



“DO YOU NEED A PARAMEDIC?” THE ROLE OF EMERGENCY MEDICAL SERVICES (EMS) IN NON-FATAL STRANGULATION CASES



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THE ROLE OF EMERGENCY MEDICAL SERVICES (EMS) IN STRANGULATION CASES



NFL Star Eric Weddle with the San Diego Paramedics at the August 2015 Advanced Course

In our last Chapter, we focused on dispatchers and the important role they play as first responders. Equally important are EMS. According to a recent article “Improving the Emergency Medical Services System’s Response to domestic violence”, the authors cited that almost **two million injuries and 1,300 deaths result from domestic violence each year**. Over a half million injuries need medical attention and more than 145,000 injuries require hospitalization of the victim. Researchers

have determined that between **22 and 35 percent** of women patients in emergency room settings are there for problems related to domestic violence. One-in- three female trauma patients is a victim of abuse. (Health matrix, Volume 25, Issue 1, 2016).

Approximately **40-50% of all 911 calls are related to domestic violence**. EMS responders are generally the first to arrive at the scene, either before, after or at the same time as law enforcement. They are usually the first to provide emergency medical services to victims with injuries. Sometimes the injuries are visible, but in strangulation cases those injuries are mainly internal and usually barely visible to the untrained eye. Since most victims of domestic violence tend to refuse transport for medical attention, one of our biggest challenges is treating strangulation as a medical emergency. We need to help victims understand why medical attention is necessary.



Gael Strack, Dr. Bill Smock, and Michelle Morgan with the Fort Worth, TX Paramedics at the October 2017 Advanced Course

Michelle’s Tape

In San Diego, California, 40% of 911 calls are domestic violence related. [Listen to the call here.](#)

Caller: Hello?

911: Yeah, Michelle. This is Lynn at San Diego Police Department. Is this your husband or boyfriend?

Caller: My husband.

911: It’s your husband?

Caller: Yes.

911: Okay. Does he have any weapons at all?

Caller: No.

911: What did he do to you?

Caller: He-

911: Okay, I want you to try to take a deep breath and calm down.

Caller: He tried to break my neck.

911: He did what?

Caller: He tried to break my neck and suffocated me. And he- (unclear speech)

911: Okay, do you need a paramedic? Okay, Michelle, do you need a paramedic?

Caller: No.

911: Are you sure?

Caller: Yes, I’m sure.

911: Okay. He’s inside your house alright. He’s not there with you?

Caller: He might have taken off in the car right now.

911: What kind of car would it be? Hey, Michelle, I want you to take a deep breath and try to calm down, okay? He’s not right there, so he- (audio cuts out)

Caller: He- (unclear speech)

911: Okay, Michelle?

Caller: Yeah?

911: Okay.

Caller: I-I-I’m not crying. I just can’t breathe very

well.

911: Alright. Do you want a paramedic?

Caller: No, I’m o- I’m okay.

911: Are you sure? If you can’t breathe..

Caller: How come I can’t- How come I can’t breathe? How come I can’t- I can’t -

The Role of EMS

There are many reasons why injured victims decline medical attention: fear of retaliation, to protect her abuser, lack of child care, involvement by children protection services, work obligations, financial limitations, more concern for immediate safety than health, not wanting to disclose the abuse, not believing anyone can help and/or a perceived lack of time. In many cases, victims simply do not understand or under estimate the seriousness of non-fatal strangulation nor the need for medical care.

This is where EMS responders play a critical role. When responding to domestic violence calls, they can ask important questions to identify injuries that may be hidden by clothing or are internal and not visible. They can look for clues of strangulation when the victim can’t remember details or is too traumatized or afraid to speak. They will, of course, provide needed medical treatment and make appropriate transport decisions. Importantly, they can recognize and document physical findings relevant to the identification of non-fatal strangulation.



WHEN TO TRANSPORT A STRANGLING VICTIM

In partnership with the San Diego Fire Department, the Institute has developed the Strangulation Assessment Card. The Assessment Card was designed to help EMS responders determine when to transport a strangled victim. When an EMS responder determines the need to transport a victim to the emergency room, but the victim refuses, **what is said to the victim at the scene may save the victim's life.**

The EMS responder needs to educate and convince the victim that seeking emergency medical attention is critical for her health and safety. Strangulation has immediate, delayed and long-term consequences. Most strangulation injuries are internal, not external. **Even in fatal strangulation cases, there may be no external visible injuries.** Strangulation victims have also been known to die from delayed consequences of strangulation days, weeks, months and/or years later.

