PEDIATRIC

SCENARIO GUIDEBOOK
April 4, 2018

Dear EMS Service Director and/or EMS Medical Director,

In the summer of 2017, all Emergency Medical Services (EMS) agencies in Kansas completed the National Emergency Medical Services for Children (EMSC) Data Analysis Resource Center (NEDARC) 2017-18 EMS Performance Measure Assessment. When assessed on EMSC performance measure EMSC03; use of pediatric-specific equipment and how often providers within your service are required to demonstrate skills in a skill station, simulated event and/or field encounter, data collected showed room for improvement. These results can be found at www.kdheks.gov/emsc under the EMS Survey tab. The Kansas EMSC program reached out to services across the state regarding pediatric education and training. Those comments determined the need for a resource to guide agencies and educators on pediatric call types.

Along with members from the EMSC EMS Committee and pediatric advocates throughout the state, the Kansas Pediatric Scenario Guidebook was developed. This resource will walk your providers through a scenario containing vital signs, pertinent patient and call information, graphics, considerations and links for additional educational opportunities surrounding that call type. The hope is that this guidebook will encourage additional trainings and educational opportunities on pediatrics throughout the year, while also increasing provider confidence when treating pediatric patients.

The Kansas EMSC program is interested in your comments on the guidebook and look forward to seeing an increase on pediatric training within your service. If you have any questions or need further guidance, please do not hesitate to contact the Kansas EMSC program!

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INDEX

MEDICAL ............................................................. Pages 5 – 27

  Accidental Overdose, 2-year-old ............................................. 6 – 7
  Seizure, Febrile, 15-month-old ................................................. 8 – 9
  Seizure, Epilepsy, 4-year-old .................................................. 10 – 11
  Diabetic, 15-year-old .............................................................. 12 – 13
  Abdominal Pain, 14-year-old ................................................... 14 – 15
  Cardiac, 3-year-old ................................................................. 16 – 17
  Sepsis, 2-year-old ................................................................. 18 – 19
  Sepsis, PICC Line Infection, 15-year-old ................................. 20 – 21
  Sudden Infant Death Syndrome (SIDS), 5-month-old .................. 22 – 23
  Code Blue, 3-year-old .............................................................. 24 – 25
  Code Blue, 11-year-old ............................................................ 26 – 27

RESPIRATORY ......................................................... Pages 29 – 39

  Asthma, 10-year-old ............................................................... 30 – 31
  Croup, 4-year-old ................................................................. 32 – 33
  Bronchitis, 9-year-old ........................................................... 34 – 35
  Epiglottitis, 6-year-old ............................................................ 36 – 37
  Tracheostomy, 2-year-old ....................................................... 38 – 39

TRAUMA ................................................................. Pages 41 – 60

  Child Abuse, 2-year-old ......................................................... 42 – 43
  Motor Vehicle Crash, 4-year-old ............................................. 44 – 45
  Near Drowning, 4-year-old .................................................... 46 – 47
  Burns, Smoke Inhalation, 16-year-old ..................................... 48 – 49
  Burns, Accidental Scalding, 3-year-old .................................... 50 – 51
  MV vs Pedestrian, 4-year-old .................................................. 52 – 53
  Abdominal Injuries, 10-year-old ............................................. 54 – 55
  Gun Shot Wound, 14-year-old ................................................ 56 – 57
  Hanging, Code Blue, 14-year-old ........................................... 58 – 59
  Kansas Trauma Center Locations ............................................ 60
INDEX, continued

COMMUNICATIONS ......................................................... Pages 61 – 68
  Language Barrier, 5-year-old ................................................ 62 – 63
  Kansas EMSC EMS Communication Cards .................................. 64 – 68

PEDIATRIC SAFE TRANSPORT ........................................ Pages 69 – 79
  NASEMSO Safe Transport of Children by EMS: Interim Guidance ........ 70 – 71
  Safe Transport, Uninjured/Not Ill ............................................. 72 – 73
  Safe Transport, Ill/Injured but Requiring No Intensive Interventions/Monitoring . 74 – 75
  Safe Transport, Ill/Injured Requiring Intensive Interventions/Monitoring ........ 76 – 77
  Safe Transport, Requiring Spinal Immobilization or Supine Transport ............. 78
  Safe Transport, Multiple Patients .............................................. 79

ACKNOWLEDGEMENTS .................................................... Page 81

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MEDICAL SCENARIOS
## ACCIDENTAL OVERDOSE

### Goals/Objectives:
- Scene safety
- Assess and secure airway
- Recognition and treatment for unresponsive state
- Recognition of transport necessity

### Dispatch Information:
A call was received from a frantic adult stating that her 2-year-old granddaughter was unresponsive on the bedroom floor. Patient is breathing, but not currently alert.

### Chief Complaint:
Unresponsive

### Additional Resources Requested:
Police and Fire Departments, ALS

### Scene Description:
- Arrive at address and notice an older gentleman waving at you from the porch
- Home is clean, tidy and no animals are noted to be present. You are escorted to a basement bedroom
- The patient is lying on the carpeted floor with an older woman at her side. Woman identifies self as patient’s grandma
- Patient was reportedly napping

### Initial Impression:
Patient is dressed appropriately for time of year. You notice a pill bottle under the bed.

### Vital Sign – Set 1
- AVPU: Unresponsive
- B/P: 80/palpation
- HR: 70, regular
- Resp: 10, labored
- O₂ Sat: 90% (room air)
- Pain:
- GCS: 3 (1,1,1)
- BGL:

### Physical Exam
- **HEENT:**
  - Head: No trauma noted
  - Eyes: Sluggish and pinpoint
  - Ears: Unremarkable
  - Nose: Unremarkable
  - Oral Cavity: Lips noted to have white substance on them. Half of a white pill is noted in the patient’s mouth

- **Chest:**
  - Equal chest rise and fall noted
  - Clear equal in all lung fields

- **Back:**
  - No external trauma noted

- **Abdomen/Pelvis:**
  - Unremarkable

- **Extremity:**
  - No external trauma noted

- **Other:**
  - Skin: Cool, pale and dry
  - EKG: Sinus Rhythm

### Vital Sign – (prior to Naloxone) Set 1
- AVPU: Unresponsive
- B/P: 82/64
- HR: 78, regular
- Resp: 10, labored
- O₂ Sat: 94% (O₂ applied)
- Pain:
- GCS: 3 (1,1,1)
- BGL: 84 mg/dl

### Vital Sign – (after Naloxone) Set 1
- AVPU: Alert, Confused
- B/P: 100/60
- HR: 110, regular
- Resp: 18, nonlabored
- O₂ Sat: 98%
- Pain: 0
- GCS: 14 (4,4,6)
- BGL:

### Suggested Treatment:
- O₂, Suction if necessary, Monitor, IV/IO, Administration of Naloxone

### HPI:
Patient has been putting everything in their mouth lately

### S/S:
Unresponsive

### Allergies:
NKDA

### Medications:
Daily Vitamin

### PmHx:
RSV at 1 year of age

### Last Meal:
Pizza and chips for lunch

### Events Prior:
Napping in bedroom. Was checked on an hour previous and was asleep in the bed

### Current on Immunizations?
Yes

### Patient Weight:
12kgs

### Notes:
Grandmother advises that she was caring for a friend last week that had knee surgery. Her friend stayed in this room and was taking Lortab for post op pain relief

### Pill bottle found is for Lortab 7.5mL

### Transport Consideration:
Secure patient properly on cot
Transport in seated position secondary to possible vomiting
ACCIDENTAL OVERDOSE

Additional Things to Consider about the Scene:
- Possibly have grandma call friend and inquire about number of pills missing
- Family centered care

Additional Things to Consider during Treatment/Transport:
- If dealing with an unknown medication, contact the Poison Control Center
- When administering Naxolone, it is a slow push and titrated to desired effect
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility
- Contact patient’s legal guardian, if possible

Additional Educational Resources to Consider:
- Poison Control Center
  - https://www.poison.org
- Kansas Poison Control Center
  - https://www.kansashealthsystem.com/medical-services/poison-control

The University of Kansas Hospital Poison Control Center
University of Kansas Medical Center
3901 Rainbow Blvd., Room B-400
Kansas City, KS 66160
1-800-222-1222

Things to consider based on your EMS protocols, procedures and/or policies:

Naloxone Dose: ______________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

- 7 -
## SEIZURE: FEBRILE

### Goals/Objectives:
- Assess and secure airway
- Recognition of risk and/or presence of secondary trauma
- Recognition of transport necessity

### Dispatch Information:
Responding to a 15-month-old male having a seizure. Patient’s father called 911 after he brought child into his room when child would not settle down. Father stated that patient kept thrashing around and then realized he was having a seizure.

### Chief Complaint:
Seizure

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- December 21st at 0100
- Outside temperature is 25 degrees F with 1 inch of new snow on top of 2 inches of ice
- Patient’s father meets Fire and EMS in living room with child
- Home noted to be clean

### Initial Impression:
Patient is in pajamas being held by father. Patient is sleepy and whimpers when moved.

### Vital Sign – Set 1
AVPU: Alert
B/P: 80/50
HR: 124, regular
Resp: 30, non-labored
O₂ Sat: 94% (room air)

### Physical Exam
HEENT:
Head: Unremarkable
Eyes: Initially, Left – sluggish, Right - quick
Ears: Unremarkable
Nose: Unremarkable
Oral Cavity: Unremarkable
Patient able to clear and control own airway

Chest:
Equal chest rise and fall noted
Lung sounds clear
No external trauma noted

Back:
No trauma noted

Abdomen/Pelvis:
No guarding noted upon quadrant palpation
No trauma noted
Pelvis stable

Extremity:
No trauma noted to legs or arms
PMS x 4 (presumed, since child moves limb away when pain applied)

Other:
Skin: pale, warm
No step off’s or tenderness noted to neck

Pupils noted to be PERL 10 minutes into call

### Vital Sign – Set 2
AVPU: Alert
B/P: 96/52
HR: 138, regular
Resp: 28, non-labored
O₂ Sat: 98% (O₂ applied)

### HPI:
See events prior below

### S/S:
pale, GCS 11 initially; limp limbs, but will move to pain

### Allergies:
NKDA

### Medications:
None

### PmHx:
Ear infection three weeks ago

### Last Meal:
Dinner, 7hr ago

### Events Prior:
Patient’s mother is out of town, so father brought son into their room to sleep. Patient awoke his father when he was noted to be moaning

### Current on Immunizations?
Yes

### Patient Weight:
11kgs

### Notes:
- Body Temp: 99.4
- ECG: Sinus Tachycardia
- Father denies noting any recent fevers

### Suggested Treatment:
O₂, Monitor, Airway monitor/control

### Vital Sign – Set 3
AVPU: Alert
B/P: 90/70
HR: 120, regular
Resp: 24, non-labored
O₂ Sat: 98% (O₂ applied)

### Transport Consideration:
Securing patient properly on cot
Guardian ride along
SEIZURE: FEBRILE

Additional Things to Consider about the Scene:
- Will family allow you to view where the seizure activity took place
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Is or was patient taking any medications for his recent ear infection
- Is incontinence noted
- Was a cooling agent and/or activity done by family prior to your arrival
- Oral cavity can have trauma secondary to biting of the tongue
- Weigh the pros and cons of starting an IV on this patient
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Temperature Measurement in Pediatrics
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2819918/

Things to consider based on your EMS protocols, procedures and/or policies:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from medguidance*
## SEIZURE: EPILEPSY

### Goals/Objectives:
- Assess and secure airway
- Recognition of risk and/or presence of secondary trauma
- Recognition of transport necessity

### Dispatch Information:
Responding to a 4-year-old female having a seizure at school. Patient is a known epileptic, well-controlled on medication. Patient was playing with friends on the playground when the other children alerted the teacher she was having a seizure.

### Chief Complaint:
Seizure

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- Spring afternoon at local preschool/daycare, high of 88 degrees
- Two adults carried the patient inside and are currently with her
- You are waved to the door by the school’s main office

### Initial Impression:
Patient is in regular street clothes noted to lying in caregiver’s arms. Mouth is open, eyes rolled back in head and breathing is rapid and shallow. Patient is not currently seizing. All seizure activity ended about a minute ago.

<table>
<thead>
<tr>
<th>Vital Sign – Set 1</th>
<th>Physical Exam</th>
<th>HPI: See events prior below</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Painful</td>
<td>HEENT:</td>
<td>S/S: Initially; limp limbs,但 will respond to pain</td>
</tr>
<tr>
<td>B/P: 98/62</td>
<td>Head: Small “goose egg” spot to R temporal</td>
<td>Allergies: NKDA</td>
</tr>
<tr>
<td>HR: 144, regular</td>
<td>Eyes: Initially, Right pupil is dilated, non-reactive</td>
<td>Medications: Multivitamin, Keppra 120mg BID</td>
</tr>
<tr>
<td>Resp: 36, non-labored</td>
<td>Ears: Unremarkable</td>
<td>PmHx: Seizures, Concussion at 3yo</td>
</tr>
<tr>
<td>O₂ Sat: 90% (room air)</td>
<td>Nose: Unremarkable</td>
<td>Last Meal: Snack, 45min ago</td>
</tr>
<tr>
<td>Pain:</td>
<td>Oral Cavity: Unremarkable</td>
<td>Events Prior: Classmates said patient slipped on climbing structure and hit her head on the railing. Teacher witnessed the patient fall onto soft recycled tire material</td>
</tr>
<tr>
<td>GCS: 5 (1, 1, 3)</td>
<td>Patient able to clear and control own airway</td>
<td>Current on Immunizations? Yes</td>
</tr>
<tr>
<td>BGL:</td>
<td></td>
<td>Patient Weight: 17kgs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Sign – Set 2</th>
<th>Chest:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Verbal Inappropriate</td>
<td>Equal chest rise and fall noted</td>
<td>Body Temp: 97.1</td>
</tr>
<tr>
<td>B/P: 96/52</td>
<td>Lung sounds clear</td>
<td>ECG: Sinus Tachycardia</td>
</tr>
<tr>
<td>HR: 138, regular</td>
<td>No external trauma noted</td>
<td>Parents will meet at local hospital. Patient moans and whimpers with any intervention. Muscles are weak, and patient is easily restrained and compliant during treatment</td>
</tr>
<tr>
<td>Resp: 28, non-labored</td>
<td>Small red mark noted to patient’s mid-back</td>
<td>Transport Consideration: Securing patient properly on cot</td>
</tr>
<tr>
<td>O₂ Sat: 98% (O₂ applied)</td>
<td>on the right side</td>
<td></td>
</tr>
</tbody>
</table>
SEIZURE: EPILEPSY

Additional Things to Consider about the Scene:
- Have there been any changes to her medications
- How far was the fall from the playground equipment to the ground
- Did patient fall on her head or land on another body part
- How exactly was the patient carried into the school from the playground
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Have there been any changes to her medications
- When was her last lab work completed
- Is incontinence noted
- Oral cavity can have trauma secondary to biting of the tongue
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Epilepsy Foundation

Things to consider based on your EMS protocols, procedures and/or policies:

_Sedative____________________________________________________________

_Anticonvulsant______________________________________________________

____________________________________________________________________

*Graphic obtained from findmeacure.com
**DIABETIC: KETOACIDOSIS**

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess and secure airway</td>
</tr>
<tr>
<td>• Recognition of risk and/or presence of secondary illness</td>
</tr>
<tr>
<td>• Recognition of transport necessity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responding to a 15-year-old female patient complaining of nausea, vomiting and weakness while attending a summer school activity. Patient is a known diabetic and in the office of the school nurse. Patient’s blood glucose monitor is reading “high” on bedside glucometer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperglycemia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scene Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Summer July morning, 88 degrees F outside and rising. Bright sunshine, slight breeze</td>
</tr>
<tr>
<td>• You proceed/are shown to the school nurse office, where the patient is lying on her right side on an exam table</td>
</tr>
<tr>
<td>• Patient is moaning, but opens her eyes and looks at you when you approach</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial Impression:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient is wearing shorts and t-shirt lying on exam table of nurse’s office.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Sign – Set 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
</tr>
<tr>
<td>B/P: 108/68</td>
</tr>
<tr>
<td>HR: 112, regular</td>
</tr>
<tr>
<td>Resp: 24, nonlabored</td>
</tr>
<tr>
<td>O₂ Sat: 98% (room air)</td>
</tr>
<tr>
<td>Pain:</td>
</tr>
<tr>
<td>GCS: 15 (4, 5, 6)</td>
</tr>
<tr>
<td>BGL:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEENT:</strong></td>
</tr>
<tr>
<td>Head: Patient states she has a headache</td>
</tr>
<tr>
<td>Eyes: PEERL</td>
</tr>
<tr>
<td>Ears: Unremarkable</td>
</tr>
<tr>
<td>Nose: Unremarkable</td>
</tr>
<tr>
<td>Oral Cavity: Dry tongue, membranes</td>
</tr>
<tr>
<td>Patient able to clear and control own airway</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chest:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal chest rise and fall noted</td>
</tr>
<tr>
<td>Lung sounds clear</td>
</tr>
<tr>
<td>No external trauma noted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Back:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No trauma noted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abdomen/Pelvis:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarding noted upon quadrant palpation</td>
</tr>
<tr>
<td>Patient says her entire abdomen hurts</td>
</tr>
<tr>
<td>No trauma noted</td>
</tr>
<tr>
<td>Pelvis stable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extreme:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No trauma noted to legs or arms</td>
</tr>
<tr>
<td>PMS x 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin: Flush, Warm, Dry</td>
</tr>
<tr>
<td>Patient complains of blurred vision during transport</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HPI:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient was not feeling well this morning and skipped breakfast. Patient could not focus in class, left for the restroom and vomited. Patient then went to school nurse. Patient does not monitor her diet nor does regular blood testing, but does take her insulin as scheduled</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S/S:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feels weak, Headache</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allergies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxicillin, penicillin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medications:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin BID, Multivitamin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PmHx:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I Diabetes,</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Meal:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinner, last night</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Events Prior:</th>
</tr>
</thead>
<tbody>
<tr>
<td>See above</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current on Immunizations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Weight:</th>
</tr>
</thead>
<tbody>
<tr>
<td>65kgs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Temp: 100.3</td>
</tr>
<tr>
<td>ECG: Sinus Tachycardia</td>
</tr>
<tr>
<td>Patient realizes during assessment with appropriate questioning that she drank a lot of water yesterday and has been urinating more often the last two days</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport Consideration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securing patient properly on cot</td>
</tr>
</tbody>
</table>
**DIABETIC: KETOACIDOSIS**

**Additional Things to Consider about the Scene:**
- Know the range limitations for ‘lows’ and ‘highs’ on the monitor you are using
- Is the patient in air conditioning or outside temperatures throughout the day
- Family centered care

**Additional Things to Consider during Treatment/Transport:**
- Know the range limitations for ‘lows’ and ‘highs’ on the monitor you are using
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

**Additional Educational Resources to Consider:**
- American Diabetes Association
  - [www.diabetes.org](http://www.diabetes.org)
- American Academy of Pediatrics: Healthy Children
  - [www.healthychildren.org/English/health-issues/conditions/chronic/Pages/Diabetes.aspx](http://www.healthychildren.org/English/health-issues/conditions/chronic/Pages/Diabetes.aspx)

*Graphic obtained from Daily Health Post

**HYPOGLYCEMIA**
- Sleepiness
- Sweating
- Pallor
- Lack of coordination
- Irritability
- Hunger

**HYPERGLYCEMIA**
- Dry mouth
- Increased thirst
- Blurred vision
- Weakness
- Headache
- Frequent urination

**Things to consider based on your EMS protocols, procedures and/or policies:**

Range on service glucometers

*Graphic obtained from Daily Health Post*
# ABDOMINAL PAIN

## Goals/Objectives:
- Assess and secure airway
- Recognition of risk and/or presence of secondary illness or trauma
- Recognition of transport necessity

## Dispatch Information:
You are called to the local hotel where the caller states her 14-year-old daughter is experiencing abdominal discomfort. Caller states that have been in the car driving for the last 8 hours. When patient got out of the car, she stated she did not feel well and has not quit crying stating the pain is too much to bear.

## Chief Complaint:
Abdominal Pain

## Additional Resources Requested:
Police and Fire Department, ALS

## Scene Description:
- It is a hot July day with outside temperatures reaching 102 degrees F. Current time is 1930
- Patient is found laying in hotel bed in the fetal position, crying
- There is a small trash can to also be noted in the bed with that patient

## Initial Impression:
Patient is in obvious pain and refuses to sit up or move upon EMS arrival. Patient is crying but slows to respond appropriately to questioning.

## Vital Sign – Set 1
- AVPU: Alert
- B/P: 122/84
- HR: 116, regular
- Resp: 22, nonlabored
- O2 Sat: 98% (room air)
- Pain: 9
- GCS: 15 (4, 5, 6)
- BGL:

## Vital Sign – Set 2
- AVPU: Alert
- B/P: 126/90
- HR: 122, regular
- Resp: 22, nonlabored
- O2 Sat: 98% (room air)
- Pain: 9 (7 with medication)
- GCS: 15 (4, 5, 6)
- BGL: 84 mg/dl (if assessed)

## Vital Sign – Set 3
- AVPU: Alert
- B/P: 118/78
- HR: 112, regular
- Resp: 20, nonlabored
- O2 Sat: 98% (room air)
- Pain: 9 (6 with medication)
- GCS: 15 (4, 5, 6)
- BGL:

## Physical Exam
- **HEENT:**
  - Head: Unremarkable
  - Eyes: PERL
  - Ears: Unremarkable
  - Nose: Unremarkable
  - Oral Cavity: Unremarkable
- **Chest:**
  - Equal chest rise and fall noted
  - Lung sounds clear
  - No external trauma noted
- **Back:**
  - Has some radiating pain to lower back
- **Abdomen/Pelvis:**
  - Guarding noted upon palpation, radiating pain noted from right lower quadrant
  - No trauma noted
  - Pelvis stable
- **Extremity:**
  - No trauma noted to legs or arms
  - PMS x 4
- **Other:**
  - Skin: Pale, warm
  - No step off’s or tenderness noted to neck
  - Patient had a bowel movement about 1400

## Suggested Treatment:
- O₂, Monitor, IV, Fluids, Pain control

## HPI:
Patient states she wasn’t feeling well earlier, but thought she was just tired. About an hour ago she had a sudden onset of lower abdominal pain

## S/S:
- Nausea, Fever, Abdominal pain

## Allergies:
- NKDA

## Medications:
- Birth Control

## PmHx:
- None

## Last Meal:
- Refused lunch

## Events Prior:
- Patient has been asleep in the car most of the day

## Current on Immunizations?
- Yes

## Patient Weight:
- 49kgs

## Notes:
- Body Temp: 101.6 F
- ECG: Sinus Tachycardia
- Patient denies being sexually active
- Patient’s menstrual cycle is normal, and she is on day 17
- Patient states pain increases when walking

## Transport Consideration:
- Securing child properly on cot
ABDOMINAL PAIN

Additional Things to Consider about the Scene:
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Modesty of patient during exam
- Asking personal questions without guardian or others hearing answers
- Considerations: ectopic pregnancy, ovarian cyst, menstrual cramps, constipation, appendicitis
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Academy of Pediatrics: Healthy Children
  o www.healthychildren.org/English/health-issues/conditions/abdominal/Pages/default.aspx

Things to consider based on your EMS protocols, procedures and/or policies:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from researchgate.net
# Cardiovascular (CARDIAC)

## Goals/Objectives:
- Assess and secure airway
- Assessment of family history
- Recognition of possible cardiac complication
- Recognition of transport necessity

## Dispatch Information:
You are called to the home of a 3-year-old having trouble breathing. Caller states her daughter was outside running around and became very tired and now cannot catch her breath. This is the first nice day outside since they had a colder winter and the patient was excited to play outdoors. Patient also is telling mother her chest hurts.

## Chief Complaint:
Difficulty Breathing

## Additional Resources Requested:
Police and Fire Department, ALS

## Scene Description:
- Warm day in late March. First day above 50 degrees in months. The sun is shining, and it is around 1600
- Patient is found sitting on the back porch in her father’s lap. Patient is struggling to breath as you approach her
- Patient looks at you but does not move, smile or speak

## Initial Impression:
Patient is dressed in shorts and a t-shirt. Patient is visible scared and will not let go of her father.

## Vital Sign – Set 1
- **AVPU:** Alert
- **B/P:** 126/70
- **HR:** 132, regular
- **Resp:** 32, labored
- **O2 Sat:** 86% (room air)
- **Pain:**
- **GCS:** 15 (4, 5, 6)
- **BGL:**

## Physical Exam
- **HEENT:**
  - Head: Bobbing while trying to catch breath
  - Eyes: PERL
  - Ears: Unremarkable
  - Nose: Nasal flaring noted
  - Oral Cavity: Dry, pursed lips, cyanosis noted
  - Patient is trying hard to control her breathing
- **Chest:**
  - Equal chest rise and fall noted, shallow
  - Lung sounds diminished in all lobes
  - No external trauma noted
  - Patient states her chest is ‘tight’
- **Back:**
  - Unremarkable
- **Abdomen/Pelvis:**
  - No guarding noted upon quadrant palpation
  - No trauma noted
  - Pelvis stable
- **Extremity:**
  - No trauma noted to legs or arms
  - PMS x 4
- **Other:**
  - Skin: Pale, Cool, Moist
  - No step off’s or tenderness noted to neck

## Vital Sign – Set 2
- **AVPU:** Alert
- **B/P:** 122/80
- **HR:** 126, regular
- **Resp:** 28, labored
- **O2 Sat:** 84% (room air) 94% O₂
- **Pain:** 4
- **GCS:** 15 (4, 5, 6)
- **BGL:** 92 mg/dl

Patient begins to calm down with oxygen administration

## Vital Sign – Set 3
- **AVPU:** Alert
- **B/P:** 118/76
- **HR:** 118, regular
- **Resp:** 24, slightly labored
- **O2 Sat:** 95% (O₂)
- **Pain:** 3
- **GCS:** 15 (4, 5, 6)
- **BGL:**

Patient releases from her dad and feels better sitting straight up. She can speak in 4-5-word sentences with oxygen administration

## HPI:
Patient has not been ill but after her 3-year-old check-up, the pediatrician thought it necessary to involve a cardiologist to evaluate a persistent heart murmur and anxiety

## S/S:
Cyanosis, Difficulty breathing, Dizziness, Chest pain

## Allergies:
NKDA

## Medications:
Aspirin, Ativan

## PmHx:
Currently being evaluated for cardiac condition, anxiety

## Last Meal:
Lunch at 1130

## Events Prior:
Playing outside

## Current on Immunizations?
Yes

## Patient Weight:
12kgs

## Notes:
Body Temp:

## ECG:
Mother states that last week they say a specialist at the Children’s Hospital to discuss possible cardiac conditions

Patient has these episodes and gets very anxious

## Suggested Treatment:
O₂, Monitor, Airway Management

## Transport Consideration:
Securing child properly on cot
CARDIAC

Additional Things to Consider about the Scene:
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Contacting specialty hospital/physician for treatment guidelines
- Any documentation from the physician about current condition
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Academy of Pediatrics: Healthy Children
  - www.healthychildren.org/English/health-issues/conditions/heart/Pages/default.aspx
- American Heart Association: Cardiovascular Conditions of Childhood
  - www.heart.org/HEARTORG/Conditions/More/CardiovascularConditionsofChildhood/Cardiovascular-Conditions-of-Childhood_UCM_314135_SubHomePage.jsp

Things to consider based on your EMS protocols, procedures and/or policies:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

*Graphics obtained from opentextbc.ca
## SEPSIS

### Goals/Objectives:
- Assess and secure airway
- Recognition of risk for sepsis secondary to recent infection
- Recognition of transport necessity

### Dispatch Information:
You are called to a home where the caller is stating his 2-year-old daughter is lethargic and not acting like normal. Patient came home from daycare yesterday and went straight to bed without dinner. His wife had to wake the child this morning after she did not come downstairs for breakfast.

### Chief Complaint:
Lethargic

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- It is a cool fall Saturday morning at 0900
- Patient is found in her mother’s lap on the couch. Patient does not move or look up as you enter the home
- Home is tidy and both parents are present. Mother hands you a prescription antibiotic bottle that is empty
- Patient was being treated for a urinary tract infection secondary to bubble baths and potty training

### Initial Impression:
Patient is wearing pajamas and does not follow movement of individuals.

### Vital Sign – Set 1
- AVPU: Alert
- B/P: 80/60
- HR: 110, regular
- Resp: 28, labored
- O2 Sat: 96% (room air)
- Pain: Constantly moaning
- GCS: 15 (3, 4, 5)
- BGL:

### Vital Sign – Set 2
- AVPU: Alert
- B/P: 84/58
- HR: 116, regular
- Resp: 30, labored
- O2 Sat: 97% (O2) 94% (room air)
- Pain: Screams when touched
- GCS: 15 (4, 5, 6)
- BGL: 70 mg/dl

### Vital Sign – Set 3
- AVPU: Alert
- B/P: 76/52
- HR: 114, regular
- Resp: 28, labored
- O2 Sat: 97% (O2) 94% (room air)
- Pain:
- GCS: 15 (4, 5, 6)
- BGL:

### Suggested Treatment:
O2, Monitor, IV, Fluids

### Physical Exam
**HEENT:**
- Head: Unremarkable
- Eyes: PERL, keeps eyes closed during exam
- Ears: Unremarkable
- Nose: Unremarkable
- Oral Cavity: Dry
- Patient able to clear and control own airway

**Chest:**
- Equal chest rise and fall noted, shallow
- Lung sounds clear
- No external trauma noted

**Back:**
- Unremarkable

**Abdomen/Pelvis:**
- Guarding in all quadrants upon palpation
- No trauma noted
- Pelvis stable

**Extremity:**
- No trauma noted to legs or arms
- PMS x 4

**Other:**
- Skin: Pale and clammy
- No step off’s or tenderness noted to neck
- Patient has had a decrease in urinating and no bowel movement for 2 days

**Notes:**
- Body Temp: 103.5 F
- ECG: Sinus Tachycardia

Mother states that physician advised no more bubble baths and that patient would need help while cleaning after using the restroom

### Transport Consideration:
Securing child properly on cot
Guardian riding
SEPSIS

Additional Things to Consider about the Scene:
- Family centered care

Additional Things to Consider during Treatment/Transport:
- What other infections or illnesses has the patient experienced recently
- What over-the-counter medication(s) have been used, if any
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Academy of Pediatrics: Healthy Children
  - [www.healthychildren.org/English/health-issues/conditions/infections/Pages/Sepsis-in-Infants-Children.aspx](http://www.healthychildren.org/English/health-issues/conditions/infections/Pages/Sepsis-in-Infants-Children.aspx)
- The Rory Staunton Foundation: For Sepsis Prevention
  - [rorystauntonfoundationforsepsis.org/](http://rorystauntonfoundationforsepsis.org/)

Things to consider based on your EMS protocols, procedures and/or policies:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from The Rory Staunton Foundation*
# SEPSIS: PICC LINE INFECTION

### Goals/Objectives:
- Recognition of risk and/or presence of sepsis
- Recognition of sepsis treatment/pediatric fluid resuscitation guidelines
- Recognition of transport necessity

### Dispatch Information:
You are responding to a 15-year-old female who is unresponsive at home. Patient has been sick for a few days per mother, and suddenly became unresponsive after being confused for the last hour.

