners, as well as those who use the building, by offering:

- A safer working/living environment for employees/residents.
- A safer building for unfamiliar occupants (visitors, shoppers, clients, etc.).
- Business and job security. Up to 80 percent of all small businesses that experience a large fire never reopen; this not only affects the building/business owner, but also results in the loss of jobs. Of the businesses that do reopen, many lose much of their customer base due to prolonged absence of production or service.
- A better-maintained building for improved resale value. It is commonplace for buyers to hire a company to inspect the building prior to purchase to identify potential hidden costs related to fire and life safety.
- A possible reduction in insurance premiums. Some items may be required by both the fire department and your insurance carrier, such as annual fire-sprinkler and fire-alarm inspections verifying proper system maintenance. Many insurance carriers give businesses premium reductions for properly installed and maintained fire-protection systems.

Preparation is Important to Passing Your Fire Inspection

Preparing for the fire inspection is key to developing a good working relationship with the fire inspector and gaining positive results. Using a general checklist can help you prepare for the inspection.

The inspection from the fire department may be unscheduled, depending on occupancy type. Meet with the inspector prior to beginning the actual inspection and ask what types of items the inspector will be looking for. Give the fire inspector copies of all of your system or equipment inspection, testing, and maintenance (ITM) reports. Review these reports with the inspector prior to his/her walkthrough, and let the inspector know that any issues noted previously have been corrected. Make sure a responsible person is available to accompany the fire inspector with keys to all areas, and take notes (even though the inspector will likely give you a report when the inspection has been completed). These notes may give you additional insight into the inspector's thought process, and may provide valuable information for future inspections.

Maintaining fire-protection features is critically important for fire and life safety within buildings. Fire-protection systems' ITM and results reports are required by the state and national codes and standards, and likely by your insurance carrier.

FIRE PREVENTION

That's what it's all about!

By: Troy Haase
Division Chief of Fire Prevention



How to Comply with Your Annual Fire Inspection, continued...

Fire-protection and fire-alarm systems have become much more complex and far more technical in the past decade. When hiring a contractor to perform ITM for your building, make sure he/she is reputable and takes the time to explain any items that require your attention. As with most other things, you get what you pay for. Price is important, but make sure the fire-sprinkler or fire-alarm company is going to provide you with a quality inspection and complete report. Review the report and make corrections prior to your scheduled fire inspection (make sure you get a corrected report once the items have been repaired).

The following issues are either common reasons for noncompliance, or may require outsourcing to others for completion.

Maintaining the means of egress is critical to providing proper life safety in your building. Making sure all exit doors are always accessible and open properly is important. Also make sure that fire-rated areas, such as stairways and corridors, have features like fire doors, self-closing devices, releasing mechanisms, and latches that have been installed properly and are operating. No combustible materials can be stored in any portion of the means of egress, and no storage can reduce the required width or block exits.

These are items that fire inspectors will check. If the fire inspector finds problems, he/she will spend more time checking additional equipment. It's better to make sure that any equipment the fire inspector checks has been properly checked and maintained. There are companies that will perform testing and maintenance on many of these items in one visit, such as emergency lighting, exit signs, fire extinguishers, single-station smoke alarms, etc. Make sure all your heat-producing appliances are properly maintained by authorized personnel, including all manufacturing equipment, furnaces, and hot water heaters.



Storage of combustible materials must be maintained in an orderly fashion, away from flame-producing appliances, and at least 18-inches below the fire sprinklers. Any combustible or flammable liquids must be in approved containers and storage cabinets. There are specific limits on the amount of combustible and flammable liquids by type of occupancy, as well as specific storage arrangements.

There are also items that need to be addressed to help emergency-response personnel do their jobs better, including making sure the building address is clearly visible from the street, and that access to the building is not restricted. National codes now require that buildings allow fire departments safe and immediate access. The most common means of doing this is with fire department lockboxes. These are special fire department master-keyed lockboxes, mounted to the exterior of the building. The building owner provides building keys that the fire department puts into these lockboxes for future use. The lockbox should be readily accessible to the fire department. If you've changed locks in your building and have a fire department lockbox, make sure you have extra keys available at the time of inspection for the fire department to replace the current keys in the lockbox.

Additionally, the fire department connection (FDC) that allows the fire department to supply water to a sprinkler or standpipe system must be clearly visible and readily accessible. All fire hydrants should also be clearly visible and accessible.

Electrical-related issues, such as making sure all cover plates are installed on all electrical receptacles, should also be addressed. It's required that circuits be properly labeled on all electrical panels, and that clear access of 36 inches must be maintained in front of all electrical panels. Extension cords are not allowed except where used for temporary power; all extension cords must be heavy duty, in good condition, and for small appliances. All extension cords are required to be grounded, and if multiple items need to be plugged in, power strips with built-in circuit breakers are to be used, and must be plugged directly into a permanent receptacle.

FIRE PREVENTION

That's what it's all about!

**By: Troy Haase
Division Chief of Fire Prevention**



How to Comply with Your Annual Fire Inspection, continued...

Finishing the Inspection Process

Stress your concerns about making the building as safe as possible by working positively with the fire department to achieve compliance. Ask questions and make sure you fully understand all issues. If there are corrections required, identify who is responsible for making these. If the building owner is different than the business owner, then responsibility must be determined for each item. In many cases, the building owner and business owner are responsible, by lease agreement, for different items. It needs to be identified for the fire inspector who is responsible, and who will communicate these items to the responsible party, if not present.

If there are costly items requiring attention, discuss alternatives and compliance timeframes with the inspector. Most fire inspectors are willing to negotiate a longer time period since the inspector is most interested in gaining compliance and making your building safer without causing you financial difficulties. Not all compliance items cost a great deal of money or require great effort. Many can be operational issues and are easily corrected.

