

Safe Transport of Children in Ground Ambulances

Proposal for Testing Child Restraint Devices

National Association of State EMS Officials www.nasemso.org

EXECUTIVE SUMMARY

This proposal describes a proven methodology that can be used to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. Because pediatric populations have unique transport needs, the testing methods would be developed for each of three unique pediatric subsets: (1) supine pediatric patients; (2) seated pediatric patients or pediatric companion transports; and, (3) supine neonatal patients.

With ambulance crash rates at least 2.5 times greater than that of an automobile¹, and an estimated 1.6 million children transported annually in the United States², development and testing of crashworthy pediatric restraint devices for ambulances is long overdue.

Because the manufacture, testing, and licensing of an ambulance is not regulated by the federal government, the only immediately available avenue to influence real change on a national level is through the consensus standards development process. Unfortunately, the complexity required to complete such an endeavor is too great for any one entity, public or private, to successfully execute independently. As a result, the proposed methodology requires the active participation of ambulance manufacturers and their suppliers, pediatric transport device manufacturers, pediatric transport experts, emergency medical service (EMS) practitioners, and key government officials.

Each would play a key role in the development of the three new test methods by providing engineering or medical expertise, design and manufacturing capacity to support testing, or specific vehicle and occupant testing expertise. At the conclusion of this effort, the extended project collaborative should have a minimum of three new published test methods and industry partners

¹ Centers for Disease Control and Prevention (CDC). Ambulance Crash-Related Injuries Among Emergency Medical Services Workers, United States, 1991-2002. *MMWR Morb Mort Wkly Rep*.2003;52(08):154-6.

² National Emergency Medical Services Information System, Version 2 Data Cube. https://nemsis.org/view-reports/public-reports/ems-data-cube/. Accessed April 1, 2019.

will have designed and tested new, safe, and more robust pediatric transport devices. Once each test method is published, manufacturers will be able to advertise that the products they have developed and tested meet a specific, industry accepted minimum testing requirement. Manufacturer test results, derived from the new consensus test methods, may then be used comparatively by prospective purchasers both nationally and internationally, as they strive to provide safe and effective transport options for their pediatric patients.

We will use the same methodology that was developed by the National Institute for Occupational Safety and Health (NIOSH) over an eight-year period as part of a government and industry collaborative (2010-2018) specifically focused on improving EMS practitioner and patient safety when being transported in a ground ambulance;³ especially when involved in a crash. The NIOSH project resulted in the creation of ten new test methods, each published by the Society of Automotive Engineers (SAE). The SAE published test methods are all focused on improving EMS personnel and adult patient safety in the back of an ambulance during a crash or near crash event by strengthening worker seating, the adult patient cot, equipment mounts and storage devices, as well as the patient compartment structure. Many in the EMS community, including Mark Van Arnam, former CEO of AEV Ambulance and now Administrator for the Commission on Accreditation of Ambulance Services (CAAS) Ground Vehicle Standard, have asserted the new test methods that resulted from the adult patient and EMS practitioner research have produced the most profound improvement to EMS practitioner and adult patient safety in an ambulance in the last 30 years. Unfortunately, because NIOSH is a worker-focused federal research institute, in accordance with their Congressional mandate, they will not be addressing pediatric patient safety.⁴

Those that participated in the earlier effort to improve EMS practitioner and adult patient safety are unified in their belief that this same methodology can be utilized to dramatically improve pediatric patient safety during ground ambulance transport. A list of those who have already committed funding support is provided in Appendix A, and a list of those who have indicated an interest in supporting such a collaborative research effort, to include individual letters of support are provided in Appendix B. Based on the success of the NIOSH project, and the partnerships forged during its development, NASEMSO feels strongly the time to address pediatric transport safety is at hand and is now prepared to take the lead on this effort so that we can provide our pediatric patients with the same level of safety now provided to our adult patients. Approximately \$2,200,000 is needed to complete this 5-year project.

³ Ambulance Test Methods. cdc.gov. https://www.cdc.gov/features/ambulance-test-methods/index.html. Updated May 23, 2017. Accessed April 15, 2019.

⁴ Occupational Safety and Health Act of 1970, 29 CFR § 671, Section 22.

For additional information on work NASEMSO is doing with safe transport of children, as well as available resources, visit the Safe Transport of Children Committee webpage: https://nasemso.org/committees/safe-transport-of-children/.