### Chief Complaint:
Unresponsive

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- Fall evening, 64 degrees F outside. No rain/storms around, slight chill to the air. Pleasant
- Female shows you inside and to a bedroom. Two other children are being ushered from the room by another adult
- Patient’s mother is holding her and rocking her slowly while crying and patting her face gently
- Slight grimace of patient’s face noted with patting.

### Initial Impression:
Patient is in pajamas and limp in mother’s arms.

### Vital Sign – Set 1
<table>
<thead>
<tr>
<th>AVPU</th>
<th>Painful</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>78/40</td>
</tr>
<tr>
<td>HR</td>
<td>134, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>30, shallow</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>91% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>8 (2, 2, 4)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

### Physical Exam
**HEENT:**
- Head: Unremarkable
- Eyes: PEERL, will resist light shone in eyes with weak movement of head/neck
- Ears: Unremarkable
- Nose: Unremarkable
- Oral Cavity: Note to be slightly pale, moist

**Chest:**
- Equal chest rise and fall noted, shallow
- Lung sounds clear in uppers, diminished in lowers
- No external trauma noted

**Back:**
- Unremarkable

**Abdomen/Pelvis:**
- No guarding noted upon quadrant palpation
- No trauma noted
- Pelvis stable

**Extremity:**
- PMS x 4 (presumed, since child moves limb away when pain applied)
- Left arm noted to look red around site of PICC Line; if colored bandage moved, will see crusty yellow at site of entrance to body. Mother states it is ‘not as long as normal’

**Other:**
- Skin: Pale, Hot, Flushed

### HPI:
Patient is four days post-chemo and has been ill. Patient has been awake some of the day but returned to be after becoming tired and confused. Mother came to get her dinner and found her unresponsive.

### S/S:
Pale, Flaccid, No movement

### Allergies:
NKDA

### Medications:
Chemo medications, Steroids, Probiotics, Multivitamins

### PmHx:
Leukemia for last two years

### Last Meal:
Lunch, 7hr ago

### Current on Immunizations?
No

### Patient Weight:
45 kgs

### Notes:
- Body Temp: 104.5
- ECG: Sinus Tachycardia

Patient will open eyes to sound once fluids are started and 250-400mL of fluids are given. (20cc/kg bolus)

Nearest children’s hospital is where the patient is treated for her cancer

### Transport Consideration:
Securing patient properly on cot
Guardian riding along

---

**Suggested Treatment:**
- O₂, Monitor, Fluids, Airway monitor/control
SEPSIS: PICC LINE INFECTION

Additional Things to Consider about the Scene:
- Cleaning solutions or maintenance schedule for the PICC line
- Additional health care needs or equipment to take during transport
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Review the patient care plan from patient’s specialist on treatment modalities
- Directly contact the patient’s specialist for best desired treatment
- Alternative route for medication/fluid administration
- Stabilize PICC line, however do not use, reinsert or pull completely out
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility; specialty hospital in resources allow

Additional Educational Resources to Consider:

Pediatric PICC Line Sites

Things to consider based on your EMS protocols, procedures and/or policies:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from slideshare.net
SUDDEN INFANT DEATH SYNDROME

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Scene preservation</td>
<td></td>
</tr>
<tr>
<td>• Acknowledgement of situation</td>
<td></td>
</tr>
<tr>
<td>• Communication with guardians - verbiage</td>
<td></td>
</tr>
<tr>
<td>You are dispatched to a home for an unresponsive infant. Caller states her 5-month-old daughter had been put to sleep in her own crib and was found unresponsive. Mother is hysterical on the phone and unable to follow dispatch instructions for CPR. Mother does state the infant is cold to the touch.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unresponsive Infant</td>
<td></td>
</tr>
<tr>
<td>Police and Fire Department, ALS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scene Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It is a cool fall morning around 0600</td>
</tr>
<tr>
<td>• You arrive on scene and PD advises the scene is safe for you to enter</td>
</tr>
<tr>
<td>• Patient is found in a crib on her back next to the mother’s bed. There are no blankets or additional items in the crib</td>
</tr>
<tr>
<td>• Patient is wearing a onesie</td>
</tr>
</tbody>
</table>

**Initial Impression:** Patient is cold to the touch with rigor mortis present in jaw and upper extremities. Code black.

### Vital Sign – Set 1
**AVPU:** Unresponsive  
**B/P:**  
**HR:** 0  
**Resp:** 0  
**O₂ Sat:**  
**Pain:**  
**GCS:** 3 (1,1,1)  
**BGL:**

### Physical Exam

**HEENT:**  
Head: Unremarkable  
Eyes: Constricted and pinpoint  
Ears: Unremarkable  
Nose: Unremarkable  
Oral Cavity: Cyanosis noted to lips and jaw is stick, rigor present  

**Chest:**  
Absent lung sounds upon auscultation in all lobes  
No external trauma noted  

**Back:**  
Mottling noted  

**Abdomen/Pelvis:**  
No trauma noted  
Pelvis stable  

**Extremity:**  
No trauma noted to legs or arms  
Upper extremities noted to have rigor  

**Other:**  
Skin: Pale and cold to the touch

### Vital Sign – Set 2
**AVPU:**  
**B/P:**  
**HR:**  
**Resp:**  
**O₂ Sat:**  
**Pain:**  
**GCS:**  
**BGL:**

### Vital Sign – Set 3
**AVPU:**  
**B/P:**  
**HR:**  
**Resp:**  
**O₂ Sat:**  
**Pain:**  
**GCS:**  
**BGL:**

### Suggested Treatment:
Supportive care for family

### HPI:
Patient is breastfeeding and has no complications with intake or output. Normal diapers yesterday and no illnesses to report

### S/S:
**Allergies:** None  
**Medications:** None  
**PmHx:** Full term birth with no complications during pregnancy  
**Last Meal:** Patient ate before bed around 2200 the night before  
**Events Prior:**  
**Current on Immunizations?** Yes  
**Patient Weight:** 7.3kg  

### Notes:
PD remains present as EMS unzips onesie to assess patient  
EMS triages code black within 8 minutes of arriving on scene  
PD accepts responsibility for patient  

### Transport Consideration:
SUDDEN INFANT DEATH SYNDROME

Additional Things to Consider about the Scene:
- Assessing where the patient is found and/or sleeping area is important for documentation
- Noting guardians’ reaction and documentation of their account of event
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Preservation of scene as this is a death investigation until the coroner states otherwise
- If needed, notify medical control early
- Availability and contact with either service chaplain and/or faith-based leader for family
- Working with PD on who will give the death notification to family
- Being aware of verbiage to use and respectful acts towards family during notification
- Anticipate anger and/or other reactions from family
- Stay calm. Family will ask hard questions and you may not have the answers they want to hear

Additional Educational Resources to Consider:
- Kansas Infant Death and SIDS Network
  - www.kidsks.org
- Kansas State Child Death Review Board – Sudden Unexplained Infant Death Investigation Form

Things to consider based on your EMS protocols, procedures and/or policies:

Is there a local Safe Sleep Instructor in your area? __________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

*Graphic obtained from kokomoperspective.com
# CODE BLUE

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess and secure airway</td>
<td>You are called to a local restaurant when the caller states a 3-year-old male is having difficulty breathing and speaking. Patient was eating dinner with his family when everyone started screaming and one male starting patting patient on the back. Patient is coughing now, but unable to speak.</td>
</tr>
<tr>
<td>• Recognition of obstruction</td>
<td></td>
</tr>
<tr>
<td>• Recognition of respiratory distress and/or failure</td>
<td></td>
</tr>
<tr>
<td>• Recognition of transport necessity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty Breathing; Possible Choking</td>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

**Scene Description:**
- A spring day in April. 72 degrees F outside. Around 1800. You had a 3-minute response time as you were down the road
- You arrive to the restaurant and are escorted back to a room decorated in birthday balloons and presents
- Adults are moving other children and point you to a corner when a child and man are standing

**Initial Impression:** Patient is standing with male behind him. Patient’s face is red, and he looks at you momentarily and then back to the floor. Patient is noted to be wearing an “I am 3” t-shirt. Patient stops coughing as you approach him.

<table>
<thead>
<tr>
<th>Vital Sign – Set 1 (Distress)</th>
<th>Physical Exam</th>
<th>HPI: Patient was eating some pizza and started coughing</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>HEENT:</td>
<td>S/S: Tachypnea, Stridor, Retractions, Inability to cough</td>
</tr>
<tr>
<td>B/P: Unable to obtain</td>
<td>Head: Bobbing with each breath</td>
<td>Allergies: NKDA</td>
</tr>
<tr>
<td>HR: 100, weak</td>
<td>Eyes: PERL</td>
<td>Medications: Multivitamin</td>
</tr>
<tr>
<td>Resp: 32, labored</td>
<td>Ears: Unremarkable</td>
<td>PmHx: None</td>
</tr>
<tr>
<td>O₂ Sat: 88% (room air)</td>
<td>Nose: Nasal flaring noted</td>
<td>Last Meal: Currently eating</td>
</tr>
<tr>
<td>Pain:</td>
<td>Oral Cavity: Small object seen in back of throat</td>
<td>Events Prior: Kept running around while eating</td>
</tr>
<tr>
<td>GCS: 12 (4, 2, 6)</td>
<td>Lips are noted to have cyanosis present</td>
<td>Current on Immunizations? Yes</td>
</tr>
<tr>
<td>BGL:</td>
<td>Chest:</td>
<td>Patient Weight: 14kgs</td>
</tr>
<tr>
<td></td>
<td>Poor chest rise and fall noted, almost absent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inspiratory stridor noted, retractions present</td>
<td>Notes:</td>
</tr>
<tr>
<td></td>
<td>No external trauma noted</td>
<td>Body Temp:</td>
</tr>
<tr>
<td></td>
<td>Back:</td>
<td>ECG: Sinus Tachycardia to Bradycardia</td>
</tr>
<tr>
<td></td>
<td>Unremarkable</td>
<td>Patient triage code blue. CPR is started</td>
</tr>
<tr>
<td></td>
<td>Abdomen/Pelvis:</td>
<td>You have pediatric Magill forceps available</td>
</tr>
<tr>
<td></td>
<td>No guarding noted upon quadrant palpation</td>
<td>Transport Consideration:</td>
</tr>
<tr>
<td></td>
<td>No trauma noted</td>
<td>Securing patient properly on cot</td>
</tr>
<tr>
<td></td>
<td>Pelvis stable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extremity:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No trauma noted to legs or arms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PMS x 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin: Pale, Warm, Moist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No step off’s or tenderness noted to neck</td>
<td></td>
</tr>
</tbody>
</table>

**Vital Sign – Set 2 (Failure)**
- AVPU: Unresponsive
- B/P: Unable to obtain
- HR: 80, weak
- Resp: 42, labored, shallow
- O₂ Sat: Unable to obtain
- Pain:
- GCS: 3 (1, 1, 1)
- BGL: 94 mg/dl

**Vital Sign – Set 3 (Code Blue)**
- AVPU: Unresponsive
- B/P: Unable to obtain
- HR: 50, weak
- Resp: 0
- O₂ Sat: Unable to obtain
- Pain:
- GCS: 3 (1, 1, 1)
- BGL:

**Suggested Treatment:**
- O₂, Monitor, Airway Management, IV, Medications

<table>
<thead>
<tr>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Temp:</td>
</tr>
<tr>
<td>ECG: Sinus Tachycardia to Bradycardia</td>
</tr>
<tr>
<td>Patient triage code blue. CPR is started</td>
</tr>
<tr>
<td>You have pediatric Magill forceps available</td>
</tr>
</tbody>
</table>

**Transport Consideration:**
- Securing patient properly on cot
Additional Things to Consider about the Scene:
- Additional crew members for CPR
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Modesty of the patient when performing CPR
- 3 most common causes of upper airway obstruction; infection, airway swelling and foreign body airway obstruction
- Management of FBAO; Evaluate, Identify, Intervene
- Do not perform a blind finger sweep. This can lodge an object further into the trachea
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Pediatric Advanced Life Support (PALS)
  - https://acls-algorithms.com/pediatric-advanced-life-support/

Conscious
<1 year: Give 5 back slaps then 5 chest thrusts
>1 year: Abdominal thrusts

Unconscious
Start CPR

Universal Sign of Choking

*Graphic 1 obtained from Healthwise *Graphic 2 obtained from goodtoknow *Graphic 3 obtained from Potomac Pediatrics
**CODE BLUE**

### Goals/Objectives:
- Assess and secure airway
- Recognition of additional resources early in call
- Use of resources/tools
- Recognition of transport necessity

### Dispatch Information:
You are dispatched to the local elementary school. The caller advised that there was a basketball tournament being played and an 11-year-old player collapsed while running down the court. The caller advises that another person has been sent to get the AED. Caller relays dispatch CPR instructions to other bystanders treating the patient.

### Chief Complaint:
Unresponsive, CPR in progress

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- It is a Saturday in early November. It is 42 degrees F outside and cloudy
- You are escorted by other bystanders to the hallway opposite the gymnasium door you entered
- You see an off-duty firefighter/EMT doing compressions. An AED is attached and counting down to the next shock

### Initial Impression:
Patient is lying supine on the ground with his chest exposed and AED patches correctly placed.

#### Vital Sign – Set 1
- AVPU: Unresponsive
- B/P: Unable to obtain
- HR: 0
- Resp: 0
- O₂ Sat: Unable to obtain
- Pain: GCS: 3 (1, 1, 1)
- BGL: 

#### Physical Exam
- **HEENT:**
  - Head: Unremarkable
  - Eyes: Sluggish, left nonreactive
  - Ears: Unremarkable
  - Nose: Unremarkable
  - Oral Cavity: Dry
- **Chest:**
  - Equal chest rise and fall noted with BVM
  - No external trauma noted
- **Back:** Unremarkable
- **Abdomen/Pelvis:**
  - No trauma noted
  - Pelvis stable
- **Extremity:**
  - No trauma noted to legs or arms
  - All extremities are flaccid
- **Other:**
  - Skin: Pale, Cool, Dry
  - No step off’s noted to neck

After airway is secured, lung sounds are noted to be present and equal in all lobes. Chest rise is adequate with ventilations

#### HPI:
Patient was playing basketball and showed no signs of distress or fatigue. Coach states that patient has not been sick recently

#### S/S:
Unresponsive, apneic, pulseless

#### Allergies:
Unknown

#### Medications:
Unknown

#### PmHx:
Unknown

#### Last Meal:
Snack before the game

#### Events Prior:
Patient played the first quarter and the 5 minutes of the second quarter. Patient collapsed without warning while running

#### Current on Immunizations?
Unknown

#### Patient Weight:
40kgs

#### Notes:
- Body Temp: 98.0 F
- ECG: Asystole
- CPR is being properly performed
- Coach attempting to contact patient’s legal guardian. Aunt and uncle on scene

#### Transport Consideration:
Securing child properly on cot
CODE BLUE

Additional Things to Consider about the Scene:
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Exact down time, use of an AED, bystander effective CPR
- Modesty of patient and respect for family and bystanders when performing CPR
- Most common causes of Sudden Cardiac Arrest in children are structural cardiac abnormalities
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Academy of Pediatrics: Healthy Children
  - www.healthychildren.org/English/health-issues/conditions/heart/Pages/default.aspx
  - www.healthychildren.org/English/news/Pages/Understanding-Pediatric-Sudden-Cardiac-Arrest.aspx

Things to consider based on your EMS protocols, procedures and/or policies:

Are there known community AED locations

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

*Graphic obtained from defibshop.co.uk
RESPIRATORY SCENARIOS
# ASTHMA

## Goals/Objectives:
- Assess and secure airway
- Treatment of asthma, primary and secondary levels of treatment
- Recognition of transport necessity

## Dispatch Information:
You are responding to a 10-year-old female with difficulty breathing. Caller states that two breathing treatments have been given with no improvement. Caller says this was a sudden onset and the patient does have a history of asthma.

