



# HOT TOPICS

Oshkosh Fire Department



## CHIEF'S CORNER



This month's issue focuses on fall prevention. Falls among our aging population are one of the most significant threats that our community faces. Every year approximately 25% of the emergencies that the Oshkosh Fire Department responds to are for falls

The majority of these occur from adults who are 65-years or older. Sadly, when older adults begin falling it begins a sequence of events that have many undesirable outcomes such as loss of mobility, loss of independence, development of serious medical conditions, and even death.

The Oshkosh Fire Department is committed to fall prevention. We have been actively working with other partners in our community to identify the causes of falls, listen to our community members that are or may be impacted by falls, and to find possible solutions that will reduce the number of falls that we respond to each year.

I'm very excited to say that we will be launching our first fall prevention campaign this year. A tremendous risk factor for falls in older adults in the home are decorative throw rugs. Our new "Mugs for Rugs" campaign will incentivize people to remove the throw rugs from their homes. We look forward to sharing more information soon.

In the meantime, it's snow and ice season in Oshkosh. Please practice your penguin walk!

## UNDERLYING CONDITIONS

by Chuck Hable, Battalion Chief EMS

As we know, falls are the most common call to which we are dispatched. In 2020, we were dispatched to 1,583 calls for falls. Of those, 859 were transported. Over 46% were not transported to a hospital.

When you have a patient that has fallen and doesn't want to be transported, think of two things. First, rather than assuming that everything is OK and there isn't anything wrong with the patient, assume there is an underlying medical condition that caused the fall. Perform a thorough assessment, and know that these calls have high morbidities; that is, there is an underlying medical condition that caused the fall. Don't easily brush these off as nothing wrong.

Second, understand that as time goes on in a medical situation, things become clearer as to what the diagnosis is. We don't have much time! Physiological changes happen to patients in an urgent situation that might cause them to appear better off than they actually are. Sympathetic responses improve vital signs and cause the patient to be more alert. At the same time, fall patients often don't want to appear seriously ill or injured due to embarrassment, pride or fear they will be taken out of their home. They may be working hard to appear 'normal' when they know they aren't.

Have a high index of suspicion, take your time if you can, perform a thorough assessment and err on the side of caution.

# EVERYONE GOES HOME

by Drew Jaeger, Lieutenant

The IAFF and Firefighter's Cancer Support Network have joined to declare January 2021 as Firefighter Cancer Awareness Month. This is especially timely for a few reasons. In 2019, 75% of the line of duty deaths for firefighters were related to occupational cancer.

In December, Cancer Consultant Jim Burneka Jr., founder of the Firefighter Cancer Consultants, LLC reviewed our department operations and facilities to determine how we compared to best practices for cancer prevention.

We are doing well in some areas:

- the use of the Plymovent Exhaust System; and
- our newly updated exposure documentation software.

We also learned of a few areas where we could make some improvements:

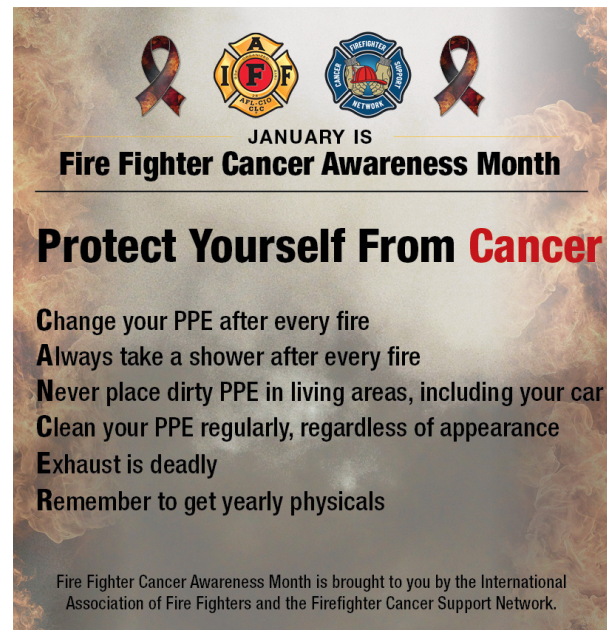
- such as the removal of drinking fountains from our garage spaces;
- drying cabinets for our turnout gear rather than the inside hallways of our fire stations.

