South Dakota EMS for Children

EMS Voluntary Pediatric Readiness Recognition

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January 1, 2020

Dear EMS Agency Administrator:

It is my pleasure to introduce a new ***voluntary*** statewide initiative sponsored by the South Dakota EMS for Children (EMSC) program: a recognition project for South Dakota EMS agencies who wish to demonstrate their commitment to go above and beyond for our pediatric patients.

Participating in this program provides an excellent opportunity for your agency to receive community and media recognition for your commitment to improving the delivery of emergency medical care to children.

Please note that your decision to participate in this project will in ***no*** way impact your licensure by the South Dakota Department of Health Division of Emergency Medical Systems.

If you and your organization are interested in participating in the EMS Voluntary Pediatric Readiness Recognition project, please review this guide and send the attached application to SD EMSC. Organizations that successfully complete the process will receive a certificate and decal to affix to their ambulances to recognize their accomplishments and commitments to South Dakota's children.

The SD EMSC Advisory Board will review this program a*nnually*. Changes to the recognition criteria will be shared with participating organizations to allow them the opportunity to maintain their pediatric readiness status.

Should questions arise, please contact SD EMS for Children at 605-328-6668 or corolla.lauck@usd.edu

Caring for children doesn't get better by chance…

It gets better by choice!

Corolla J. Lauck, Program Director
SD EMS for Children
1400 West 22nd Street
Sioux Falls, SD 57104

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Introduction

The mission of the South Dakota EMSC Program is to ensure that every child in South Dakota receives the best pediatric care in the event of severe injury or illness. SD EMSC aims to; advocate for the unique needs of children of all ages, ensure all children in our state have timely access to optimal medical care and to provide safety, injury and prevention initiatives.

This document has been prepared by the SD Emergency Medical Services for Children (SD EMSC) Program, to assist the leadership of licensed EMS agencies within the State of South Dakota who desire to apply for recognition through the SD EMSC Voluntary Pediatric Readiness Recognition project (E-VPRR). EMS agencies currently licensed within the State of South Dakota are eligible to participate. This handbook will describe the steps necessary to apply for, and maintain, recognition status.

This document is subject to review and revision; therefore, the applicant is encouraged to review a current copy and confer with SD EMSC to secure additional assistance. The most recent version of this overview document is posted on the SD EMSC website.

Frequently Asked Questions

Q. Is participation in this program mandatory?

A. No, participation in this program is **voluntary.**

Q. Does the SD Board of EMS plan to mandate future participation?

A. No, participation in this program is **voluntary**.

Q. What are the benefits to participating?

A. Participation will improve the capability of your organization to treat pediatric emergencies. It will allow you to present this achievement to your elected officials and community, as well as the local media.

Q. Is there a fee to participate in this recognition program?

A. No. There is no cost to an organization to participate in the program beyond the cost to meet the requirements of the program, which we hope are minimal.

Q. Our pulse-ox does not have pediatric probes but it seems to work on children, does this count?

A. Yes, the terminology used on the required equipment list is based on nationally developed lists. EMS agencies will comply with the SD EMSC Voluntary Pediatric Readiness Recognition as long as its pulse-oximeter is pediatric *CAPABLE*, even if it does not have a specific pediatric probe. EMS agencies should obtain documentation from the pulse-ox manufacturer validating the unit's ability to obtain accurate readings on pediatric patients.

Q. What is meant by "small, medium, and large" extremity splints?

A. The terminology used on the required equipment list is based on federally developed lists. EMS agencies will comply with the SD EMSC Voluntary Pediatric Readiness Recognition project (E-VPRR) as long as it carries, on all units, a variety of splint sizes that would be appropriate for use on pediatric patients. Typically, SAM splints (or equivalent) and a variety pack of padded board splints will serve this purpose.

Criteria for Recognition

The SD EMSC Volunteer Pediatric Readiness Recognition project (E-VPRR) is a single-level system designed to recognize agencies who have demonstrated a commitment to excellence in pediatric emergency care. Agencies must meet all requirements stated below to be eligible for participation in the program. Renewal recognition will occur every two years to coincide with the state ambulance inspections.

The EMS Voluntary Pediatric Readiness Recognition program features five required areas of participation in order to achieve recognition:

1. Compliance with SD EMS Statutes and Regulations
    a. To include data submission requirements
2. Participate in SD EMSC assessments/surveys
3. Pediatric Emergency Care Coordinator; designated
    a. Pediatric Education
    b. Pediatric Skills; competency evaluation
4. Community Outreach
5. Pediatric equipment; have equipment per national recommendations
    a. Safe transport: have a pediatric restraint device – recommended

Compliance with SD EMS Statutes and Regulations

All interested agencies must be compliant with all applicable SD EMS statutes and regulations.

Quality data and effective data management plays an important role in improving the performance of an agency's system of care. Uniform data collection is needed to evaluate systems and develop quality improvement (QI) in pediatric emergency medical and trauma care. NEMSIS enables state and national EMS agencies to evaluate current pre-hospital care and patient outcomes.

