

Friday Night [under the] Lights...

2019



Happy Friday...

And – Happy 2nd day of spring. Wednesday at 5:58 PM ET was the Spring Equinox

“Equinox” is Latin for “equal night”. An equinox occurs twice a year when the length of the night and the day are close to equal (do you ever wonder just how excited early astrologers were when they figured that out – “Holy crud Xantheles – this exact same thing happened in the autumn!”).

Spring’s always a great season. It was a brutal winter for so much of the US this year – it’s nice to have some warmer weather, flowers and new leaves on the trees.



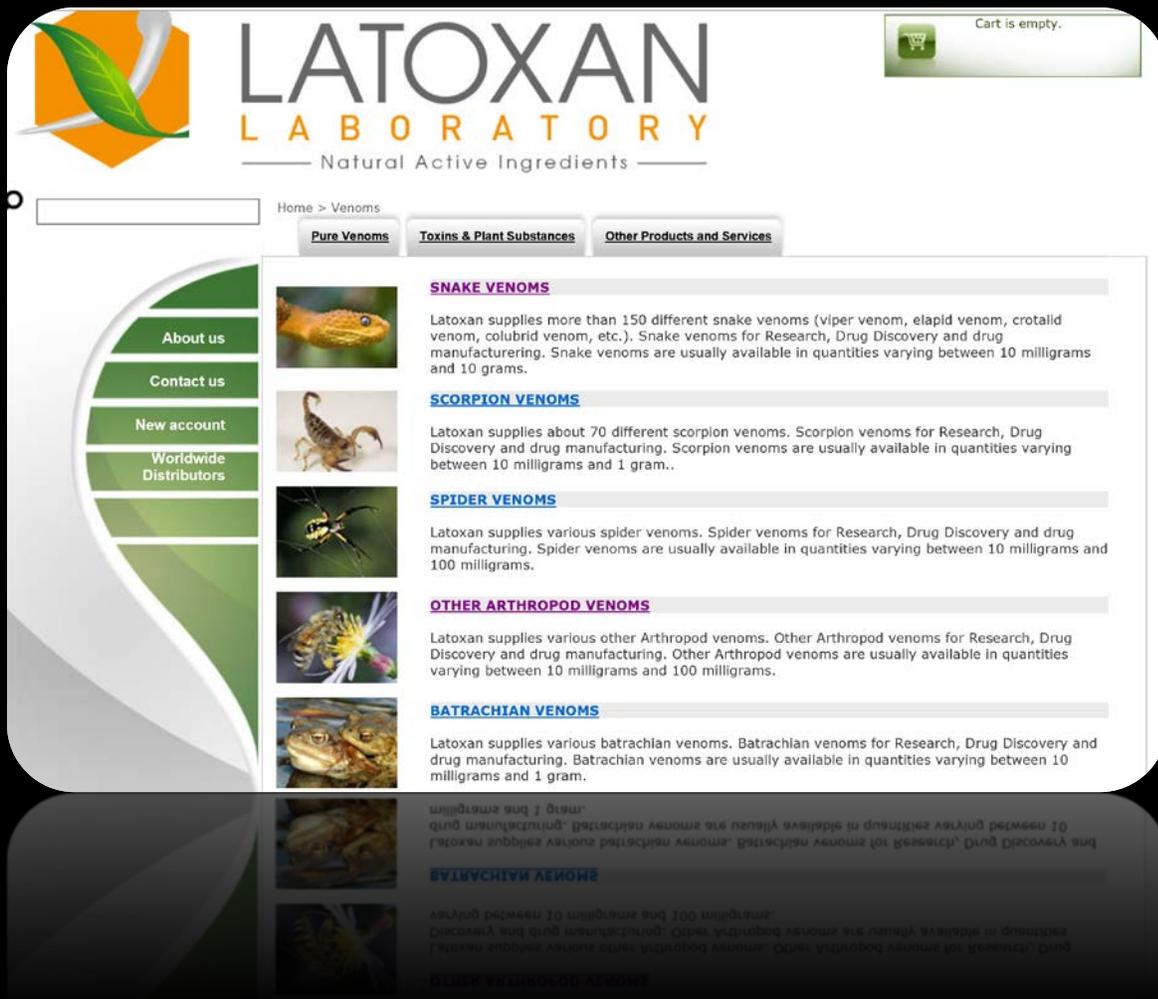
In Texas, we know it’s Spring when the foliage changes to a different shade of tan...

