

Emergency Medical Services for Children: Pediatric Medical Direction and Equipment Survey

Before you get started, please tell us about your agency in case we need to contact you for any follow up information...

1. Date of survey completion (mm/dd/yy): _____
2. Name of your EMS Agency: _____
3. EMS Agency ID: _____
4. Address: _____
5. City: _____
6. County: _____
7. State: _____
8. Zip Code: _____
9. Name of person completing survey: _____
10. Job title of person completing survey: _____
11. Agency phone number: _____ [format: (xxx) xxx-xxxx]
12. Email of person completing survey: _____ (format: johndoe@someplace.com)

13. Does your agency respond to 911 emergency medical calls (or emergency medical calls placed through other emergency access numbers if used in your region)?
(select one)

- Yes → **Go to 14**
 No

If your agency DOES NOT respond to 911 emergency calls, you are finished with the survey. Please return the survey as outlined in the instructions above. Thank you for your time.

14. Please indicate your highest level of state certification/licensure for your EMS agency:
(select one)

- Basic Life Support (BLS)
- Advanced Life Support (ALS)

Next, please tell us how medical direction is utilized in your agency...

15. In the past year, have any of your providers attempted to contact on-line medical direction for medical advice when treating a pediatric patient, age 0-18 years?
(select one)

- Yes
- No → **Skip to 18**

16. In the past year, how often was on-line medical direction available to provide medical advice to your providers when they were treating pediatric patients, ages 0-18 years? (Please IGNORE situations where on-line medical direction was not available due to equipment failure such as non-working radios or lack of cell phone signal.)
(select one)

- Always (100%)
- Almost Always (90 to 99%)
- Usually (50 to 89%)
- Occasionally (10 to 49%)
- Rarely (1 to 9%)
- Never (0%) → **Skip to 18**

17. In the past year, when on-line medical direction was available, what type of medical professional **PRIMARILY** gave your providers medical advice when they were treating a pediatric patient, age 0-18 years?
(select one)

- EMT-Basic
- EMT-Intermediate
- Paramedic
- Nurse
- Nurse practitioner
- Physician assistant
- Physician
- Do Not Know
- Other Type of Medical Professional:

18. Are written protocols (paper or electronic) available to your providers for the treatment of pediatric patients, ages 0-18 years?
(select one)

- Yes
 No → **Skip to 20**
- 

19. In the past year, how often were these pediatric protocols physically available (paper or electronic) in the EMS vehicle or carried by your providers during emergency calls? *(select one)*

- Always (100%)
- Almost Always (90 to 99%)
- Usually (50 to 89%)
- Occasionally (10 to 49%)
- Rarely (1 to 9%)
- Never (0%)

20. If you have any additional thoughts about pediatric medical direction, please share them here.

Please tell us about the vehicles operated by your agency...

21. Does your agency operate any ground vehicles that transport patients from scene to hospital?
(select one)

Yes
 No → **Skip to 32**

22. Please indicate the total number of ground vehicles that your agency operates that transport patients from scene to hospital:

23. How many of your transporting ground vehicles are Basic Life Support (BLS)?

24. How many of your transporting ground vehicles are Advanced Life Support (ALS)?

Note: The sum of #23 and #24 needs to match the answer to question #22.

Please tell us about equipment on your BLS transporting vehicles. The following equipment is recommended by the National EMS for Children Program and may not correspond with Virginia's required equipment list.

First it is important to read the instructions below...

If your agency does not operate any BLS transporting ground vehicles, skip to question 28.

In the list below you are indicating how many of your transporting ground vehicles carry at least 1 of each item. As a result, your responses cannot be greater than the number of BLS vehicles you reported in question 23 on page 4.