We also learned that a class of chemicals known as PFAS and PFOAS (Per- and polyfluoroalkyl substances) are present in firefighting foams and in the water repellent chemicals that are applied to our turnout gear. They are suspected of leading to cancer and other human health problems.

This is a complex nationwide issue. Our department is actively networking with our state fire chief's association, the Wisconsin DNR and other state officials to determine a sound strategy for replacing our current foam cache as soon as safer products are available. We also have instituted a rigorous documentation SOG when we utilize foam at fire scenes to ensure that both any environmental contamination is mitigated, and that our employees document this type of exposure. It almost feels like some kind of cruel trick that chemical foams designed to help us fight flammable liquid fire, are in themselves a danger to our health.

The next few years will be a time of transition. As the fire service tries different strategies and improved record keeping to try to make a difference in the elevated cancer rates present in the fire service. We will soon put 2 new engines in service that utilize what is called the "Clean Cab" concept, where SCBA's and dirty turnout gear are kept out of the main riding area. Like many changes, only time and our best efforts will determine if such practices make a difference.

I am glad that our department is attempting a proactive approach, and willing to expend time, money and effort into trying to get ahead of these profoundly concerning trends. We unfortunately will likely not find that it is one single thing that causes an immediate reduction in cancer rates, but I remain hopeful that by working together we will improve things sooner rather than later. And that not only will **Everyone Go Home**, but have long healthy retirements, whether you spend them coming back to the firehouse for coffee and conversation, or in your dream spot where it doesn't snow.



For more information and sources of support visit [CancerSupport](#)

# WHAT'S NEW

Congratulations to Brian Bending for his recent promotion from Battalion Chief of Fire Prevention to Assistant Chief. He has been in his current role since 2014.

Brian began his career with the Oshkosh Fire Department in 2001. During his career he has served as a firefighter/paramedic, Lieutenant Inspector, the regional hazardous materials team coordinator, and Fire Marshall. He continues to demonstrate his passion for the fire service by teaching courses at the local technical college and volunteered with the Berlin Fire Department for nearly thirty years.

In a recent interview, Brian said, "So . . . . . I'm excited about this new opportunity. What a great way to start the year!"

Chief Mike Stanley said "I've gotten to know Brian over the past 3 years and he is a very talented and dedicated individual; a true leader and model for others in the department." Brian will continue in his role of Fire Marshall and will now also oversee the Training Division. We wish him great success in his new role.



### Upcoming Promotions

Lt. Mike Johnson to Captain

EO Keith Kramer to Lieutenant

FF Dave Koller to Equipment Operator



OFD has been selected to participate in the NFPA Community Risk Assessment (CRA) project! This project provides a customized experience with community-level data aligned to the 9 profiles in NFPA 1300. This will help us complete CRA as well as support grant-writing and partnership building



**Assistant Chief Brian Bending**

Jordan Olson has successfully completed the REO qualification program. He will be ready to REO after 5 years experience in March 2021. Congrats Jordan!!!!



### Our Mission

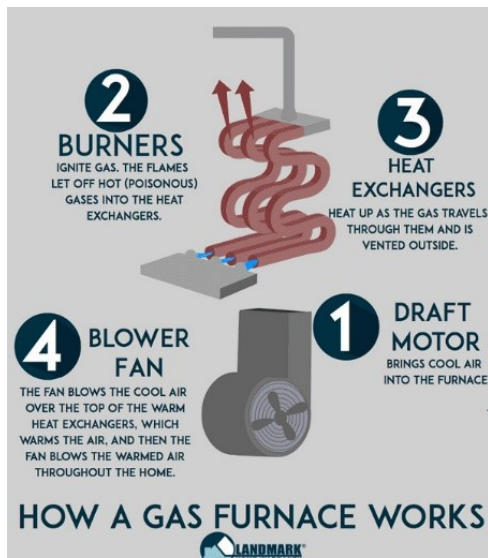
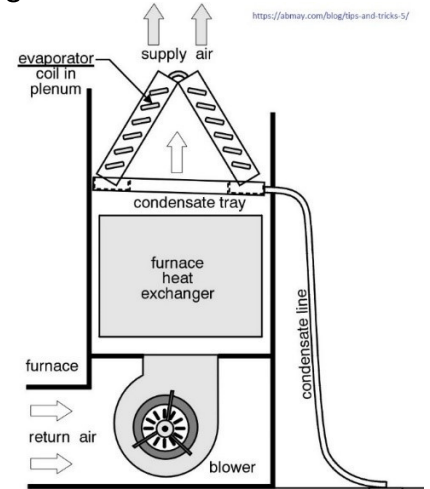
The mission of the City of Oshkosh Fire Department is to prevent, respond to, and to minimize harmful situations to the people we serve.