APPENDIX A: FUNDING CONTRIBUTIONS

Funding contributions to date:

Manufacturers

- EVS
- Stryker

State EMS for Children Programs

• Virginia EMS for Children Program

APPENDIX B: LETTERS OF SUPPORT

Included in the next pages are letters identifying national associations, organizations, and children's hospitals, as well as testing facilities, ambulance, and equipment manufactures who have provided support for this project.

Additionally, individual letters of support from the following organizations are included:

- American Academy of Pediatrics (AAP)
- American Academy of Orthopaedic Surgeons (AAOS)
- American Ambulance Association (AAA)
- EMS for Children Innovation & Improvement Center (EIIC)
- Emergency Nurses Association (ENA)
- National Association of EMS Educators (NAEMSE)
- National Association of EMS Physicians (NAEMSP)
- National EMS Management Association (NEMSMA)
- National Truck Equipment Association (NTEA) Ambulance Manufacturers Division (AMD)
- Riley Children's Health Indiana University Health
- WVU Medicine Children's

Manufacturer Letter of Support

(Starts on next page)



March 11, 2020

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

We, the undersigned manufacturers and independent testing laboratories, do hereby pledge to support the collaborative research program developed by the National Association of State EMS Officials (NASEMSO) to improve pediatric transport outcomes through the development, validation, and publication of a family of three new test methods. It is our understanding the intent of this research collaborative is development of new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or uninjured pediatric passengers, and (3) supine neonatal patients.

As collaborative partners, we understand we may be invited to participate on one or more committees focused on the drafting of each of the three new test methods. Committee participation is expected to include 2 or 3 face-to-face meetings annually, held in conjunction with major EMS conferences such as EMS World Expo, EMS Today, or FDIC. *Our participation on a committee, including the cost of travel and employee compensation for same, will be considered an in-kind contribution to the collaborative effort.*

Once drafted, pediatric transport device manufacturers will be invited to design products to meet the new testing and pass/fail criteria outlined in each new test method. We understand the NASEMSO-led team will identify funding to complete validation testing for each of the three test methods through independent, commercial testing laboratories. We also understand the testing program will likely be a one- to two-year iterative process with two distinct goals; (1) the refinement and validation of each test method, and (2) the development of robust pediatric transport products with designs tested and ready for market. *As manufacturers and collaborative partners, we commit to providing products for testing as an in-kind contribution to the testing program. Further, we commit to providing the needed engineering and manufacturing support necessary to refine products as testing indicates throughout the iterative process.* Each participating manufacturer understands a non-disclosure agreement will be signed between each manufacturer and NASEMSO to protect intellectual property. Test results for individual products will not be shared within the committees.

At the completion of the testing effort, NASEMSO will pursue publication of each of the three validated test methods through the Society of Automotive Engineers (SAE). During this process, each NASEMSO-led test method committee may be asked to consider comments from SAE as potential modifications. *As collaborative partners, we commit to remaining active participants on each NASEMSO committee throughout the publication process as our continued in-kind contribution to the research program.* Once published by SAE, NASEMSO will advocate for each test method's inclusion in each of three national ambulance standards published by the Commission for the Accreditation of Ambulance Services (CAAS), the National Fire Protection Association (NFPA), and the General Services Administration (GSA), respectively.

As collaborative partners, we understand our participation in this program is voluntary and our pledge of support is non-binding. However, we believe in this collaborative process as it has been demonstrated to be successful at improving adult patient and EMS practitioner safety. It is our belief we are on the cusp of providing that same level of safety for our pediatric patients and pledge to be active, engaged participants in moving pediatric safety forward collaboratively.

Sincerely,

Ambulance Builders

- 1. American Emergency Vehicles (AEV) (<u>https://www.aev.com/</u>)
- 2. Braun Industries (https://www.braunambulances.com/)
- 3. Braun Northwest (<u>https://www.braunnw.com/</u>)
- 4. Crestline (http://crestlinecoach.com/vehicles/ambulances/)
- 5. Demers (https://www.demers-ambulances.com/)
- 6. Excellance (<u>http://excellance.com</u>)
- 7. Frazer (<u>https://www.frazerbilt.com/</u>)
- 8. Horton (https://www.hortonambulance.com/)
- 9. Leader (http://leaderambulance.com)
- 10. Marque (https://www.marqueambulance.com/)
- 11. McCoy Miller (https://mccoymiller.com/)

- 12. PL Custom (<u>https://plcustom.com/</u>)
- 13. Road Rescue (https://www.roadrescue.com/)
- 14. Wheeled Coach (<u>https://www.wheeledcoach.com/</u>)