Example:
 You have 5 vehicles and each vehicle carries 2 rigid tonsil tip suction catheters. **Your answer should be 5, not 10.**

25. How many of your BLS transporting ground vehicles carry a(n):	# of Vehicles
Rigid tonsil tip suction catheter	<u>5</u>

25. How many of your BLS transporting ground vehicles carry a(n):	# of Vehicles
Rigid tonsil tip suction catheter	_____
Suction catheter in one of the following sizes: 6fr, 8fr, <u>or</u> 10fr	_____
Suction catheter in one of the following sizes: 12fr, 14fr, <u>or</u> 16fr	_____
Child size nasal cannula	_____
Adult size nasal cannula	_____
Child size non-rebreather mask	_____
Adult size non-rebreather mask	_____
Child size (450-750 ml) hand operated self-expanding bag (bag-valve mask)	_____
Adult size (>1000 ml) hand operated self-expanding bag (bag-valve mask)	_____
Neonate size mask for a bag-valve mask	_____
Infant size mask for a bag-valve mask	_____
Child size mask for a bag-valve mask	_____
Adult size mask for a bag-valve mask	_____
Nasal airway in one of the following sizes: 16fr, 18fr, 20fr, 22fr, <u>or</u> 24fr (internal diameters 3.5mm to 6.0mm)	_____
Nasal airway in one of the following sizes: 26fr, 28fr, 30fr, 32fr, <u>or</u> 34fr (internal diameters 6.5mm to 8.5mm)	_____

25. How many of your BLS transporting ground vehicles carry a(n):	# of Vehicles
Either a size 0 or size 1 (50mm or 60mm) oral airway	_____
Either a size 2 or size 3 (70mm or 80mm) oral airway	_____
Either a size 4 or size 5 (90mm or 100mm) oral airway	_____
Pulse oximeter with pediatric probes	_____
<i>Note: Pulse oximeter may be independent or integrated with a monitor/ defibrillator or other device</i>	_____
Pulse oximeter with adult probes	_____
<i>Note: Pulse oximeter may be independent or integrated with a monitor/ defibrillator or other device</i>	_____
OB kit	_____
Bulb suction for infants	_____
<i>Note: Bulb suction may be carried either separately or as part of the OB Kit</i>	_____
Either a thermal absorbent blanket and head cover or appropriate heat-reflective material	_____
<i>Note: May be carried either separately or as part of the OB Kit</i>	_____
Small rigid cervical immobilization device	_____
Medium rigid cervical immobilization device	_____
Large rigid cervical immobilization device	_____
Child size lower extremity (femur) traction device	_____
<i>Note: This could be a device that is adjustable based on patient size</i>	_____
Adult size lower extremity (femur) traction device	_____
<i>Note: This could be a device that is adjustable based on patient size</i>	_____
Small extremity immobilization device	_____
<i>Note: This could be a device that is adjustable based on patient size</i>	_____
Medium extremity immobilization device	_____
<i>Note: This could be a device that is adjustable based on patient size</i>	_____
Large extremity immobilization device	_____
<i>Note: This could be a device that is adjustable based on patient size</i>	_____
Sphygmomanometer with a pediatric cuff	_____
Sphygmomanometer with an adult cuff	_____
AED or defibrillator with the appropriate paddles and/or pads to defibrillate children	_____
Length/weight based tape or appropriate reference material for pediatric equipment sizing and drug dosing	_____

26. How many of your BLS transporting ground vehicles carry **ALL** of the equipment items listed on the previous pages? (Note that your answer cannot be greater than the smallest number previously provided for any of the BLS equipment items. See list below for a review of the equipment items.) _____