Compliance with the SD CL 34-11-7 data collection regulation is important and agencies must submit data to NEMSIS. An agency with a deficiency or disciplinary action related to data submission is eligible to apply ***provided*** they have a corrective action plan and are not delinquent on planned benchmarks. Compliance will be verified through consultation with the SD EMS Data Administrator.

Deficiencies or disciplinary action related to other regulatory requirements or complaints may preclude or delay program participation depending on the circumstances and will be evaluated on a case-by-case basis.

EMS Agency Assessments/Surveys

Federal performance measures obligate SD EMSC to provide information to Congress on the effectiveness of our program through data collection. EMS agencies participating in the voluntary recognition program *<u>are required</u>* to participate in all state and national EMSC surveys/assessments. These surveys generally take 30 minutes or less to complete. A review of previous assessment data and a signed statement by the Agency Director will be utilized to verify this requirement.

Pediatric Emergency Care Coordinator

Participating agencies are required to have a designated Pediatric Emergency Care Coordinator (PECC). The Institute of Medicine [1,2] recommends that EMS agencies have a PECC to champion and provide pediatric leadership for the organization to ensure the agency and its providers are prepared to care for sick and injured children.

A PECC should be a member of the EMS Agency and be familiar with day-to-day operations.
Roles for a PECC:

- Ensure pediatric perspectives are included in the EMS protocols and guidelines.
- Promote pediatric continuing education
- Facilitate pediatric QI/PI
- Ensure availability of pediatric: medications, supplies and equipment
- Promote pediatric safety, injury and prevention programs
- Promote participation in pediatric research
- Liaison with the Emergency Department PECC
- Promote family-centered care

Provide the name and contact information of the individual fulfilling the PECC role on the application. SD EMSC requires notification for PECC personnel changes.

*Pediatric Continuing Education

Continuing education improves provider readiness, confidence and competency skills to care for sick and injured children in high acuity low occurrence (HALO) events.

To achieve program recognition, an EMS agency shall require pediatric specific education:

- ALS providers receive a minimum of four (**4**) hours of continuing education annually
- BLS providers receive a minimum of three (**3**) hours of continuing education annually
    - Recommended pediatric courses
        - Pediatric Advanced Life Support – PALS
        - Pediatric Education for the Pre-hospital Provider – PEPP
        - State EMS accredited courses

Verification will be completed in the form of a statement signed by the EMS Agency Administrator with maintenance of training records demonstrating compliance. It should be understood that any EMS Agency receiving recognition is subject to a random audit of its personnel training records specific to pediatric continuing education and the PECC contact information. EMS Agencies will need to keep on file; proof of completion of the required course hours for each EMS provider. EMS providers who function with multiple services are allowed to use the same courses to satisfy the education requirements.

Instructions for submitting documentation for verification: *Appendix A.*

[1] Institute of Medicine Committee on the Future of Emergency Care in the U. S. Health System (2007). Emergency care for children: growing pains

*Pediatric Skills Competency Evaluation Plan

To achieve program recognition, an EMS agency shall develop and submit a written plan to evaluate pediatric skill competencies for all providers at a ***minimum*** of once per year. It is **highly encouraged and recommended** that skill competency evaluations be completed at least twice annually using a variety of modalities.

Verification will be completed in the form of a statement signed by the EMS Agency Administrator and submission of the written plan for initial recognition. In subsequent years, documentation will include submission of the written plan and maintenance of training records demonstrating compliance. Instructions for submitting documentation for verification: *Appendix A*.

Community Outreach Programs

Beyond providing high quality and safe clinical care to children, EMS Agency's also share a responsibility to provide education, safety, injury and prevention initiatives within their community. Outreach can be accomplished in multiple ways and may target a variety of audiences to include: children, parents, teachers, day care providers, etc.

Outreach shall include at **least two (2) offerings** on an annual basis, there is no specific way that this must be accomplished as long as a benefit to children can be demonstrated.
Examples included, not limited to:

- Host a community safety day
- Host a community CPR class, include child/infant curriculum
- Provide a presentation to local elementary school students about EMS
- Conducting injury prevention presentations or campaigns;
    - Bicycle, ATV, or Hunter safety
    - Water safety
    - It's Not Fine 'til They're 4'9"
    - Don't Thump Your Melon
    - Protected Not Ejected
    - STOP the BLEED
- Community Health Fairs
- Host or participate in Pediatric Disaster Trainings or drills
- Collaborate with daycares and schools to educate and improve awareness of EMS topics including, but not limited to: compression-only CPR, first aid, and 9-1-1 use.

Instructions for submitting documentation for verification: *Appendix A*.

[2] Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). A national assessment of pediatric readiness of emergency departments. *JAMA Pediatrics,* 169(6), 527–534.

Pediatric Equipment Standards

Pre-hospital providers must have the appropriate pediatric equipment and supplies to care for ill and injured children in order to achieve optimal pediatric outcomes. The Joint Policy Statement "Equipment for Ground Ambulances"[3] is the metric used to determine a state's compliance with the Federal EMSC performance objectives.