Finally, close on a positive note by thanking the fire inspector for his/her concern for you and the building occupants, and schedule a date for completion of any compliance items. Always negotiate realistic compliance and/or progress check dates if you need additional time, or if the issues require money not readily available.

In many types of occupancies, security vs. fire and life safety is an ongoing challenge. In some occupancies, security can be a major concern for theft or unauthorized access from both outside and within a business. Actions that may be taken as a result include securing doors with unapproved locks, chaining doors, covering doors so they're not readily discernable by building occupants, etc. There are always options available, however, that can satisfy both concerns. Talk with your fire inspector to resolve these issues so your building is both safe and secure.

Keith S. Frangiamore, March 1, 2009.

How to Comply with Your Annual Fire Inspection: www.buildings.com. Web January 10, 2020.

#NBAW

National Burn Awareness Week

FEBRUARY 2–8, 2020

Fire Alarms in Apartment Buildings

Large apartment buildings are built to keep people safe from fire. Fire alarm systems detect smoke and fire. They will warn residents of danger.

- » The fire alarm system has many parts that work together. Some of the parts are out of sight. In a fire, smoke detectors sense smoke and activate the fire alarm. Manual fire alarm boxes allow people to sound the alarm. When the fire alarm system activates it will warn residents of danger.
- » Everyone in the building should know where to find the manual fire alarm boxes (alarm boxes on the wall with a pull bar). Most are found within five feet of an exit door.
- » If there is a fire, pull the manual fire alarm box handle on your way out of the building.
- » When the system senses smoke or fire, a loud horn or tone will sound. Everyone must know what this sound means and how to react.
- » Leave the building right away if you hear the sound of a fire alarm. Stay outside at your meeting place until you are told the building is safe.
- » Treat every fire alarm as an emergency. When the alarms sounds, get outside.
- » Only use a manual fire alarm box if there is smoke or fire. Frequent false alarms are a problem. People might ignore the sound if they hear too many false alarms. False alarms also put firefighters at risk.

Escape 101



Know the locations of all exit stairs from your floor. If the nearest one is blocked by fire or smoke, you may have to use another exit.

If the fire alarm sounds feel the door before opening. If it is hot, use another way out. If it is cool, use this exit to leave.

Close all doors behind you as you leave. Take the key to your apartment in case you are not able to get out of the building.

If fire or smoke is blocking all exits, return or stay in your apartment. Keep the door closed. Cover cracks around the door with towels or tape. Call **9-1-1** and let the fire department know you are trapped. Signal from the window by waving a flashlight or light-colored cloth.

Meet with your landlord or building manager to learn about the fire safety features and plans in your building.



Your Source for **SAFETY** Information

NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169

Name _____
Fond du Lac Fire/Rescue

815 S. Main St.

Contact Information _____
Fond du Lac, WI 54935

PEER FITNESS TIPS

By: Peer Fitness Trainer
Jack Prall

3 Benefits of Dairy For Workout Recovery

When most people think of dairy foods, they think of building strong bones. However, there are many nutrients in dairy foods that help support exercise recovery, such as protein for muscle repair and rebuilding, carbohydrates (in the form of lactose) for replenishment of glycogen stores, and fluids and electrolytes for restoring hydration. Plus, current research suggests that dairy foods and dairy protein ingredients (like casein and whey) can help improve body composition, strength, aerobic fitness and exercise performance.

Checkout three surprising benefits of dairy foods when it comes to refueling and rehydrating after a workout!



#1: Rehydration

Nutrition and rehydration after exercise can help with recovery and may improve future exercise performance. Both milk and chocolate milk have been shown to help with muscle recovery after a workout, but some research suggests that milk may also be better for rehydration when compared to a carbohydrate and electrolyte beverage alone. A small study in the British Journal of Nutrition investigated whether drinking milk after a bout of dehydrating exercise would help restore fluid balance more than other beverages. The researchers found that, likely due to the nutrient package it provides, drinking milk did restore fluid balance better than water or a carbohydrate electrolyte beverage. These findings support previous studies performed in adults and children.

#2: Improve Body Composition & Aerobic Fitness

When most exercisers and athletes think of adding protein to their diets, they typically associate the benefits in the context of resistance training. Very few studies to date have investigated/demonstrated a benefit with endurance exercise. However, a 2019 study took young, moderately active men and put them on a 10-week endurance-training program.

In addition to their regular diet, study participants consumed about 29 grams of dairy protein (casein) every day before sleep on non-training days. On training days, study participants consumed an additional 29 grams of dairy protein (casein) immediately following exercise, as well as the 29 grams before sleep (about 60 grams total in addition to their regular diet). Control study participants consumed a calorie matched carbohydrate replacement on all days in addition to their regular diet. After the 10 weeks, the group consuming more dairy protein had enhanced improvements in aerobic fitness and body composition as compared to the control (carbohydrate-only) group. This study suggests that a higher protein diet may be warranted for certain physiological improvements which can be seen with realistic exercise routines/programs.

#3: It's Not Just About Milk

We know that milk and/or whey protein plus resistance exercise can increase strength and muscle size and optimize body composition in adult males and females. But do other dairy foods have the same effect?

Greek yogurt contains similar muscle-supporting nutrients as milk, yet differs by being a semi-solid food, containing bacterial cultures and having a higher protein content (mostly casein) per serving. While it had previously not been investigated, a 2019 12-week study showed that supplementing a 3-day per week plyometric strength training program with Greek yogurt resulted in improved strength, muscle thickness and body composition when compared to a carbohydrate-based placebo. Study participants consumed Greek yogurt (20 grams protein per serving) three times a day on training days and two times a day on non-training days.

The results of the study indicate that Greek yogurt can be an easy, nutrient-rich way to refuel post-exercise.