

## EMS for Children

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#### **EMS-C** Disclosure

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The mission of Emergency Medical Services for Children (EMSC) is to reduce child and youth mortality and morbidity resulting from severe illness or trauma.





#### EMS-C?

Emergency Medical Services for Children

From birth through age 18

26% of Maine's population – Approximately 335,000 age
 18 and under







### Early History

- 1979 Dr. Calvin C.J. Sia sought legislation through Sen.
   Daniel Inouye (HI) to improve pediatric care.
- 1984 Congress enacted legislation to use federal funds for EMS-C
  - Preventive Health Amendments of 1984 (PL 98-555)
- 1985 Grant process announced
- 1986 First grants awarded (AL, CA, NY, OR)
- 1987 Maine receives EMS-C grant
- 2010 Maine elects to not renew EMS-C grant

2017 – Maine applies and is awarded EMS-C grant



Dr. Calvin C.J. Sia









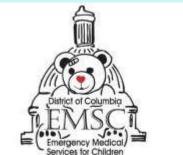
















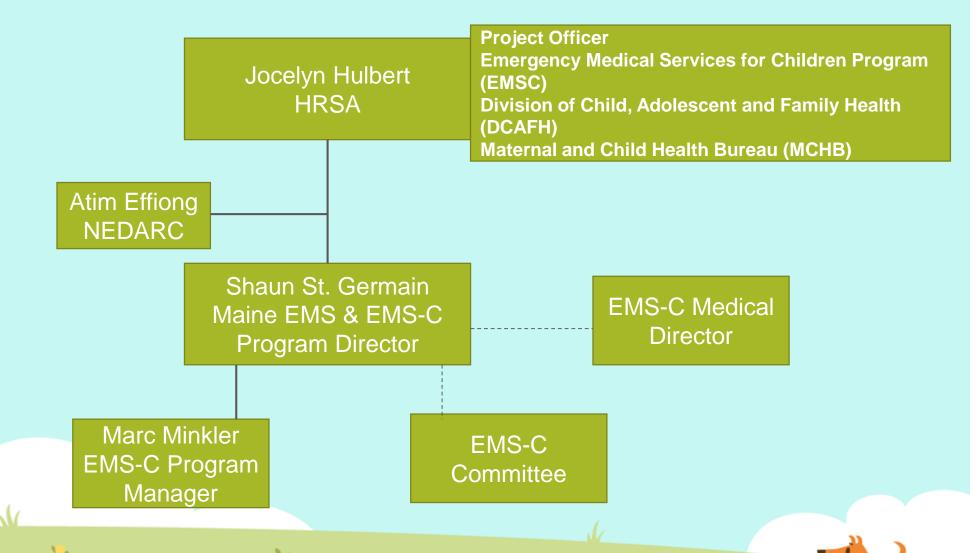








### Maine EMS-C Organizational Chart





- 11 Offices and 6 Bureaus
- \$1.3 billion budget
- 2,000 employees
- Award Grants
- Receive regular reports
- Sponsor webinars and technical advisory programs





### National EMSC Data Analysis Center

# Using Data to Improve Care for Children

- Provides technical assistance to EMSC grantees
- Located at the University of Utah School of Medicine
- Established in 1995 to
  - Assist in the collection of EMSC data
  - Help provide define and foster adoption of common EMS definitions
  - Enhance data collection analysis





### What does EMS-C do?

Hospital Systems **EMS**Systems

Integrate pediatric care across the emergency medical system.







## Overall Strategy

Improve Quality of Care & Outcomes for Children



Communicate Goals



Meet & Assist Goal Implementation



Review Performance





Report Performance to EMS, Hospitals & Public



The EMS-C program performance measures are a **set of standards** that were developed to measure **long-term progress** at both state and national levels of the EMS-C program in key areas of pediatric emergency care.





### State Resources

- Develop EMS-C Advisory Committee
- Integrate into state statutes
- Assist EMS & Hospital systems

### EMS Systems

- Submit NEMSIS data
- Pediatric
   Emergency Care
   Coordinator
- PediatricEquipmentCompetency

### Hospital Systems

- RecognizePediatric TraumaCapabilities
- Recognize
   Pediatric Medical
   Emergency
   Capabilities
- Assist with
   Pediatric Transfer
   Guidelines &
   Agreements