# TABLE TOP TRAINING

by Greg Stelter

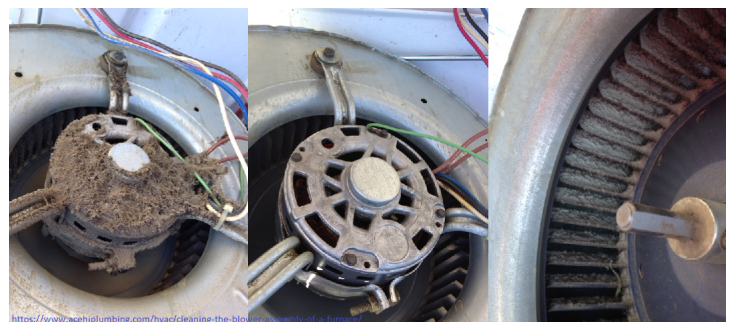
We are commonly called to complaints of a smoke odor in residences and light commercial occupancies. It is important that we determine the source of these odors to rule out a situation that could result in a structure fire. When reporting parties describe an electrical odor or smell "something hot," a forced air furnace is a good place to begin looking for a cause.

Some smoke smells are benign. It is normal for a furnace to produce a smell of burning dust when it is operated for the first time in autumn. The image on the right shows how air continues to flow over the heat exchanger during air conditioner (evaporator) operation. This can lead to a small buildup of dust that burns off when the heat exchanger gets hot for the first time.



A hot electrical smell may result from a failed blower motor. The picture on the left shows a blower motor that has become clogged with dust and debris, which may cause the motor to overheat. If the blower stops while the furnace is operating, the heat exchanger can overheat until a safety device called a Limit Switch shuts off the furnace. This will also result in a smoke odor as the exchanger reaches excessively high temperatures.

This picture shows the opposite side of the blower. Note that most modern furnaces use direct drive instead of belt drive. A slipping or burning blower belt is not a likely cause of a smoke odor in an occupancy with a furnace less than 30 years old.



If you suspect a problem with the furnace, shut off its electrical power. Most professionally installed furnaces will have a switch near the furnace. A panel on the front of the furnace can then be easily removed to assess the interior components of the furnace visually or with a TIC. Discharge extinguishing agent into the furnace only as a last resort. Advise the occupant to have the furnace serviced before use and be sure to record model and serial numbers for your report. Watch for a furnace training prop at the OFD Training Facility in the near future.

# MEDICAL DIRECTOR MINUTE

by Dr. Kerry Ahrens

You're at Station 15 when the tone goes off: "Med 15 Falls- Adam at 111 Main Street; 68 year old male, fell at ground level". You load up and head out to help the ever aging population of Oshkosh. Upon arrival you grab vitals and get a thorough assessment... aaaand as you thought, this was a patient needing only a lift assist to get him off the ground. You readily help him up as the care facility staff watches at the sidelines.



At least 1/3 of people aged 65 or older fall once or more annually. Lift assists (LA) for paramedics nationwide seem to equal a life sucking force greater than a Star Wars Sith. One community decided to evaluate this in Maplewood, MN. They found that fall calls increased by 268% over the past 10 years. Those deemed only lift assists (assist, no transport) cost this community approximately \$825/run, equaling \$1.5 million over the 10-year span of the study. But could a lift assist be seen more as an opportunity or a 'herald' (if I may) of impending doom or decline of any person older than 60?