Appendix B includes the national recommendations for equipment on ground ambulances and a list of specific items not currently required under SD regulations. To obtain recognition through this program, agencies must demonstrate compliance with the national recommendations. Agencies must attest that they carry 100 percent of the state and national recommended equipment. National recommended equipment compliance is subject to review and discretion of the board.

Verification of any equipment items not included in SD regulations may occur either through an in-person or virtual site visit by SD EMSC representative(s).

Special Note: Safe Transport of Pediatric Patients

The safe transport of pediatric patients remains an area of significant challenge for EMS providers. It is strongly recommended that EMS agencies have policies that include prohibiting the transport of unrestrained pediatric patients and provisions for securing all equipment during transport.

Furthermore, agencies should seek compliance with both the *Safe Transport of Children by EMS: Interim Guidance* (2017 NASEMSO) and the *Working Group Best-Practice Recommendations for the Safe Transport of Children in Ground Ambulances* (2012 NHTSA). Both documents can be found in *Appendix B*.

Future program revisions will likely include specific requirements regarding the safe transport of pediatric patients.

NOTICE: Beginning in 2021, EMS agencies applying for recognition will be required to have pediatric transport devices designed to transport children between 5 and 99 lbs. on every ambulance in service. A single device or a combination of devices may be used to meet this requirement. Written policies as recommended in the 2017 NASEMSO guidance may also be required.

[3] American Academy of Pediatrics, American College of Emergency Physicians, American College of Surgeons Committee on Trauma, Emergency Medical Services for Children, Emergency Nurses Association, National Association of EMS Physicians, National Association of State EMS Officials. (2014) Equipment for Ground Ambulances. Pediatrics, 134(3), e919: DOI: 10.1542/peds.2014-1698.

Application Process

To Obtain an Application:

1. Application forms can be downloaded from: www.sdemsc.org

2. If you do not have internet access, applications can be requested by contacting:

SD EMSC
605-328-6668

Submitting a Completed Application:

At such time that the applicant believes your EMS agency is ready for application submission; the completed application can be returned to the South Dakota EMS for Children Program in one of the following three ways:

1. Mail:

SD EMS for Children
1400 West 22nd Street
Route #5679
Sioux Falls, SD 57105

2. FAX: **(605-328-6671)**

3. E-mail: Corolla.Lauck@usd.edu

Application Review Process

1. **SD EMS for Children Program Review**

All applications must be sent to the SD EMSC Program Director for initial review, during this process the application will be checked for accuracy.

The EMS agency's licensure status and status of "good standing" will be verified through SD EMS.

The applying agency will be contacted by the EMS for Children Program Director via e-mail or phone to arrange an in-person or virtual site visit as needed to verify program compliance. The agency will also be contacted if the application is incomplete or clarification is required.

2. **Award of Recognition**

Upon successful submission of completed verification documentation, the EMS for Children Program will send a recognition certificate and decal(s) to the applicant. While placement of the vehicle recognition decal is strongly encouraged, it is not required.

Successful applicants, by virtue of applying for recognition, authorize their organization name and general information to be posted in program documents and on the EMS for Children website.

EMS agencies are also encouraged to promote their recognition under this program through a public relations event, press release, etc. SD EMS for Children has a generic press release available for use. EMS agencies seeking assistance with public relations events should contact the EMSC Project Director.

3. **Renewal of Recognition**

Recognition certificates and decals will be marked with the year recognition is awarded. *Renewal submissions will be due no later than* ***March 15***th *each year of* ***renewa****l* for review by the EMSC Advisory Board in April.

SD EMSC will release an updated list of recognized agencies to the press/public each year during EMS Week on EMS for Children Day.

In order to "**renew**" program recognition, the agency must update their application between *January 1 and March 15*.

This includes:

a. Pediatric continuing education documentation/verification
b. Pediatric specific skill competency documentation/verification
c. Community outreach events for the previous year and a summary of plans for the coming year.

Application Review Process continued

4. Appeal Process for Denied Applications

EMS Agencies may appeal a decision to deny recognition by submitting a written request to have their application or status re-evaluated. Appeal letters should be submitted to the EMSC Program Director for further review by the EMS for Children Advisory Board. A written response to the appeal will be returned to the EMS agency within 90 days of its receipt.

5. Suspension or Revocation

Recognition through this program may be suspended or revoked if the EMS agency:

a. Willfully or repeatedly violated any provision of these guidelines

b. Willfully or repeatedly acted in a manner inconsistent with preserving the health and safety of patients, the public, or providers

c. Provided falsified information in order to gain recognition

d. Failed to maintain the standards of this EMSC Voluntary Pediatric Readiness Recognition as identified in the guidance; or

e. In the event that an organization no longer maintains recognition status, decals must be removed from all EMS vehicles within 5 days and returned to the SD EMS for Children Program.

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Application for Enrollment

Please use the following forms to gather information needed to complete the application.