## Chief Complaint:
Difficulty Breathing

## Additional Resources Requested:
Police and Fire Department, ALS

## Scene Description:
- The patient is sitting on front porch with adults and a few other children of same age around
- It is an August evening with ambient temperature noted to be 82 degrees Fahrenheit. Dusty and dry outside

## Initial Impression:
Patient is sitting with arms tight to her body pushing against concrete step. Patient is leaning forward at the hips. Mouth is open, skin on face noted to be pale and damp with sweat. Patient looks up at you as you approach.

## Vital Sign – Set 1

**AVPU:** Alert  
**B/P:** 110/52  
**HR:** 134, regular  
**Resp:** 48, labored  
**O₂ Sat:** 88% (room air)  
**Pain:** 0  
**GSC:** 15  
**BGL:** (see below if requested)

## Physical Exam

### HEENT:
Head: No trauma noted  
Eyes: PERL  
Ears: Unremarkable  
Nose: Unremarkable  
Oral Cavity: Dry, pale  
Patient able to clear and control own airway

### Chest:
Equal chest rise and fall noted  
Audible wheezing upper lung fields  
Minimal air movement in lower fields  
Shallow breathing with retractions and accessory muscle usage noted

### Back:
No external trauma noted

### Abdomen/Pelvis:
All quadrants soft and non-tender  
Pelvis stable

### Extremity:
No trauma noted to legs or arms  
PMS x 4

### Other:
Skin: warm, pale, and damp

## Vital Sign – Set 2

**AVPU:** Alert  
**B/P:** 99/62  
**HR:** 128, regular  
**Resp:** 44, labored  
**O₂ Sat:** 94% (Neb/O₂ applied); 86% (no Neb/O₂ applied)  
**Pain:** 0  
**GSC:** 15  
**BGL:** 87 mg/dl

## Vital Sign – Set 3

**AVPU:** Alert  
**B/P:** 98/70  
**HR:** 130, regular  
**Resp:** 40, labored  
**O₂ Sat:** 98% (O₂/Neb applied); 80% (no Neb/O₂ applied)  
**Pain:** 0  
**GSC:** 15  
**BGL:**

## Suggested Treatment:
Nebulizer, O₂, Steroids, Magnesium, Monitor

## HPI:
Trouble breathing for last 20 min

## S/S:
Pale, tripoding, tachypneic

## Allergies:
NKDA

## Medications:
Multivitamin, Albuterol inhaler; daily, rescue inhaler; PRN

## PmHx:
Asthma

## Last Meal:
Dinner, approx. 1hr ago

## Events Prior:
Patient forgot to take inhaler dose this morning. Patient was playing with her siblings when she started gasping for air

## Current on Immunizations?
Yes

## Patient Weight:
35kgs

## Notes:
Body Temp: 98.6 F  
EKG: Sinus Tachycardia, no ectopy  
If no oxygen applied, SpO₂ does not improve  
If no nebulizer or steroids are given, patient continues to worsen during transport to hospital

## Transport Consideration:
Securing patient properly on cot  
Parent or guardian ride along
**ASTHMA**

**Additional Things to Consider about the Scene:**
- Is the Albuterol at home in date
- What kind of system does the patient use for treatments
- Family centered care

**Additional Things to Consider during Treatment/Transport:**
- Remove patient from any irritants present
- Any recent illnesses or new foods
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

**Additional Educational Resources to Consider:**
- American Academy of Pediatrics: Healthy Children
  - [https://www.healthychildren.org/English/health-issues/conditions/allergies-asthma/Pages/Asthma-Fables-and-Facts.aspx](https://www.healthychildren.org/English/health-issues/conditions/allergies-asthma/Pages/Asthma-Fables-and-Facts.aspx)
- Easy Auscultation: Lung Sounds Training Sessions
  - [https://www.easyauscultation.com/lung-sounds](https://www.easyauscultation.com/lung-sounds)

**Things to consider based on your EMS protocols, procedures and/or policies:**

_Bronchodialtor_

_Steroid_

*Graphic obtained from simplybiology.com*
# Croup

## Goals/Objectives:
- Assess and secure airway
- Recognition of importance for position of comfort
- Recognition of transport necessity

## Dispatch Information:
You are called to an apartment complex for a 4-year-old female having trouble breathing. Patient was asleep and woke her mother up saying she was coughing. Patient also has a fever and mother does not have any medication to give her at home.

## Chief Complaint:
Difficulty Breathing

## Additional Resources Requested:
Police and Fire Department, ALS

## Scene Description:
- It is January, 18 degrees F outside and 0230
- A young child is seen waving you down in the middle of the roadway and directs you to the apartment
- You enter the apartment to find a female holding a child on the bathroom floor. The shower is running

## Initial Impression:
Patient is in apparent distress and only looks at you for a second as you enter the room. The child is limp and wearing a pullup and t-shirt. Patient is noted to have a deep bark-like cough with no mucous production.

## Vital Sign – Set 1
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Alert</td>
</tr>
<tr>
<td>B/P</td>
<td>110/60</td>
</tr>
<tr>
<td>HR</td>
<td>130, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>18, labored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>92% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>15 (4, 5, 6)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

## Vital Sign – Set 2
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Alert</td>
</tr>
<tr>
<td>B/P</td>
<td>116/70</td>
</tr>
<tr>
<td>HR</td>
<td>128, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>16, labored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>96% (O₂), 92% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td>2</td>
</tr>
<tr>
<td>GCS</td>
<td>15 (4, 5, 6)</td>
</tr>
<tr>
<td>BGL</td>
<td>72 mg/dl (if obtained)</td>
</tr>
</tbody>
</table>

## Vital Sign – Set 3
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Alert</td>
</tr>
<tr>
<td>B/P</td>
<td>116/66</td>
</tr>
<tr>
<td>HR</td>
<td>132, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>18, labored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>96% (O₂), 90% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td>2</td>
</tr>
<tr>
<td>GCS</td>
<td>15 (4, 5, 6)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

## Physical Exam

### HEENT:
- Head: Unremarkable
- Eyes: PERL
- Ears: Unremarkable
- Nose: Nasal flaring noted
- Oral Cavity: Lips are dry and cracked

### Chest:
- Equal chest rise and fall noted, shallow inspiratory stridor and slight retractions noted
- No external trauma noted

### Back:
Unremarkable

### Abdomen/Pelvis:
- No guarding noted upon quadrant palpation
- No trauma noted
- Pelvis stable

### Extremity:
- No trauma noted to legs or arms
- PMS x 4

### Other:
- Skin: Pink, Hot, Dry
- No step off’s or tenderness noted to neck

## HPI:
Sudden onset of coughing

## S/S:
Labored breathing, Hoarse and deep cough, fever

## Allergies:
NKDA

## Medications:
Multivitamin

## PmHx:
None

## Last Meal:
Dinner at 1830

## Events Prior:
Patient was sleeping in her room. She has had a cold for the last several days

## Current on Immunizations?
No

## Patient Weight:
21kgs

## Notes:
- Body Temp: 101.4 F
- ECG: Sinus Tachycardia

As you take the child outside, you note a relaxation and decreased coughing

Patient can speak in 3 to 4-word sentences

## Transport Consideration:
Securing patient properly on cot
Position of comfort

## Suggested Treatment:
- O₂, Monitor, Airway management, Positioning
CROUP

Additional Things to Consider about the Scene:
- Are any other family members sick
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Keeping the patient calm is imperative as the airway is already compromised
- Is the child scheduled to see a pediatrician for an immunization update
- When transporting, do not have the heater on full blast nor pointed directly on patient
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Academy of Pediatrics: Healthy Children
  - https://www.healthychildren.org/English/health-issues/conditions/chest-lungs/Pages/Croup-Treatment.aspx
- Easy Auscultation: Lung Sounds Training Sessions
  - https://www.easyauscultation.com/lung-sounds

Things to consider based on your EMS protocols, procedures and/or policies:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from news-medical.net*
## BRONCHITIS

### Goals/Objectives:
- Assess and secure airway
- Recognition of importance for position of comfort
- Recognition of transport necessity

### Dispatch Information:
You are dispatched to the local elementary school. The school nurse states she has a 9-year-old male having trouble breathing and keeps coughing. Patient has had a cold for the last 2-3 days and today is his first day back. School nurse advises they are unable to reach the patient’s parents.

### Chief Complaint:
Shortness of Breath, Increased fatigue

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- Early December, mid-morning around 1030
- School security personnel escort you to the school nurse’s office
- Patient is noted to be on the exam table, nurse at his side with 4 other children with cold-like symptoms in the office

### Initial Impression:
Patient is noted to be struggling for air and restless. Patient has taken off his sweater and undershirt is noted to be sweaty. Wheezing can be heard upon moving closer to the patient.

### Vital Sign – Set 1
**AVPU:** Alert
**B/P:** 122/70
**HR:** 130, regular
**Resp:** 28, shallow
**O₂ Sat:** 88% (room air)
**Pain:**
**GCS:** 15 (4, 5, 6)
**BGL:**

### Physical Exam
**HEENT:**
Head: Unremarkable
Eyes: PERL
Ears: Right ear is red in color
Nose: Snot noted to be dripping from nose
Oral Cavity: Unremarkable
Cough noted with phlegm production

**Chest:**
Equal chest rise and fall noted, shallow
Wheezing noted in upper lobes
Retractions present
No external trauma noted

**Back:**
Unremarkable

**Abdomen/Pelvis:**
No guarding noted upon quadrant palpation
No trauma noted
Pelvis stable

**Extremity:**
No trauma noted to legs or arms
PMS x 4

**Other:**
Skin: Pale, Warm, Moist
No step off’s or tenderness noted to neck

### Vital Sign – Set 2
**AVPU:** Alert
**B/P:** 122/80
**HR:** 134, regular
**Resp:** 30, shallow
**O₂ Sat:** 94% (O₂), 86% (room air)
**Pain:** 0
**GCS:** 15 (4, 5, 6)
**BGL:** 94 mg/dl

### Vital Sign – Set 3
**AVPU:** Alert
**B/P:** 120/78
**HR:** 132, regular
**Resp:** 30, shallow
**O₂ Sat:** 96% (O₂/neb), 86% (room air)
**Pain:** 0
**GCS:** 15 (4, 5, 6)

### Suggested Treatment:
O₂, Monitor, Airway Management, IV, Fluids

### HPI:
Patient cannot ‘shake’ this cold

### S/S:
Headache, Sore throat, Tired, Shortness of breath, Fever

### Allergies:
NKDA

### Medications:
Cough medicine for the last 2 days

### PmHx:
Recent cold

### Last Meal:
Donut around 0800

### Events Prior:
Patient was in math class when he started feeling anxious and could not catch his breath

### Current on Immunizations?
Yes

### Patient Weight:
40kgs

### Notes:
Body Temp: 101.0 F
ECG: Sinus Tachycardia
Patient only able to speak in 4-5-word sentences. States nothing is helping him catch his breath
Patient states he is getting tired

### Transport Consideration:
Securing patient properly on cot
BRONCHITIS

Additional Things to Consider about the Scene:
- Any recent illnesses or outbreaks within the school community
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Encourage patient to excrete phlegm if coughed up, produced
- Continuous monitoring and notation of lung sound changes
- Obtain contact information to guardians listed in school paperwork
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- The Nemours Foundation
- Easy Auscultation: Lung Sounds Training Sessions
  - https://www.easyauscultation.com/lung-sounds

![Image of healthy and bronchitis lungs]

Things to consider based on your EMS protocols, procedures and/or policies:

Bronchodilator

*Graphic obtained from news-medical.net*
# EPITLLOTTITIS

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess and secure airway</td>
<td>You are responding to a 6-year-old female with difficulty swallowing. Patient is also having some trouble breathing. She has been sick for a few days, but this is a sudden onset and she is drooling a lot.</td>
</tr>
<tr>
<td>• Recognition of stridor and possible epiglottitis</td>
<td></td>
</tr>
<tr>
<td>• Recognition of importance for position of comfort</td>
<td></td>
</tr>
<tr>
<td>• Transport necessity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty Swallowing, difficulty breathing</td>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

### Scene Description:
- Assess and secure airway
- Upon arrival, a man waves from the front porch, then steps inside the open door
- The living room is tidy. A female is noted to be sitting next to the patient
- Male identifies as patient’s father, and female as patient’s mother

### Initial Impression:
Patient is sitting with hands clutching edge of sofa cushions. Patient’s eyes lift to meet the crew, and she looks scared. Significant amount of drool noted to be dripping from patient’s mouth and into a towel on her lap.

### Vital Sign – Set 1
- **AVPU:** Alert
- **B/P:** 108/70
- **HR:** 124, regular
- **Resp:** 30, shallow
- **O₂ Sat:** 98% (room air)
- **Pain:** 0
- **GCS:** 15
- **BGL:** (see below if requested)

### Vital Sign – Set 2
- **AVPU:** Alert
- **B/P:** 99/62
- **HR:** 126, regular
- **Resp:** 32, shallow
- **O₂ Sat:** 97% (room air); 98% (nebulizer applied)
- **Pain:** 0
- **GCS:** 15
- **BGL:** 78 mg/dl

### Vital Sign – Set 3
- **AVPU:** Alert
- **B/P:** 104/70
- **HR:** 122, regular
- **Resp:** 32, shallow
- **O₂ Sat:** 98% (room air/O₂/neb)
- **Pain:** 0
- **GCS:** 15
- **BGL:**

### Physical Exam
#### HEENT:
- Head: No trauma noted
- Eyes: PERL
- Ears: Unremarkable
- Nose: Unremarkable
- Oral Cavity: Pink, mouth slightly open, significant amount of saliva dripping

#### Chest:
- Equal chest rise and fall noted
- Clear lung fields
- Stridor noted with respirations
- Shallow breathing, nonlabored

#### Back:
- No external trauma noted

#### Abdomen/Pelvis:
- No guarding noted upon quadrant palpation
- No trauma noted
- Pelvis stable

#### Extremity:
- No trauma noted to legs or arms
- PMX x 4

#### Other:
- Skin: Warm
- No step-off’s or tenderness noted to neck

### HPI:
- Has been sick with sore throat, cough last few days. Suddenly unable to swallow in last 30min, got worse with drooling
- **S/S:** large amount of saliva out of mouth, shallow breathing, stridor audible
- **Allergies:** Penicillin
- **Medications:** None
- **PmHx:** None
- **Last Meal:** Lunch, approx. 3 hours ago
- **Events Prior:** Was reading
- **Current on Immunizations?** Yes
- **Patient Weight:** 29kgs

### Notes:
- **Body Temp:** 101.2°F
- **ECG:** Sinus Tachycardia, no ectopy
- Patient tolerates the nebulizer for nebulized epinephrine (or racemic epinephrine) treatment

### Transport Consideration:
- Securing patient properly on cot

### Suggested Treatment:
- **O₂,** Monitor, IV, Airway Management
EPIGHLOTTITIS

Additional Things to Consider about the Scene:
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Information on recent illness
- Acute epiglottitis usually leads to generalized toxemia
- There is no seasonal predilection to epiglottitis
- Tracheal intubation of a patient with epiglottitis must be regarded as a potentially difficult procedure
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Academy of Pediatrics: Healthy Children
  o www.healthychildren.org/English/health-issues/conditions/ear-nose-throat/Pages/Epiglottitis.aspx

Things to consider based on your EMS protocols, procedures and/or policies:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from YouTube
## TRACHEOSTOMY

### Goals/Objectives:
- Assess and maintain airway
- Recognition of need to suction trach
- Recognition of transport necessity

### Dispatch Information:
You are responding to a 2-year-old male with difficulty breathing. Patient has a tracheostomy since motor vehicle accident that happened six months ago. He has also had a fever for the last several days. Patient is on his own ventilator that parent is willing to operate during transport.