## State Resources

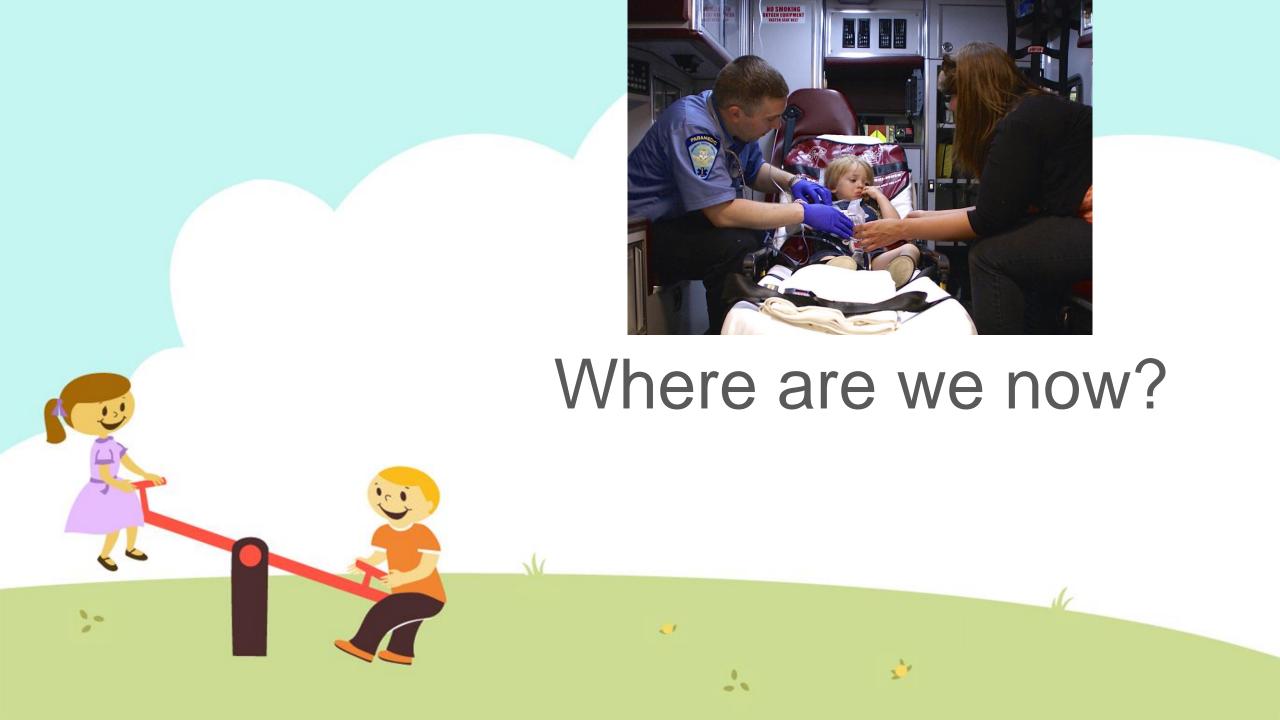
- Develop EMS-C Advisory Committee
  - Advise on pediatric protocols and care
  - Help with education and best practices
- Integrate into state statues
  - Make sure EMS-C is important through the future
- Assist EMS & Hospital systems
  - Transports and agreements, insight into EMS care

## EMS Systems

- Submit NEMSIS data
  - From EMS PCR
  - Data helps guide future care
- Pediatric Care Coordinator
  - One per service or can be shared between services
  - A resource for CEH and purchases
- Pediatric Equipment Competency
  - Personnel knowing how to use service specific pediatric equipment

## Hospital Systems

- Recognize Pediatric Trauma Capabilities
- Recognize Pediatric Medical Emergency Capabilities
  - What are individual hospital thresholds. We will not define them, but encourage hospitals to have a definition of them
- Assist with Pediatric Transfer Guidelines
   & Agreements
  - Once a pediatric patient reaches (or better, approaches) this threshold:
    - Have a plan as to moving the patient
    - Have agreements for facilities to receive these patients