EMS Agency Information

Name	
Address	
License #	
Primary Contact	
Phone	
Email	

EMS Agency Director

Name	
Address	
Phone	
Email	

Designated Pediatric Emergency Care Coordinator (PECC)

Name	
Address	
Phone	
Email	

Number of decals requested: _____

Compliance Reporting Form
State EMS, Surveys and PECC

To be completed by the EMS Agency Administrator
(eg, Chief, Director, President, or Human Resources Administrator)

By signing this verification form, I attest to the fact that my EMS Agency is:

Current and compliant with all applicable SD EMS statues and regulations.

Shall participate in all national EMSC surveys/assessments administered by SD EMS for Children State Partnership Program.

Has a designated individual to serve as the Pediatric Emergency Care Coordinator (PECC). Contact information is included on the application, with an understanding that SD EMSC will be notified of changes related to this position.

I, _____, attest that we maintain, on record, proof of this accomplishment, to include SD EMS compliance, participation in assessments and have a designated PECC.

I acknowledge that our records, specific to this requirement, are subject to audit and inspection without notice.

Print Name: _____Title:_____

Agency Name: _____

License Number: _____

Signature: _____

Date: _____

Compliance Reporting Form
Pediatric Education

To be completed by the EMS Agency Administrator
(eg, Chief, Director, President, or Human Resources Administrator)

By signing this verification form, I attest to the fact that my EMS Agency requires all EMS providers to obtain continuing education on pediatric subject matter per year.
To achieve program recognition, an EMS agency shall require pediatric specific education:

- ALS providers receive a minimum of four (**4**) hours of continuing education yearly
- BLS providers receive a minimum of two (**3**) hours of continuing education yearly

I, _____, attest that we maintain, on record, proof of this accomplishment, such as course completion certificates, SD EMS continuing education reports for each provider.

I acknowledge that our community outreach records, specific to this requirement, are subject to audit and inspection without notice.

Print Name: _____Title:_____

Agency Name: _____

License Number: _____

Signature: _____

Date: _____

Compliance Reporting Form
Pediatric Skills Competency

To be completed by the EMS agency ***Medical Director***

By signing this verification form, I attest to the fact that I provide direct oversight, actively participate, or appoint a Training Officer to ensure this EMS Agency will evaluate all certified levels of EMS provider skill competencies. This process requires **individual physical demonstration** of the correct use of pediatric-specific equipment. All personnel must be evaluated annually, however, twice-yearly evaluations are recommended.

I, _____, attest that we maintain, on record, proof of this accomplishment, such as skill competency check lists for the correct use of pediatric-specific equipment.

I acknowledge that our training records, specific to this requirement, are subject to audit and inspection without notice.

Medical Director

Print Name: _____Title:_____

Agency Name: _____

License Number: _____

Medical Director

Signature_____

Date: _____

Compliance Reporting Form
Community Outreach

To be completed by the EMS Agency Administrator
(eg, Chief, Director, President, or Human Resources Administrator)

By signing this verification form, I attest to the fact that my EMS Agency regularly participates in a minimum of two (2) community outreach offerings ***annually*** which focus on pediatric safety, injury and prevention initiatives.

I, _____, attest that we maintain, on record, proof of this accomplishment, such as community events specifically related to pediatric safety, injury and prevention initiatives.

I acknowledge that our community outreach records, specific to this requirement, are subject to audit and inspection without notice.

Print Name: _____Title:_____

Agency Name: _____

License Number: _____

Signature: _____

Date: _____

List community outreach:

1._____

Date held/scheduled: _____

Collaborating organization: _____

2._____

Date held/scheduled: _____

Collaborating organization: _____

Compliance Reporting Affidavit
Pediatric Ambulance Equipment

To be completed by the EMS Agency Administrator
(i.e., chief, human resources administrator, director, president, etc.).

By signing this affidavit, I attest to the fact that my EMS Agency maintains, on all licensed vehicles, all pediatric equipment recommended by the SD EMS for Children Voluntary Pediatric Readiness Recognition Program.

I acknowledge that our equipment, specific to this form, is subject to audit and inspection without notice. I acknowledge that future ambulance inspections conducted by a representative from the SD EMSC Advisory Board will verify the continued maintenance of these items in order to maintain recognition through the SD EMS for Children Voluntary Recognition Program.

AFFIDAVIT

Before me, the undersigned authority, personally appeared, _____, who being by me duly sworn, deposed as follows:

I, _____, am of sound mind, capable of making this affidavit, and personally acquainted with the facts herein state:

I am employed with the _____Ambulance Service, as the Administrator. Included in my responsibilities as the Administrator is oversight of the ambulances and the equipment carried on each unit.

Attached hereto is a copy of the equipment listing for _____Ambulance Service. I do affirm that _____out of _____ambulance(s) carries the exact listing attached.
_____, Ambulance Administrator

In witness whereof, I have hereunto subscribed my name and affixed my official seal this day _____ of _____, 20_____.

