

Maryland EMS News

For All Emergency Medical Care Providers

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Child Passenger Safety Week 2018



September 23-29, 2018 was designated as Child Passenger Safety Week. Car crashes are a leading cause of death for children ages 1 to 13. Many times, deaths and injuries

can be prevented by proper use of car seats, boosters, and seat belts. On average, two children under 13 were killed per day in 2016 while riding in cars, SUVs, pickups, or vans. Traffic fatalities nationwide are climbing at an alarming rate, and securing child passengers correctly is the best way to protect them. The basics of child passenger safety include seat selection, direction (orientation), location, installation, and harnessing. Across the county and in Maryland, Certified Child Passenger Safety Technicians provided free education on how to use car seats, booster seats, and seat belts. These technicians helped educate

individuals about choosing the right car seat for a child, installing that seat correctly in their vehicle, and using that seat correctly every time. They also stressed the importance of registering car seats with its manufacturer, and what to expect if the seat is subject to a safety recall. The week concluded with National Seat Check Saturday on September 29, when Certified Child Passenger Safety Technicians across the country were available at car seat check events to offer advice and instruction to parents and caregivers.

Boosters Are For Big Kids

Most children need to ride in a booster seat from about age six until between ten to twelve years of age. If the child is not using a booster, use the simple Five Step Test the next time you ride in the car. Children may not yet be ready to use a safety belt without a booster. Have the child get ready for a “pretend” ride by sitting in the car and buckling the lap and shoulder belt in the back seat. Answer the following questions:

1. Does the child sit all the way back against the auto seat?
2. Do the child’s knees bend comfortably at the edge of the auto seat?
3. Does the belt cross the shoulder between the neck and arm?
4. Is the lap belt as low as possible, touching the thighs?
5. Can the child stay seated like this for the whole trip?

If you answered “no” to any of these questions, the child needs a booster seat to make both the shoulder belt and lap belt fit properly for the best crash protection.

United States Postal Service Honors First Responders

The United States Postal Service has honored First Responders with the issuing of a new stamp. First issued on September 13, 2018, the Postal Service has recognized the men and women that respond to life saving situations, 24 hours a day, every day. The stamp’s image depicts three first responders as they react to an emergency.



The U.S. Postal Service recently released the “Honoring First Responders” stamp to recognize emergency services providers.

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Correct Use of Seat Belts During Pregnancy: Results of a Recent International Study

Pregnant women face all sorts of concerns about their health and the health of their unborn child. The greatest danger may often be overlooked. Motor vehicle crashes (MVC) in which pregnant women are occupants are the greatest cause of placental abruption and the expectant women's unintentional injury deaths according to Pearlman et al.¹ However, if seat belts are worn by pregnant women, they are very effective at protecting the mother and the fetus as illustrated by crash testing with dummies. Proper use of the seat belt is key to their effectiveness. Unfortunately, observational studies and surveys show that many pregnant women do not wear a seat belt in every vehicle seating position, on every ride, or wear it properly.

A recent study by Acar, Edwards, and Aldah in the British journal, *Safety*², investigated the use and correct use of both the lap and shoulder parts of the seat belt among an international sample of pregnant women. They recruited participants via an on-line pregnancy forum, providing the survey in five languages and including diagrams of seat belt positioning on pregnant women to help respondents identify and report on their own personal use. Nearly 2,000 women participated in the study, with 64% of them from Europe, 12% from North America and 24% from other parts of the world.

Overall, 91.9% of this internet-savvy group reported wearing a seatbelt while pregnant. (Note: Maryland's overall seat belt use rate for the front seat was 92.1% in 2017 according to Maryland's Department of Transportation). Among those who did not wear a seat belt while pregnant, they cited "comfort" and "safety" as their primary reasons. But non-use of seat belts by anyone is highly correlated with an increased risk of injury or death in a MVC. In fact, someone not wearing a seat belt is 30 times more likely to be ejected from a vehicle during a crash, and 3 out of 4 people ejected in a crash die from their injuries as reported by the CDC.

While a 91% self-reported seat belt use rate is pretty high, this number does not guarantee that the belts were correctly used. In this study only 5.2% of European women and



Photo courtesy of MIEMSS.

3.5% of North American women indicated they positioned both their lap and shoulder belts correctly on themselves. The shoulder belt was positioned correctly ("passing between the breasts and around the abdomen") on North American women only 43.8% of the time and the lap belt was positioned correctly "across the hips and under the abdomen" only 11.7% of the time. Correct use rates for lap and shoulder belts were a little higher among the European women surveyed and lower among those from "Other Countries" than among North American women.