### Chief Complaint:
Difficulty breathing, Fever

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- As you arrive, you note a wheelchair ramp to the front porch, leading from the driveway
- Patient has a trach and is on a home ventilator. Hallways are wide enough for a cot to be maneuvered
- Patient’s mother says she had to increase patient’s FiO2 on the ventilator from his normal 30% to 80% to keep his SpO2 normal.

### Initial Impression:
Patient is sitting in an at-home hospital bed, semi-fowler’s position. You hear noisy breathing and the patient has a wet cough with weak effort. He looks at you when you enter the room.

### Vital Sign – Set 1
AVPU: Alert
B/P: 88/56
HR: 124, regular
Resp: 40, shallow
\( \text{O}_2 \text{ Sat: } 98\% (\text{FiO}_2 80\%)
\)
\( \text{Pain: } 0 \)
GSC: 12 (able to make sounds)
BGL: (see below if requested)

### Physical Exam
HEENT:
- Head: No trauma noted
- Eyes: PERL, Spontaneous movement
- Ears: Unremarkable
- Nose: Some nasal drainage, yellow/cloudy
- Neck: Trach in place, secured around the neck
- Oral Cavity: Pink, slightly dry; mom recently applied chapstick-type protectant to lips

Chest:
- Equal chest rise and fall noted
- Coarse lung sounds
- Shallow breathing, nonlabored
- Frequent weak coughs, wet

Back:
- No external trauma noted

Abdomen/Pelvis:
- All quadrants soft and non-tender
- Pelvis stable
- GI tube in place, looks clean

Extremity:
- No trauma noted to legs or arms

Other:
- Skin: hot to touch, flushed
- No recent trauma known

### HPI:
Fever for three days, increasing congestion. More lethargic than normal. Normally off except for at night, but today 100% usage

### S/S:
Fever, skin hot and flushed, tachycardic, lethargic, decreased SpO2

### Allergies:
Penicillin (hives)

### Medications:
Tylenol, ibuprofen for fever; probiotics, multivitamin, DHA

### PmHx:
MVC resulting TBI; pneumonia

### Last Meal:
via GI tube, 2 hour ago

### Current on Immunizations?
Yes

### Patient Weight:
12.7kg

### Notes:
Body Temp: 103.2 F
EKG: Sinus Tachycardia, no ectopy
Patient uses cloth diapers, which mom recently changed; fewer number of wet diapers than normal.
Patient’s mom can accompany patient & operate the transport ventilator

### Suggested Treatment:
Suction, \( \text{O}_2 \), Steroids, position of comfort, monitor

### Transport Consideration:
Securing patient properly on cot, Parent ride along/ventilator use
TRACHEOSTOMY

Additional Things to Consider about the Scene:
- Maintain as sterile environment as you can
- Family centered care

Additional Things to Consider during Treatment/Transport:
- The guardian will be your most abundant resource
- D-O-P-E = Dislodged, Obstructed, Pneumothorax, Equipment
- Alerting receiving hospital about additional medical needs; ventilator, replacement trach
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Nationwide Children’s
  - www.nationwidechildrens.org/tracheostomy-care-how-to-suction-your-childs-trach-tube

Things to consider based on your EMS protocols, procedures and/or policies:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic 1 obtained from amdnext.com *Graphic 2 obtained from Fairview.org
# CHILD ABUSE

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stay nonjudgmental and calm</td>
<td>You are dispatched to a 2-year-old lethargic male patient at a local daycare. Guardian dropped off the patient approximately 20 minutes ago and stated that the patient was more tired this morning than normal. Staff states that the patient is now vomiting and keeps falling asleep.</td>
</tr>
<tr>
<td>• Recognition of suspected abuse, injury pattern</td>
<td></td>
</tr>
<tr>
<td>• Recognition of transport necessity to appropriate facility</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lethargic patient, vomiting</td>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

## Scene Description:
- It is a warm, summer morning at 0815
- Patient is found in the front office being held by a staff member. Another member is trying to make contact with family
- Patient is noted to be in his long sleeve pajamas. Staff state these are the clothes that he came in this morning
- Small amounts of vomitus is noted on patients hands, shirt and on the staff member holding him

## Initial Impression:
Patient makes no eye contact with EMS upon arrival and lays limp without movement during your assessment. Bruising is noted on the patients left ear and he moans when you touch the left side of his head

## Vital Sign – Set 1

<table>
<thead>
<tr>
<th>AVPU</th>
<th>Verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>90/60</td>
</tr>
<tr>
<td>HR</td>
<td>130, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>24, shallow</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>96% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>10 (3,3,4)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

## Vital Sign – Set 2

<table>
<thead>
<tr>
<th>AVPU</th>
<th>Verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>94/82</td>
</tr>
<tr>
<td>HR</td>
<td>126, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>24, shallow</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>98% (O₂) and 96% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>10 (3,3,4)</td>
</tr>
<tr>
<td>BGL</td>
<td>80 mg/dl (if assessed)</td>
</tr>
</tbody>
</table>

## Vital Sign – Set 3

<table>
<thead>
<tr>
<th>AVPU</th>
<th>Verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>96/76</td>
</tr>
<tr>
<td>HR</td>
<td>132, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>24, shallow</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>98% (O₂)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>10 (3,3,4)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

## Physical Exam

### HEENT:
Head: Hematoma noted to the left temporal
Eyes: Left pupil is sluggish, Right is dilated
Ears: Bruising noted to left ear
Nose: Unremarkable
Oral Cavity: Child is missing teeth
Patient able to clear and control own airway

### Chest:
Equal chest rise and fall noted, shallow
Lung sounds clear
Bruises of different colors noted to left side

### Back:
Red marks are noted on left lower back

### Abdomen/Pelvis:
Guarding noted in left lower quadrant
Slight distention noted to upper quadrants
Pelvis stable

### Extremity:
Bruising noted to upper extremities
PMS x 4 (presumed, since child moves limb away when pain applied)

### Other:
Skin: Pale, warm
Patient moans when neck is palpated

### HPI:
Patient refused to wake for breakfast. 5 minutes after, he started projectile vomiting

### S/S:
Vomited approx. 50cc’s

### Allergies:
None on file

### Medications:
None on file

### PmHx:
An unexplained seizure approx. 4 weeks ago

### Last Meal:
Patient refused breakfast

### Events Prior:
Patient has laid on the floor since being brought to school. Guardian denied any illnesses

### Current on Immunizations?
Yes

### Patient Weight:
9kgs

### Notes:
ECG: Sinus Tachycardia

Staff notes that patient has been having increased wet diapers and scares easily the last few weeks

Staff state that no injury reports had been filed recently at school

### Suggested Treatment:
O₂, Monitor, IV access

### Transport Consideration:
Securing patient properly on cot
Appropriate trauma facility
CHILD ABUSE

Additional Things to Consider about the Scene:
- Has staff noted any behavioral changes
- Is the incident described possible with injury patterns and/or evidence visualized on scene
- Family centered care; in this case, the daycare facility staff members

Additional Things to Consider during Treatment/Transport:
- Remove patient from dangerous or unhealthy situation and transport to hospital
- Trending of vital signs is important when considering suspected head trauma
- Documentation of statements by individuals on scene needs to be properly quoted
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility
- State law in Kansas states that as a prehospital care provider, you are a mandatory reporter of suspected child abuse. Follow local policy and procedure for reporting

Additional Educational Resources to Consider:
- Kansas Department for Children and Families
  - www.dcf.ks.gov
  - Reports of Abuse, Neglect and Exploitation of an Adult or Child may be made to the Kansas Protection Report Center.
    - By phone: 1-800-922-5330
    - Online: Mandated Reporter Only
- Online child abuse recognition education provided by Children’s Hospital Colorado
  - http://www.identifychildabuse.org/

Accidental Bruising Patterns

Abusive Bruising Patterns

Things to consider based on your EMS protocols, procedures and/or policies:

Nearest trauma center (see page 60) ________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

*Graphic obtained from Pediatric EM Morsels
### Goals/Objectives:
- Remove patient from dangers
- Assess and secure airway
- Recognition of Cushing’s Triad
- Recognition of transport necessity to most appropriate facility

### Dispatch Information:
You are responding to a rollover accident with a known fatality of the driver and a 4-year-old ejected patient. Vehicle was traveling at highway speeds when it lost control and rolled 3 times after going off the road. A nurse is on scene maintaining c-spine and is triaging code red.

### Chief Complaint:
MVC, Ejection

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- Summer afternoon around 1500. A thunderstorm came through last night and area received 2 inches of rain
- The patient is found approximately 10 feet from the vehicle. Extensive damage is noted to SUV
- Patient is face up in a muddy field with bystanders at his side

### Initial Impression:
Multi-system trauma patient. Patient ejected and found approximately 10 feet from vehicle.

### Vital Sign – Set 1
**AVPU:** Painful appropriate  
**B/P:** 130/80  
**HR:** 70, regular  
**Resp:** 14, shallow  
**O₂ Sat:** 94% (room air)  
**Pain:**  
**GCS:** 9 (2, 2, 5)  
**BGL:**

### Vital Sign – Set 2
**AVPU:** Painful appropriate  
**B/P:** 134/80  
**HR:** 68, regular  
**Resp:** 12, shallow  
**O₂ Sat:** 94% (O₂) 90% (room air)  
**Pain:**  
**GCS:** 9 (2, 2, 5)  
**BGL:** 80 mg/dl (if assessed)

### Vital Sign – Set 3
**AVPU:** Painful appropriate  
**B/P:** 140/90  
**HR:** 52, regular  
**Resp:** 12, shallow  
**O₂ Sat:** 96% (Interventions) 88% (Room air or just O₂)  
**Pain:**  
**GCS:** 9 (2, 2, 5)  
**BGL:**

### Physical Exam
**HEENT:**  
Head: Abrasion noted to right temporal  
Eyes: Sluggish  
Ears: Unremarkable  
Nose: Blood noted to right nostril  
Oral Cavity: Unremarkable  
Patient currently breathing on his own

**Chest:**  
Equal chest rise and fall noted, shallow  
Lung sounds clear, slightly diminished in right upper lobe  
Laceration noted to right thoracic, no blood

**Back:**  
Redness noted to right lower back

**Abdomen/Pelvis:**  
No rebound tenderness noted  
Pelvis stable

**Extremity:**  
Small lacerations noted to all extremities  
Bleeding is controlled. No deformities noted  
PMS x 4 (presumed, since child moves limb away when pain applied)

**Other:**  
Skin: Pale, warm  
No step off’s or tenderness noted to neck  
Patient whimpers as you palpate extremities during your assessment

### HPI:
Bystanders state that the patient came out of an open window on the 2nd rollover of the vehicle

### S/S:
Decreased LOC, Incontinence noted, shallow breathing

### Allergies:
Unknown

### Medications:
Unknown

### PmHx:
Unknown

### Last Meal:
Unknown

### Events Prior:
Patient’s vehicle was traveling at highway speed and for unknown reasons left the roadway

### Current on Immunizations?
Unknown

### Patient Weight:
18kgs

### Notes:
- Body Temp: 98.5 F
- ECG: Sinus and Sinus Bradycardia
- Patient vomits as you begin transport
- Reassessment of lung sounds reveal right side is now absent (during transport)

### Suggested Treatment:
O₂, Monitor, C-spine, IV, Airway management

### Transport Consideration:
Securing patient properly on cot
MOTOR VEHICLE CRASH

Additional Things to Consider about the Scene:
- Provider and bystander safety; vehicle stability if working below or around vehicle
- Safe removal of patient from field to ambulance
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Preparation of and for airway management
- Preparation of and for seizure activity
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Pediatric Trauma Society: Clinical Resources
  - http://pediatrictraumasociety.org/resources/clinical-resources.cgi
- Cushing's Triad
  - http://www.emergencymedicalparamedic.com/what-is-cushings-triad/

CUSHING’S TRIAD

HYPERTENSION

BRADYCARDIA

RESPIRATORY IRREGULARITY

Things to consider based on your EMS protocols, procedures and/or policies:

_ Nearest trauma center (see page 60) ______________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

*Graphic obtained from slideshare.net
# NEAR DROWNING

**Goals/Objectives:**
- Assess and secure airway
- Treatment of hypothermia
- Recognition of risk and/or presence of secondary trauma
- Recognition of transport necessity

**Dispatch Information:**
You are responding to a possible drowning at the local swimming pool. Swim lessons are being conducted, however the patient is a 4-year-old male, not participating in any class. Patient was reported underwater for 2-3 minutes.

**Chief Complaint:**
Difficulty Breathing

**Additional Resources Requested:**
Police and Fire Department, ALS

**Scene Description:**
- Community Pool going from 2 foot to 10 foot in water depth and has been open for one week
- It is a May evening with ambient temperature noted to be 64 degrees Fahrenheit
- As you arrive you note multiple parents and children crying and waving you into the gated area
- Lifeguard on scene is kneeling with patient. Patient in sitting upright position against the chain link fence

**Initial Impression:**
Patient is in regular street clothes noted to be wet sitting upright, coughing and whimpering

### Vital Sign – Set 1

<table>
<thead>
<tr>
<th>AVPU</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>88/52</td>
</tr>
<tr>
<td>HR</td>
<td>124, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>28, unlabored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>92% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>14</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

### Vital Sign – Set 2

<table>
<thead>
<tr>
<th>AVPU</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>90/62</td>
</tr>
<tr>
<td>HR</td>
<td>108, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>24, nonlabored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>98% (O2 applied)</td>
</tr>
<tr>
<td>Pain</td>
<td>0</td>
</tr>
<tr>
<td>GCS</td>
<td>15</td>
</tr>
<tr>
<td>BGL</td>
<td>87 mg/dl</td>
</tr>
</tbody>
</table>

### Vital Sign – Set 3

<table>
<thead>
<tr>
<th>AVPU</th>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/P</td>
<td>90/70</td>
</tr>
<tr>
<td>HR</td>
<td>112, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>24, nonlabored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>98% (O2 applied)</td>
</tr>
<tr>
<td>Pain</td>
<td>0</td>
</tr>
<tr>
<td>GCS</td>
<td>15</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

**Physical Exam**

**HEENT:**
- Head: No trauma noted
- Eyes: PERL
- Ears: Unremarkable
- Nose: Clear fluid noted
- Oral Cavity: Vomitus noted
- Patient able to clear and control own airway

**Chest:**
- Equal chest rise and fall noted
- Crackles noted in lower lobes
- Upper lung lobes clear
- No external trauma noted

**Back:**
- No external trauma noted

**Abdomen/Pelvis:**
- No guarding noted upon quadrant palpation
- All quadrants soft and slight distension noted to upper left quadrant
- Pelvis stable

**Extremity:**
- No trauma noted to legs or arms
- PMS x 4

**Other:**
- Skin: Cool, pale and damp
- No step off’s or tenderness noted to neck

**HPI:** See events prior below

**S/S:** Vomit, coughing, anxious

**Allergies:** NKDA

**Medications:** Multivitamin

**PmHx:** Unremarkable

**Last Meal:** Eating snack 5 min before

**Events Prior:** Patient was playing near pool when pregnant mother saw him leaning over to retrieve a toy

**Current on Immunizations?** Yes

**Patient Weight:** 16kgs

**Notes:**
- Body Temp: 97.1
- EKG: Sinus Tachycardia
- Patient vomits approx. 100cc’s during packaging for transport

**Transport Consideration:**
- Securing patient properly on cot
- Parent or guardian ride along

**Suggested Treatment:**
O₂, Suction, Monitor,
NEAR DROWNING

Additional Things to Consider about the Scene:
- Water temperature
- Chemicals of the pool and last treatment
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Drying and warming of the patient
- Patient modesty if/when removing clothing
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Consumer Product Safety Commission
- Kansas Safe Kids
  - http://www.safekidskansas.org/
- Kansas Wildlife, Park and Tourism
  - http://ksoutdoors.com
- Local recreation boards

Things to consider based on your EMS protocols, procedures and/or policies:

Nearest trauma center (see page 60)

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

*Graphic obtained from International Drowning Research Alliance (IDRA)
**BURN; SMOKE INHALATION**

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess and secure airway</td>
<td>The fire department has requested you to respond to a scene of an extinguished house</td>
</tr>
<tr>
<td>• Assess for risk of secondary trauma</td>
<td>fire. Patient is a 16-year-old male that was asleep in the basement when he heard the</td>
</tr>
<tr>
<td>• Recognition of transport necessity and destination</td>
<td>smoke detectors going off. He awoke to find a fire on the upper level of his home.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trouble breathing; possible smoke inhalation</td>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

**Scene Description:**
- Arrive on scene to find patient being attended to by the fire department
- Patient was reported to have gone back into the home numerous time trying to remove animals
- Home is a complete loss according to fire department

**Initial Impression:** Patient is having a hard time catching his breath and can only speak in short sentences. Patient is noted to have a continuous cough that produces a soot.