Ambulance Seating

- 15. E.V.S. Ltd. (https://www.evsltd.com/)
- 16. USSG Valor Seating (http://www.usscgroup.com/valor-first-responder-seating/)

Other Equipment

17. First Line Technology (https://www.firstlinetech.com/)

Patient Cots

- 18. Ferno (<u>https://www.fernoems.com/us/en-us/ems/patient-handling</u>) also under pediatric transport devices
- 19. Stryker (https://ems.stryker.com/en/)

Pediatric Transport Devices

- 20. Emergency Child Restraint (emergencychildrestraint.com)
- 21. Ferno (<u>https://www.fernoems.com/us/en-us/ems/pediatric-transport</u>) also under patient cots
- 22. IMMI (https://www.imminet.com/products/child-restraints/)
- 23. International Biomedical (https://www.int-bio.com/)
- 24. Pediatric Medical (<u>https://www.pediatricsafety.net/the-pedrest/</u>)
- 25. Quantum EMS (http://quantum-ems.com/)

Testing Facilities

- 26. Calspan (https://www.calspan.com/)
- 27. The Center for Advanced Product Evaluation (CAPE) (https://www.capetesting.com/)
- 28. MGA Research (https://mgaresearch.com/)
- 29. Progressive Engineering Inc. (PEI) (<u>www.p-e-i.com/</u>)

Associations, Organizations, and Children's Hospitals Letters of Support

(Starts on next page)



February 18, 2020

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

The associations and organizations listed below have joined this statement of support for the proposal and initiative being led by the National Association of State Emergency Medical Services Officials (NASEMSO) titled "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

We are very interested in supporting this critical initiative to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. It is our understanding the intent of this research collaborative is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

We believe in this collaborative process as it has been demonstrated to be successful at improving adult patient and EMS practitioner safety for other restraint types. It is our belief we are on the cusp of providing that same level of safety for our pediatric patients and pledge to be active, engaged participants in moving pediatric safety forward collaboratively. Most importantly, it assists local EMS agencies in selecting and utilizing devices to assure that the back of an ambulance is the safest place that an infant or child can be transported, which in turn builds trust and confidence in their communities.

We look forward to end products that will improve the safety and health of our pediatric patients and reduce preventable morbidity and mortality.

We are pleased to offer our highest level of support for this project.

- Air & Surface Transport Nurses Association (ASTNA) <u>www.astna.org</u>
- Ambulance Manufacturers Division <u>https://www.ntea.com/amd/</u> (National Truck Equipment Association)
- American Academy of Pediatrics (AAP) <u>www.aap.org</u>
- American Academy of Orthopaedic Surgeons (AAOS) <u>https://www.aaos.org</u>
- American Ambulance Association (AAA) https://ambulance.org
- American College of Emergency Physicians (ACEP) <u>www.acep.org</u>
- American Trauma Society (ATS) <u>https://www.amtrauma.org</u>
- Association of Air Medical Services (AAMS) <u>https://aams.org</u>
- Association of Critical Care Transport (ACCT) <u>www.acctforpatients.org</u>
- Education Development Center (EDC) <u>www.edc.org</u>
- EMS for Children Innovation and Improvement Center (EIIC) <u>https://emscimprovement.center</u>
- Emergency Nurses Association (ENA) <u>www.ena.org</u>
- International Association of EMS Chiefs (IAEMSC) <u>www.iaemsc.org</u>
- International Association of Fire Chiefs (IAFC) <u>www.iafc.org</u>
- International Association of Fire Fighters (IAFF) <u>www.iaff.org</u>
- International Public Safety Data Institute (IPSDI) <u>www.i-psdi.org</u>
- International Trauma Life Support (ITLS) <u>www.itrauma.org</u>
- Life EMS Ambulance <u>https://www.lifeems.com</u>
- National Association of EMS Educators (NAEMSE) <u>www.naemse.org</u>
- National Association of EMS Physicians (NAEMSP) <u>www.naemsp.org</u>
- National EMS Management Association (NEMSMA) <u>www.nemsma.org</u>
- National Safety Council (NSC) <u>www.nsc.org</u>
- Riley Children's at Indiana University Health https://www.rileychildrens.org

- The Children's Hospital at Oklahoma University Medicine <u>https://www.oumedicine.com/oumedicine/the-children's-hospital</u>
- The Paramedic Foundation (TPF) <u>http://paramedicfoundation.org</u>
- WVU Medicine Children's <u>https://wvumedicine.org/childrens/</u>