Almost all the women expressed concern about wearing seat belts during pregnancy, even though they did wear them. Many of those who said they didn't wear a seat belt said they stopped during their pregnancy fearing the seat belt might hurt the fetus in a MVC, reflecting wrong beliefs about proper seat belt use. The most common identified misuse of the lap belt was to position it "across the abdomen," which could result in fetal trauma in a crash. The authors of this study note that as pregnant women advance in their pregnancy, their lap belts have a tendency to move up over the abdomen and

rest less over the pelvic bones, which is incorrect use. Some women report holding their belts away from their baby bump with their hands or thumbs in an attempt to protect the fetus. It is not known what this might do under crash forces. Jennifer Anders, MD, FAAP, Associate State EMS Medical Director for Pediatrics says, "Seat belts can be a lifesaver for pregnant women and their fetuses, but it is important that pregnant women know how to wear it properly. The lap belt should be positioned low, underneath the baby bump, so that if it is needed, it will hold the woman safely with pressure on the hip bones, and not put pressure on the uterus and fetus."

Seat belts save thousands of lives each year, and having everyone buckle up in every seating position on every ride would save thousands more. It is hard to estimate how many lives would be saved or injuries prevented with proper placement of both the lap and shoulder parts of the seat belt, but it is especially important to the protection of pregnant women and their unborn babies. Dr. Anders says, "Please buckle up; your baby is depending on you!"

¹ Pearlman, M.D.; Phillips, M.E. *Obstet. Gynaecol.* 1996, 88, 1026-1029

² Acar, B.S.; Edwards, A.M. and Aldah, M. *Safety.* 2018, 4(1)



Upcoming Pediatric Education Opportunities

- October 19, 2018**
Children's National Health System Trauma Update
 Location: Children's National Medical Center, Washington, DC
 REGISTRATION: <https://traumaburneducation.ticketleap.com/>
- November 7, 2018**
12th Annual EMS for Children Research Update
 Location: MIEMSS, Baltimore, MD
 For more information, visit pepp@miemss.org
- November 9, 2018**
Mid Maryland ENA Memorial Conference
 Location: Silver Spring, MD
 For more information, visit www.mdena.org/events/mmc-ena-memorial-conference/
- November 16, 2018**
2018 Eastern Shore Emergency and Critical Care Symposium
 Location: Wye Mills, MD
 For more information, visit <https://bit.ly/2oD0e2X>

For more information, email pepp@miemss.org



Licensure and Certification TIDBIT

Q. How do I update my roster to remove a provider who no longer serves as a member of my company?

A. Service administrators have the ability to remove personnel from a service roster by completing the following steps:

- Go to www.miemsslicense.com (or just click the Provider Login button on the MIEMSS homepage) and log in to your provider account
- Select Services and click on your target service
- Select Personnel
- Once your roster appears, select the member(s) that you would like to remove
- At the bottom of the roster select the bulk action, "Remove Selected Users," and press Go



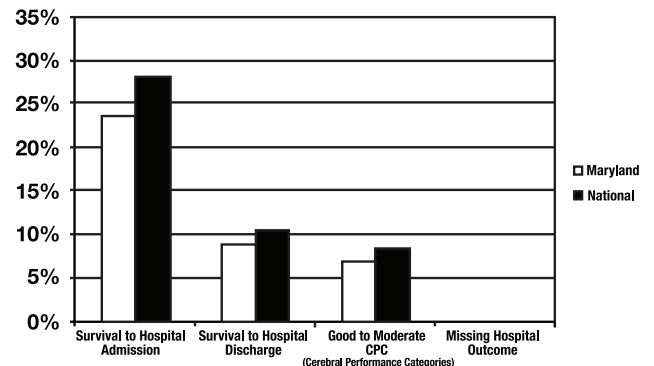
CARES Corner

In Maryland, there were 6,888 total non-traumatic sudden out-of-hospital cardiac arrests submitted to the CARES registry for Calendar Year 2017. National reports are now available on the CARES website: <https://mycares.net>.

As 2017 is the first year that Maryland has complete data in the CARES registry, the statewide data for that year will act as a baseline. This data will enable hospitals, EMS providers, and other members of the health care community to improve cardiac arrest survival strategies.