<table>
<thead>
<tr>
<th>Vital Sign – Set 1</th>
<th>Physical Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>HEENT:</td>
</tr>
<tr>
<td>B/P: 130/80</td>
<td>Head: Unremarkable</td>
</tr>
<tr>
<td>HR: 125, regular</td>
<td>Eyes: PERL</td>
</tr>
<tr>
<td>Resp: 26, labored, shallow</td>
<td>Nose: Unremarkable</td>
</tr>
<tr>
<td>O₂ Sat: 92% (room air)</td>
<td>Oral Cavity: Lips noted to be red and swollen</td>
</tr>
<tr>
<td>Pain: 7</td>
<td>Patient able to clear and control own airway</td>
</tr>
<tr>
<td>GCS: 15</td>
<td>Chest:</td>
</tr>
<tr>
<td>BGL:</td>
<td>Equal chest rise and fall noted, shallow</td>
</tr>
<tr>
<td></td>
<td>Lung sounds diminished in all lobes</td>
</tr>
<tr>
<td></td>
<td>No external trauma noted</td>
</tr>
<tr>
<td></td>
<td>Back: Unremarkable</td>
</tr>
<tr>
<td></td>
<td>Abdomen/Pelvis: No guarding noted upon quadrant palpation</td>
</tr>
<tr>
<td></td>
<td>No trauma noted</td>
</tr>
<tr>
<td></td>
<td>Pelvis stable</td>
</tr>
<tr>
<td></td>
<td>Extremity:</td>
</tr>
<tr>
<td></td>
<td>First degree burns noted to hands</td>
</tr>
<tr>
<td></td>
<td>PMS x 4</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
</tr>
<tr>
<td></td>
<td>Skin: Pale, warm</td>
</tr>
<tr>
<td></td>
<td>No step offs or tenderness noted to neck</td>
</tr>
<tr>
<td></td>
<td>Patient complains of throat scratching and hurting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Sign – Set 2</th>
<th>HPI: See Events Prior</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>S/S: Cough; producing soot, nauseated</td>
</tr>
<tr>
<td>B/P: 126/84</td>
<td>Allergies: NKDA</td>
</tr>
<tr>
<td>HR: 115, regular</td>
<td>Medications: None</td>
</tr>
<tr>
<td>Resp: 28, labored, shallow</td>
<td>PmHx: Broken leg two years ago</td>
</tr>
<tr>
<td>O₂ Sat: 96% (O₂) 92% (room air)</td>
<td>Last Meal: Lunch 12 hours ago</td>
</tr>
<tr>
<td>Pain: 7</td>
<td>Events Prior: Sleeping when awaken by house on fire. Patient spent approx. 15 minutes getting animals before fire department removed him from scene</td>
</tr>
<tr>
<td>GCS: 15</td>
<td>Current on Immunizations? Yes</td>
</tr>
<tr>
<td>BGL: 105 mg/dl</td>
<td>Patient Weight: 54kgs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Sign – Set 3</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>Body Temp:</td>
</tr>
<tr>
<td>B/P: 132/90</td>
<td>ECG: Sinus Tachycardia</td>
</tr>
<tr>
<td>HR: 118, regular</td>
<td>Patient requests a drink of water numerous times during contact</td>
</tr>
<tr>
<td>Resp: 28, labored, shallow</td>
<td>Patient has increased nausea during transport</td>
</tr>
<tr>
<td>O₂ Sat: 98% (nebulizer) 96% (O₂)</td>
<td>Transport Consideration:</td>
</tr>
<tr>
<td>Pain: 7</td>
<td>Secure patient properly on cot</td>
</tr>
<tr>
<td>GCS: 15</td>
<td>Position of comfort for breathing</td>
</tr>
<tr>
<td>BGL:</td>
<td></td>
</tr>
</tbody>
</table>

Suggested Treatment: O₂, Monitor, IV, Pain and Airway Management

- 48 -
BURN; SMOKE INHALATION

Additional Things to Consider about the Scene:
- Safe access and egress from fire scene
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Remove patient for burn source and/or stop the burning process
- Oxygen should be delivered via Nonrebreather at 15 liters
- $O_2$ saturations may not be reliable.
  - The sensor could be measuring both carbon and oxygen as ‘good’ $O_2$
- Prepare to secure airway for patient if he is unable to maintain own airway
  - Prepare for increased swelling and unidentifiable landmarks
- Keep patient compartment warm in ambulance, assessing for signs of shock
- Do not fluid overload the patient. Follow protocols for proper fluid administration
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport patient in position of comfort, ease of breathing
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- American Burn Association
  - http://ameriburn.org/education/

Things to consider based on your EMS protocols, procedures and/or policies:

Calculation method for Total Body Surface Area (TBSA) _______________________

Calculation method for Fluid Resuscitation____________________________________

Nearest verified Burn Center__________________________________________________

*Graphic obtained from clincalgate.com
# Goals/Objectives:
- Assess and secure airway
- Recognition of splash patterns and additional burns
- Recognition of transport necessity to appropriate facility

## Dispatch Information:
You are dispatched to a local retirement center when the caller states her 3-year-old grandson pulled a cup of coffee off the table and onto his face and arm. Caller states that the little boy is crying and scared but will not let go of her, so she can see the injured area.

## Chief Complaint:
Burn injury

## Additional Resources Requested:
Police and Fire Department, ALS

## Scene Description:
- Escort by security to an independent living area of the retirement community
- Female is holding patient on her lap and has his head hidden from you as you enter the tidy living room
- Grandmother states she made a cup of coffee and set it on the table to get patient’s breakfast. 16oz cup was full
- Cup noted on floor with coffee stained carpet

## Initial Impression:
Possible 1<sup>st</sup> and 2<sup>nd</sup> degree burns noted to visible area of patient’s head, face and arm. Patient able to speak but will only talk to grandmother. No distress noted as he is crying.

## Vital Sign – Set 1
**AVPU:** Alert  
**B/P:** 90/60  
HR: 132, regular  
Resp: 24, nonlabored  
**O<sub>2</sub> Sat:** 97% (room air)  
Pain: 8  
**GCS:** 15 (4, 5, 6)  
**BGL:**

## Vital Sign – Set 2
**AVPU:** Alert  
**B/P:** 92/70  
HR: 136, regular  
Resp: 24, nonlabored  
**O<sub>2</sub> Sat:** 97% (room air)  
Pain: 8  
**GCS:** 15 (4, 5, 6)  
**BGL:** 82 mg/dl (if assessed)

## Vital Sign – Set 3
**AVPU:** Alert  
**B/P:** 88/64 (with medication)  
HR: 130, regular  
Resp: 22, nonlabored  
**O<sub>2</sub> Sat:** 97% (room air)  
Pain: 7 (with medication)  
**GCS:** 15 (4, 5, 6)  
**BGL:**

## Physical Exam

### HEENT:
- Head: Left temporal area is red and small blisters noted  
- Eyes: PERL  
- Ears: Left ear is red  
- Nose: Unremarkable  
- Oral Cavity: Unremarkable  
- Patient able to clear and control own airway.

### Chest:
- Equal chest rise and fall noted  
- Lung sounds clear  
- Left side of thorax is red when exposed

### Back:
Unremarkable

### Abdomen/Pelvis:
- No guarding noted upon quadrant palpation  
- No trauma noted  
- Pelvis stable

### Extremity:
- Left hand, upper and lower arm is red  
- PMS x 4

### Other:
- Skin: Warm, Pink, Dry  
- No step off’s or tenderness noted to neck

## Suggested Treatment:
O<sub>2</sub>, Monitor, IV, Pain control

## HPI:
Grandmother was 3 feet away when patient pulled cup down

## S/S:
Redness to left hand, lower and upper arm. Redness and blisters noted to left side of head and face

## Allergies:
None

## Medications:
Multivitamin

## PmHx:
None

## Last Meal:
Cracker 20 minutes ago

## Events Prior:
Patient was preparing to eat breakfast at kitchen table

## Current on Immunizations?
Yes

## Patient Weight:
14kgs

## Notes:
- Body Temp: 99.0
- ECG: Sinus Tachycardia
- Shirt is removed to reveal 1<sup>st</sup> degree burns to left thorax. Shirt is wet and smells life coffee
- Patient is noted to be left handed and grandmother confirms

## Transport Consideration:
Securing patient properly on cot  
Position of comfort
BURN; ACCIDENTAL SCALDING

Additional Things to Consider about the Scene:
- Keep in mind splash patterns and secondary trauma sources
- Is the incident described possible with injury patterns and/or evidence visualized on scene
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Pain Control; both positional in maintaining as sterile environment as possible and medications
- When measuring TBSA, remember that first degree burns DO NOT go into the calculation
- Keep patient compartment warm in ambulance, assessing for signs of shock
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:

Additional Things to Consider based on your EMS protocols, procedures and/or policies:

_ Calculation method for Total Body Surface Area (TBSA) ____________________________

_ Calculation method for Fluid Resuscitation ________________________________

_ Nearest verified Burn Center ___________________________________________

*Graphic obtained from Via Christi Regional Burn Center, Wichita, Kansas
Goals/Objectives:
- Assess and secure airway
- Control bleeding
- Treatment of hypothermia
- Assess/stabilize trauma
- Treat pain
- Recognize transport necessity

Dispatch Information:
Responding to a 4-year-old child hit by a car. Child’s older sibling pulled victim to the side of road after he was hit, then ran to nearest house to call 911. Vehicle sped off after striking child, reportedly at high rate of speed.

Chief Complaint:
MVC; vehicle vs pedestrian

Additional Resources Requested:
Police and Fire Department, ALS

Scene Description:
- Spring Saturday afternoon, child is located on curb across from a local neighborhood park
- Patient is sitting upright and looks up as you approach. Patient’s older sibling and grandmother are with him

Initial Impression:
Patient is in regular street clothes noted to be sitting on curb, crying and holding head and left leg, left arm cradled to chest. Left leg noted to be bent at odd angle from thigh.

Vital Sign – Set 1
AVPU: Alert
B/P: 108/72
HR: 112, regular
Resp: 30, shallow
O2 Sat: 96% (room air)
Pain: 8 on faces scale
GCS: 15

Vital Sign – Set 2
AVPU: Alert
B/P: 112/74
HR: 116, regular
Resp: 30, nonlabored
O2 Sat: 96% (room air); 98% (O2 applied)
Pain: 4(with analgesia); 10 (no analgesia)
GCS: 15
BGL: 97 mg/dl

Vital Sign – Set 3
AVPU: Alert
B/P: 110/70
HR: 112, regular
Resp: 30, nonlabored
O2 Sat: 96% (room air); 98% (O2 applied)
Pain: 5(with analgesia); 10 (no analgesia)
GCS: 15

Suggested Treatment:
Splinting, protect c-spine, monitor airway

Physical Exam

HEENT:
Head: Large Scrape to forehead, over left eye
Eyes: PEERL
Ears: Scrape to left ear
Nose: Dried blood noted around/under nostrils
Oral Cavity: Patient says missing a tooth; dried blood noted, no continued bleeding
Patient able to clear and control own airway

Chest:
Equal chest rise and fall noted, clear lungs
Scrapes to left side of chest and left shoulder

Back:
Patient denies pain with palpation
Scrape seen to both sides, mid-back

Abdomen/Pelvis:
No guarding noted upon quadrant palpation
Pelvis stable, but patient screams when tested/palpated

Extremity:
PMS x 4
Left leg noted to be deformed at thigh
Left clavicle noted to be deformed

Complains of left shoulder, right leg and right hip pain

Other:
Skin: warm
No step off’s or tenderness noted to neck

S/S: Anxiety, tachycardic, pain; deformed L shoulder, L thigh

Allergies: NKDA

Medications: Multivitamin, Zyrtec

PmHx: None

Last Meal: Eating snack 5 min before

Events Prior: Patient was walking to park with sibling and grandmother, when he ran to catch up with brother. Grandmother reports the truck driver was looking down and traveling very fast. Patient bounced away from truck, landed and laid still for a minute and then started to cry and move

Current on Immunizations? Yes

Patient Weight: 18kgs

Notes:
Body Temp: 97.1

EKG: Sinus Tachycardia

Patient’s mother will meet at hospital (she is an RN there)

Patient screams with movement and splinting of extremities; also, when pelvis is tested for stability

Transport Consideration:
Securing patient properly on cot
Parent or guardian ride along
Additional Things to Consider about the Scene:
- Completely removing patient from roadway
- Removing patient off hot asphalt or gravel/sand
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Modesty of the patient when removing clothing for assessment
- Keeping the patient warm and assessing for signs of shock
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Pediatric Trauma Society: Clinical Resources
  - http://pediatrictraumasociety.org/resources/clinical-resources.cgi
- Waddell’s Triad of Trauma
  - http://www.emergencymedicalparamedic.com/what-is-waddell%E2%80%99s-triad-of-trauma/

Waddell’s Triad
- Femur Fracture
- Intraabdominal or Intrathoracic injury
- Head Injury

Things to consider based on your EMS protocols, procedures and/or policies:

Nearest trauma center (see page 60) ______________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

*Graphic obtained from clincalgate.com
**ABDOMINAL INJURIES**

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess and secure airway</td>
<td>You are dispatched to a local bike path. Caller states he and his friends were riding their bikes when their 10-year-old friend crashed into a tree. They are trying to get the patient to the nearest roadway, but he is having a hard time walking because of the pain. The patient’s parents are out of town and told the kids to call an ambulance.</td>
</tr>
<tr>
<td>• Recognition of secondary trauma and/or shock</td>
<td></td>
</tr>
<tr>
<td>• Recognition of transport necessity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma, Bicycle accident</td>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

**Scene Description:**
- Cool, spring day. 62 degrees F and sunny. Approximately 1530
- A group of young boys are waving at you as you enter the park area. All are visually shaken as you exit ambulance
- Patient is noted to be laying in the fetal position next to a mangled bicycle, damaged helmet is also lying next to bicycle
- One boy is speaking with the patient’s parents on the phone