Individual Letters of Support

(Starts on next page)

American Academy of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

345 Park Blvd Itasca, IL 60143 Phone: 630/626-6000 Fax: 847/434-8000 E-mail: kidsdocs@aap.org www.aap.org

Executive Committee

President Kyle Yasuda, MD, FAAP

President-Elect Sara H. Goza, MD, FAAP

Immediate Past President Colleen A. Kraft, MD, FAAP

Secretary/Treasurer Anthony D. Johnson, MD, FAAP

CEO/Executive Vice President (Interim) Mark Del Monte, JD

Board of Directors

District I Wendy S. Davis, MD, FAAP Burlington, VT

District II Warren M. Seigel, MD, FAAP Brooklyn, NY

District III Margaret C. Fisher, MD, FAAP Long Branch, NJ

District IV Jane M. Foy, MD, FAAP Winston-Salem, NC

District V Richard H. Tuck, MD, FAAP Zanesville, OH

District VI Dennis M. Cooley, MD, FAAP Topeka, KS

District VII Anthony D. Johnson, MD, FAAP Little Rock, AR

District VIII Martha C. Middlemist, MD, FAAP Centennial, CO

District IX Yasuko Fukuda, MD, FAAP San Francisco, CA

District X Lisa A. Cosgrove, MD, FAAP Merritt Island, FL September 9, 2019

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor,

On behalf of the American Academy of Pediatrics (AAP), I am pleased to provide a letter of applause for development of a National Association of State EMS Officials (NASEMSO) sponsored "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

The Academy acknowledges the long-standing collaboration between the AAP and NASEMSO to ensure high quality EMS and emergency care systems for all children in the U.S., including co-authorship of the joint policy statement titled "Equipment for Ground Ambulances." With ambulance crash rates at least 2.5 times greater than that of an automobile, and an estimated 1.6 million children transported annually in the U.S., we agree that pediatric populations have unique needs and recognize the importance of the goals of your project to develop, validate, and publish new test methods.

The AAP in an organization of 67,000 pediatricians dedicated to the health, safety, and well-being of all infants, children, adolescents and young adults. We are a non-profit, professional association, which maintains a 501(c)3 tax-exempt status.

As in all such collaborations, AAP participation would be subject to internal review and approval by our Board or Directors and would be contingent on funding.

We applaud your proposal and look forward to collaborating on the project if funded.

Sincerely,

Cc:

Indas

⁶Anne Edwards, MD, FAAP Senior Vice President, Primary Care and Subspecialty Pediatrics

Sue Tellez, Manager Committee on Pediatric Emergency Medicine & Section on Emergency Medicine



American Association of Orthopaedic Surgeons

January 20, 2020

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor,

On behalf of over 34,000 orthopaedic surgeons and residents represented by the American Academy of Orthopaedic Surgeons (AAOS), we are pleased to provide a letter of support for the development of a National Association of State MES Officials (NASEMSO) sponsored "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices".

The AAOS applauds the NASEMSO for setting forth this critical initiative to ensure pediatric patient safety during ambulance transports through a proven methodology and with unique pediatric subsets in mind.

This initiative will have a significant impact on the safety of pediatric patients across the country. The AAOS is please to offer our support for this project.

Sincerely,

Kristz Weber

Kristy L. Weber, MD, FAAOS President, American Association of Orthopaedic Surgeons

cc: Joseph A. Bosco III, MD, FAAOS, First Vice-President, AAOS Daniel K. Guy, MD, FAAOS, Second Vice-President, AAOS Thomas E. Arend, Jr., Esq., CAE, CEO, AAOS William O. Shaffer, MD, FAAOS, Medical Director, AAOS

9400 West Higgins Road Rosemont, Illinois 60018-4976 PHONE 847.823.7186 www.aaos.org



American Association of Orthopaedic Surgeons

9400 West Higgins Road Rosemont, Illinois 60018-4976 PHONE 847.823.7186 www.aaos.org



Dia Gainor, MPA, QAS Executive Director National Association of State EMS Officials 201 Park Washington Court | Falls Church, VA 22046

Dear Dia:

The American Ambulance Association (AAA) appreciates the work of the National Association of State EMS Officials (NASEMSO) on the subject of the safe transport of children. The work of the NASEMSO Safe Transport of Children (STC) Ad Hoc Committee is important and needed as we all make our best efforts to provide the safest environment possible for our pediatric patients. To that end the AAA and its Professional Standards Committee appreciates the opportunity to comment on the recent NASEMSO Executive Summary regarding Safe Transport of Children in Ground Ambulances; Proposal for Testing Child Restraint Devices.