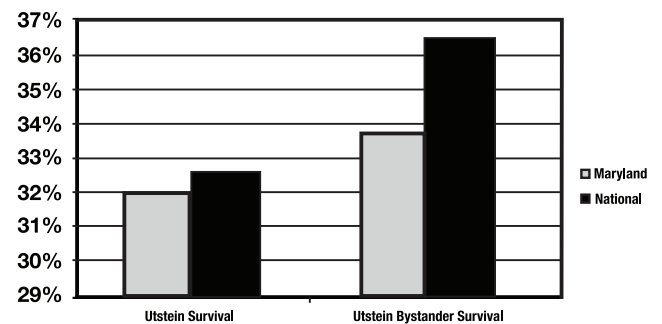
Survival rates in Maryland and Nationally (Source: CARES Registry):

Survival Rates: Overall Survival



CARES: 2017 State Summary

Survival Rates: Bystander Witnessed Shockable Rhythm



- Utstein = Witnessed by bystander and found in shockable rhythm
- Utstein Bystander = Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR by bystander and/or AED applied by bystander)



CARES: 2017 State Summary

Peninsula Regional Medical Center - Trauma Services Recognized for Injury Prevention Efforts

The American Trauma Society (ATS) Maryland Division recently presented their Distinguished Service Award for 2018 to the Peninsula Regional Medical Center - Trauma Services for their work in injury prevention and dedication to Maryland's Trauma and EMS system.

The Trauma Services at the Peninsula Regional Medical Center (PRMC) was recognized for their Stop the Bleed classes working in collaboration with Dorchester County EMS/Public Safety; as well as their participation in the Statewide Distracted Driving Injury Prevention Initiative, and the Statewide Falls Injury Prevention Initiative. Staff members have gone to the Salisbury School, Pinehurst, and Stepping Stones to talk with children about various injury prevention topics. They have also represented the ATS and PRMC at the Maryland State Fireman's Association Convention in Ocean City in the children's room for the past five years bringing awareness on injury prevention issues. Each year they assist with the Mock Crash at Wicomico High School. Members of the staff serve as members of the Ocean City Pedestrian Safety Committee.

The American Trauma Society is a voluntary, non-profit organization dedicated to preventing traumatic injuries and reducing



Staff members from the Peninsula Regional Medical Center's Trauma Services accept the American Trauma Society Distinguished Service Award for their efforts in injury prevention in the community.

their consequences. The main missions of the ATS are to provide injury prevention information through public education and to serve as leaders in the development, advocacy,

and maintenance of trauma systems. This year acknowledges 50 years of commitment by the ATS to saving lives, improving trauma care, and injury prevention.

Seat Belts and Body Mass

Many studies¹ show that body mass is correlated with a higher risk of injury or death for drivers and occupants in motor vehicle crashes. Some of this risk may be due to Newton's Second Law which provides Force = Mass x Acceleration. In other words a larger body rapidly decelerating will be subjected to a larger blunt force trauma. Also some surveys² reveal that large people often find standard seat belts to be uncomfortable or not big enough to fit around their body and so they don't use them.

Seat belt extenders which can be purchased at many stores, vehicle parts departments, and online may be a solution to the non-use problem. They range in price from about \$8.00 - \$20.00. These devices usually consist of a buckle and a "tongue" portion that you plug into your existing seat belt system, and come in various lengths. They can be ordered to match your specific vehicle type, or "universal" extenders are also available. Some on-line sources offer a webbed or metal bracket "extension" that gets bolted to your vehicle and attached to your belt. DO NOT disassemble your seat belt system yourself to use this. Larry Branche, an executive at Fitzgerald Auto Mall and a Child Passenger Safety Instructor says, "You should never adjust your own seat belt bolts, as some have wires and igniters that could easily be damaged, causing your car's safety features to fail. Talk with your vehicle's service department about the best way to extend your seat belt." Note that none of the seat belt extenders have been specifically tested by the National Highway Traffic Safety Administration (NHTSA), the agency that regulates seat belts and sets performance standards. However, Russ Rader, a spokesperson for the Insurance Institute for Highway Safety says, "Seatbelt extenders are a good option for people who can't comfortably use regular seatbelts."

¹ Obesity (Silver Spring). 2007 Nov; 15(11): 2541-5."BMI and Seat Belt Use" by Schlundt, DG et al.

