

Friday Night [under the] Lights... 2015



Happy Friday.

Greetings on what seems like a chilly Friday nationwide. Hard to believe how amazingly cold, snowy & icy the past few weeks have been all over the country.

As a matter of fact, just this past week, we've had to break out the sweaters here in Texas. If this keeps up, we may even have to turn on the heat. It's devastating...

Now – for those of you who pointed out some parentheses errors in the last FNuL issue, thank you for your input. If you want updates that are grammatically perfect, please hit delete now.

All kidding aside, I found a website for those of you that love the exciting world of grammar & spelling – Just look at the topics in the last few months!

[Commas and Adjectives: A Fresh \[comma\] Insightful Look](#)
By Larry Zwieter, on November 6th, 2014 No Comments

The other day, I was filling my gas tank at one of those pumps where a screen flashes ads while your hand is on the trigger. This interesting message popped ...

[Read More](#)

[Figuring Out Phrasal Verbs](#)
By Amy Tate, on November 6th, 2014 1 Comment

Phrasal verbs are two-part verbs that consist of a main verb and a particle (figure + out). The meaning of phrasal verbs can be tricky for students because of the ...

[Read More](#)

[Getting Everyone on the Same Page with Verb Forms](#)
By Alice Savage, on November 6th, 2014 1 Comment

The beginning of the semester often starts with verbs, which necessarily includes making sure intermediate students know a good number of regular and irregular verb forms. The challenge for teachers ...

[Read More](#)

The discussion on commas and adjectives is riveting. *Thanks for your valuable input.*

Now back to the boring world of EMS and Healthcare...

There is nothing more powerful than recognition by one's peers...

All of my professional life, I've believed that recognition by one's peers is one of the most significant ways to celebrate the extraordinary efforts of a colleague, a group or an event. Because our peers know what it's *really* like, when they highlight successes, it's firmly rooted in an understanding of what *really* matters...

So at this year's EMS Today Conference in Baltimore, Maryland, one of our own was recognized for his amazing commitment to EMS, and specifically, for his efforts to help our own when the challenges of the profession impact our day to day lives.

Bill Lang, one of our Paramedic colleagues in Oregon & Washington, was recognized as one of the "EMS 10 Innovators" this past week. The event is graciously co-sponsored by our friends at Physio-Control. The list of past awardees is impressive. You'd recognize many of them for their efforts to make EMS a better place for us as providers, our communities, our patients and our profession.

I'll share with you the wonderful discussion in the JEMS Supplement written by Cynthia Kincaid. She masterfully tells Bill's story...

More than two decades ago, William "Bill" Lang, BA, EMT-P, left a career in pastoral ministry to pursue his interest in emergency medicine. The draw to EMS started as far back as high school when he volunteered as a firefighter and first responder for the local volunteer ambulance company. Still, his desire to serve people stayed with him and he began to focus on those who struggle professionally in emergency medicine.



"Over the years I've watched a number of EMS personnel disintegrate in the field," said Lang, whose lead paramedic and critical incident stress management (CISM) coordinator for American Medical Response (AMR) in northwest Oregon and southwest Washington. "I've seen several people die pretty young, and I've seen them break down psychologically and emotionally. Others developed a pattern of behaviors and made decisions that were career ending."

These incidents left a mark on Lang, but it wasn't until 1998 that he came up close and personal with his own critical incident—one that would change his life forever. He and his partner had been called to the shooting of two police officers. They quickly found themselves in the hot zone of potential gunfire.

"We declared one officer dead on scene and treated and transported the other. In the process we were brought under threat of fire, although no gunfire happened while we were there," said Lang. "That incident ended my partner's career, and it almost ended mine."

Lang developed some of the classic symptoms of critical incident stress, including the dread and fear of going to work. With help he recovered, and then he developed a keen interest in understanding how to survive critical incidents and CISM.

“Looking after people and making sure they have the resources and the internal skill set to do what they need to do in critical incidents has always been on my mind,” he said.

In 2005, his chance to do something about CISM became a reality when AMR entered a contractual obligation that required the company to have a CISM program in place. The company already had a few pieces, but it was far from a working program. “I was getting requests at times to talk with coworkers after a bad call, but I realized that wasn’t really a program,” Lang said. He talked to his general manager about restarting the program. Lang was appointed the coordinator two years ago.

Lang started his quest to rebuild the program with reading and research, and is indebted to the International Critical Incident Stress Foundation (ICISF) for their support. “They have a lot of great information and ideas and have really tried to hone in on what works and what doesn’t work,” he said.

The whole idea of addressing critical incident stress is a controversial one, as the mental health community has pushed back some about having these programs in emergency service environments. Lang recognized that he would have to keep this in mind if the program was to be successful.

“It’s a specialty in mental health to work with people affected by traumatic incidents,” he said. “So what the ICISF came up with is the need to have a multicomponent program in place. That involves, among other things, pre-incident education.”

To achieve this education, Lang would need to build a program that would educate his providers in the signs, symptoms and treatments of critical incident stress. He also would need to develop peer-to-peer support resources. “We needed to train selected field personnel in psychological and emotional first aid,” he said. “That’s the first line of intervention for people who have been exposed to critical incident stress.”