_____
NOTARY PUBLIC

My Commission Expires:

_____

South Dakota EMSC: EMS Recognition Equipment Check List	G	A
Equipment: BLS Emergency Ground Ambulances		
Official Completing Form (please print)_____ Initials:_____ **Note: **G**: Ground **A**: Air **NA**: not available, not applicable		
*Instructions: Please initial each box whether the specified item/equipment is present, if not present, please indicate by writing **"NP"***		
A. Ventilation and Airway Equipment		
1. Portable and fixed suction apparatus with a regulator, per federal specifications		
• Wide-bore tubing, rigid pharyngeal curved suction tip; tonsil and flexible suction catheters, 6F-16F, are commercially available (have one between 6F and 10F and one between 12F and 16F)		
2. Portable oxygen apparatus, capable of metered flow with adequate tubing		
3. Portable and fixed oxygen supply equipment		
• Variable flow meter		
4. Oxygen administration equipment		
• Adequate-length tubing; transparent mask (adult and child sizes), both non-rebreathing and valve less; nasal cannulas (adult and child)		
5. Bag-valve mask (manual resuscitator)		
• Hand-operated, self-expanding bag; adult (>1000 mL) and child (450–750 mL) sizes, with oxygen reservoir/accumulator, valve (clear, operable in cold weather), and mask (adult, child, infant and neonate sizes)		
6. Airways		
• Nasopharyngeal (16F–34F; adult and child sizes)		
• Oropharyngeal (sizes 0–5; adult, child, and infant sizes)		
7. Pulse oximeter with pediatric and adult probe		
B. Monitoring and Defibrillation		
BLS ground ambulances should be equipped with an automated external defibrillator (AED) unless staffed by advanced life support personnel who are carrying a monitor/defibrillator. The AED should have pediatric capabilities, including child-size pads and cables OR dose attenuator with adult pads.		
C. Immobilization Devices		
1. Cervical collars		
• Rigid for children ages 2 years or older; child and adult sizes (small, medium, large, and other available sizes) OR pediatric adult adjustable collars		
2. Head immobilization device (not sand bags)		
• Firm padding or commercial device		
3. Upper and lower extremity immobilization devices		

• Joint-above and joint-below fracture (sizes appropriate for adults and children) rigid support, constructed with appropriate material (cardboard, metal pneumatic, vacuum, wood or plastic)		
4. Impervious backboards (long, short; radiolucent preferred) and extrication device		
• Short extrication/immobilization device (e.g., KED)		
• Long transport (head-to-feet length) with at least 3 appropriate restraint straps (chin strap alone should not be used for head immobilization) and with padding for children and hand holds for moving patients		
D. Bandages/Hemorrhage Control		
1. Commercially packaged or sterile burn sheets		
2. Bandages		
• Triangular bandages		
3. Dressings		
• Sterile dressings, including gauze sponges of suitable size		
• Abdominal dressing		
4. Gauze rolls		
• Various sizes		
5. Occlusive dressing or equivalent		
6. Adhesive tape		
• Various sizes (including 1 and 2) hypoallergenic		
• Various sizes (including 1 and 2) adhesive		
7. Arterial tourniquet (commercial preferred)		
E. Communication		
Two-way communication device between ground ambulance, dispatch, medical control, and receiving facility		
F. Obstetrical Kit (commercially packaged are available)		
1. Kit (separate sterile kit)		
• Towels, 4 x 4 dressings, umbilical tape, sterile scissors or other cutting utensil, bulb suction, clamps for cord, sterile gloves, blanket		
2. Thermal absorbent blanket and head cover, aluminum foil roll, or appropriate heat-reflective material (enough to cover newborn infant)		
G. Miscellaneous		
1. Access to pediatric and adult patient care protocols		
2. A length-based resuscitation tape OR a reference material that provides appropriate guidance for pediatric drug dosing and equipment sizing based on length or age		
3. Sphygmomanometer (pediatric and adult regular size and large cuffs)		
4. Adult stethoscope		
5. Thermometer with low-temperature capability		
6. Heavy bandage or paramedic scissors for cutting clothing, belts, and boots		
7. Cold packs		

8. Sterile saline solution for irrigation		
9. Two functional flashlights		
10. Blankets		
11. Sheets (at least one change per cot)		
12. Pillows		
13. Towels		
14. Triage tags		
15. Emesis bags or basins		
16. Urinal		
17. Wheeled cot		
18. Stair chair or carry chair		
19. Patient care charts/forms or electronic capability		
20. Lubricating jelly (water-soluble)		
H. Infection Control∗		
1. Eye protection (full peripheral glasses or goggles, face shield)		
2. Face protection (e.g., surgical masks per applicable local or state guidance)		
3. Gloves, non-sterile		
4. Fluid-resistant overalls or gowns		
5. Waterless hand cleanser, commercial antimicrobial (towelette, spray, or liquid)		
6. Disinfectant solution for cleaning equipment		
7. Standard sharps containers, fixed and portable		
8. Biohazard trash bags (color coded or with biohazard emblem to distinguish from other trash)		
9. Respiratory protection (e.g., N95 or N100 mask—per applicable local or state guidance)		
∗Latex-free equipment should be available		
I. Injury-prevention Equipment		
1. Availability of necessary age/size-appropriate restraint systems for all passengers and patients transported in ground ambulances. For children, this should be according to the National Highway Traffic Administration's document: Safe Transport of Children in Emergency Ground Ambulances (www.nhtsa.gov/staticfiles/nti/pdf/811677.pdf)		
2. Fire extinguisher		
3. Department of Transportation Emergency Response Guide		
4. Reflective safety wear for each crewmember (must meet American National Standard for High Visibility Public Safety Vets if working with the right of way of any federal-aid highway. Visit www.reflectivevest.com/federakhighwayruling.html for more information)		

