EPIC eNews

See Epic.arizona.edu for more details

Welcome to the EPIC eNewsletter!   Keeping you up to date

Quarterly Highlights

Upcoming Events

July 16	**EPIC Master Training Course**
	River Medical Training Facility
	Lake Havasu City, AZ
	1300-1700
	Jennifer.Richards@AMR.net
July 23	**EPIC Master Training Course**
	Kingman Regional Hospital
	Kingman, AZ
	0900-1300
	Jennifer.Richards@AMR.net

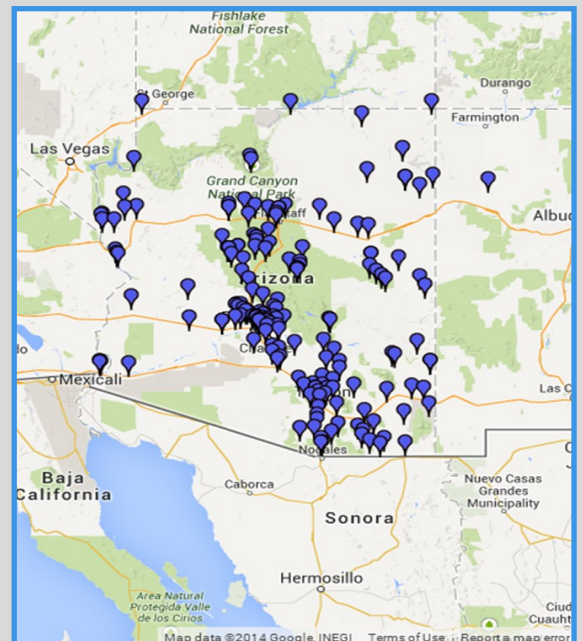See **website** for more details

Remember: No H-Bombs!

⇒ **H**ypoxia– put on high flow O$_2$ immediately

⇒ **H**ypotension-fluids if B/P low or falling

⇒ **H**yperventilation-ETCO$_2$ target 40 (range 35-45)

⇒ **H**ypoglycemia-Check BS

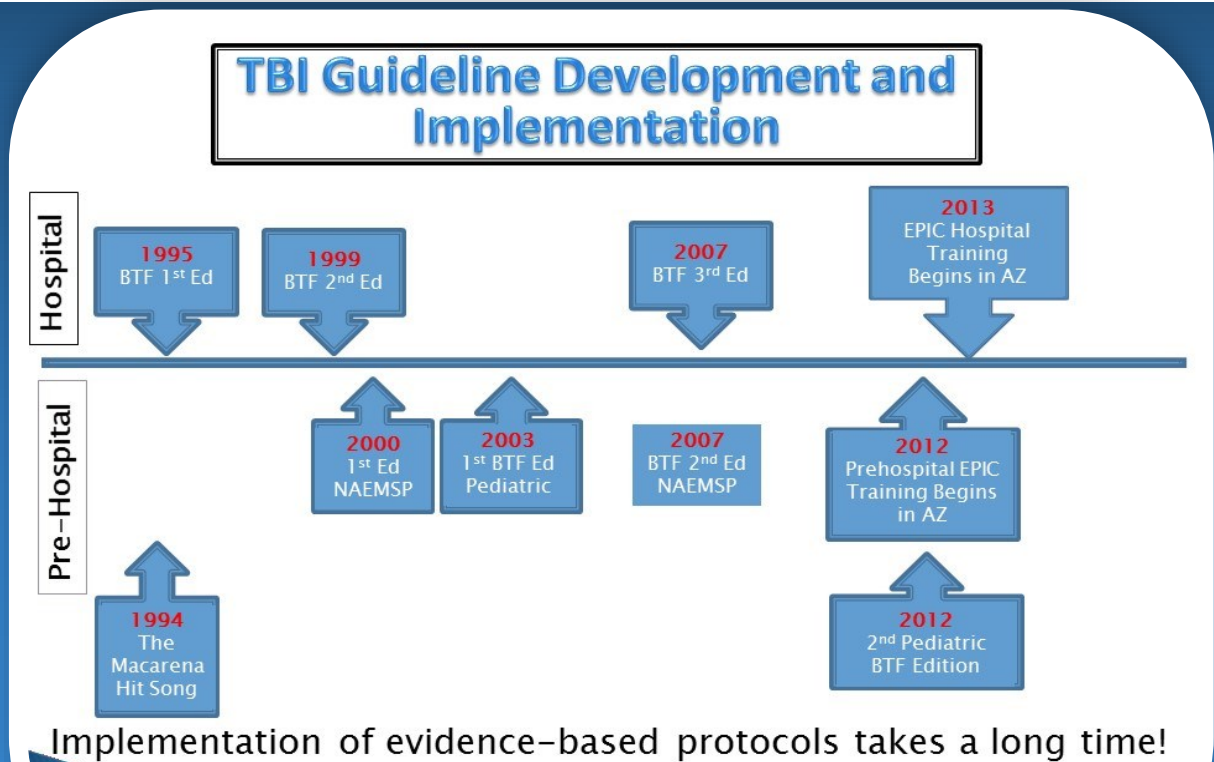⇒ Treat the injured brain well!