The AAA hopes to actively participate in the process of developing these standards for testing methods, however, we would like to request additional information from NASEMSO before committing to a predefined approach. Specifically, our Professional Standards committee is requesting any available information and/or data to understand the size and scope of this issue. The committee is hoping to learn more as to how to better define and focus all of our efforts on the key elements of this pediatric transport safety issue. It is our hope that we would be able to ensure that we are addressing specific problems leading to focused solutions without creating a regulatory framework where it may not be needed.

Sincerely,

Bill Mergendahl AAA Professional Standards Chair

202-802-9020 info@ambulance.org www.ambulance.org



July 24, 2019

Dia Gainor MPA, Executive Director National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046-4527

Dear Ms. Gainor,

Because children have unique transport needs, the development of testing methods for child restraint devices to ensure pediatric patient safety during ambulance transports should be developed and validated. It is our understanding the intent of this research collaborative, *"Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices,"* is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

The National EMS for Children Innovation and Improvement Center (EIIC) focuses on accelerating improvements in quality of care and outcomes for children who are in need of urgent or emergency care through an infrastructure that ensures routine, integrated coordination of quality improvement activities between key stakeholder organizations and their champions. As such, the EIIC would like to offer its formal endorsement of the initiative, *"Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."*

Sincerely,

Charles Macias, MD, MPH Executive Director, National EMS for Children Innovation and Improvement Center

50.V-

Sam Vance, MHA, LP Prehospital Domain Lead National EMS for Children Innovation and Improvement Center



1102 Bates Avenue | Suite 1850 | Houston TX 77030 EMSCImprovement.Center





Committed to Care ena.org

930 E. Woodfield Road Schaumburg, Illinois 60173 847.460.4000

July 31, 2019

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

On behalf of the Emergency Nurses Association (ENA) and our more than 44,000 members, I am writing to express our support for the proposal and initiative being led by the National Association of State Emergency Medical Services Officials (NASEMSO) titled *"Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."*

We are very interested in supporting this critical initiative to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. It is our understanding the intent of this research collaborative is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

We believe in this collaborative process as it has been demonstrated to be successful at improving adult patient and EMS practitioner safety for other restraint types. It is our belief we are on the cusp of providing that same level of safety for our pediatric patients and pledge to be active, engaged participants in moving pediatric safety forward collaboratively. Most importantly, it assists local EMS agencies in selecting and utilizing devices to assure that the back of an ambulance is the safest place that an infant or child can be transported, which in turn builds trust and confidence in their communities.

We look forward to products that will improve the safety and health of our pediatric patients and reduce preventable morbidity and mortality.

We are pleased to offer our highest level of support for this project.

Patricia LungStockard

Patricia Kunz Howard, PhD, RN, CEN, CPEN, TCRN, NE-BC, FAEN, FAAN 2019 ENA President

NATIONAL ASSOCIATION OF EMS EDUCATORS



250 Mt. Lebanon Blvd. Suite 209 Pittsburgh, PA 15234 Phone: 412-343-4775 Fax: 412-343-4770 Email: naemse@naemse.org Web: www.naemse.org

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

The associations and organizations listed below have joined this statement of support for the proposal and initiative being led by the National Association of State Emergency Medical Services Officials (NASEMSO) titled "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

We are very interested in supporting this critical initiative to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. It is our understanding the intent of this research collaborative is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

We believe in this collaborative process as it has been demonstrated to be successful at improving adult patient and EMS practitioner safety for other restraint types. It is our belief we are on the cusp of providing that same level of safety for our pediatric patients and pledge to be active, engaged participants in moving pediatric safety forward collaboratively. Most importantly, it assists local EMS agencies in selecting and utilizing devices to assure that the back of an ambulance is the safest place that an infant or child can be transported, which in turn builds trust and confidence in their communities.

We look forward to end products that will improve the safety and health of our pediatric patients and reduce preventable morbidity and mortality. We are pleased to offer our highest level of support for this project.