Required Equipment for ALS Emergency Ground Ambulances	G	A
For paramedic services, include all of the required equipment listed above, plus the following additional equipment and supplies. For advanced EMT services (and other non-paramedic advanced levels), include all of the equipment from the above list and selected equipment and supplies from the following list, based on scope of practice, local need, and consideration of out-of-hospital characteristics and budget. **Note: **G**: Ground **A**: Air **NA**: not available/not applicable		
A. Airway and Ventilation Equipment		
1. Laryngoscope handle with extra batteries and bulbs or *Video Laryngoscope*		
2. Laryngoscope blades, sizes: *Video Laryngoscope blades* :		
a. 0–4,straight (Miller), and *Pediatric specific video laryngoscope blades*		
b. 2–4, curved		
3. Endotracheal tubes (if ALS service scope of practice includes tracheal intubation),sizes:		
a. 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, and 5.5 mm **cuffed** and/or un-cuffed, and		
b. 6.0, 6.5, 7.0, 7.5, and 8.0 mm cuffed (1 each), other sizes optional		
4. 10-mL non-luer Lock syringes		
5. Stylettes for endotracheal tubes, adult and pediatric		
6. Magill forceps, adult and pediatric		
7. End-tidal CO2 detection capability (adult and pediatric)		
8. Rescue airway device, such as the ETDLA (esophageal–tracheal double-lumen airway), laryngeal tube, disposable supra-glottic airway, or laryngeal mask airway (as approved by local medical direction)		
B. Vascular Access		
1. Isotonic crystalloid solutions		
2. Antiseptic solution (alcohol wipes and povidone iodine wipes preferred)		
3. Intravenous fluid bag pole or roof hook		
4. Intravenous catheters, 14G–24G		
5. Intraosseous needles or devices appropriate for children and adults		
6. Latex-free tourniquet		
7. Syringes of various sizes		
8. Needles, various sizes (including suitable sizes for intramuscular injections)		
9. Intravenous administration sets (micro drip and macro drip)		
10. Intravenous arm boards, adult and pediatric		
C. Cardiac		
1. Portable, battery-operated monitor/defibrillator		
• With tape write-out/recorder, defibrillator pads, quick-look paddles or electrode, or hands-free patches, electrocardiogram leads, adult and pediatric chest attachment electrodes, adult and pediatric paddles		
2. Transcutaneous cardiac pacemaker, including pediatric pads and cables		
• Either stand-alone unit or integrated into monitor/defibrillator		

D. Other Advanced Equipment	**G**	**A**
1. Nebulizer		
2. Glucometer or blood glucose measuring device with reagent strips		
3. Long large-bore needles or angio-catheters (should be at least 10-12 gauge and 3.25" in length for needle chest decompression in large adults)		
E. Medications		
Drug dosing in children should use processes minimizing the need for calculations, preferably a Length-Based Tape system. In general, medications may include:		
1. Cardiovascular medication, such as 1:10,000 epinephrine, atropine, anti-dysrhythmic (e.g., adenosine and amiodarone), calcium channel blockers, beta-blockers, nitroglycerin tablets, aspirin, vasopressor for infusion		
2. Cardiopulmonary/respiratory medications, such as albuterol (or other inhaled beta agonist) and ipratropium bromide, 1:1000 epinephrine, furosemide		
3. 50% dextrose solution (and sterile diluent or 25% dextrose solution for pediatrics)		
4. Analgesics, narcotic and non-narcotic		
5. Anti-epileptic medications, such as diazepam or midazolam		
6. Sodium bicarbonate, magnesium sulfate, glucagon, naloxone hydrochloride, calcium chloride		
7. Bacteriostatic water and sodium chloride for injection		
8. Additional medications, as per local medical director		
OPTIONAL EQUIPMENT		
The equipment in this section is not mandated or required. Use should be based on local needs and resources		
A. Optional Equipment for BLS Ground Ambulances		
1. Glucometer or blood glucose test strips (per state protocol and/or local medical control approval		
2. Infant oxygen mask		
3. Infant self-inflating resuscitation bag		
4. Airways		
a. Nasopharyngeal (12F, 14F)		
b. Oropharyngeal (size 00)		
5. CPAP/Bi-PAP capability		
6. Neonatal blood pressure cuff		
7. Infant blood pressure cuff		
8. Pediatric stethoscope		
9. Infant cervical immobilization device		
10. Pediatric backboard and extremity splints		
11. Femur traction device (adult and child sizes)		