Your biggest challenge as a paramedic is within a 5-10 minute visit determine the specific nature or cause of the patient's inability to mobilize. Often those you are assisting do not want to admit that they need further help. One study by Cone et al found that 55% of patients who had a LA were eventually brought to a hospital by EMS within 30 days of their initial call.

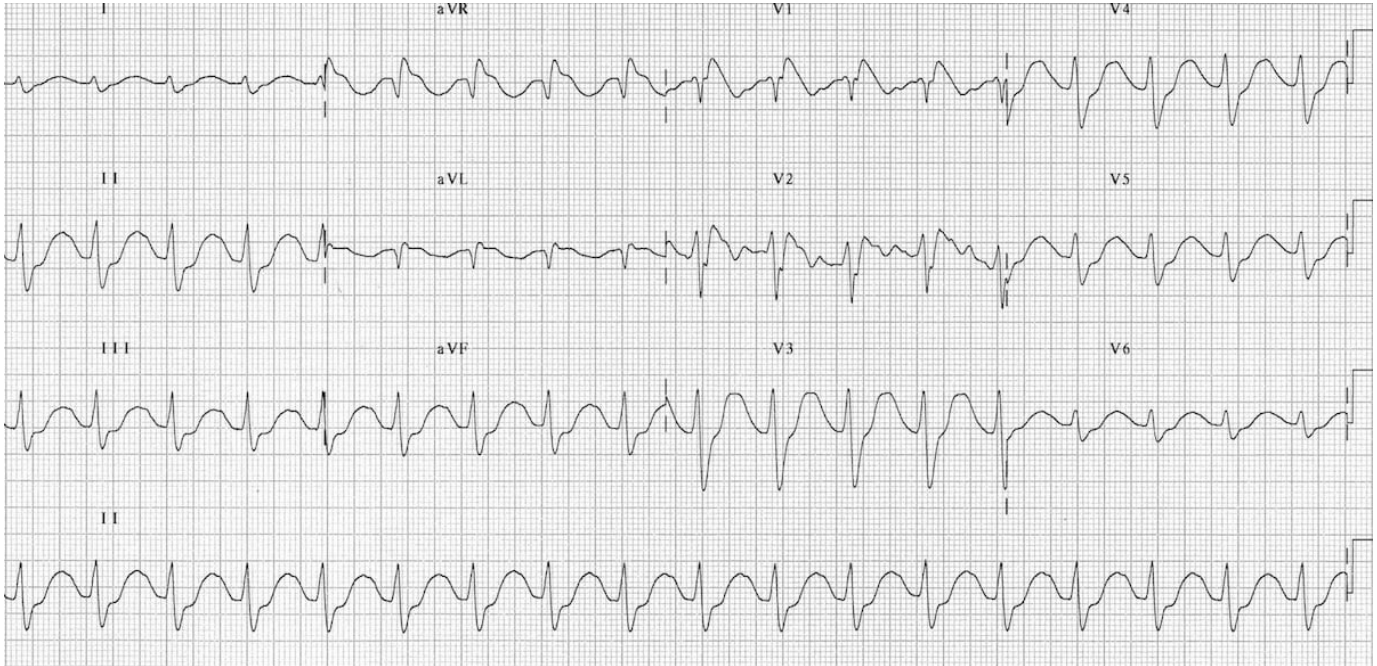
A Canadian study looked at 804 LA calls; of these 169 were ED visits, 93 admissions to the hospital, and 9 deaths within 14 days of an initial LA call. Twenty-eight percent had greater than 1 LA call. Predictors of hospital admission? Age (I know that one is obvious) and Ambulance Call Record missing at least 1 vital sign. Of those admitted the average length of stay was 7 days with most common diagnoses at discharge being infection (33.3%), cancer (9.7%) and fractures (8.6%); of those 19.4% were discharged to new long-term care homes and 45.2% were discharged to home with new care supports, while 11.8% died within 14 days of their LA call.