For these reasons, victims need to be assessed and treated for internal injuries related to non-fatal strangulation. Proper assessment includes the use of appropriate imaging technology. A simple CTA of the neck may be a life-saving procedure which could rule out serious injury such as a carotid dissection which if missed can lead to stroke, disability and death.

STRANGULATION ASSESSMENT CARD			
SIGNS	SYMPTOMS	CHECKLIST	TRANSPORT
<ul style="list-style-type: none"> Red eyes or spots (Petechiae) Neck swelling Nausea or vomiting Unsteady Loss or lapse of memory Unrinated Defecated Possible loss of consciousness Ptosis – droopy eyelid Droopy face Seizure Tongue injury Lip injury Mental status changes Voice changes 	<ul style="list-style-type: none"> Neck pain Jaw pain Scalp pain (from hair pulling) Sore throat Difficulty breathing Difficulty swallowing Vision changes (spots, tunnel vision, flashing lights) Hearing changes Light headedness Headache Weakness or numbness to arms or legs Voice changes 	<p>S Scene & Safety. Take in the scene. Make sure you and the victim are safe.</p> <p>T Trauma. The victim is traumatized. Be kind. Ask: what do you remember? See? Feel? Hear? Think?</p> <p>R Reassure & Resources. Reassure the victim that help is available and provide resources.</p> <p>A Assess. Assess the victim for signs and symptoms of strangulation and TBI.</p> <p>N Notes. Document your observations. Put victim statements in quotes.</p> <p>G Give. Give the victim an advisal about delayed consequences.</p> <p>L Loss of Consciousness. Victims may not remember. Lapse of memory? Change in location? Urination? Defecation?</p> <p>E Encourage. Encourage medical attention or transport if life-threatening injuries exist.</p>	<p>If the victim is Pregnant or has life-threatening injuries which include:</p> <ul style="list-style-type: none"> Difficulty breathing Loss of consciousness Difficulty swallowing Unrinated Petechial hemorrhage Defecated Vision changes <p>DELAYED CONSEQUENCES</p> <p>Victims may look fine and say they are fine, but just underneath the skin there would be internal injury and/or delayed complications. Internal injury may take a few hours to be appreciated. The victim may develop delayed swelling, hematomas, vocal cord immobility, displaced laryngeal fractures, fractured hyoid bone, airway obstruction, stroke or even delayed death from a carotid dissection, bloodclot, respiratory complications, or anoxic brain damage.</p> <p>Tallaferrro, E., Hawley, D., McNamee, G.E. & Strack, G. (2009). Strangulation in Intimate Partner Violence: Intimate Partner Violence: A Health-Based Perspective. Oxford University Press, Inc.</p> <p><small>This project is supported all or in part by Grant No. 2014-7A-A0006 awarded by the Office on Violence Against Women, U.S. Dept. of Justice. The opinions, findings, conclusions, and recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the Department of Justice, Office on Violence Against Women.</small></p>

Duty to Warn: A New Law in California

In California, law enforcement officers responding to domestic violence calls are legally obligated to warn victims about the dangers of strangulation. (EMS responders do not have this legal obligation.) Effective January 1, 2018 -- thanks to Senator Roth from Riverside, California -- Penal Code Section 137301(I) requires officers to give victims of strangulation a warning that strangulation may cause internal injuries and they should seek medical attention. In order that dangerous offenders are tracked, the new law also requires officers to document strangulation and suffocation assaults in their incident reports.

Here's what the Institute recommends should be included in the warning given by a law enforcement officer:

“I have a duty to warn you that strangulation is serious and can cause internal injuries, brain damage, delayed consequences such as strokes, thyroid issues, miscarriage and/or death.

Research shows that if you are strangled even one time, you are 750% more likely to be killed by your partner.

We strongly encourage you to seek immediate medical attention at an emergency department and ask for support from an advocate.”