- Suction catheter – rigid tonsil tip
- Suction catheter *in one of the following sizes*: 6fr, 8fr, *or* 10fr
- Suction catheter *in one of the following sizes*: 12fr, 14fr, *or* 16fr
- Nasal canula – child size
- Nasal canula – adult size
- Non-rebreather mask – child size
- Non-rebreather mask – adult size
- Hand operated self-expanding bag (bag-valve mask) – child size (450-750 ml)
- Hand operated self-expanding bag (bag-valve mask) – adult size (>1000 ml)
- Mask for bag-valve mask – neonate size
- Mask for bag-valve mask – infant size
- Mask for bag-valve mask – child size
- Mask for bag-valve mask – adult size
- Nasal airway *in one of the following sizes*: 16fr, 18fr, 20fr, 22fr, *or* 24fr (internal diameters 3.5mm to 6.0mm)
- Nasal airway *in one of the following sizes*: 26fr, 28fr, 30fr, 32fr, *or* 34fr (internal diameters 6.5mm to 8.5mm)
- Oral airway – *either* a size 0 *or* size 1 (50mm or 60mm)
- Oral airway – *either* a size 2 *or* size 3 (70mm or 80mm)
- Oral airway – *either* a size 4 *or* size 5 (90mm or 100mm)
- Pulse oximeter with pediatric probes
- Pulse oximeter with adult probes
- OB kit
- Bulb suction for infants
- Thermal absorbent blanket with head cover *or* appropriate heat-reflective material
- Rigid cervical immobilization device – small
- Rigid cervical immobilization device – medium
- Rigid cervical immobilization device – large
- Lower extremity (femur) traction device – child size
- Lower extremity (femur) traction device – adult size
- Extremity immobilization device – small
- Extremity immobilization device – medium
- Extremity immobilization device – large
- Sphygmomanometer with a pediatric cuff
- Sphygmomanometer with an adult cuff
- AED or defibrillator that includes pediatric capability
- Length/weight-based tape *or* appropriate reference material for pediatric equipment sizing and drug dosing

27. If you have additional thoughts about equipment on your BLS transporting ground vehicles, please share them here.

Please tell us about equipment on your ALS transporting vehicles. The following equipment is recommended by the National EMS for Children Program and may not correspond with Virginia's required equipment list.

First it is important to read the instructions below...

If your agency does not operate any ALS transporting ground vehicles, skip to question 32.

In the list below you are indicating how many of your transporting ground vehicles carry at least 1 of each item. As a result, your responses cannot be greater than the number of ALS vehicles you reported in Question 24 on page 4.

Example:

You may have 5 vehicles and each vehicle carries 2 rigid tonsil tip suction catheters. **Your answer should be 5, not 10.**

28. How many of your ALS transporting ground vehicles carry a(n):	# of Vehicles
Rigid tonsil tip suction catheter	<u>5</u>

28. How many of your ALS transporting ground vehicles carry a(n):	# of Vehicles
Rigid tonsil tip suction catheter	_____
Suction catheter in one of the following sizes: 6fr, 8fr, <u>or</u> 10fr	_____
Suction catheter in one of the following sizes: 12fr, 14fr, <u>or</u> 16fr	_____
Child size nasal cannula	_____
Adult size nasal cannula	_____
Child size non-rebreather mask	_____
Adult size non-rebreather mask	_____
Child size (450-750 ml) hand operated self-expanding bag (bag-valve mask)	_____
Adult size (>1000 ml) hand operated self-expanding bag (bag-valve mask)	_____
Neonate size mask for a bag-valve mask	_____
Infant size mask for a bag-valve mask	_____
Child size mask for a bag-valve mask	_____
Adult size mask for a bag-valve mask	_____
Nasal airway in one of the following sizes: 16fr, 18fr, 20fr, 22fr, <u>or</u> 24fr (internal diameters 3.5mm to 6.0mm)	_____

28. How many of your ALS transporting ground vehicles carry a(n):	# of Vehicles
Nasal airway in one of the following sizes: 26fr, 28fr, 30fr, 32fr, <u>or</u> 34fr (internal diameters 6.5mm to 8.5mm)	_____
<u>Either</u> a size 0 <u>or</u> size 1 (50mm or 60mm) oral airway	_____
<u>Either</u> a size 2 <u>or</u> size 3 (70mm or 80mm) oral airway	_____
<u>Either</u> a size 4 <u>or</u> size 5 (90mm or 100mm) oral airway	_____
Pulse oximeter with pediatric probes <i>Note: Pulse oximeter may be independent or integrated with a monitor/ defibrillator or other device</i>	_____
Pulse oximeter with adult probes <i>Note: Pulse oximeter may be independent or integrated with a monitor/ defibrillator or other device</i>	_____
OB kit	_____
Bulb suction for infants <i>Note: Bulb suction may be carried either separately <u>or</u> as part of the OB Kit</i>	_____
<u>Either</u> a thermal absorbent blanket and head cover <u>or</u> appropriate heat-reflective material <i>Note: May be carried either separately <u>or</u> as part of the OB Kit</i>	_____
Small rigid cervical immobilization device	_____
Medium rigid cervical immobilization device	_____
Large rigid cervical immobilization device	_____
Child size lower extremity (femur) traction device <i>Note: This could be a device that is adjustable based on patient size</i>	_____
Adult size lower extremity (femur) traction device <i>Note: This could be a device that is adjustable based on patient size</i>	_____
Small extremity immobilization device <i>Note: This could be a device that is adjustable based on patient size</i>	_____
Medium extremity immobilization device <i>Note: This could be a device that is adjustable based on patient size</i>	_____
Large extremity immobilization device <i>Note: This could be a device that is adjustable based on patient size</i>	_____
Sphygmomanometer with a pediatric cuff	_____
Sphygmomanometer with an adult cuff	_____
Length/weight based tape <u>or</u> appropriate reference material for pediatric equipment sizing and drug dosing	_____

