

# Friday Night [under the] Lights...

## 2016

*Happy Friday...*

Hope everyone is doing well...

So, did you wear Red today? Today is National Wear Red Day.

Also known as **Go Red for Women Day**, the tradition was started back in 2003. While tons of you are familiar with the concept of National Wear Red Day, there's a really interesting story associated with the powerful movement to focus on heart disease in women.

Why such a focused, specific initiative?

Today, most of us understand the risk factors for heart disease apply to both genders. But it hasn't always been that way. For decades, one of the risk factors for cardiac disease was believed to be being male. The message was, if you were female, you had a lower likelihood of having heart disease and your symptoms were less likely to be related to ischemia.

And we now understand that women present differently than men do when they experience myocardial ischemia. Females are much more likely to have atypical symptoms (such as shortness of breath, numbness, severe fatigue) or be symptom free altogether. Because of that, many diagnoses were historically missed in women because they didn't experience the classic "textbook" symptoms of myocardial ischemia or infarction.

Finally, there was widespread perception that the leading killer of women was breast cancer, not heart disease. In a 1997 survey, 35% of women cited cancer vs heart disease (30%) as the leading cause of death. Ironically, that perception was a result of strong, aggressive advocacy and education for breast cancer (obviously, a good thing...).



So the Go Red for Women Day initiative is a purposeful effort to raise awareness about the risks of heart disease in women.

Here's why this issue is so important:

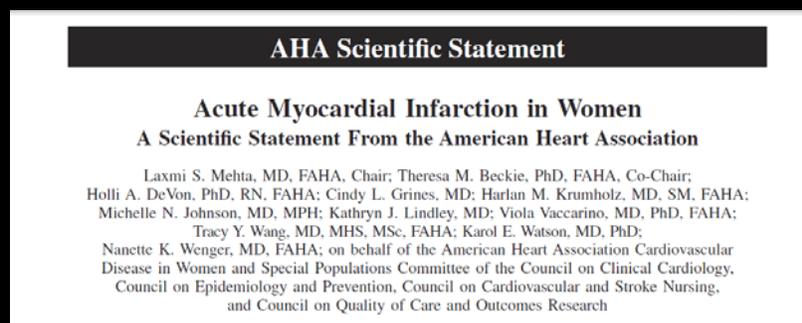
- Since 1984, the annual cardiovascular mortality rate has remained greater for women than men
- Heart disease is the #1 killer of women
- 1 in 3 deaths in females are from heart disease and stroke
- Coronary Heart Disease remains understudied, underdiagnosed and undertreated in females
- It's estimated that one woman dies *every minute* from heart disease or stroke
- Within a year of a first Acute Myocardial Infarction (AMI), more women than men will die (26% of women and 19% of men)
- Within 5 years of a first AMI, more women than men will die (47% of women and 36% of men), have heart failure (HF), or suffer from a stroke.
- The difference in mortality is related to two distinct components: sex differences resulting from biological factors and gender differences affected by broader social, environmental, and community factors.

Efforts like Go Red for Women are paying off. When we all pay attention to the risk factors, signs, symptoms and differences in presentation, this is what happens:

- More than one-third have lost weight.
- More than 50% have increased their exercise.
- 6 out of 10 have changed their diets.
- More than 40% have checked their cholesterol levels.
- Death in women has decreased by more than 30 percent over the past 10 years.
- *Today, nearly 300 fewer women die from heart disease and stroke each day*

So the efforts work. It's a great public health story and a good reminder for us to pay attention to the risk factors and prevention efforts. Medicine has a ways to go, but we're making progress.

On an historic note, the American Heart Association just published the first ever Scientific Statement on Acute Myocardial Infarction in Women. It's a well written paper that clearly defines the challenges and efforts to improve...



But, one last thing. Remember this from elementary school - “Every action has an equal and opposite reaction”?

*Unfortunately, while heart disease is declining, many of you will now be enjoying celery and carrot sticks on Super Bowl Sunday while you watch your neighbors down the queso...*

Another reminder of EMS job security...

### ◆ **Just when we feel comfortable understanding Ebola - Zika ?** ◆

I (like you, I bet) distinctly remember the minute I heard about a patient being diagnosed with “Ebola” in Dallas. While I had certainly heard of the disease and had a vague recollection of what it was (emphasis on *vague*), I didn’t know enough about it that I would be able to understand the principles of diagnosis, management or appropriate approaches by EMS. I’m sure it was probably a Board exam question but, really, who’s ever going to see this?

What I DID know about Ebola is that I certainly DIDN’T know enough. I knew I needed to learn about the disease and everything associated with it.

The rest of that story (again, just like your story I imagine) unfolded over the next 12-18 months.

As an EMS profession and as the nation’s largest EMS and IFT transport organization, we were able to collectively harness the clinical, operational and professional expertise of our colleagues to manage through an historic period of US infectious diseases.