In this issue:

- *TBI Guidelines Review*
- *EMS Providers suffer TBI too !*
- *EPIC Progress*
- *Certification How to*

Agencies in Arizona

There are about 218 EMS agencies in Arizona. EPIC is making a last push to get ALL Arizona agencies certified before the interim analysis. See page 3 for certification process.

Map data ©2014 Google, INEGI   Terms of Use   Report a map error

TBI and the Macarena

TBI Guideline Development and Implementation

Hospital

| 1995 BTF 1st Ed | 1999 BTF 2nd Ed | 2007 BTF 3rd Ed | 2013 EPIC Hospital Training Begins in AZ |

Pre-Hospital

| 2000 1st Ed NAEMSP | 2003 1st BTF Ed Pediatric | 2007 BTF 2nd Ed NAEMSP | 2012 Prehospital EPIC Training Begins in AZ |

1994 The Macarena Hit Song

2012 2nd Pediatric BTF Edition

Implementation of evidence-based protocols takes a long time!

Remember the Macarena? The first TBI guidelines were published when everyone was dancing to the Macarena.
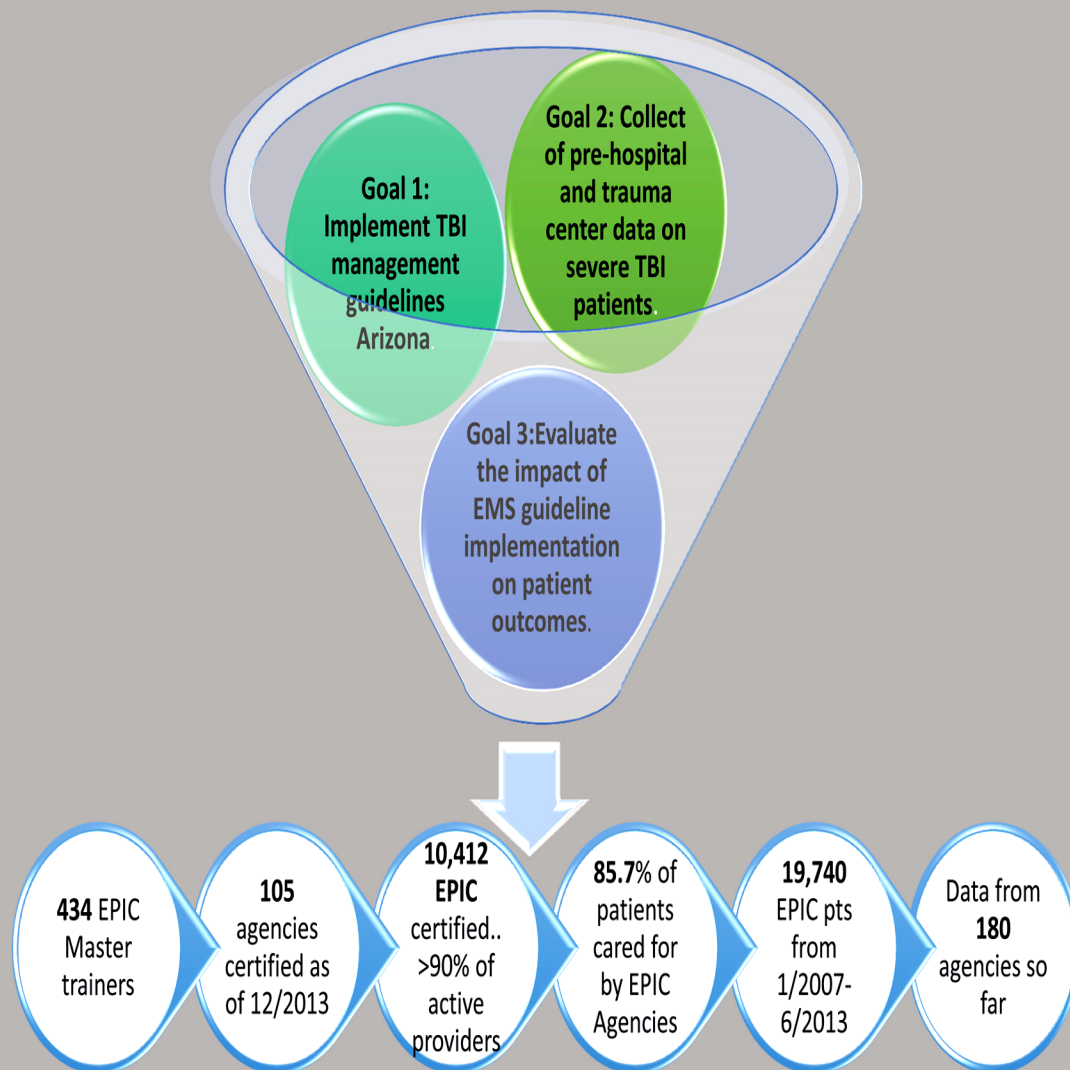
It has taken almost **20 years** to get these life-saving guidelines implemented in one state, and Arizona is the first!

TBI and Your Family

We know of AT LEAST 11 EMS providers, instructors, or their families whose lives have been changed forever by severe TBI or death from TBI. Six have occurred in the last year.

TBI affects our family as much as it does other families. Your care matters. Thank you.

Look at what is being accomplished being part of EPIC

Goal 1: Implement TBI management guidelines Arizona

Goal 2: Collect of pre-hospital and trauma center data on severe TBI patients.

Goal 3: Evaluate the impact of EMS guideline implementation on patient outcomes.

434 EPIC Master trainers

105 agencies certified as of 12/2013

10,412 EPIC certified.. >90% of active providers

85.7% of patients cared for by EPIC Agencies

19,740 EPIC pts from 1/2007-6/2013

Data from **180** agencies so far

EPIC-TBI CERTIFIED! EASY AS 1..2..3

If you have not been certified yet, these are the steps to do so!

For questions, please email **Octavio Perez** octaviopp8@email.arizona.edu

1) Have your agency participate in the education and training process,

2) Provide specific patient care records for data for collection and assessment-if any, and

3) Report of trauma-based Quality Improvement outcomes to your agency.

FREE DOWNLOAD!!!