## Maine Pediatric Data

July 1, 2017 - June 30, 2018





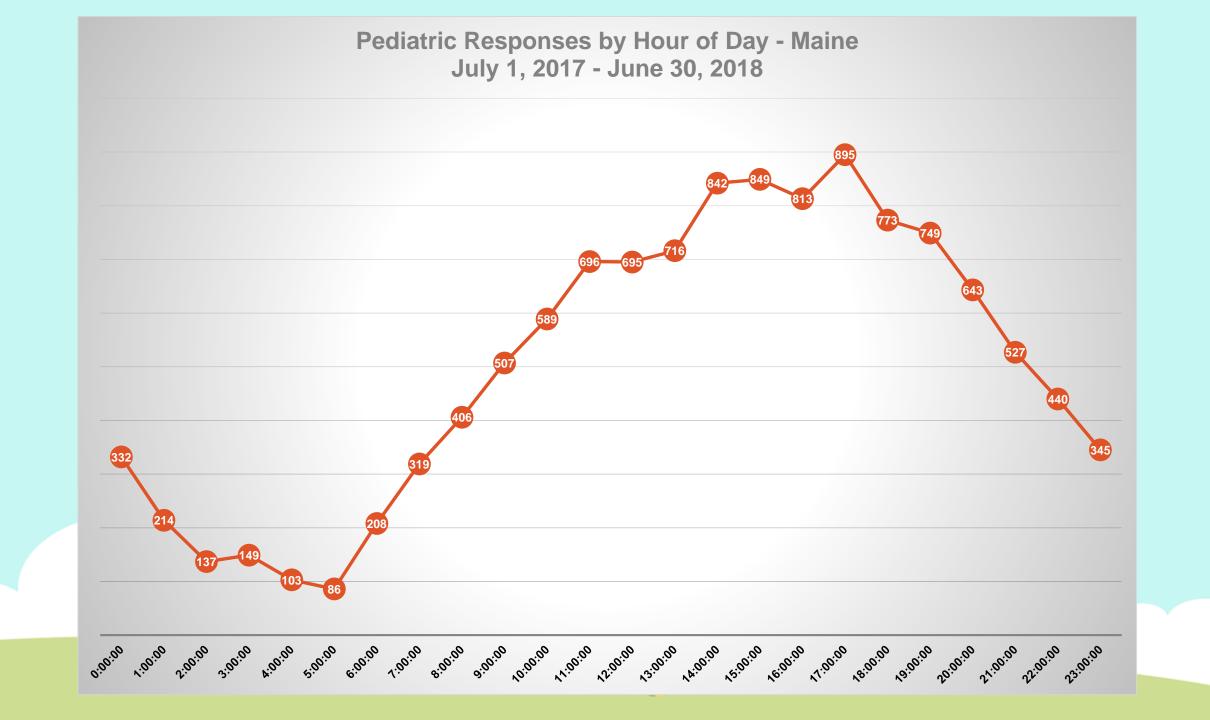


# 272 EMS Agencies in Maine evaluated 11,720 pediatric patients between July 1, 2017 and June 30, 2018

- Data does not include:
  - Lifeflight
  - Portland Fire Department/Medcu (started reporting 8/1/18)
  - United Ambulance (started 8/1/18)

Data for North East Mobile Health Services starts in March 2018.