Several studies have found that EMS referrals to community fall prevention programs can reduce future falls, improve clinical outcomes, be cost effective, and prevent you from having further lift assist calls. When you arrive, see this visit as an opportunity to evaluate this person for a likelihood of a recurrent fall that could lead to more devastating consequences than a set of sore buttocks and even sorer pride.

See my **Challenge Question** on Page 6.

# CHALLENGE QUESTION

You are caring for a woman who's family called 911 for an overdose after they found her confused and having difficulty ambulating. Family reports she has been particularly depressed over the past several weeks and has had worsening of her chronic pain. She is rousable to voice and is protecting her airway. Blood sugar is 156. You try 2mg Narcan. Nothing happens. You put her on the monitor and see the following pattern:



Shortly after, she begins to seize.

## How would you manage this patient?

**Answer:** One of your partners asks to see the pill bottle which reads: Amitriptyline. You are a savvy, seasoned paramedic and have not seen this overdose in a long time but remember that sodium bicarbonate is often what helps this patient - even when they begin to seize.

1. Establish IV access; start high flow oxygen;
2. Administer IV sodium bicarbonate 100 mEq (1-2m Eq/kg) - repeat every few minutes until QRS begins to narrow;
3. Prepare to secure the airway .

Tricyclic antidepressants, like amitriptyline, are on the rise in use for chronic pain as an alternative to opiate pain medications. Keep in mind that even though the initial agent of over dose is presumed to be opiates, they do NOT cause EKG changes unless they are in asystole from respiratory arrest.

# PREVENT, PREPARE, PRACTICE

by John Holland, Public Information

The Mayo Clinic reports that nation-wide, falls are the number one cause of injury in older adults, sending more than two million people to Emergency Departments each year. Surprisingly, falling once increases your chances of falling again. The good news is a lot of these falls can be prevented by taking some preventative measures now. Some in-expensive and easy fixes are:

- Keep your floors and stairs clutter free.
- Arrange your furniture so that it works well with the flow of traffic in your home.
- Use double-sided tape to secure throw rugs to the floor. Or better yet, remove them entirely from your home.
- Turn on any lights before traveling through your home at night or at least install night lights.
- Store food, clothing, dishes, and other necessities within easy reach.
- Wipe up all spills immediately.
- Use non-slip mats or treads in showers or bathtubs.
- Be aware of any side effects of medication that you're taking. Never mix alcohol and medications.
- Actually use your walker, cane, or any other mobility appliances that your doctor says you need and keep them handy.

Some more expensive but still worthwhile fixes are:

- Install grab bars in the bathroom (in the shower and/or bathtub and by the toilet).
- Install a raised toilet seat or one with armrests.
- Have handrails installed on both sides of any stairways.
- Repair or replace any uneven or crumbling stairs, loose carpeting, or uneven floorboards.
- Winter comes with its own set of fall hazards:
- Thoroughly clean ice and snow from steps, sidewalks, and driveways as soon as you possibly can, even if that means asking others for assistance.
- Salt any accumulated ice on all of the above.
- Slow down and "penguin-walk" (wider gait and side-to-side) when walking outdoors.
- Consider purchasing ice grippers for your shoes.

Remember that physical activity can go a long way toward fall prevention as well. Any gentle exercise that you can do to improve your strength, balance, coordination, and flexibility will help. Finally, always keep a cell phone handy and, especially if you live alone, subscribe to a medical alert system of some kind (Life Alert®, Medical Alert™, etc.). Make sure that if you need to get ahold of us that you can.

# METRICS MATTER

by MaryJo VanGompel, Management Analyst

In 2020, the Oshkosh Fire Department responded to over 9,000 calls. Of those, 1,583 calls or +17% of those were for falls in Winnebago County. Of all falls calls, over 81% of those calls were in the City of Oshkosh.

Each fall call that comes in is assigned a 'determinant'. I refer to it as severity level.