12. Pelvic immobilization device		
13. Elastic wraps		
14. Ocular irrigation device		
15. Hot packs		
16. Warming blanket		
17. Cooling device		
18. Soft patient restraints		
19. Folding stretcher		
20. Bedpan		
21. Topical hemostatic agent/bandage		
22. Appropriate CBRNE PPE (chemical, biological, radiological, nuclear, explosive personal protective equipment), including respiratory and body protection; protective helmet/jackets or coats/pants/boots		
23. Applicable chemical antidote auto-injectors (at a minimum for crew members' protection; additional for victim treatment based on local or regional protocol; appropriate for adults and children)		
B. Optional Equipment for ALS Emergency Ground Ambulances		
1. Respirator, volume-cycled, on/off operation, 100% oxygen, 40–50 psi pressure (child/infant capabilities)		
2. Blood sample tubes, adult and pediatric		
3. Automatic blood pressure device		
4. Nasogastric tubes, pediatric feeding tube sizes 5F and 8F, sump tube sizes 8F–16F		
5. Size 1 curved laryngoscope blade		
6. Gum elastic bougies		
7. Needle cricothyrotomy capability and/or cricothyrotomy capability (surgical cricothyrotomy can be performed in older children in whom the cricothyroid membrane is easily palpable, usually by puberty)		
8. Rescue airway devices for children		
9. Atomizers for administration of intranasal medications		
OPTIONAL MEDICATIONS		
A. Optional Medications for BLS Emergency Ambulances		
1. Albuterol		
2. Epi – auto injector		
3. Oral glucose		
4. Nitroglycerin (sublingual tablet or paste)		
5. Aspirin		
B. Optional Medications for ALS Emergency Ground Ambulances		
1. Intubation adjuncts, including neuromuscular blockers		

INTERFACILITY TRANSPORT		
Additional equipment may be needed by ALS and BLS out-of-hospital care providers who transport patients between facilities. Transfers may be made to a lower or higher level or care depending on the specific need. Specialty transport teams, including pediatric and neonatal teams, may include other personnel, such as respiratory therapists, nurses, and physicians. Training and equipment needs may be different depending on the skills needed during transport of these patients. There are excellent resources available that provide detailed lists of equipment needed for inter-facility transfer, such as Guidelines for Air and Ground Transport of Neonatal and Pediatric Patients for the AAP and The Inter-facility Transfer Toolkit for the Pediatric Patient from the EMS for Children, ENA and the Society of Trauma Nurses.		
Any ground ambulance that, either by formal agreement or by circumstance, may be called into service during a disaster or mass casualty incident to treat and/or transport any patient from the scene to the hospital or to transfer between facilities any patient other than those within their designated specialty population should carry, at a minimum, all equipment, adult and pediatric listed under "Required Equipment for All Emergency Ground Ambulances."		
EXTRICATION EQUIPMENT		
In many cases, optimal patient care mandates appropriate and safe extrication or rescue from the patient's situation or environment. It is critical that EMS personnel possess or have immediate access to the expertise, tools, and equipment necessary to safely remove patients from entrapment or hazardous environments. It is beyond the scope of this document to describe the extent of these. Local circumstances and regulations may affect both the expertise and tools that are maintained on an individual ground ambulance, and on any other rescue vehicle that may be needed to accompany an ambulance to an EMS scene. The tools and equipment carried on an individual ground ambulance need to be thoughtfully determined by local features of the EMS system with explicit plans to deploy the needed resources when extrication or rescue is required.		

Appendix A

Compliance guidelines: Education, Skills, Outreach

To demonstrate compliance with the pediatric readiness program criteria, please provide a written plan, summary and/or records.

Pediatric Education:

Initial Recognition:

Submit a written plan as to how your agency will sponsor, provide, or require pediatric specific education for the previous calendar year current year.

- ALS providers receive a minimum of four (**4**) hours of continuing education ***yearly.***
- BLS providers receive a minimum of three (**3**) hours of continuing education ***yearly.***

Renewal Recognition:

Submit a written summary of compliance: pediatric-specific educational for the previous calendar year and current calendar year.

Include:

- Number of certified/licensed personnel on your roster
- Title, date, and length of pediatric topics or courses provided to personnel
- Percentage of those personnel who met the minimum requirement
- Copies of rosters. Training records *do not* need to be included but *must be available for review upon request.*

Appendix A

Pediatric Skill Competency:

Initial Recognition:

Submit a written plan as to how your agency will evaluate pediatric skill competencies for the calendar year. This process **must** require **physical demonstration** by each provider of correct use of pediatric-specific equipment.

Methods used:

- skill stations
- case scenarios with integrated skills
- field treatment with integrated team performance

It is not required that all personnel or skills be evaluated in a single session. Each individual should be evaluated on each skill at least once per calendar year

All certified/licensed personnel must be evaluated annually, however, *twice-yearly* evaluations are recommended.