28. How many of your ALS transporting ground vehicles carry a(n):	# of Vehicles
Size 0 Miller laryngoscope blade	_____
Size 1 Miller laryngoscope blade	_____
Size 2 Miller laryngoscope blade	_____
<u>Either</u> a size 3 <u>or</u> size 4 Miller laryngoscope blade	_____
Size 2 curved laryngoscope blade	_____
<u>Either</u> a size 3 <u>or</u> 4 curved laryngoscope blade	_____
Pediatric size stylette	_____
Adult size stylette	_____
Meconium Aspirator Adaptor	_____
Pediatric size Magill forceps	_____
Adult size Magill forceps	_____
End-tidal CO ₂ detection capability for pediatric patients <u>either</u> : quantitative capnometry <u>or</u> colorimetric	_____
End-tidal CO ₂ detection capability for adult patients <u>either</u> : quantitative capnometry <u>or</u> colorimetric	_____
4 different sizes of intravenous catheters from 14 gauge to 24 gauge	_____
<u>Either</u> a size 22 <u>or</u> size 24 gauge intravenous catheter	_____
Child size intraosseous needle	_____
Adult size intraosseous needle	_____
1cc size syringe	_____
Syringe in one of the following sizes: 3cc, 5cc, <u>or</u> 10cc	_____
Defibrillator with the appropriate paddles and/or pads to defibrillate children	_____
Defibrillator with the appropriate paddles and/or pads to defibrillate adults	_____
Transcutaneous cardiac pacemaker with pediatric pads/cables <i>Note: Includes both independent and monitor/ defibrillator incorporated pacing units</i>	_____
Transcutaneous cardiac pacemaker with adult pads/cables <i>Note: Includes both independent and monitor/ defibrillator incorporated pacing units</i>	_____

This page lists ET tubes and sizes. The questions on this page are asking for information that is different than the previous pages. Please read the statement below regarding the items on this page.

For the following questions, please indicate the number of ALS transporting ground vehicles that carry **at least 2** of each size of either **CUFFED** or **UNCUFFED** endotracheal tubes.

29. How many of your ALS transporting ground vehicles carry a(n):	# of Vehicles
At least 2 size 2.5mm endotracheal tubes	_____
At least 2 size 3.0mm endotracheal tubes	_____
At least 2 size 3.5mm endotracheal tubes	_____
At least 2 size 4.0mm endotracheal tubes	_____
At least 2 size 4.5mm endotracheal tubes	_____
At least 2 size 5.0mm endotracheal tubes	_____
At least 2 size 5.5mm endotracheal tubes	_____
At least 2 size 6.0mm endotracheal tubes	_____
At least 2 size 7.0mm endotracheal tubes	_____
At least 2 size 8.0mm endotracheal tubes	_____

30. How many of your ALS transporting ground vehicles carry ALL of the equipment items listed on the previous pages? (Note that your answer cannot be greater than the smallest number previously provided for any of the ALS equipment items. See list below for a review of the equipment items.)