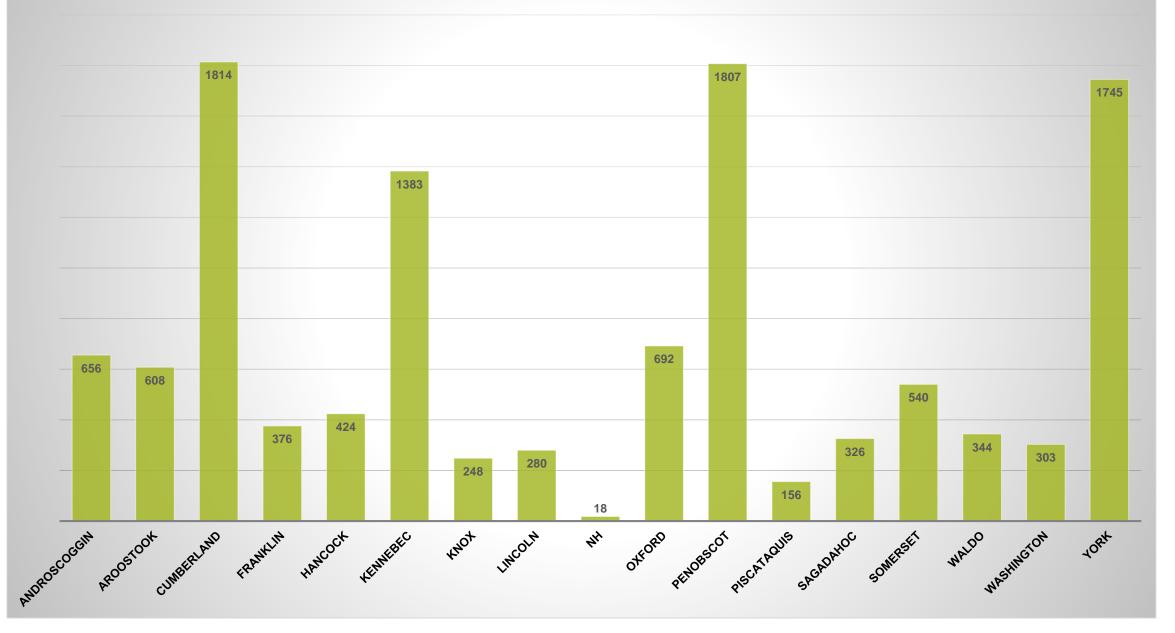


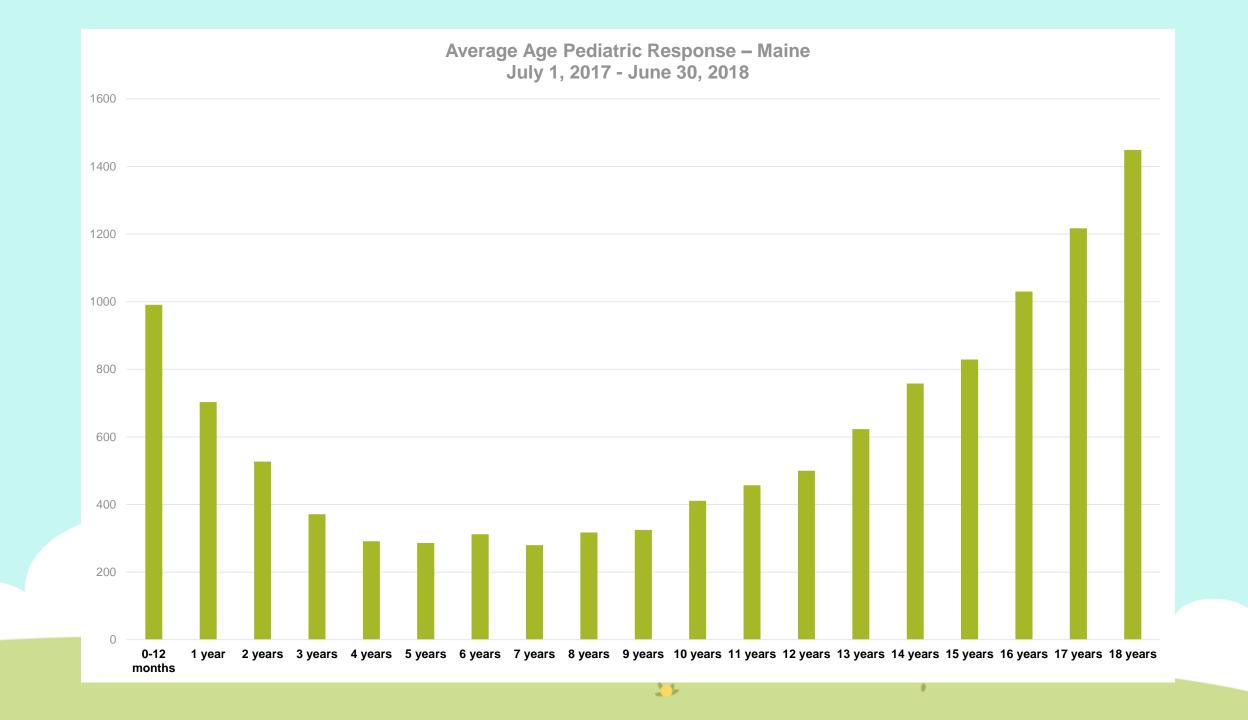


#### Pediatric Responses By Month - Maine July 1, 2017 - June 30, 2018