Suggested Skills/Equipment Evaluations:

- Safe transport devices - pediatric
- Airway management: OPA, NPA, BVM, laryngoscopy, ET tubes, LMA, King Airway, i-gel, etc.
- IV and IO, pull/push method for fluid bolus
- Immobilization devices
- Medication administration (i.e. transferring Rx to a 1 ml syringe for an infant in cardiac arrest)
- Length based taped use (i.e. Broselow, Handtevy System, other)
- Cardiac monitor: defibrillation, cardioversion, pacing
- Copies of rosters. Training records do not need to be included but *must be available for review. upon request.*

Renewal of Recognition:

*Submit a written summary of compliance: pediatric-specific equipment evaluations for the previous calendar year and current calendar year.

Summary should include:

- Number of certified/licensed personnel on your roster
- Dates, skills evaluated, and methods used
- Percentage of those personnel who met the minimum requirement
- Copies of rosters. Training records *do not* need to be included *but must be available for review upon request.*
  - for details see: SD EMS for Children Program Review pg. 11

Appendix A

Community Outreach:

Initial Recognition:

Submit a written plan for how your agency will meet the requirement for at least two (2) community outreach events with a pediatric focus in the coming/current year.

For planned events, list the following as applicable:

- Date of event or planned
- Sponsor/Partnership/Collaborations
- Location
- Name/type of event
- Specific program or activities that are pediatric related
- Recognized or anticipated benefits to children in your community

Renewal of Recognition:

Submit a written summary of compliance: community outreach focused on pediatrics for the previous calendar year and current calendar year. Summaries for completed events can include: copies or links to media coverage, flyers, pictures, or other available documentation. Follow the same guidelines for planned events as listed above under initial recognition.

Appendix B

Compliance guidelines: Pediatric Equipment

Pediatric Equipment:

Initial Recognition:

Submit an equipment check sheet documenting compliance with the national recommendations for equipment on ground ambulances. To obtain recognition through this program, your agency must demonstrate compliance and carry 100 percent of the state recommended pediatric equipment and meet minimum requirements for the national recommended pediatric equipment. https://pediatrics.aappublications.org/content/134/3/e919

Renewal of Recognition:

Submit an equipment check sheet documenting compliance with the state recommended pediatric equipment and meet minimum requirements for national recommendations for ground or air ambulances.

Appendix B

Compliance guidelines: Pediatric Safe Transport

Pediatric Safe Transport:

Safely transporting pediatric patients remains an area of significant challenge for EMS providers. It is strongly recommended that EMS agencies have policies that include prohibiting the transport of unrestrained pediatric patients and provisions for securing all equipment during transport.

Pediatric restraint devices must be made available at all times, even if it is held at the station for pediatric calls or on a supervisor's vehicle or other support resource. This requirement applies to licensed transport units only.

EMS agencies should consider compliance with both the *Safe Transport of Children by EMS: Interim Guidance* (2017 NASEMSO) and the *Working Group Best-Practice Recommendations for the Safe Transport of Children in Ground Ambulances* (2012 NHTSA).

SD Child Safety Laws*: Child Restraint Device Law* (Codified Law 32-37.1.1**)

https://sdlegislature.gov/Statutes/Codified_Laws/DisplayStatute.aspx?Type=Statute&Statute=32-37-1.1

Safe Transport Documents

The complete documents follow this page or you can access them at the links provided.

Safe Transport of Children by EMS: *Interim Guidance* (2017 NASEMSO)

https://nasemso.org/wp-content/uploads/Safe-Transport-of-Children-by-EMS-InterimGuidance-08Mar2017-FINAL.pdf

EQUIPMENT: Pediatric Transport Resources for Ambulances:

NASEMSO (National Association of State EMS Officials) July 8, 2019

https://nasemso.org/news-events/news/news-item/nasemso-releases-pediatric-transport-resource-for-ambulances/

Best-Practice Recommendations for the Safe Transport of Children

Ground Ambulances (2012 NHTSA)

https://www.nhtsa.gov/staticfiles/nti/pdf/811677.pdf

SOP Template: for EMS agencies that ensures safe transport of children

https://www.azdhs.gov/documents/preparedness/emergency-medical-services-trauma-system/data/PEAP/guardian-medical-transport-stc.pdf

https://www.azdhs.gov/documents/preparedness/emergency-medical-services-trauma-system/data/PEAP/tempe-fire-medical-rescue-stc.pdf

*see online template for Pediatric Restraint protocol/algorithm www.sdemc.org

Checklist for Recognition

- ☐ EMS Agency Information
- ☐ EMS Agency Director
- ☐ Designated Pediatric Emergency Care Champion
  - Alternate PECC
- ☐ Number of decals requested
- ☐ Compliance Reporting Forms completed
  - State EMS, Surveys and PECC
  - Pediatric Education
  - Pediatric Skills Competency; *signed* by your **Medical Director**
  - Community Outreach
  - Pediatric Ambulance Equipment: Notarized Affidavit
- ☐ Equipment check list
- ☐ Personnel roster
  - Training records *do not* need to be included but must be available for review upon request.
    - For details see: SD EMS for Children Program Review pg. 11