**Initial Impression:** Multisystem trauma patient. Patient looks to have removed most of his protective clothing/gear.

<table>
<thead>
<tr>
<th>Vital Sign – Set 1</th>
<th>Physical Exam</th>
<th>HPI:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>HEENT:</td>
<td>Group has been riding on the paths since around 1000. All have on protective gear including helmets</td>
<td></td>
</tr>
<tr>
<td>B/P: 118/60</td>
<td>Head: No trauma noted, reports headache</td>
<td>S/S: Abdominal pain, nausea, headache, blurred vision, dizzy</td>
<td></td>
</tr>
<tr>
<td>HR: 132, regular</td>
<td>Eyes: PERL</td>
<td>Allergies: Shell fish</td>
<td></td>
</tr>
<tr>
<td>Resp: 26, nonlabored</td>
<td>Ears: Unremarkable</td>
<td>Medications: None</td>
<td></td>
</tr>
<tr>
<td>O₂ Sat: 97% (room air)</td>
<td>Nose: Unremarkable</td>
<td>PmHx: None</td>
<td></td>
</tr>
<tr>
<td>Pain: 8</td>
<td>Oral Cavity: Unremarkable</td>
<td>Last Meal: Lunch around noon</td>
<td></td>
</tr>
<tr>
<td>GCS: 15 (4, 5, 6)</td>
<td>Patient able to clear and control own airway</td>
<td>Events Prior: Patient was going fast to make a jump when his foot slipped, and he hit a tree with his front tire</td>
<td></td>
</tr>
<tr>
<td>BGL:</td>
<td></td>
<td>Current on Immunizations? Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Sign – Set 2</th>
<th>Back:</th>
<th>Patient Weight: 46kgs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>Unremarkable</td>
<td></td>
</tr>
<tr>
<td>B/P: 116/80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR: 140, regular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resp: 26, nonlabored</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O₂ Sat: 98% (O₂)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain: 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCS: 15 (4, 5, 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BGL: 92 mg/dl (if assessed)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vital Sign – Set 3</th>
<th>Abdomen/Pelvis:</th>
<th>Patient complains of increased nausea when he lays flat, wants to remain in fetal position</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU: Alert</td>
<td>Guarding noted in all quadrants</td>
<td>Patient comments multiple times that he is thirsty</td>
</tr>
<tr>
<td>B/P: 120/80</td>
<td>Circular mark noted in left upper quadrant</td>
<td>Transport Consideration: Securing patient properly on cot</td>
</tr>
<tr>
<td>HR: 134, regular</td>
<td>Pelvis stable</td>
<td></td>
</tr>
<tr>
<td>Resp: 24, nonlabored</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O₂ Sat: 98% (O₂)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain: 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCS: 15 (4, 5, 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BGL:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested Treatment:</th>
<th>Extremity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂, Monitor, Pain</td>
<td>Small scrapes noted to upper extremities</td>
<td>Body Temp: 99.2 F</td>
</tr>
<tr>
<td>Management, C-spine</td>
<td>PMS x 4</td>
<td>ECG: Sinus Tachycardia</td>
</tr>
</tbody>
</table>

Patient has increased abdominal pain upon reassessment during transport

**Events Prior:** Patient was going fast to make a jump when his foot slipped, and he hit a tree with his front tire

**Current on Immunizations?** Yes

- **Patient Weight:** 46kgs
- **Notes:** Body Temp: 99.2 F
- **ECG:** Sinus Tachycardia

Patient complains of increased nausea when he lays flat, wants to remain in fetal position

Patient comments multiple times that he is thirsty

**Transport Consideration:** Securing patient properly on cot
ABDOMINAL INJURIES

Additional Things to Consider about the Scene:
- Is the incident described possible with injury patterns and/or evidence visualized on scene
- Are the handlebars bent on bicycle; damage to bike; damage to helmet
- Family centered care

Additional Things to Consider during Treatment/Transport:
- Early and late signs of shock; internal blood loss
- Modesty of patient when removed clothing during assessment
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Pediatric Trauma Society: Clinical Resources
  - http://pediatrictraumasociety.org/resources/clinical-resources.cgi

Blunt abdominal trauma is the third most common cause of pediatric trauma-related deaths. The spleen and liver are the most frequently injured organs, followed by the kidney, small bowel, and pancreas.

Things to consider based on your EMS protocols, procedures and/or policies:

_ Nearest trauma center (see page 60) _______________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

*Graphic 1 obtained from sciencedirect.com *Graphic 2 obtained from clincalgate.com
### GUN SHOT WOUND

#### Goals/Objectives:
- Scene Safety
- Assess and secure airway
- Recognition of entrance and exit wounds, bleeding control
- Recognition of transport necessity

#### Dispatch Information:
You have been dispatched to a farm home. Caller advises that a 14-year-old male showed up saying he and his friends were dove hunting when he felt a ‘punch’ in his chest and immediately started having difficulty breathing. Patient has walked nearly ¼ mile to the farmer’s home asking for help.

#### Chief Complaint:
Gun Shot Wound, Difficulty Breathing

#### Additional Resources Requested:
Police and Fire Department, ALS

#### Scene Description:
- September afternoon around 1300. Clear, sunny and 65 degrees F outside
- Arrive to home to find farmer and patient sitting out front. Farmer advises he has secured patient’s gun
- Patient appears restless and immediately starts walking towards the ambulance

#### Initial Impression:
Patient’s shirt is unbuttoned, and a small hole noted below the sternum. A small amount of blood is oozing from the hole. Patient can speak in full sentences and then gasps for air.

#### Vital Sign – Set 1
- AVPU: Alert
- B/P: 130/70
- HR: 142, regular
- Resp: 24, slightly labored
- O₂ Sat: 96% (room air)
- Pain: 7
- GCS: 15 (4, 5, 6)
- BGL: 

#### Vital Sign – Set 2
- AVPU: Alert
- B/P: 128/80
- HR: 140, regular
- Resp: 24, nonlabored
- O₂ Sat: 98% (O₂) 95% (room air)
- Pain: 7
- GCS: 15 (4, 5, 6)
- BGL: 102 mg/dl (if assessed)

#### Vital Sign – Set 3
- AVPU: Alert
- B/P: 130/76
- HR: 136, regular
- Resp: 24 nonlabored
- O₂ Sat: 98% (O₂) 94% (room air)
- Pain: 7
- GCS: 15 (4, 5, 6)
- BGL: 

#### Physical Exam

**HEENT:**
- Head: Unremarkable
- Eyes: PERL
- Ears: Unremarkable
- Nose: Unremarkable
- Oral Cavity: Unremarkable
- Patient able to clear and control own airway

**Chest:**
- Equal chest rise and fall noted
- Lung sounds clear
- Wound noted just below sternum

**Back:**
- Unremarkable

**Abdomen/Pelvis:**
- No guarding noted upon quadrant palpation
- No trauma noted
- Pelvis stable

**Extremity:**
- No trauma noted to legs or arms
- PMS x 4

**Other:**
- Skin: Pale, Warm, Moist
- No step off’s or tenderness noted to neck
- Patient states all his pain is in his thoracic cavity (points to where the wound is located)

#### HPI:
- S/S: Entrance wound noted about an inch below the sternum. No exit wound found during assessment. Short of air, difficulty speaking
- Allergies: NKDA
- Medications: None
- PmHx: Asthma as a child
- Last Meal: Breakfast around 0800
- Events Prior: Dove hunting with small group. Patient is unaware of who or how he was shot
- Current on Immunizations? Yes
- Patient Weight: 46kgs

#### Notes:
- Body Temp: 99.0 F
- ECG: Sinus Tachycardia
- Patient calms during transport and once he finds a position of comfort, can breathe much easier. Nervous about friends getting in trouble

#### Suggested Treatment:
- O₂, Monitor,

#### Transport Consideration:
- Securing patient properly on cot
GUN SHOT WOUND

Additional Things to Consider about the Scene:
• Family centered care

Additional Things to Consider during Treatment/Transport:
• Modesty of patient while removing clothing during assessment/examination
• Pattern of injury based on; Nonpenetrating, Penetrating, Perforating, Avulsive
• Pattern of injury based on weapon used; handgun vs rifle vs shotgun
• Keeping clothing intact for local police agency in case of crime scene investigation needs
• Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
• Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
• Kansas Wildlife, Park and Tourism: Hunter Education
  o http://ksoutdoors.com/Services/Education/Hunter
• Stop the Bleed
  o https://www.bleedingcontrol.org/

Things to consider based on your EMS protocols, procedures and/or policies:

*Nearest trauma center (see page 60) ________________________________

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

*Graphic obtained from texasguntalk.com
### HANGING

<table>
<thead>
<tr>
<th>Goals/Objectives:</th>
<th>Dispatch Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess and secure airway</td>
<td>Dispatch is sending you to an unknown medical call. Caller advised that she got into an</td>
</tr>
<tr>
<td>• Cervical spine precautions</td>
<td>argument with her 14-year-old son and now he will not answer the phone. She last spoke</td>
</tr>
<tr>
<td>• Recognition of hypoxic state</td>
<td>with him an hour ago. Patient has had increased stress and battled depression the last 3</td>
</tr>
<tr>
<td>• Recognition of transport necessity</td>
<td>years. Neighbors have been unable to contact the patient for the last 15 minutes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint:</th>
<th>Additional Resources Requested:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide Attempt</td>
<td>Police and Fire Department, ALS</td>
</tr>
</tbody>
</table>

### Scene Description:

- Police on scene triaging code red. Police made access to the home and found patient hanging in garage.
- Police advise that patient had thick rope around his neck that they cut off.
- You note a small desk nearby and a knocked over chair that PD advises was that way when they entered.

### Initial Impression:
Possible suicide attempt via hanging. Pill bottles are also present in the area prescribed to patient and all are empty. You recognize patient from a call a few weeks ago for a behavioral issue at the local middle school.

### Vital Sign – Set 1
- AVPU: Unresponsive
- B/P: Unable to obtain
- HR: 60, regular
- Resp: 8, labored and shallow
- O₂ Sat: 90% (room air)
- Pain:
- GCS: 3 (1, 1, 1)
- BGL:  

### Vital Sign – Set 2
- AVPU: Unresponsive
- B/P: 72/50
- HR: 56, regular
- Resp: 8, labored and shallow
- O₂ Sat: 94% (O₂)
- Pain:
- GCS: 3 (1, 1, 1)
- BGL: 64 mg/dl (if assessed)

### Vital Sign – Set 3
- AVPU: Unresponsive
- B/P: 70/50
- HR: 54, regular
- Resp: 8, labored and shallow
- O₂ Sat: 94% (O₂)
- Pain:
- GCS: 3 (1, 1, 1)
- BGL:  

### Physical Exam

#### HEENT:
- Head: Unremarkable
- Eyes: Bulging and sluggish
- Ears: Unremarkable
- Nose: Unremarkable
- Oral Cavity: Tongue is swollen, jaw clamped
- Patient is gasping for air

#### Chest:
- Equal chest rise and fall noted, shallow
- Lung sounds clear
- No external trauma noted

#### Back:
- No external trauma noted

#### Abdomen/Pelvis:
- No trauma noted
- Pelvis stable

#### Extremity:
- No trauma noted to legs or arms
- All extremities are flaccid

#### Other:
- Skin: Cool, Pale, Dry
- Marking around the neck line, red in color
- Appears patient has vomited on self

### HPI:
- Patient was recently expelled from school following another fight

### S/S:
- Cyanosis to lips/face, pill bottles around patient’s feet, markings to patient’s neck, vomit on shirt

### Allergies:
- Depakote

### Medications:
- Prozac, Lexapro, Ativan

### PmHx:
- Depression, suicide attempts; 2 last month

### Last Meal:
- Unknown

### Events Prior:
- Patient had a fight with his parents via telephone

### Current on Immunizations?
- Unknown

### Patient Weight:
- 48kgs

### Notes:
- Body Temp:
- ECG: Sinus Bradycardia
- Patient makes no purposeful movements during transport. You are unable to ‘unlock’ jaw

### Transport Consideration:
- Securing patient properly on cot
HANGING

Additional Things to Consider about the Scene:
• Any note or messages left by patient
• Family centered care

Additional Things to Consider during Treatment/Transport:
• Modesty of patient
• Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
• Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
• Local treatment facility, Counseling Center and/or Mental Health Center
• American Academy of Pediatrics: Healthy Children
  o https://www.healthychildren.org/English/news/Pages/Youths-Treated-for-Nonsuicidal-Self-Harm-at-Increased-Risk-of-Suicide-Within-a-Year.aspx

*HANGMAN’S FRACTURE

Things to consider based on your EMS protocols, procedures and/or policies:

Nearest trauma center (see page 60) ________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

*Graphic obtained from Daily Mail
KANSAS TRAUMA CENTERS

Allen – Allen County Regional Hospital
Anderson – Anderson County Hospital
Barton – Clara Barton Hospital
Barton – Great Bend Regional Hospital
Brown – Hiawatha Community Hospital
Clark – Ashland Health Center
Comanche – Comanche County Hospital
Cheyenne – Cheyenne County Hospital
Cowley – William Newton Hospital
Crawford – Girard Medical Center
**Crawford – Via Christi Hospital in Pittsburg**
Ellis – HaysMed
Franklin – Ransom Memorial Hospital
Greenwood – Greenwood County Hospital
Harper – Anthony Medical Center
Haskell – Satanta District Hospital
Jackson – Holton Community Hospital
**Johnson – Overland Park Regional Medical Center**
Kingman – Kingman Community Hospital
Labette – Labette Health
Marion – Saint Luke Hospital and Living Center
Marshall – Community Memorial Healthcare
McPherson – Lindsborg Community Hospital
McPherson – McPherson Hospital
Miami – Miami County Medical Center
Mitchell – Mitchell County Hospital Health Systems
Nemaha – Nemaha Valley Community Hospital
Nemaha – Sabetha Community Hospital
Neosho - Neosho Memorial Regional Medical Center
Norton – Norton County Hospital
Pawnee – Pawnee Valley Community Hospital
Pottawatomie - Community HealthCare System, Inc
Pratt – Pratt Regional Medical Center
**Reno – Hutchinson Regional Medical Center**
Republic – Republic County Hospital
Rice – Rice County District Hospital
Rooks – Rooks County Health Center
**Saline – Salina Regional Health Care**
Sedgwick – Via Christi Hospital St. Francis
Sedgwick – Wesley Medical Center
Shawnee – Stormont Vail Hospital
Smith – Smith County Memorial Hospital
Thomas – Citizens Medical Center
Wyandotte – Providence Medical Center
**Wyandotte – University of Kansas Health Systems**
COMMUNICATION SCENARIO
## LANGUAGE BARRIER

### Goals/Objectives:
- Communicating with patients of diverse cultures
- Communicating with patients that are non-verbal
- Communicating with patients that have special needs

### Dispatch Information:
You are dispatched to a local apartment complex. Dispatch advises that they do not know what is going on as there is a language barrier. Crying is heard in the background and all the information you have is a ‘child needs help.’

### Chief Complaint:
Unknown call for EMS

### Additional Resources Requested:
Police and Fire Department, ALS

### Scene Description:
- Arrive at address and notice a gentleman waving at you from the porch
- PD has cleared the scene and advised there is a young male patient unresponsive on the floor
- Home is clean with multiple people gathered in the living room around the young child
- A woman approaches you and hands you an unopened bottle of Dilantin

### Initial Impression:
No one can give you any further information. You ask dispatch if there is a way to get in touch with a local translator. Male on scene keeps repeating ‘hospital.’