Once trained, these peers would support their fellow coworkers in addressing CISM, but they wouldn’t be engaging in actual professional mental health treatment. “When they see an individual with what looks like symptoms of critical incident stress that are deeper than their training, they can refer them to a licensed mental health professional or counselor,” said Lang.

The more Lang researched the material from the ICISF, the more he realized he could design a CISM program based on an EMS system. “EMTs and paramedics are very used to coming in, identifying a chief complaint, coming up with a treatment plan, and then transporting that person to someone with an equal or higher level of medical training,” he said. “So if you use that as a model for CIS management, EMS providers already understand that process.”

With his research completed, Lang outlined for his superiors how the program could effectively work. “CISM is to psychotherapy what first aid is to surgery. It’s seen as part of a continuum of care,” he said. “That’s how I decided we would present the idea.”

It worked. From there, Lang put out the word that he needed peer counselors for the program. He did it by asking the workforce whom they would want at their side if they were having a crisis. He received more than enough nominations for the program and selected 14.

“The peer counselors are doing critical incident stress diffusing, not debriefing. It’s a scaled-down, more casual and shorter duration form of debriefing,” Lang said. “The peer counselors do a follow-up contact with the people they’ve seen to find out if there’s more discussion needed, or if there’s a need to get the person connected with a therapist.”

To run such a program, Lang discovered that a licensed therapist had to be formally associated with them, one who would act as a professional partner. They found such a therapist in Drew Prochniak.

“We were so fortunate in finding a fellow who specializes in first responder stress that was setting up a practice as a therapist in our community,” Lang said. “He jumped on the bandwagon. This couldn’t happen without his involvement because the model wouldn’t work.”

Prochniak has adapted to his new role with gusto, riding with paramedics and EMTs and becoming known on a first-name basis. Lang couldn’t be happier with the results. “Historically, getting paramedics and EMTs to go and see a counselor has not been something that was popular,” said Lang. “It’s seen as weakness and we’ve had to overcome all that silliness.”

There’s also the logistical challenges with which Lang contends. AMR’s workforce spans 500 people across four metropolitan counties. “They all work different schedules, have different operations, and different management teams,” he said. “It’s like herding cats.”

Despite some of the initial hurdles, the program is a success. Lang is pleased and grateful for this because he recognizes the importance of having such a program in an industry where jobs are getting harder to execute. The squeeze on resources, the complexity of challenges facing many patient populations, more violent and mentally ill patients, and more gun violence and drug abuse all contribute to the difficult hazards prehospital providers face every day. New threats, such as terrorism and Ebola, only add to the mix.

“We really weren’t facing this stuff 20 years ago to the degree that we are now,” said Lang. “More accountants and attorneys have gotten into the leadership of healthcare, and that has changed the environment significantly. So we are doing more work with fewer resources.”

More advanced technology also has added to prehospital provider stress. Twenty years ago, an ambulance might have had a radio, pager and map book.

Today, that same ambulance has two radios, computers, pagers, monitoring equipment and GPS. Ultrasound is expected to be added to ambulances in the next few years. “So we are expected to know more and do more than we did previously, and we’re expected to do it faster, with more volume, in a shorter period of time,” Lang said. “There’s a personal price providers pay for being out there and attempting to do all this work.”

As such, the need for CISM programs has never been greater. It’s a challenge Lang is uniquely suited to, given his background and outlook on life. “One of my old partners said, ‘You can love EMS, but it will never love you back.’ But I’m thinking that maybe there is a way that we can look after each other,” he said.

And Lang has proceeded to do just that with his much-needed program. “I think that we find the goodness of life in our efforts to make someone else’s bad day survivable,” he said. “I’ve been very gratified with the reception we’ve gotten.”

Congratulations, Bill. Thanks for directing your passion at all of us. *We're proud to be part of your AMR fam...*

The next Emerging Infectious Disease we need to pay close attention to...

While none of us wants to be faced with an infectious disease (like Ebola), we have a responsibility to understand contagious diseases, how they're transmitted, how we protect ourselves from infection and how we manage patients with the disease (or suspicion of the disease).

While it took a lot of effort, the AMR organization did a phenomenal job of ramping up our understanding, educating our practitioners and deploying protocols and equipment to deal with the evolving threat.

It's time to do the same with a different disease. One we understand more, but is unfortunately becoming an emerging threat in the US.

Measles (the formal name given to it by its parents is Rubeola) appeared on the radar screen in the United States a couple of months ago after an outbreak was identified in Disneyland in California (it's a small world after all...). Epidemiologists believe an individual traveler infected subsequent persons at Disneyland. As of February 20, 133 people from seven different states are reported to be infected with measles directly related to the Disneyland exposure.

This amusement park outbreak is the event that's led to increased focus on the disease.

Measles affects about 20 million patients a year mainly in the developing areas of Africa and Asia. The disease resulted in 96,000 deaths in 2013 worldwide. While that's obviously a huge number of deaths, it's nothing compared to almost 545,000 deaths in 1990. Most of those who die from the infection are less than two years old. According to the CDC, the mortality rate of those infected is 0.2% to 10%.