² 2002 Behavioral Risk Factor Surveillance System Survey

Move Over Law Includes Service Vehicles Effective October 1, 2018

Highway safety partners held a press event to bring awareness to a new addition to the Maryland Move Over Law. Effective October 1, the Move Over Law expands to add protection for drivers of service and utility trucks with one or more yellow/amber flashing light or signal devices. These new vehicles include vehicles of federal, state, and local agencies such as bucket trucks, dump and snow removal trucks, highway maintenance and service vehicles. Public service trucks such as BGE, PEPCO, telephone companies, and cable providers are also included. Slow moving farm vehicles, rural letter carriers, and waste and recycling trucks are now part of the law. The original Move Over Law became effective in 2010 with protection for vehicles with red lights including law enforcement, fire, EMS, and MDOT SHA CHART Emergency Response vehicles. In 2014, the law was expanded to include tow truck drivers. Anyone violating the Move Over Law is a misdemeanor that can result in a fine of \$110.00 and one point.



Laurel Mayor Craig Moe addresses the media and highway safety advocates during a press event to bring attention to the updates to the Maryland Move Over Law. Representatives from Maryland AAA, Maryland State Police, and the Maryland Department of Transportation delivered messages about the importance of this law.



As part of the awareness program regarding the Move Over Law, individuals from the Howard County Department of Fire and Rescue Services were filmed for a Public Service Announcement (PSA). Firefighter LaShay Taft (left) and Firefighter Brian Shipley (right) delivered Move Over messages to motorists for the program.

Maryland's EMS Star of Life Citizen Award Presented in Ocean City

On Friday, September 21, 2018, MIEMSS honored Valerie Kramer of Baja Amusements in Ocean City with the Maryland Star of Life Citizen Award for her actions in saving a life. MIEMSS annually presents Stars of Life Awards to honor EMS personnel, citizens, and EMS programs during a ceremony in May, however the award winner was unable to accept it at that time. The award was presented in a ceremony during the Peninsula Regional Medical Center's 2018 Annual Topics in Trauma Conference.

On the day this event occurred Baja Amusements in Ocean City would usually be closed for business during the winter months, but last winter Valerie Kramer was in the Baja Amusements office working when she heard a commotion outside. A car crash had just occurred in front of the amusement park, and she saw that the operator of the vehicle was slumped over the steering wheel. She grabbed an AED from her office and ran out to the vehicle. With the assistance of a Maryland Natural Resources police officer, they removed the patient from the vehicle, started CPR, and applied the AED. They provided CPR until the EMS units arrived and took over care. The victim survived from this incident, which was believed to be a medical cardiac arrest that caused the vehicle to crash. Valerie's selfless heroism gave this victim a chance at survival; which could have been fatal had she not reacted so quickly and thoughtfully.

Also attending the presentation of the award were representatives from the Ocean City Fire Department and most importantly the survivor, Mr. Jeff Connell.



Pictured during the presentation of the Maryland Citizen Award (left to right) are Ocean City Fire Department Assistant Chief Eric Peterson, survivor Jeff Connell, MIEMSS Acting Co-Executive Director and State EMS Medical Director Dr. Richard Alcorta, award winner Valerie Kramer, and Ocean City Fire Department Firefighter/Paramedic Kimberly Tull.

Stop the Bleed Training Program

A Stop the Bleed training program was presented by Trauma Quality Improvement Committee (TQIC) members on September 7, 2018 to the Maryland Association of Boards of Education State Board of Education (MABE) Security Directors Group in Annapolis. MABE made a request to the Maryland Trauma Centers through the TQIC to conduct a Stop the Bleed course for their Security Directors Group. TQIC members who provided the training included representatives from the Peninsula Regional Medical Center, R Adams Cowley Shock Trauma Center, Suburban Hospital-Johns Hopkins Medicine, University of Maryland Prince George's Hospital Center, and Maryland Center for School Safety. The group trained fourteen Security Directors and others during the program.



Representatives from the Maryland Trauma Quality Improvement Committee (TQIC) provide training to the Maryland Association of Boards of Education State Board of Education (MABE) Security Directors Group in Annapolis.

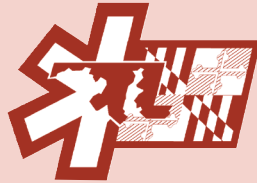


**JOIN OUR RESPONDERS
TUESDAY, NOVEMBER 13, 2018
M&T BANK STADIUM
10 am – 12 pm**

See demonstrations by law enforcement, fire department, and towing & recovery professionals.

See the American Towman “*Spirit Ride*”; a memorial and tribute to fallen responders.

MIEMSS, *Maryland EMS News*
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Governor Larry Hogan
Lt. Governor Boyd Rutherford

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