So – Happy Spring. I hope it’s nice where you are...

- **And with Spring comes...**

So, springtime is always a good time to brush up on identification and management of snakebites. Snakes are annoyed by humans poking around in their ‘hoods. Visits to the ED for potential snakebites climb in the spring for obvious reasons (in my mind, by the way – That reason is that there *are too many snakes...*)

I wanted to grab a couple of snake pics off the internet to add to the discussion and I stumbled upon one of those “I can’t believe there’s a company that does that” and “who, in their right mind would want to work there” places.



Nope. No way. Not going to happen.

“What do you do?”

“I work in a lab”.

“Cool. What exactly does the lab do?”

“We extract poisonous venom from those things that make it and sell it to other people”.

Nope.

I can’t even create the right visual of what it must look like extracting venom from a yellow jacket. Or a poisonous frog. Or even being the guys that opens the boxes shipped to the facility with “live specimens”.

“What’s in the box, Clem?”

Nope.

I do want to tell you about a great program, though...

It's run by a specialized Miami Dade Fire Rescue (MDFR) group and it's called Venom One. Venom One maintains the largest bank of anti-venom in the country and works to get the anti-venom to patients across the country.



Most of their work is actually concentrated in South Florida. That's because so many different "exotic" snakes enter through the South Florida ports. Venom One was developed in 1998 when a patient was bitten by a Black Mamba.

It's impressive that they keep over 50 different antivenoms as part of their readiness.

It's hard to know exactly how many people are affected by snakebites each year. There are a little more than 3000 snake species worldwide with only 200 that are considered medically significant venomous species and are harmful to humans (oh, is that all?)...



The US has about 20 species of venomous snakes, which include 16 species of rattlesnakes, two species of coral snakes, one species of cottonmouth (or water moccasin), and one species of copperhead. At least one species of venomous snake is found in every state except Hawaii (one more reason it's such a paradise).

Interestingly, it's estimated that between 7,000–8,000 people per year are bitten by venomous snakes in the United States, and about five of those people die. Essentially, there is a 1 in 500 chance of dying if bitten by a snake in the US.

Most fatal bites are attributed to the eastern & western diamondback rattlesnakes. Rattlesnakes are the most venomous species in the US and they can strike at up to a third of their body length. The copperhead accounts for more cases of venomous snake bite than any other North American species; however, its venom is the least toxic, so its bite is seldom fatal.

But.It's.Still.A.Snake

As you might imagine, venomous snakebites occur throughout the US, but most occur in southern states – Bites from venomous snakes are extremely rare in the states near Canada (see? Even the *snakes* are nicer up there...). Maine, for example, has only one species (timber rattlesnake); it is rarely seen, and then only in the southern part of the state.

Snake bites from a venomous species doesn't always cause symptoms. Fortunately, only 50-70% of bites by a venomous species will actually cause envenomation (these epidemiologists are totally missing the fact that mortality from snakes may actually be from a cardiac arrest in people like me that aren't too fond of the reptiles).

Only 1 in 50 million people worldwide will die from a snake bite. As a matter of fact, you are 9x more likely to die from being struck by lightning than to die from a venomous snake bite. And, ready for this??

More people die from spider bites in the United States each year than they do from snake bites.

I would have missed that one on a test.

There's always been a lot of evolving controversy in the management of snake bites (remember the joke – "Doctor says your gonna die"?).

What is (I believe) fairly well agreed upon is what NOT to do with snakebite patients:

DO NOT cut and suck

DO NOT apply a tourniquet.

DO NOT apply any sort of constriction band or pressure immobilization for pit vipers.
Pressure immobilization IS reasonable for coral snake bites.

DO NOT use electrical shock treatment.

DO NOT apply heat.

DO NOT apply PROLONGED icepacks. A few minutes at a time is okay (say, 5 minutes on, 10 minutes off) but prolonged cryotherapy is bad for the tissue.