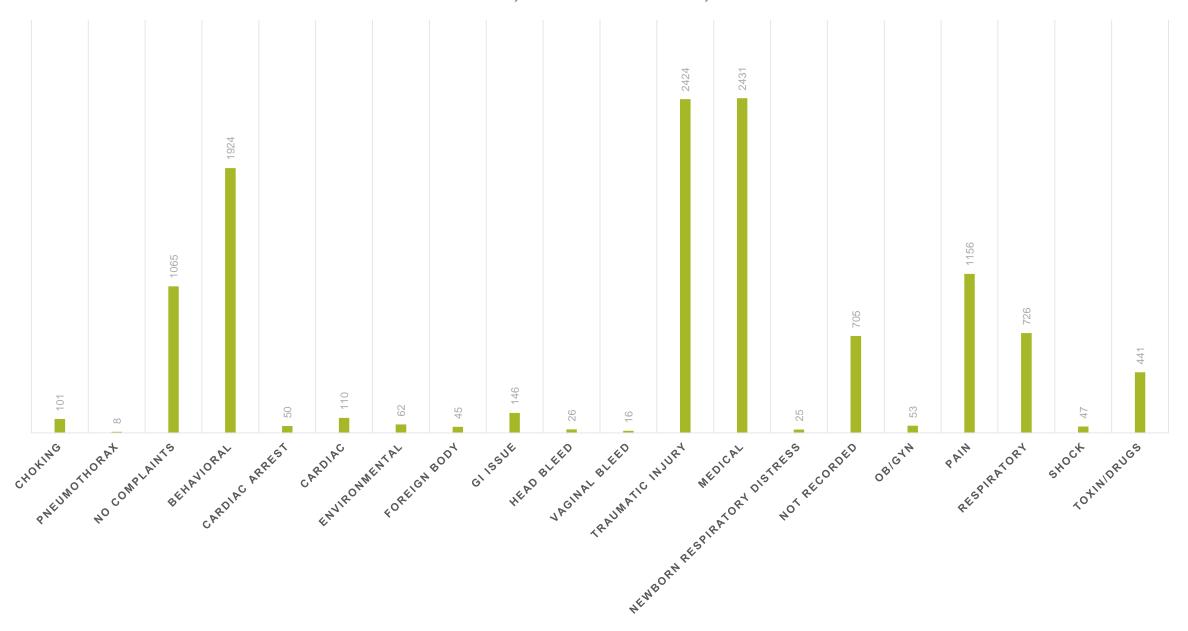




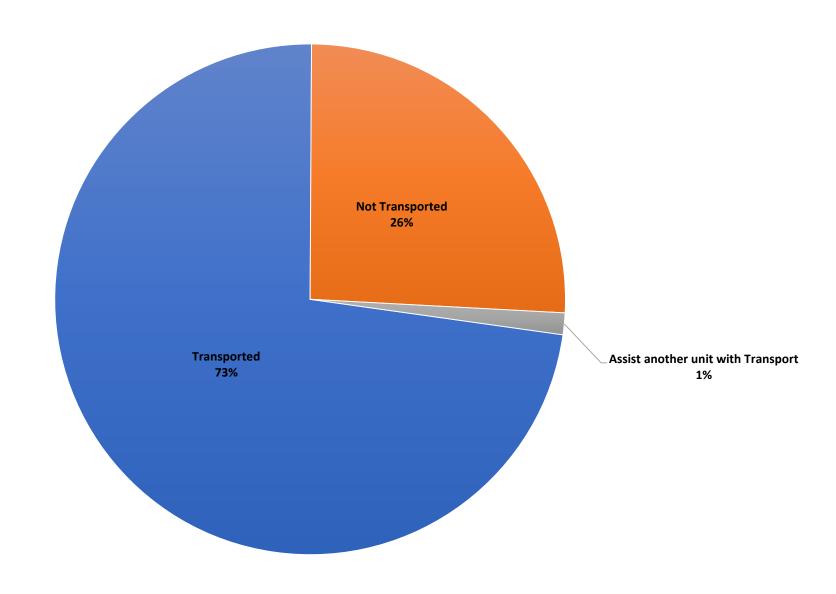




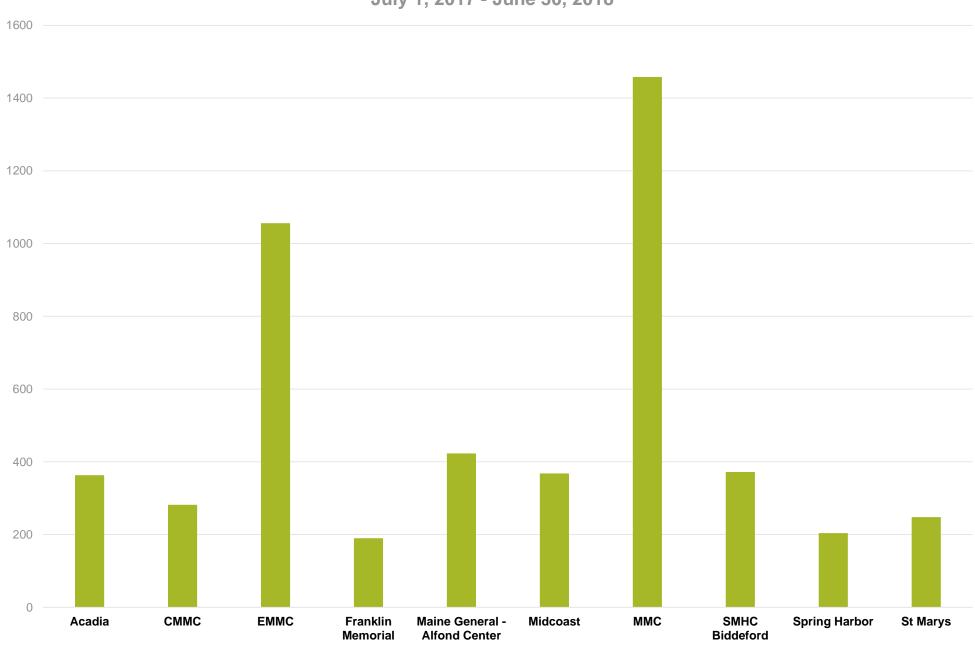
### PEDIATRIC COMPLAINTS - MAINE JULY 1, 2017 - JUNE 30,218