Look at what we were able to do:

- We identified a credible, consistent reliable source of continuous and contemporary science and practice (the CDC)
- We developed a pretty intensive communications strategy to try and hit as many of our 20,000 colleagues as we could, through as many different routes as we could
- We partnered with industry experts at Emory University & Grady EMS to help guide our approaches
- We evaluated every single component of our personal protection and equipment utilization – Decontamination, donning and doffing and post-event surveillance.
- We established a 24 hour contact number through the Williams Medical Command Center (WMCC) and designated a small number of specifically prepared clinical and operational experts to answer any question that came up
- We produced educational materials and made them available far & wide
- We shared everything we did openly and freely with anyone that wanted it
- We measured the impact of what we did by tracking web hits, utilization and by tracking the numbers of calls that came into the WMCC and the number of positive “screens” identified through MEDS

I’ve said it before – I was really proud of this organization and the efforts we collectively made to protect our communities *and ourselves*. We did what people expected us to.

...but THAT was what we did with a disease that we didn't really know a lot about to start, but we'd at least heard of it.

Unlike Zika.



New one for me. Never heard of it. Didn't even know it existed. Zika? Energy bar, isn't it??

If it was a test question for me at some point, I'm sure I got it wrong.

I knew more about Cleidocranial Dysostosis than Zika (except maybe common spelling)...

And in the past week, not only are there cases in the U.S. (including the town I live in) but the World Health Organization (WHO) declared the Zika virus and its suspected link to birth defects an international public health emergency on Monday – that's a rare move that signals the seriousness of the outbreak and gives countries new tools to fight it.

In addition, while known to be transmitted by mosquitos, it's now believed to be transmitted from human to human via sexual contact. The WHO worries that as many as 4 million people may become infected by year's end.

**It has officially become the next infectious disease EMS needs to clearly understand and be prepared for.**

*However, the risks of transmission to EMS providers remain almost infinitesimal at this point.*

So, let's tap into our lessons learned about managing with an emerging Ebola threat and apply it here. Those approaches worked for Ebola, and it will serve us, and our communities, very well with Zika (not Cleidocranial Dysostosis though).

While not known to be a direct threat to healthcare providers at this point, it's important to remember that the EMS profession became a critical component of the public health surveillance system during the active phases of Ebola. This is no different.

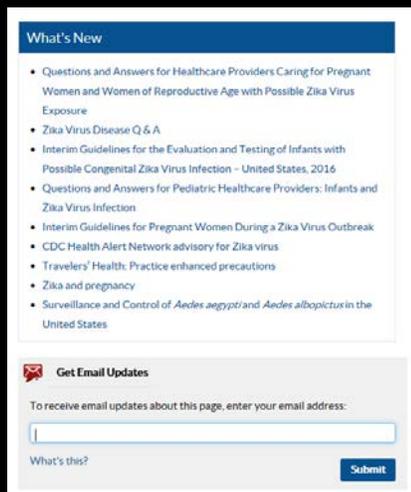
Our role is not only to be prepared; it's to be an integral part of the entire healthcare continuum.

**We have to have a clear understanding of Zika, even if we are not directly impacted. It's time.**

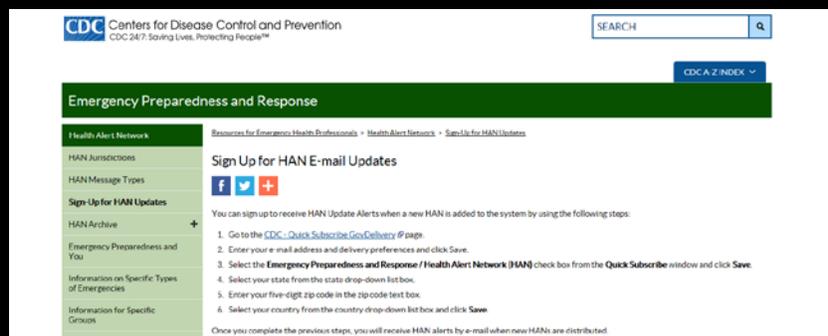
So here we go...

### ◆ What's our best source of information? ◆

- Once again, the Centers for Disease Control provide the most comprehensive, practical up-to-date guidance.
- They have established a specific Website ([www.cdc.gov/zika](http://www.cdc.gov/zika)). As was the case with Ebola, the website provides comprehensive information related to the disease, progression, consensus statements and other relevant data. Make this your “go-to” spot...
- At the bottom of the Zika page ([www.cdc.gov/zika](http://www.cdc.gov/zika)) you will see an option to be notified of any changes related to this topic. Sign up and you will be notified as new information is available (as an added bonus, you will see the two other similar viruses covered when you get the acknowledgement email)...



- I would suggest you also consider signing up for the CDC Health Alert Network (HAN-E) notification so you will be notified when the next new public health problems are identified...