DO NOT use one of those commercially-available suction devices.

DO NOT bring the snake to the hospital (for so many reasons...)

Finally, is this just the best title for an Editorial ever?



- **America's best hospitals**

Healthgrades, one of several organizations that reviews hospital performance and creates a "ranking system", just released their 2019 Best Hospitals List. Here's the direct link to the list:

<https://www.healthgrades.com/quality/americas-best-hospitals-for-2019>

Their ranking is based solely on clinical performance metrics for 32 conditions and procedures.

Organizations like this hope that being transparent about performance will provide significant peer pressure to improve care when the data is made public (one of the main drivers behind the Medicare Website : Hospital Compare).

I'd urge you to take a look at the list as it applies to your home state. These hospitals have been recognized for better outcomes than their peers in clinical care.

They should indeed be recognized...

And – as just a side thought – How would you do in your home agency if (sorry – when) this applies to EMS systems?

healthgrades. ABOUT US

Want to know which hospitals are the best in America? See America's Best Hospitals™ 2019

America's Best Hospitals for 2019

Healthgrades America's Best Hospitals™ is based solely on clinical quality outcomes for 32 conditions and procedures. This premier distinction rewards hospitals that consistently exhibit exceptional, comprehensive quality care. Simply put, patients are more likely to have a successful treatment without major complications—and have a lower chance of dying—at America's Best Hospitals.

America's 50 Best Hospitals™ (★) are in the **top 1%** of hospitals in the nation for providing overall clinical excellence across a broad spectrum of conditions and procedures consistently for six or more consecutive years.

America's 100 Best Hospitals™ (★) are in the **top 2%** of hospitals in the nation for exhibiting clinical excellence for five or more consecutive years.

America's 250 Best Hospitals™ are in the top 5% in the nation for overall clinical excellence for the current year. This award was previously known as Distinguished Hospital Award for Clinical Excellence™.

Filter: Top 50 Top 100 Top 250

- **On the flip side...**

The Joint Commission also published one of *their* lists related to an analysis of their 2018 data on sentinel events. Most of these are never-events. They should not happen in healthcare.

The Joint Commission defines a sentinel event as a patient safety event that results in death, permanent harm, severe temporary harm or intervention required to sustain life. The organization requires hospitals to conduct a root-cause analysis after a sentinel event occurs.

They reviewed 801 reports of sentinel events in 2018, 87 percent of which were voluntarily reported to the accrediting body.

Here are the 10 most frequently reported sentinel events for 2018:

1. **Fall — 111 reported**
2. **Unintended retention of a foreign body — 111**
3. **Wrong-site surgery — 94**
4. **Unassigned — 68**
5. **Unanticipated events - asphyxiation, burn, choking on food, drowning or being found unresponsive — 59**
6. **Suicide — 50**
7. **Delay in treatment — 43**
8. **Product or device event — 29**
9. **Criminal event — 28**
10. **Medication error — 24**

TJC sentinel events are almost always fully preventable. Lists like this remind us how important it is to know what's happening in order to address it as effectively as we can.

- **GMR Life...**

Size really does matter. Meet OSU-1



- **What the...?**

Tonight's WTH comes from Chief Ted Beam (Rural Metro Fire). One more reminder of the challenges of Mental Health in EMS...



- **Epilogue...**

An old man was on his death bed and wanted to be buried with his money. He called his priest, his doctor and his lawyer to his bedside. "Here's \$30,000 cash to be held by each of you. I trust you to put this in my coffin when I die so I can take all my money with me."

At the funeral, each man put an envelope in the coffin. Riding away in a limousine, the priest suddenly broke into tears and confessed, "I only put \$20,000 into the envelope because I needed \$10,000 to repair the roof of the church."

"Well, since we're confiding in each other," said the doctor, "I only put \$10,000 in the envelope because we needed a new X-ray machine for the pediatrics ward at the hospital which cost \$20,000."

The lawyer was aghast. "I'm ashamed of both of you," he exclaimed. "I want it known that when I put my envelope in that coffin, I enclosed a check for the full \$30,000."



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

Happy Snake Free Spring...

Thanks for what you do & how you do it...

Ed

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