- Suction catheter – rigid tonsil tip
- Suction catheter *in one of the following sizes*: 6fr, 8fr, *or* 10fr
- Suction catheter *in one of the following sizes*: 12fr, 14fr, *or* 16fr
- Nasal canula – child size
- Nasal canula – adult size
- Non-rebreather mask – child size
- Non-rebreather mask – adult size
- Hand operated self-expanding bag (bag-valve mask) – child size (450-750 ml)
- Hand operated self-expanding bag (bag-valve mask) – adult size (>1000 ml)
- Mask for bag-valve mask – neonate size
- Mask for bag-valve mask – infant size
- Mask for bag-valve mask – child size
- Mask for bag-valve mask – adult size
- Nasal airway *in one of the following sizes*: 16fr, 18fr, 20fr, 22fr, *or* 24fr (internal diameters 3.5mm to 6.0mm)
- Nasal airway *in one of the following sizes*: 26fr, 28fr, 30fr, 32fr, *or* 34fr (internal diameters 6.5mm to 8.5mm)
- Oral airway – *either* a size 0 *or* size 1 (50mm or 60mm)
- Oral airway – *either* a size 2 *or* size 3 (70mm or 80mm)
- Oral airway – *either* a size 4 *or* size 5 (90mm or 100mm)
- Pulse oximeter with pediatric probes
- Pulse oximeter with adult probes
- OB kit
- Bulb suction for infants
- Thermal absorbent blanket with head cover *or* appropriate heat-reflective material
- Rigid cervical immobilization device – small
- Rigid cervical immobilization device – medium
- Rigid cervical immobilization device – large
- Lower extremity (femur) traction device – child size
- Lower extremity (femur) traction device – adult size
- Extremity immobilization device – small
- Extremity immobilization device – medium
- Extremity immobilization device – large
- Sphygmomanometer with a pediatric cuff
- Sphygmomanometer with an adult cuff
- Length/weight-based tape *or* appropriate reference material for pediatric equipment sizing and drug dosing
- Laryngoscope blade – Miller size 0
- Laryngoscope blade – Miller size 1
- Laryngoscope blade – Miller size 2
- Laryngoscope blade – Miller *either* a size 3 *or* size 4
- Laryngoscope blade – curved size 2
- Laryngoscope blade – curved *either* a size 3 *or* size 4
- Stylette for endotracheal tube – pediatric size
- Stylette for endotracheal tube – adult size
- Meconium aspirator adaptor
- Magill forceps – pediatric size
- Magill forceps – adult size
- End-tidal CO₂ detection capability for pediatric patients *either* quantitative capnometry *or* colorimetric
- End-tidal CO₂ detection capability for adult patients *either* quantitative capnometry *or* colorimetric
- Intravenous catheters – *4 different sizes* from 14 gauge to 24 gauge
- Intravenous catheter – *either* a size 22 *or* size 24 gauge
- Intraosseous needle – child size
- Intraosseous needle – adult size
- Syringe – 1cc
- Syringe *in one of the following sizes*: 3cc, 5cc, *or* 10cc
- Defibrillator with the appropriate paddles and/or pads to defibrillate children
- Defibrillator with the appropriate paddles and/or pads to defibrillate adults
- Transcutaneous cardiac pacemaker with pediatric pads/cables
- Transcutaneous cardiac pacemaker with adult pads/cables
- Endotracheal tubes (2 each) – 2.5mm
- Endotracheal tubes (2 each) – 3.0mm
- Endotracheal tubes (2 each) – 3.5mm
- Endotracheal tubes (2 each) – 4.0mm
- Endotracheal tubes (2 each) – 4.5mm
- Endotracheal tubes (2 each) – 5.0mm
- Endotracheal tubes (2 each) – 5.5mm
- Endotracheal tubes (2 each) – 6.0mm
- Endotracheal tubes (2 each) – 7.0mm
- Endotracheal tubes (2 each) – 8.0mm

31. If you have additional thoughts about equipment on your ALS transporting ground vehicles or the survey itself, please share them here.

You have now completed most of the National Emergency Medical Services for Children equipment assessment. We would like to ask a few additional questions to understand how EMS practices may be changing across the country.

32. To better understand these changes are you willing to take 3-5 minutes to answer some additional questions regarding rescue airway devices and child restraint devices?

- Yes
 No → **Survey Complete. Thank you for your time.**

33. Does your agency use any rescue airway device (alternatives to endotracheal tubes) such as the disposable supraglottic airway (e.g. King LTD), esophageal obturator airway (EOA), esophageal-tracheal double lumen airway (ETDLA), laryngeal mask airway (LMA), or laryngeal tube?