### Pediatric Response Results - Maine July 1, 2017 - June 30, 2018



Top Ten Pediatric Transport Destinations - Maine July 1, 2017 - June 30, 2018



### Where are we going?

Producing education from identified pediatric responses

Meeting with regional and state groups to better communicate

Legislation submitted for pediatric representation on State EMS Board

Collaboration with national partners





#### Pediatric Coma (Decreased Level of Consciousness)

#### NEVER ADMINISTER NALOXONE TO A NEONATE

#### EMT

- EMT

  1. Immobilize spine if indicated

  2. Manage airway as appropriate per Blue 5

  3. Request ALS if available

  4. If shock present, refer to Medical Shock protocol, Pink 14

  5. Perform finger stick to measure blood glucose, if so trained. If blood glucose is less than 60 mg/dL, refer to Pink 13

  6. If respirations less than 12 per minute AND narcotic overdose suspected, refer to Antidotes for Specific Toxins: Opiates protocol, Yellow 5

#### ADVANCED EMT/PARAMEDIC

- 7. IV en route
- 8. Cardiac monitor

Page 103











#### Pediatric Coma (Decreased Level of Consciousness)

#### NEVER ADMINISTER NALOXONE TO A NEONATE

#### EMT

1. Immobilize spine if indicated

- Manage airway as appropriate per Blue 5
   Request ALS if available

- If shock present, refer to Medical Shock protocol, Pink 14
   Perform finger stick to measure blood glucose, if so trained. If blood glucose is less than 60 mg/dL, refer to Pink 13
- 6. If respirations less than 12 per minute AND narcotic overdose suspected, refer to Antidotes for Specific Toxins: Opiates protocol, Yellow 5

#### ADVANCED EMT/PARAMEDIC

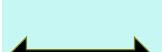
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- 7. IV en route
- Cardiac monitor

Α







#### Adult Coma (Decreased Level of Consciousness)

Assess for trauma, drugs, diabetes, breath odor, needle tracks, medical alert tags, suspected seizure. Refer to appropriate protocol for specific suspected conditions.

#### EMT

- 1. Immobilize spine if indicated
- Manage airway as appropriate per Blue 3 & Blue 5
   Request ALS if available

- If shock present, refer to Medical Shock protocol, Gold 12 & Pink 14
   Perform finger stick to measure blood glucose, if so trained. If blood glucose is less than 60 mg/dL, refer to Gold 6 & Pink 13
- If respirations less than 12 per minute AND narcotic overdose suspected, refer to Antidotes for Specific Toxins: Opiates protocol, Yellow 5 \*\*\*Never administer naloxone to a neonate\*\*\*

#### ADVANCED EMT/PARAMEDIC

- 7. IV en route
- 8. Cardiac monitor





### **Additional Opportunities**



- Dedicated Website
- School Emergency Guidelines
- Concussion Programs
- Water Safety Programs
- Child Safety Seat Programs
- Mannikin Loaners





### Years 2 and beyond

- Revise
- Revise
- Revise







### Summary / Reflection

Convince —"cause someone to believe firmly in the truth of something"

Latin convincere meaning "to overcome decisively"

#### versus

Educate – "to develop the faculties and powers of someone"

Latin ducere, meaning "to lead"





## Last thoughts

Maine EMS-C is here to help educate, improve and NOT dictate

For more information:

Visit: maine.gov/ems/

Email: marc.a.minkler@maine.gov

Call: 207-626-3867

