


Welcome to the EPIC eNewsletter!  
Keeping you up to date.

## Quarterly Highlights

- **EPIC Master Trainer Class:** There will be an EPIC Master Trainer Class on Monday September 17, 1300-1600, at the University of Arizona - Phoenix College of Medicine, 714 E. Van Buren Street, Phoenix AZ 85006. Come and see what's new and changing with TBI Care in Arizona, and become certified to help teach your agency personnel. Please RSVP to Dana Gayer at [danagayer@email.arizona.edu](mailto:danagayer@email.arizona.edu)
- EPIC Project Receives Important Donation from Ramsey Foundation:  **We are grateful to the Ramsey Foundation for the very generous donation of Pressure Controlled BVMs (PCBs) and Ventilation Rate Timers (VRTs) for the EMS agencies involved in the EPIC Project.** This life saving equipment is available **AT NO CHARGE** to **each** EMS vehicle, to **each** EPIC Certified agency, **while supplies last**. Please contact Bruce Barnhart at [bbarnhart@aemrc.arizona.edu](mailto:bbarnhart@aemrc.arizona.edu) if you have completed training 85% of your EMS Providers and are actively sharing TBI data with the EPIC Data Team.
- **New Training Materials:** A newly revised EPIC PowerPoint, v7.0 is available at [www.epic.arizona.edu/training](http://www.epic.arizona.edu/training). This includes a video produced by Phoenix Fire Department and a significant streamlining of material. The training is now easy to do in an hour. Please let us know when your training is scheduled for. We will bring resources to help you train effectively, including: manikins, pressure controlled bags, and ventilation rate timers. Contact Amy Boise at [aboise@email.arizona.edu](mailto:aboise@email.arizona.edu)
- **Show off your EPIC Agency Certification:** If your agency has attained EPIC Certification, an EPIC Certified Agency emblem is available for your agency. These are high quality, 7" Square, UV-protected decals designed to be applied to EMS vehicles. Additional decals are available for purchase. Please contact Bruce at [bbarnhart@aemrc.arizona.edu](mailto:bbarnhart@aemrc.arizona.edu) for details.



## Should TBI patients be intubated in the field?

This is a complicated and very important question to think about. Numerous studies have showed POORER outcomes in field-intubated TBI patients. The San Diego RSI Trial was terminated early by the safety board due to increased mortality with prehospital RSI. But several trials showed improved outcomes.

So, should TBI patients ever be intubated in the field? The answer is complicated.

If done well, intubation has the *potential* to:

- ◆ Protect the airway
- ◆ Provide good ventilation and oxygenation

Ironically...it also makes it *much easier* to:

- ◆ Over-ventilate
- ◆ Hyper-ventilate
- ◆ Decrease ETCO<sub>2</sub>
- ◆ Decrease cerebral perfusion
- ◆ Worsen outcome
- ◆ Add to scene time
- ◆ If you choose RSI, remember it often causes hypotension and hypoxia

So what should we do? Always think about the real risks AND the potential benefits for your patient.

**Scenario A:** Short transport time with a GCS of 9 (e-2, v-3, m-4):

Consider transport with BLS Airway on 100% O<sub>2</sub>, pulse ox and ETCO<sub>2</sub>, with constant monitoring of airway, BVM as necessary, and possible insertion of orogastric tube.

**Scenario B:** 20 minute transport with a GCS of 7 (e-2, v-2, m-3):

Consider endotracheal intubation (ETI) or supraglottic intubation (King Airway or LMA) with *meticulous* avoidance of hyperventilation or over-ventilation, titrating ETCO<sub>2</sub> to 40. Use of Ventilation Rate Timer, Pressure Controlled Bag, V-EMT and a spotter, or ideally, a ventilator is optimum treatment.

### **Take Home Message:**

*Hyperventilation is the most common EMS sin.* We ALL hyperventilate patients if we aren't constantly vigilant and refuse to allow it. ETI makes hyperventilation much easier and more likely. So...

If you decide to intubate, you are taking the responsibility of properly ventilating your patient. If you don't properly ventilate the patient, your ALS airway is actually a DOWNGRADE compared to a properly managed BLS airway.

Endotracheal or supraglottic airways should ALWAYS be accompanied by layers of monitoring to ensure safe ventilation. These tools should include: ETCO<sub>2</sub>, Ventilation Rate Timers, Pressure Controlled Bag, Pulse Oximetry, and most of all, vigilant EMS providers.