Given the seriousness of non-fatal strangulation and the new laws and protocols related to its identification, treatment and documentation, it is important for EMS responders to be trained about domestic violence **and the signs, symptoms, and consequences of non-fatal strangulation.** ACEP and the Institute believe that training in the evaluation and management of victims of domestic violence should be incorporated into the initial and continuing education of EMS personnel. This training should include understanding patterns of abuse and recognizing victims and their injuries. The training should focus on victim care, scene safety, preservation of evidence, and documentation requirements. ([ACEP, The Role of EMS in Handling Domestic Violence](#)).

In addition to non-fatal strangulation, traumatic brain injuries (TBI) also pose a serious threat to victims of domestic violence. It is estimated that approximately, 1.5 to 2 million people incur a mild traumatic injury (Campbell, 2017). Victims of domestic violence are particularly at high risk for traumatic brain injuries and it is believed that the prevalence of TBI from head or strangulation assaults among victims of IPV is approximately 50% (Campbell, 2017). It is also very likely victims have suffered multiple mild TBIs without knowing or receiving proper medical care.

In one study, at least 50% of victims of domestic violence did not seek medical care and the other half did not disclose or no one asked about abuse probably leading to misdiagnosis or inadequate treatment (Joshi, 2012). Like any injury, the more it happens, the worst it will get. But with brain injuries, the effects of cumulative mild TBIs can be devastating as it can lead to chronic traumatic encephalopathy which has been associated with depression, suicidality and Alzheimer's like syndromes (McKee, 2013). As mentioned above, strangled victims are also at risk for another assault and/or homicide. EMS can play an important part by paying particular attention to both strangulation and traumatic brain injuries – there are often the two most underreported and often missed injuries among victims of IPV.

It is equally important that EMS responders are trained about laws in their state related to medical mandated reporting and the medical diagnosis and treatment exception. EMS responders can be held legally responsible when they fail to report cases of suspected domestic violence, child abuse, elder abuse, sexual assault, rape, gunshot/stab wounds, childbirth outside a medical facility, infectious diseases, or animal bites. In Oklahoma, the legislature passed a law requiring medical professionals to report cases of strangulation (Oklahoma Statutes, Title 22, Section 22-58).



Dr. Ralph Riviello, ACEP, with Casey Gwinn and Det. Mike Agnew (ret.)

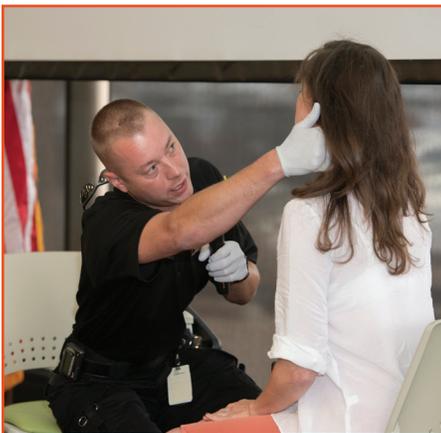
Statements made to EMS responders by victims of domestic violence, child abuse and/or sexual assault, along with medical records pertaining to diagnosis and treatment, are regularly admitted into evidence as an exception to the hearsay rule: (Ward v. Indiana (2016, Indiana) 50 N.E.3d 752; State v. Kimball (2015, Maine) 117 A.3d 585; State v. Saunders (2006, Washington) 132 Wash. App. 592).

While EMS personnel respond to many domestic violence calls, studies suggest that few are trained in domestic violence and/or non-fatal strangulation. Only two states – Kentucky and Tennessee – have passed laws mandating that EMS responders receive training. From our online research, the Institute has identified only a handful of articles, protocols and/or trainings on domestic violence targeted for EMS responders. Only one included information about strangulation - [Domestic Violence Education](#), an online continuing education course for EMS produced by Wild Iris Medical Education, Inc. All you have to do is read the course, take the test, pay \$25 and get CEU credits.

What Paramedics Need to Know About Strangulation



Unfortunately, very little information is devoted to strangulation. To help fill this gap, the Institute recommends EMS professionals first watch the webinar on [What Paramedics Need to Know About Strangulation](#) with Dr. Ralph Riviello. This webinar was developed by the Institute for paramedics to recognize the signs and symptoms of fatal and non-fatal strangulation cases and to document the injuries in a way that can be helpful toward the assessment and treatment of a strangled patient. We have also identified other resources:



Fort Worth, TX Paramedic at October 2016 Advanced Course



San Diego Paramedic at August 2015 Advanced Course

RESOURCES FOR EMS RESPONDERS

- **Webinar:** [What Paramedics Need to Know About Strangulation with Dr. Ralph Riviello](#)
- **Screening Tool:** [Strangulation Assessment Card](#)
- **Guide:** [Medical Radiographic Imaging Recommendations](#)
- **Scholarly Writing:** [Improving The Emergency Medical Services System's Response to Domestic Violence](#), Health Matrix (2016)
- **Article:** [Initial Findings in Strangulation Injury Aren't Indicative of Outcome By Abigail T. Harning](#), EMT-P, M.Ed, December 2015
- **Article:** [Strangulation Trauma in Assaults: An Overview for Emergency Services Personnel By Robert S. Cole](#), CCCEMT-P, August 2004
- **Study:** [What do EMS personnel think about domestic violence? An Exploration of attitudes and experiences after participation in training.](#) J Forensic Leg Med. 2016 Fe;38:64-9.
- **Ordinance:** [City of Burleson, Texas, "Effective Response to Strangulation"](#) 2018
- **Article:** [Strangulation Injuries by J. Stephan Stapczynski](#), MD, FACEP, Emergency Medicine Reports (2010)
- **Protocol:** [San Diego County Strangulation Protocol](#), CA (2017)
- **Protocol:** [Fairfield Police Department, Connecticut](#) (2015)
- **Protocol:** [Maricopa Domestic Violence Protocol](#) Arizona (2012, Revised 2015)
- **Online Training with CEU:** [Domestic Violence Training for EMS](#), Wild Iris
- **Online Training with Contact Hours:** [Kentucky Domestic Violence](#), 2014
- **Training Manual:** [EMS Response to Domestic Violence](#), Alaska DHSS (1998)
- **Training Manual:** [EMS Response to Domestic Violence](#), New Mexico
- **Video:** [Why Paramedics Should Attend the 4-Day Advanced Course on Strangulation](#)

FEATURED LEADER

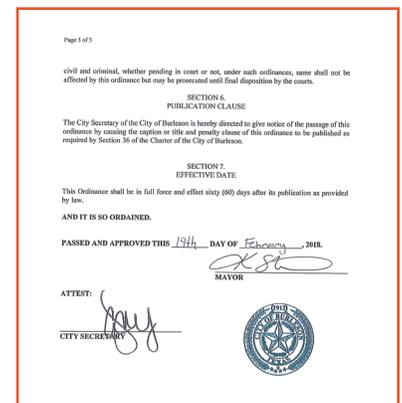
Mayor Ken Shetter from the City of Burleson, Texas recognized a need in his City for a better



response in the handling of non-fatal strangulation cases. Over 60% of victims seeking services at One Safe Place, a family justice center, in Fort Worth, Texas reported being strangled by their partner. Mayor Shetter decided to do something about it and he means business. He helped pass a new ordinance

requiring EMS responders to be summoned to the scene of a domestic violence call when officers determine an act of strangulation has occurred. The

new ordinance also calls for a strangulation task force which will be tasked to develop and implement new tools and training for first responders confronted with suspected strangulation. Plus, the new law creates a penalty. Any violator may be punished through administrative action by the City Manager.



Thank you Mayor Shetter for leading the way. Your new ordinance will save lives.

VIDEO: [Burleson Cracking Down on Domestic Violence by Targeting Strangulation Cases](#)



Our featured resource is a training video clip of San Diego Firefighter and Paramedic Mitch Mendler, Joe Russo, Danielle Bebee and San Diego Police Detective Rena Hernandez (ret.), who demonstrate how to educate a victim about the dangers of strangulation using the new strangulation assessment card.

The strangulation assessment card was developed by the San Diego Fire Department in partnership with the Institute. It was designed to assist EMS to easily determine the signs and symptoms of strangulation out in the field, use a quick checklist called “STRANGLE” to remember

important key steps, understand life-threatening injuries, understand when to transport, provide the victim information about strangulation assaults and also provide medical providers notice about the need for imaging and the new medical imaging recommendations.



We are grateful to the San Diego Fire Department and the San Diego Police Department who assisted with this training video as well as Dr. Bill Smock and Dr. Jim Dunford who reviewed and approved the strangulation assessment card.

VIDEO: <https://youtu.be/lp01PdJyvA>



Jerry Fineman and Gael Strack with the San Diego Paramedics at the August 2015 Advanced Course