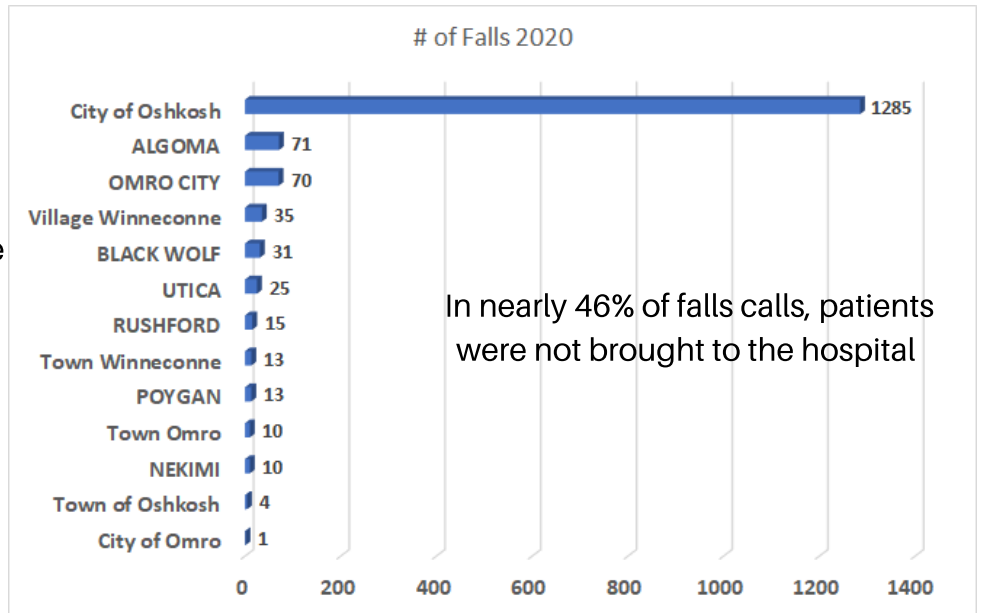
A = Possible injury, not dangerous. 36% of our falls calls were type 'A'.

B = Possibly dangerous body area, serious hemorrhage; these calls made up 39% of our falls calls.

D= Extreme (or long) fall where the patient is unconscious, or with chest or neck injury and difficulty breathing; 11% of our falls calls were serious

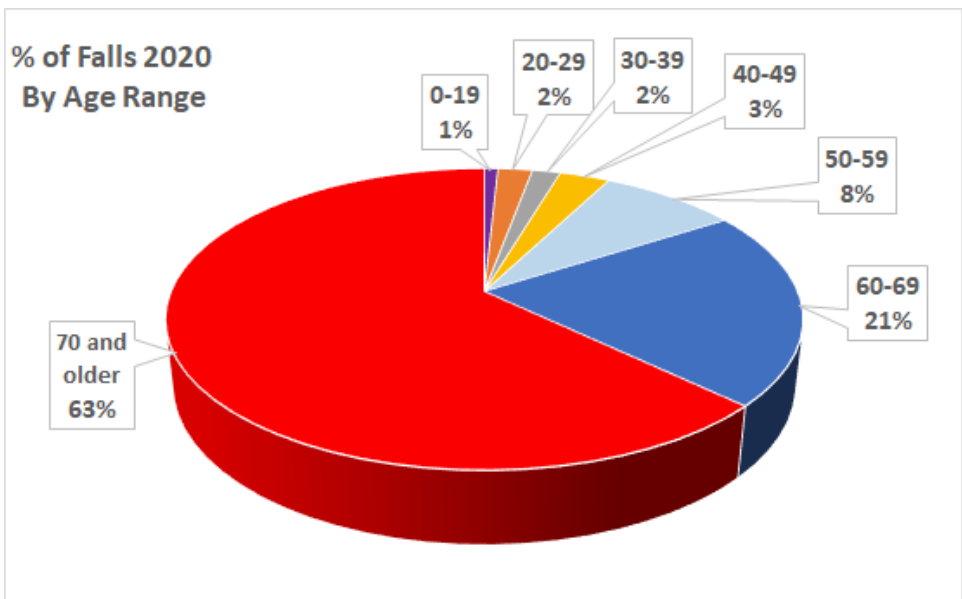
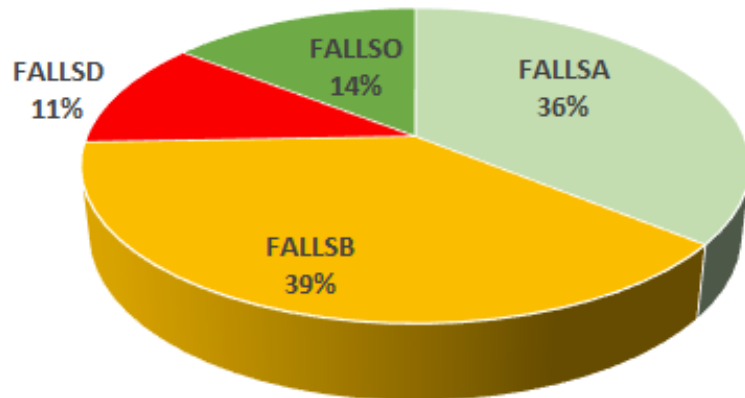
O=Assisting the patient from ground level but is not injured. Also referred to as a lift assist; FallsO made up 14% of our falls calls.