Pocket TBI App: This app gives prehospital providers immediate access to the latest EPIC Program Traumatic Brain Injury treatment protocols for adults and children to help maximize survival and neurologic outcomes when caring for victims of moderate and severe TBI.
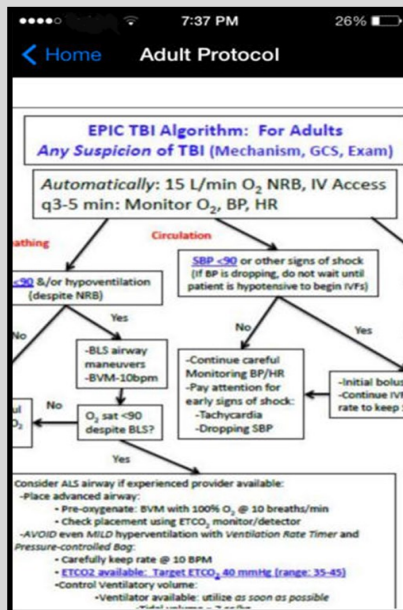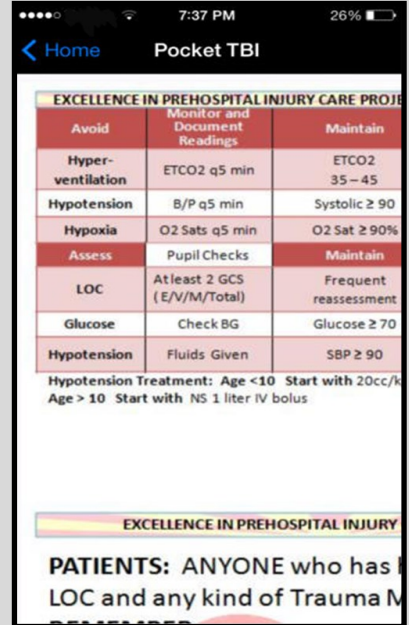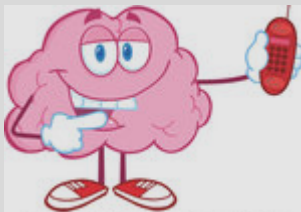
Where can I get it?

Read 3:32 PM

Google play Store, iPhone App Store, or http://ibuildapp.com/projects.php?action=info&projectid=731498

iMessage   Send

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< Home   Training

EPIC Training and Education

EPIC-TBI

Excellence in Prehospital Injury Care
Traumatic Brain Injury Project

Visit the EPIC site for Training and Education

FREE EPIC APP!

Now you can have TBI adult and children protocols at your convenience !!!

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< Home   Adult Protocol

EPIC TBI Algorithm: For Adults
Any Suspicion of TBI (Mechanism, GCS, Exam)

Automatically: 15 L/min O_2 NRB, IV Access q3-5 min: Monitor O_2, BP, HR

Circulation

SBP <90 or other signs of shock
(If BP is dropping, do not wait until patient is hypotensive to begin IVFs)

<90 &/or hypoventilation
(despite NRB)

Yes

No

-BLS airway maneuvers
-BVM-10bpm

O_2 sat <90 despite BLS?

No

Yes

-Continue careful Monitoring BP/HR
-Pay attention for early signs of shock:
-Tachycardia
-Dropping SBP

No

Yes

-Initial bolus
-Continue IVF rate to keep S

Consider ALS airway if experienced provider available:
-Place advanced airway:
  • Pre-oxygenate: BVM with 100% O_2 @ 10 breaths/min
  • Check placement using $ETCO_2$ monitor/detector
-AVOID even MILD hyperventilation with Ventilation Rate Timer and Pressure-controlled Bag:
  • Carefully keep rate @ 10 BPM
  • $ETCO_2$ available: Target $ETCO_2$ 40 mmHg (range: 35-45)
  -Control Ventilatory volume:
    -Ventilator available: utilize as soon as possible

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< Home   Pocket TBI

EXCELLENCE IN PREHOSPITAL INJURY CARE PROJ

	Avoid	Monitor and Document Readings	Maintain
	Hyper-ventilation	ETCO2 q5 min	ETCO2 35 − 45
	Hypotension	B/P q5 min	Systolic ≥ 90
	Hypoxia	O2 Sats q5 min	O2 Sat ≥ 90%
Assess	Pupil Checks		Maintain
	LOC	At least 2 GCS (E/V/M/Total)	Frequent reassessment
	Glucose	Check BG	Glucose ≥ 70
	Hypotension	Fluids Given	SBP ≥ 90

Hypotension Treatment: Age <10 Start with 20cc/k
Age > 10 Start with NS 1 liter IV bolus

EXCELLENCE IN PREHOSPITAL INJURY

PATIENTS: ANYONE who has
LOC and any kind of Trauma M

These are some screenshots from the Pocket TBI app.