### Vital Sign – Set 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Unresponsive</td>
</tr>
<tr>
<td>B/P</td>
<td>100/72</td>
</tr>
<tr>
<td>HR</td>
<td>124, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>28, nonlabored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>96% (room air)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>3 (1, 1, 1)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

### Vital Sign – Set 2

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Painful</td>
</tr>
<tr>
<td>B/P</td>
<td>102/80</td>
</tr>
<tr>
<td>HR</td>
<td>120, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>26, nonlabored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>94% room air (98% if O₂ applied)</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>7 (1,2,4)</td>
</tr>
<tr>
<td>BGL</td>
<td>84mg/dl (if assessed)</td>
</tr>
</tbody>
</table>

### Vital Sign – Set 3

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVPU</td>
<td>Verbal, Inappropriate</td>
</tr>
<tr>
<td>B/P</td>
<td>106/84</td>
</tr>
<tr>
<td>HR</td>
<td>122, regular</td>
</tr>
<tr>
<td>Resp</td>
<td>22, nonlabored</td>
</tr>
<tr>
<td>O₂ Sat</td>
<td>98% on 02</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>GCS</td>
<td>10 (2, 3, 5)</td>
</tr>
<tr>
<td>BGL</td>
<td></td>
</tr>
</tbody>
</table>

### Physical Exam

#### HEENT:
- Head: Unremarkable
- Eyes: Sluggish
- Ears: Unremarkable
- Nose: Unremarkable
- Oral Cavity: Blood noted. Tongue looks to have been bitten
- Patient able to clear and control own airway

#### Chest:
- Equal chest rise and fall noted
- Lung sounds clear
- No external trauma noted

#### Back:
- No external trauma noted

#### Abdomen/Pelvis:
- No guarding noted upon quadrant palpation
- No trauma noted
- Pelvis stable

#### Extremity:
- No trauma noted to legs or arms

#### Other:
- Skin: Pale, warm with tenting noted
- No step off’s or tenderness noted to neck
- Pupils both return to PERL during transport

### HPI:
- S/S: Vomit noted on ground and dry blood noted around the lips
- Allergies: Unknown
- Medications: Unknown other than the prescribed Dilantin
- PmHx: Unknown
- Last Meal: Unknown
- Events Prior: Unknown
- Current on Immunizations?:
- Patient Weight: Estimate of 22kgs

### Notes:
- Body Temp: 99.2F
- ECG: Sinus Tachycardia
- Patient begins to moan during transport. Patient remains sleepy during transport.

### Suggested Treatment:
- O₂, Monitor, IV access, Fluids for dehydration

### Transport Consideration:
- Securing patient properly on cot
Additional Things to Consider about the Scene:
- Ask anyone, including younger children, if they can speak English
- Use any communication tool available to you to communicate with family
- Family centered care, as much as possible

Additional Things to Consider during Treatment/Transport:
- Ask for any doctor notes or hospital paperwork
- Demonstrate, as much as possible, what you will be doing prior to any intervention
- Make contact with the physician’s office that is noted on prescription bottle
- Alert receiving facility early for the need of an interpreter
- Keep back of ambulance lighting/temperature appropriate for patient comfort, low stimulation
- Transport to the nearest appropriate facility

Additional Educational Resources to Consider:
- Kansas EMSC EMS Communication Cards (see pages 64-68)
- Cross-Cultural Communication for EMS
  - https://ambulance.org/2015/06/25/cross-cultural-communication-for-ems/
- Translation apps for smart devices
- Language Lines with 24-hour access

Things to consider based on your EMS protocols, procedures and/or policies:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
COMMUNICATION CARDS

Examination

Stethoscope

Hot

Cold

Sick

Dizzy
COMMUNICATION CARDS

Throw Up

Diarrhea

Head Hurts

Ear Hurts

Throat Hurts

Cough
Devices shown in this section are not being endorsed and are only used for visual/training purposes. Please follow your local EMS services’ transport policies and guidelines. **
Establishing guidelines for safely transporting children in ambulances has been an endeavor undertaken by various individuals and organizations in recent years. Despite these efforts, this multi-faceted problem has not been easy to solve. While there have been resources developed, such as the Working Group Best-Practice Recommendations for the Safe Transportation of Children in Emergency Ground Ambulances (NHTSA 2012), there remain unanswered questions, primarily due to the lack of ambulance crash testing research specific to children.

The National Association of EMS State Officials (NASEMSO) is committed to advocating for the creation of evidence-based standards for safely transporting children by ambulance. Such standards would ensure a safer environment for the patients who rely on the EMS provider to act on their behalf. Developing standards will require large investments of both time and funding to conduct the required crash testing. If research were started today, it would require at least three years and hundreds of thousands of dollars to complete.

While NASEMSO collaborates with other organizations to bring these standards to reality, it recognizes the gap between that goal and the reality of the decisions that EMS providers face today will continue to be an issue of concern. The purpose of this interim guidance is to reduce that gap as much and as soon as possible, until evidence can be collected, analyzed, and used to develop standards specifically for children. Ultimately, pediatric restraint devices should be tested by the manufacturer to meet a new, yet-to-be developed standard.

NASEMSO recommends that this new standard include a pass/fail injury criteria comparable to that identified in FMVSS-213, which applies to child restraints in passenger vehicles. All testing should use the ambulance-specific crash pulses described in SAE J3044, SAE J2956, and SAE J2917 respectively. Litters used in testing should meet the SAE J3027 Integrity, Retention and Patient Restraint Specifications. Manufacturers should indicate to prospective purchasers whether their device(s) have met these requirements for the weight range indicated for the device.

It is the position of NASEMSO that:

1) Evidence-based standards for safely transporting children in ambulances should be developed and published by nationally recognized standards development organizations, such as the Society for Automotive Engineers (SAE);

2) Safe ambulance transport should be considered as a standard of care for the EMS system equivalent to maintaining an open airway, adequate ventilation and the maintenance of cardiovascular circulation; and

3) There are immediate actions that can be taken to improve pediatric safety in ambulances including, but not limited to:
   a. All EMS agencies that transport children should develop specific policies and procedures that address, at minimum the following elements:
      i. Methods, training (initial and continual), and equipment to secure children during transport in a way that reduces both forward motion and possible ejection. The primary focus should be to secure the torso, and provide support for the head, neck, and spine of the child, as indicated by the patient’s condition;
ii. Considerations for the varied situations that a child who needs transport to a hospital or other point of care may present to the EMS professional. These include, but may not be limited to a child who is:

- uninjured/not ill,
- ill/injured, but requiring no intensive interventions or monitoring,
- requiring intensive interventions or monitoring,
- requiring spinal immobilization or supine transport, and
- multiple patients;

iii. Prohibits children from being transported unrestrained, e.g. held in arms or lap;

iv. Provision for securing all equipment during a transport where a child is an occupant of the vehicle, with mounting systems tested in accordance with the requirements of SAE J3043;

v. Only use child restraint devices in the position for which they are designed and tested; and

b. EMS agencies should have appropriately-sized child restraint system(s) readily available on all ambulances that may transport children. Additionally, personnel should be initially and recurrently evaluated and trained on the correct use of those restraint systems;

i. The device(s) should cover, at minimum, a weight range of between five (5) and 99 pounds (2.3 - 45 kg), ideally supporting the safest transport possible for all persons of any age or size;

ii. Only the manufacturer’s recommendations for the weight/size of the patient should be considered when selecting the appropriate device for the specific child being transported; and

c. State EMS officials should act to put interim steps in place while evidence-based standards are developed and implemented, including, but not limited to:

i. Encourage and support EMS transport agencies to implement cost effective solutions to mitigate risk while transporting children in ambulances; and

ii. Work with other state EMS officials to create uniform approaches and policy language, including, but not limited to a network of information relating to ambulance crash-related injuries; and

4) NASEMSO does not recommend or endorse any particular product.

3 The Do's and Don'ts of Transporting Children in an Ambulance (December 1999).

Safe Transport of Children by EMS: Interim Guidance March 8, 2017
SITUATION 1
UNINJURED/NOT ILL

Possible Scenario:
You are called to a low speed, minor vehicle crash. A female patient wishes to go to the hospital via EMS yet has a small child that was also in the car with her. This child is uninjured and is not considered a patient per your policy or protocol. The child’s car seat is not damaged and is deemed safe to use per NHTSA guidelines (listed below). The safest way for the child to be transported to the same facility as the patient would be (in order of preference):

National Highway Traffic Safety Administration (NHTSA) Car Seat Safety Studies
NHTSA cites several international studies which showed that after minor vehicle crash tests, even when there is visible stress to the child restraint, the restraint still performed well in subsequent crash tests. NHTSA’s policy on replacing child restraints after minor vehicle crashes to the following:
- NHTSA recommends that child safety seats and boosters be replaced following a moderate or severe crash in order to ensure a continued high level of crash protection for child passengers.
- NHTSA recommends that child safety seats do not automatically need to be replaced following a minor crash.

MINOR CRASHES ARE THOSE THAT MEET ALL OF THE FOLLOWING CRITERIA:
- The vehicle was able to be driven away from the crash site;
- The vehicle door nearest the safety seat was undamaged;
- There were no injuries to any of the vehicle occupants;
- The air bags (if present) did not deploy; AND
- There is no visible damage to the safety seat

1. The first and most ideal option would be that the child goes in another vehicle and car seat is properly installed in the backseat per the vehicle owner’s manual.
2. The second option would be to place the child in the front passenger seat of the ambulance, **ONLY** if the airbags can be turned off and the car seat can be installed in the forward-facing position.

3. The last option would be that the child’s car seat is installed in the captain’s chair of the patient treatment area of the ambulance. A rear-only facing car seat **CANNOT** be used in this position. Please ensure that all items are safely secured in the patient compartment area.
SITUATION 2
ILL/INJURED; REQUIRING NO INTENSIVE INTERVENTIONS/MONITORING

Possible Scenario:
You are called to a home for a child that is not feeling well. The guardian states that they cannot get into their primary pediatrician’s office today and she is without a vehicle. Guardian would like the child transported to the nearest hospital. The patient’s vital signs are stable, and you see no life-threatening conditions at this time.

Options listed in no particular order for situation 2:

Car seat CAN be used on cot when it is a:
- Convertible car seat 5-40lbs
  - Install facing the rear of the ambulance
  - Head of cot elevated
  - Cot straps through rear-facing and forward-facing belt paths

Rear-facing only seats CANNOT be used

- Dream Ride Car Bed
  - Infants 5-20lbs, who cannot tolerate semi-upright seated position or who must lay flat
  - Requires an extra set of belt loops
  - Install perpendicular to the cot
  - Cot straps through loops on both sides of the car bed
SITUATION 2
ILL/INJURED; REQUIRING NO INTENSIVE INTERVENTIONS/MONITORING

Ferno Pedi-Mate
- 10-40lb (4.5-18kg)
- Five-point harness system
- Fernoems.com

Ferno Pedi-Mate Plus
- 10-100lb patient (4.5-45.3kg)
- Five-point harness system
- Fernoems.com

Quantum ACR4 (Ambulance Child Restraint)
- 4-99lb patient (1.8-45kg)
- 4 color-coded size selections
- Quantum-ems.com

Integrated Child Seats
- Varies by manufacturer
SITUATION 3
ILL/INJURED; REQUIRING INTENSIVE INTERVENTIONS/MONITORING

Possible Scenario:
You are called to a home for a child that is having difficulty breathing. Patient has a history of asthma and has already taken two breathing treatments at home. Guardian would like the child transported to the nearest hospital. The patient needs continuous breathing treatments, cardiac monitoring and intravenous access for possible medication administration.

Keep in mind that during transport, you will want full access to your patient for interventions and ability to listen to lung sounds. Patient transport on the cot is vital for appropriate patient care to be delivered and monitored. Also consider that this patient may not be able to lay flat during transport.

Options listed in no particular order for situation 3;

Car seat CAN be used on cot when it is a:

- Convertible car seat 5-40lbs
  - Install facing the rear of the ambulance
  - Head of cot elevated
  - Cot straps through rear-facing and forward-facing belt paths

Rear-facing only seats CANNOT be used.
SITUATION 3
ILL/INJURED; REQUIRING INTENSIVE INTERVENTIONS/MONITORING

Ferno Neomate
- 7-14lb (3.2-6.4kg)
- Five-point harness system
- Fernoems.com

Ferno Pedi-Mate
- 10-40lb (4.5-18kg)
- Five-point harness system
- Fernoems.com

Ferno Pedi-Mate Plus
- 10-100lb patient (4.5-45.3kg)
- Five-point harness system
- Fernoems.com

Quantum ACR4 (Ambulance Child Restraint)
- 4-99lb patient (1.8-45kg)
- 4 color-coded size selections
- Quantum-ems.com
SITUATION 4
SPINAL IMMOBILIZATION OR SUPINE TRANSPORT

Possible Scenario:
You are called to a local playground for a child that has fallen off the 8-foot-tall monkey bars. Patient is complaining of neck and lower back pain. Guardian on scene advises that patient has not moved his legs since the fall. No one has moved the patient and followed all directions given by dispatch for keeping the patients head and neck still. Guardian would like the child transported to the nearest trauma facility for evaluation.

Keep in mind that during transport, you will want full access to your patient for interventions. Patient transport on the cot is vital for appropriate patient care to be delivered and monitored.

Recent studies and literature have prehospital care providers transitioning from fully immobilizing and/or transporting patients on long spine boards. Please follow our local medical director's orders when it comes to immobilizing and transporting suspected trauma patients.

Life Support Products Infant/Pediatric Immobilization Board
- Infant to approx. 75lbs (up to 34kg)
- MRI Compatible and X-ray Translucent
- Alliedhpi.com

PEDI - SPIDER straps
- Poly-Pro webbing used – rated at 800lbs
- Can be used with most long spine boards
- Resistant to mold, mildew, acids and alkalis
Possible Scenario:
You are called to a home for a woman in labor. The patient says she feels the ‘urge to push.’ Within ten minutes of being on scene, you deliver a baby boy. Mother, patient 1, is bleeding profusely and signs of shock are noted. Baby boy, patient 2, has an APGAR of 7 at one minute and 8 at 5 minutes. Meconium is present during assessment. Both patients need to be transported to the nearest facility.

Patient 1 will need to be transported on a cot. She is needing interventions and continuous monitoring. Patient 2 will need to be transported on a cot in an appropriate child restraint system. Patient two will also need continuous monitoring and possible airway interventions, i.e. suctioning.

A child passenger, especially a newborn, must **NEVER** be transported on an adult’s lap nor should **ANYONE** hold a newborn during transport.

Please keep in mind the number of appropriate pediatric transport devices that are available to you as the provider. In situations of multiple births or multiple pediatric patients needing transported at one time, resources will need to be considered early in the call. All pediatric patients need to be transported in an appropriate and safe manner.

The University of New Mexico EMSC Program has two online training modules titled “Safe Transport of Children In EMS Vehicles.” Taking the extra time to ensure safe transport is not only looking out for the patient’s safety, but also yours! The two online modules can be found at: [https://emed.unm.edu/pem/programs/ems-for-children-emsc/emsc-online-course-directory.html](https://emed.unm.edu/pem/programs/ems-for-children-emsc/emsc-online-course-directory.html)
ACKNOWLEDGEMENTS

This resource was completed by the amazing work of the following individuals and programs that strive to increase the level of pediatric education given to prehospital healthcare providers within the state of Kansas, and beyond. Their dedication is appreciated and their passion unmeasurable.

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Kansas EMSC Program

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Kansas Trauma and EMSC Program

Lisa Baldwin-Bateman, Paramedic
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LifeTeam

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Ford County Fire and EMS

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Via Christi Hospital Wichita, Inc.

Katherine Schafer, BS
Program Manager
New Mexico EMSC Program

Hutchinson Community College
EMS Education Program

Nye & Associates, Wichita, Kansas
Kansas EMS Commination Cards

Kansas EMSC – www.kdheks.gov/emsc
Kansas Trauma Program – www.kstrauma.org
Via Christi Regional Burn Center - www.viachristi.org/location/via-christi-regional-burn-center
New Mexico EMSC - emed.unm.edu/pem/programs/ems-for-children-emsc
Hutchinson Community College EMS Education - http://www.hutchcc.edu/ems
Nye & Associates – nyeandassociates.com
NASEMSO Safe Transport of Children Ad Hoc Committee - www.nasemso.org/Committees/STC
HRSA Maternal and Child Health - mchb.hrsa.gov/maternal-child-health-topics/child-health
EMSC Innovation and Improvement Center – emscimprovement.center
NEDARC – www.nedarc.org