As you can see by the pie chart on the right, 84% of our falls calls are comprised of people 60 and older. Next month we will tell you about our 'Mugs for Rugs' program that targets people in this age range.



In nearly 46% of falls calls, patients were not brought to the hospital

% of Falls 2020 by Type



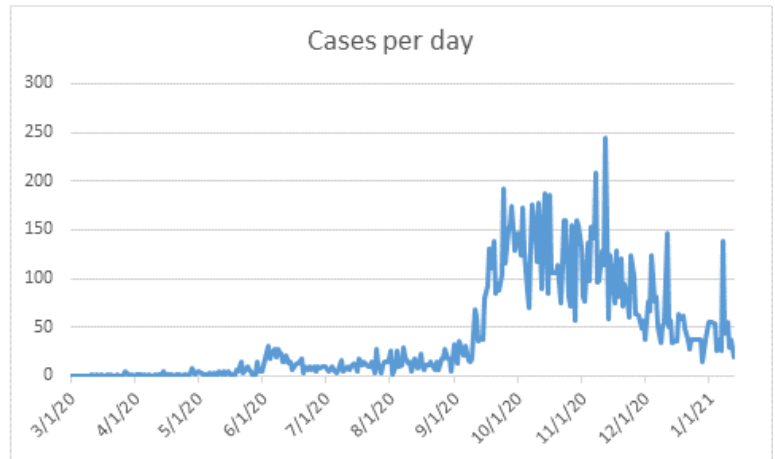


# EMERGENCY OPERATIONS CENTER

by MaryJo VanGompel, Management Analyst

For most people, their first day of work on a new job would entail a day of reading policies and signing things. Not at the Oshkosh Fire Department! Back in March, my first day of work was an all-day meeting in the Emergency Operations Center (EOC). A group of dedicated professionals all focused on the sole purpose of preparing and planning for the impact of COVID in Winnebago County. This group included leaders from Public Health, Emergency Management, fire leaders from Oshkosh, Neenah/Menasha Fire Rescue & Fox Crossing, OPD, communications, logistics, research and other City of Oshkosh leaders. Chief Mike Stanley lead the group.

Over the days, weeks and months that followed, meetings dropped from all day to our now weekly meeting which continues to monitor the number of positives in Winnebago County and plan strategies for vaccinations and testing. Although the numbers of positives have declined, so has testing. With schools re-opening for in-person learning, and holiday gatherings, we expect the numbers to spike in 2 weeks.



Next week, first responders in Winnebago County will be able to be vaccinated against COVID-19. It will take months before we reach a point of herd immunity. We need to continue to practice safety in and away from work. It is not the time to become complacent. That means we need to:

- WEAR**  
Wearing a face covering is required.
- WAIT**  
6 feet apart. Avoid close contact.
- WASH**  
your hands often or use hand sanitizer.



## DECEMBER 2020



699 EMS Calls



73 Fire Calls



175 Inspections

## LET'S CONNECT