It's important that every one of us understand this disease and how to prevent transmission.

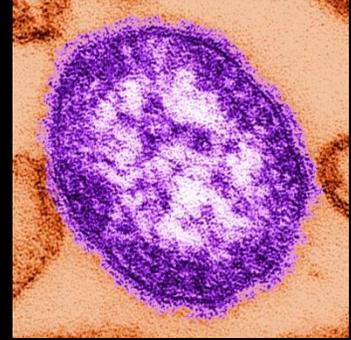
So, just as we did with Ebola, let's walk through:

- The Measles Virus
- Symptoms of the disease
- Details of how the disease is spread
- How to protect against infection
- Resources to help

The Measles virus

Measles (Rubeola or Red Measles) is a paramyxovirus (a useful term to impress your friends with) is a single-stranded RNA virus. Interestingly, the virus is related to the virus that causes canine distemper in dogs.

Rubeola should not be confused with Rubella which causes German Measles. Unfortunately, regular measles (Rubeola) is actually more severe and more contagious than German measles (Rubella, remember?).



Symptoms of Measles

The symptoms of measles usually appear within 7 to 14 days of infection with the virus. Symptoms of the disease include a high fever, runny nose and red, watery eyes. Patients generally feel very ill.

2 to 3 days after those symptoms begin, patients develop small white spots in their mouth called Koplik spots. 1 to 2 days after that, patients develop small red spots that usually begin on the head and spread to the trunk, arms, abdomen then legs. At this point the fever can become very high.

After a few days the rash subsides and the fever resolves...

While the infection is certainly no fun, it's the complications that can be devastating. Significant complications of Measles include:

- Pneumonia
- Encephalitis (an infection of the brain – occurs in 1 out of 1000 infected kids)
- Premature birth or birth defects in pregnant women
- Death

Because measles is such a contagious disease, and the complications can be so significant, it's important to prevent spread aggressively.

How the disease is spread

Measles is highly contagious and the virus lives in the nose and throat of infected individuals. It is spread via the airborne route and can live for up to two hours on a surface or in an airspace where an infected person has coughed or sneezed.

Measles is so contagious that up to 90% of individuals that are close to an infected patient and do not have immunity **will** become infected.

That's significant. *Now you understand how so many people became infected at Disneyland just by coming close to an infected individual.*

One challenging aspect of the disease is that it can be transmitted from four days before to four days after the rash appears. That means (from a practical standpoint), individuals may be infectious while they have a cough, runny nose and /or high fever. While this particular aspect of the disease makes it challenging to know when patients might be infective, it reinforces a crucial part of what we do – Protect ourselves (in this case, mask & gloves) in anyone that may have fever, coughing, sneezing, etc.

While Measles is considered to be eliminated in the U.S. (in this case, “eliminated” means an absence of continuous disease transmission for 12 months or more in a specific geographic area), there are still pockets of outbreaks (it's a small world, after all, remember?).

Why do these outbreaks occur? Two main reasons:

- An infected traveler brings the disease into a geographic area (thought to be the case in Mickey land)
- There is decreased “herd” immunity due to lower levels of vaccination

How to protect ourselves

Here's the really good news. Protection against Measles (Rubeola, remember?) is very straight forward. There are two main areas of focus:

- Make sure your vaccinations are up to date. Measles vaccine is given in a combined MMR (Measles / Mumps / Rubella) form
- Practice Universal Precautions *as we always should, all the time, every time, every patient*. If someone has a fever, cough or appears ill with a rash, wear an appropriate mask and protect yourself against blood / body fluids

Per the CDC, appropriate Measles protection (provided as part of the MMR series) in healthcare providers is defined as:

- written documentation of vaccination with 2 doses of live measles or MMR vaccine administered at least 28 days apart,
- laboratory evidence of immunity,§
- laboratory confirmation of disease, or
- birth before 1957

Finally, it's important to take a good history from patients with fever, cough and/or runny nose. Ask about any exposure to known Measles patients, any rash and immunization status.

Any positive history should be treated appropriately with notification to the receiving facility...

Remember, as with Ebola... We may be the first encounter – Know what to look for & what to do.

In the category of "wonder why they made that sign?"

I noticed this during one of my recent travels through Houston, TX...



...and do you feel any better that whatever happened that required a sign like that was being "fixed" by the guy that put the sign for Gate 21 at gate 41?

Epilogue...

An artist asked a gallery owner if there had been any interest in his paintings on display at that time.

"I have good news and bad news," the owner replied. "The good news is that a gentleman enquired about your work and wondered if it would appreciate in value after your death. When I told him it would, he bought all 15 of your paintings."

"That's wonderful," the artist exclaimed. "What's the bad news?"

"The guy was your doctor..."

That's it from my world. *Happy Friday.* Bundle up. Check your vaccine records and pay attention to parentheses).

As always, thanks for what you do and how you do it...

Ed

Edward M. Racht, MD
Chief Medical Officer
AMR / Evolution Health
ed.racht@evhc.net