## ◆ What is the Zika virus and how is it spread? ◆

- The virus was first identified in 1947 in Uganda, but for decades it afflicted mainly monkeys. In 2007, the first outbreak was documented in the Pacific islands (specifically in Micronesia). In May of last year, Brazil reported its first case of Zika virus disease.
- Since then, the disease has spread within Brazil and to more than 20 other countries in the region
- The nasty little virus is carried and transmitted by the *Aedes aegypti* species of mosquito, the same vector that transmits the dengue and chikungunya viruses. These mosquitoes typically lay eggs in and near standing water in things like buckets, bowls, animal dishes, flower pots and vases. They prefer to bite people (like vampires).
- These mosquitoes are aggressive daytime biters but also bite at night.
- Mosquitoes become infected when they feed on a person already infected with the virus. Infected mosquitoes can then spread the virus to other people through bites.
- Zika virus symptoms are usually pretty mild, consisting mainly of a maculopapular rash, low grade fever, joint & muscle aches, and conjunctivitis. Only one in five people with a Zika virus infection develop symptoms, but patients who present as such and who have traveled to Central or South America in the week prior to the onset of symptoms should be considered likely infected.
- Patients infected with Zika rarely seek hospitalization and death is extremely rare.
- The virus can be passed from mother to child (rarely) during the birth process. There is also evidence of passing the virus from mother to fetus during pregnancy.
- There is now evidence of sexual transmission of the virus from human to human.
- There is evidence of transmission through blood transfusion.



## ◆ What is the risk of microcephaly? ◆

Microcephaly is a condition characterized by children born with heads smaller than normal. Occurrence in the US ranges from 2-12 babies per 10,000 live births.

According to data from the CDC, 1,248 suspected cases of microcephaly had been reported in Brazil as of Nov. 28, 2015, compared with the annual rate of just 150-200 such cases during 2010-2014.

Examination of the fetus and amniotic fluid, in some cases, has shown Zika virus.

That's why it is believed (based on epidemiologic data above) that the Zika virus may cause microcephaly in children of infected mothers. Of note, this isn't yet definitive but the association is compelling...

### ◆ How do EMS Providers protect themselves? ◆

There is no vaccine and there are no specific drugs that are known to be effective against Zika.

The CDC advises health care providers to remain vigilant in areas with known infection, remember the importance of Universal Precautions and to “treat the symptoms,” which means telling patients to stay in bed, stay hydrated.

Those who are infected are also advised to stay indoors and remain as isolated as possible for at least a week after symptoms first present. While the risk of a domestic outbreak is probably low, the more exposure a Zika virus–infected individual has to the outside world, the more likely he or she is to be bitten by another mosquito, which can then carry and transmit the virus to another person.

Finally, because of the risk of sexual transmission, the CDC made this recommendation today.



Extreme at this point, but a public health consideration if the caseload increases. Or, it could be a brilliant trick to get everyone to focus on mosquito control...

Controlling the vector controls the disease.

Bottom line – Continue to keep an eye on the progression, understand the disease and focus on common-sense protection and prevention.

I hope that puts the disease in perspective...

◆ **A glimpse into the World of AMR** ◆

Tonight's glimpse into the World of AMR comes from Mike Nicoli [AMR – Springfield, Mass]. A few months ago, our colleagues in Springfield AMR, Massachusetts State Police, Springfield Fire Department and the Springfield Police Department made the dream of a terminally ill 5y/o boy come true.

He had a dream of being a police officer...

With a combined group of over 50 first responders, take a look at the power public safety has to make people's lives just a little better (in a different way than we usually do), even when faced with such an unimaginable situation...

[http://videos.masslive.com/republican/2015/11/springfield\\_first\\_responder\\_co.html](http://videos.masslive.com/republican/2015/11/springfield_first_responder_co.html)



*Thanks to Mike and all his colleagues...*

◆ **WTH?** ◆

WTHs are a constant reminder that there are some things in life that you just can't make up. Tonight's WTH was a little FNuL gift I spotted while traveling through an airport with Holly Stewart, one of our colleagues from Medtronic...



I decided I'd hold it until the flight...

---

◆ **Epilogue** ◆

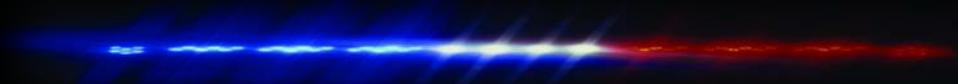
At a motivational seminar, three men are asked to come up to the stage.

They are all asked, "When you are in your casket and friends and family are mourning upon you, what would you like to hear them say about you?"

The first guy says, "I would like to hear them say that I was the great doctor of my time, and a great family man."

The second guy says, "I would like to hear that I was a wonderful husband and school teacher who made a huge difference in our children of tomorrow."

The last guy replies, "I would like to hear them say..... LOOK!!! HE'S MOVING!!!!!"



So, that's it from my world. *Happy Friday.*

*And hopefully Happy Sunday...*



*Ed*

---

Ed Racht, MD  
Chief Medical Officer  
American Medical Response  
[ed.racht@evhc.net](mailto:ed.racht@evhc.net)