EPIC Certified Agencies

A huge THANK YOU to the following agencies for their commitment to improving both the survival and neurological outcome of TBI patients in Arizona!!

Air Evac
American ComTrans
American Ambulance
Apache Junction Fire District
Arivaca Fire District
Arizona City Fire District
Avondale Fire Department
AvraValley Fire District
Black Canyon Fire District
Blue Ridge Fire Department
Bouse Volunteer Fire Department
Buckeye Fire Department
Buckeye Valley Fire District
Bullhead City Fire Department
Camp Navajo Fire Department
Camp Verde Fire District
Canyon State Ambulance Inc. (PMT)
Carefree FD (Rural Metro)
Casa Grande Fire Department
Chandler Fire Department
Christopher Kohl's Fire District
Clarkdale Fire Department
Cottonwood Fire Department
Daisy Mountain Fire Department
Department of Public Safety
El Mirage Fire Department
Eloy Fire Department
Flagstaff Fire Department
Fort McDowell Fire Department
Fountain Hills/Rural Metro FD
Gilbert Fire Department
Glendale Fire Department
Globe Fire Department
Golden Valley Fire District
Golder Ranch Fire District

Goodyear Fire Department
Green Valley Fire Department
Guardian Air Transport
Guardian Medical Transport
Highlands Fire District
Holbrook EMS
Huachuca City Fire Department
Jerome Fire Department
Joseph City Fire Department
Kayenta Fire Department
Kearny Fire & EMS
LifeLineAmbulance
LifeNet – Southern Arizona
LifestarAmbulance
Maricopa County Sheriff's Office
Maricopa Fire Department
Mayer Fire Department
Mesa Fire/Medical Department
Montezuma-Rimrock FD
Mount Lemmon Fire District
Native Air
Navajo Nation EMS
Nogales Fire Department
Nogales Suburban Fire
Northwest Fire District
Patagonia Fire & Rescue
Payson Fire Department
Peoria Fire Department
Phoenix Fire Department
Picture Rocks Fire Department
Pine-Strawberry Fire District
PMT Ambulance
Ponderosa Fire Department
Portal Fire and Rescue
Prescott Fire Department

Queen Creek Fire Department
Regional Fire and Rescue
Rincon Valley Fire Department
Rio Rico Fire District
Rio Verde Fire Department
River Medical Inc.
Rural/Metro Corporation
San Simon Fire Department
Scottsdale Fire Department
Sedona Fire Department
Sierra Vista Fire Department
Sonoita Elgin Fire Department
Southwest Ambulance
St. David Volunteer Fire Department
Summit Fire Department
Sun City Fire Department
Sun City West Fire Department
Sun Lakes Fire Department
Sunnyside Fire District
Sunsite-Pearce Fire Department
Surprise Fire Department
TanqueVerde Valley Fire District
Taylor Ambulence Service & EMS
Tempe Fire Department
Tombstone Volunteer FD
Tonopah Valley Fire Department
Tri-Valley Ambulance
Tubac Fire District
Tucson Fire Department
Tusayan Fire Department
Verde Valley Ambulance
Verde Valley Fire District
Wilderness Medics
Yuma Fire Department

If your agency is not listed, please email us: octaviopp8@email.arizona.edu

Thank you to the Ramsey Social Justice Foundation & Rural/Metro Corporation, for Supplying Arizona's EPIC-Certified Agencies with free Pressure/Flow-Controlled Bags