These are not easy cases, but *think about ALL of your options* before committing to any one of them.

## Training Update

The EPIC Education team, EPIC Master Trainers and other generous people across the state are actively training Arizona EMS Providers. We are well on our way to reaching 85% EPIC training of Arizona EMS Agencies.

42% of the Arizona TBI patient population is now being cared for by at least one EPIC Certified EMS Agency.

*Mesa Fire Department* is moving along well on training staff. Thanks to their efforts, we will have one of the largest Fire Departments in Arizona trained by the end of September.

*Drexel Heights Fire District* will also be certified by the end of September.

*AirEvac* is actively in training and coming closer to reaching EPIC Certification as well.

# KUDOS...

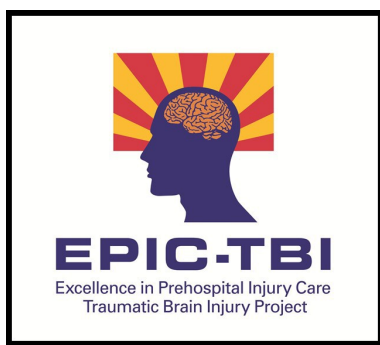
A huge **THANK YOU** goes out to:

**Jennifer Atchley RN**, Flight Nurse with LifeNet, who has been tireless in training people from Douglas to Payson and beyond. She has been amazing with her efforts. Thanks to LifeNet for supporting her work.

**Kathy Brown RN** and **Tracy Moroney RN** from John C. Lincoln who have been organizing training for MCSO and DPS, as well as in the Camp Verde/Cottonwood area.

**Sean Culliney CEP**, with Northwest Fire District, who stepped up and helped with Drexel Heights Fire District training when the EPIC trainer was called away on short notice for family business.

Thanks to all of your efforts and support of the EPIC project!!



## EPIC Certified Agencies

We encourage and support all agencies to become EPIC Certified. EPIC Certification involves: data submission on TBI victims based on Trauma Registry criteria and training 85% of your agency's EMS providers in EPIC care guidelines.

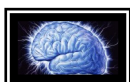
### Congratulations to the following EPIC Certified agencies:

- ◇ American Ambulance - CON 75
- ◇ Apache Junction Fire District
- ◇ Avondale Fire Department
- ◇ Avra Valley Fire District
- ◇ Flagstaff Fire Department
- ◇ Gilbert Fire Department
- ◇ Glendale Fire Department
- ◇ Goodyear Fire Department
- ◇ Highlands Fire District
- ◇ LifeNet - Southern Arizona
- ◇ Lifestar Ambulance CON 58
- ◇ Nogales Suburban Fire
- ◇ Northwest Fire District
- ◇ Peoria Fire Department
- ◇ PMT Ambulance CON 71
- ◇ Rio Rico Fire District
- ◇ Rural/Metro Corp. (Maricopa) CON 109
- ◇ Rural/Metro Corp. (Pima) CON 55
- ◇ Rural/Metro Corp. (Pinal) CON 87
- ◇ Rural/Metro Corp. (Yuma) CON 65
- ◇ Rural/Metro Fire Department Pima County
- ◇ Sierra Vista Fire Department
- ◇ Sonoita Elgin Fire District
- ◇ Southwest Ambulance (Maricopa) CON 86
- ◇ Southwest Ambulance and Rescue of Arizona CON 66
- ◇ Southwest Ambulance of Casa Grande, Inc. CON 85
- ◇ Southwest Ambulance of Safford CON 63
- ◇ Southwest Ambulance of Tucson, Inc. CON 54
- ◇ Sun City West Fire Department
- ◇ Tanque Verde Valley Fire District
- ◇ Tubac Fire District



\*\* If you feel your agency should be listed, please email us: [danagayer@email.arizona.edu](mailto:danagayer@email.arizona.edu) \*\*

**We are grateful to the EMS providers in Arizona who are working hard to save lives from Traumatic Brain Injury.**



### **BrainFact:**

⇒ Where do the most TBI cases happen in Phoenix?!?

288 TBI cases occurred in the Zip Code of 85009, in west central Phoenix between 2007 - 2011

Please see [www.epic.arizona.edu](http://www.epic.arizona.edu) for updates on the EPIC Project and all training and certification opportunities.