- Yes
 No → **Skip to 44**

34. What types of rescue airway devices does your agency use?
(check all that apply)

- Disposable Supraglottic Airway (e.g. King LTD™)
 Esophageal Obturator Airway (EOA)
 Esophageal-Tracheal Double Lumen Airway (ETDLA/ Combitube™)
 Laryngeal Mask Airway (LMA)
 Laryngeal Tube
 Other: _____

} **Answer any or all
of Questions 35-
40 if checked**

35. What *PEDIATRIC* sizes do you carry in the Disposable Supraglottic Airway device?
(select one)

- All pediatric sizes
 Some pediatric sizes
 We do not carry any pediatric sizes

36. What *PEDIATRIC* sizes do you carry in the Esophageal Obturator Airway? (select one)

- All pediatric sizes
 Some pediatric sizes
 We do not carry any pediatric sizes

37. What **PEDIATRIC** sizes do you carry in the Esophageal-Tracheal Double Lumen Airway device? (*select one*)
- All pediatric sizes
 - Some pediatric sizes
 - We do not carry any pediatric sizes
38. What **PEDIATRIC** sizes do you carry in the Laryngeal Mask Airway device? (*select one*)
- All pediatric sizes
 - Some pediatric sizes
 - We do not carry any pediatric sizes
39. What **PEDIATRIC** sizes do you carry in the Laryngeal Tube device? (*select one*)
- All pediatric sizes
 - Some pediatric sizes
 - We do not carry any pediatric sizes
40. What **PEDIATRIC** sizes do you carry for your “other” airway device? (*select one*)
- All pediatric sizes
 - Some pediatric sizes
 - We do not carry any pediatric sizes
41. Do your state and/or local protocols allow EMT-Basic providers to use rescue airway devices? (*select one*)
- Yes
 - No
 - Our service does not have EMT- Basic providers
42. What type of airway device does your agency **PRIMARILY** use? (*select one*)
- Disposable Supraglottic Airway (e.g. King LTD™)
 - Endotracheal Tubes
 - Esophageal Obturator Airway (EOA)
 - Esophageal-Tracheal Double Lumen Airway (ETDLA/ Combitube™)
 - Laryngeal Mask Airway (LMA)
 - Laryngeal Tube
 - Other: _____

43. In the next 3-5 years, how do you envision your agency using airway devices?

(Select the most appropriate choice from the list below)

- We anticipate using **ONLY** endotracheal tubes
- We anticipate using **ONLY** rescue airways (excluding endotracheal tubes)
- We anticipate using **PRIMARILY** endotracheal tubes with some rescue airways
- We anticipate using **PRIMARILY** rescue airways with some endotracheal tubes
- Other: _____

44. Are you aware of the “*Working Group Best-Practice Recommendations for the Safe Transportation of Children in Emergency Ground Ambulances*” document published by the National Highway Traffic Safety Administration (NHTSA) in 2012?

- Yes
- No

45. Do your transporting ground vehicles carry a child restraint device (defined as any device, except a passenger system lap seat belt or lap/shoulder seat belt, designed for use in a motor vehicle to restrain, seat, or position a child)?

Yes → **Skip to 47**

No
↓

46. If your vehicles do not carry a child restraint device, how do you restrain a child who is being transported? _____ → **Skip to 49**

47. What type of child restraint device(s) do your ground vehicles carry?

(check all that apply)

- Federally approved child safety seat
- Inflatable pediatric transport seat
- Stretcher-mounted pediatric restraint
- Other: _____

48. If a child is a *PATIENT*, where is the child restraint device *PRIMARILY* positioned during transport? (select one)

- Attendant’s / Captain’s chair
- Bench (to the side of the stretcher)
- Jump /CPR seat (to the side of the stretcher opposite the bench)
- Stretcher
- Other: _____

49. Is your EMS agency an approved car seat inspection station?

Yes

No

50. If you have additional thoughts about rescue airway devices or child restraints please share them with us.

**Thank you again for completing the survey! We appreciate your time.
Please return the survey as outlined in the instructions above**