Sincerely

Stephen Perdziola

Executive Director National Association of EMS Educators



National Association of EMS Physicians[®] 4400 College Boulevard, Suite 220, Overland Park, KS 66211

Phone: (913) 222-8654, Toll Free: 800-228-3677, Fax: (913) 222-8606 info-NAEMSP@NAEMSP.org • www.NAEMSP.org

August 23, 2019

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

The associations and organizations listed below have joined this statement of support for the proposal and initiative being led by the National Association of State Emergency Medical Services Officials (NASEMSO) titled "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

We are very interested in supporting this critical initiative to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. It is our understanding the intent of this research collaborative is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

We believe in this collaborative process as it has been demonstrated to be successful at improving adult patient and EMS practitioner safety for other restraint types. It is our belief we are on the cusp of providing that same level of safety for our pediatric patients and pledge to be active, engaged participants in moving pediatric safety forward collaboratively.

Most importantly, it assists local EMS agencies in selecting and utilizing devices to assure that the back of an ambulance is the safest place that an infant or child can be transported, which in turn builds trust and confidence in their communities.

We look forward to end products that will improve the safety and health of our pediatric patients and reduce preventable morbidity and mortality.

We are pleased to offer our highest level of support for this project.

JerrieLynn Kind National Association of EMS Physicians



August 29, 2019

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

The National EMS Management Association is pleased to offer our support for the proposal and initiative being led by the National Association of State Emergency Medical Services Officials (NASEMSO) titled "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

We are very interested in supporting this critical initiative to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. It is our understanding the intent of this research collaborative is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

This type of initiative will no doubt have a significant impact to the safety and well being of our nation's children. We are pleased to offer our support for this project.

Brian LaCroix, President National EMS Management Association 2901 Williamsburg Terrace Suite G, PO Box 472 Platte City, MO 64079



Ambulance Manufacturers Division (AMD)

An Industry Division of the National Truck Equipment Association 37400 Hills Tech Drive, Farmington Hills, MI 48331-3414 • 248/489-7090 • Fax 248/489-8590

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046 January 13, 2020

Dear Ms. Gainor:

The Ambulance Manufacturers Division of the NTEA join this statement of support for the proposal and initiative being led by the National Association of State Emergency Medical Services Officials (NASEMSO) titled "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

We are very interested in supporting this critical initiative to ensure pediatric patient safety during ambulance transports through the collaborative development, validation, and publication of three new test methods. It is our understanding the intent of this research collaborative is to develop new test methods for products focused on the safe transport of three classes of pediatric ambulance occupants: (1) supine pediatric patients, (2) seated pediatric patients or pediatric companion transports, and (3) supine neonatal patients.

We believe in this collaborative process as it has been demonstrated to be successful at improving adult patient and EMS practitioner safety for other restraint types. It is our belief we are on the cusp of providing that same level of safety for our pediatric patients and pledge to be active, engaged participants in moving pediatric safety forward collaboratively. Most importantly, it assists local EMS agencies in selecting and utilizing devices to assure that the back of an ambulance is the safest place that an infant or child can be transported, which in turn builds trust and confidence in their communities.

We look forward to end products that will improve the safety and health of our pediatric patients and reduce preventable morbidity and mortality. We are pleased to offer our highest level of support for this project, and AMD offers the use its logo in the list of supporting organizations with the following conditions:

- Logo is never to be used in such a manner that suggests or indicates in any way that the member company or individual represents AMD or NTEA.
- Logo may not be revised or altered in any way, and must be displayed in the same form as produced by NTEA. If resizing, maintain proper aspect ratio (do not stretch or condense in one direction more than another).
- There must be an area of clear space surrounding the logo so as to prevent any nearby text, images or other graphic elements from interfering with the impact of the mark.

Mut

Michel Pelletier, AMD Chairman



November 26, 2019

Dia Gainor, MPA National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046

Dear Ms. Gainor:

On behalf of Riley Children's Health, I am pleased to provide a letter of strong support for development of a National Association of State EMS Officials (NASEMSO) sponsored "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices."

Riley Children's Health, through the Automotive Safety Program, has long been involved in the academic pursuit of supporting safe transportation of children in ambulance transport. Our faculty have conducted tests, published findings, developed curricula and made many presentations presenting the best possible practices for transporting children.

With the many advances including development of an ambulance specific crash pulse and standards that improve ambulance structure, patient protection, and securement of adults, it is now urgent that similar standards for optimal safety of children be developed. Children have been left behind, and it is possible now to change that reality.

With ambulance crash rates at least 2.5 times greater than that of an automobile, and an estimated 1.6 million children transported annually in the U.S., Riley Hospital for Children recognizes that pediatric populations have unique needs and recognize the importance of the goals of your project to develop, validate, and publish new test methods.

We support the NASEMSO "Safe Transport of Children in Ground Ambulances" proposal and look forward to collaborating on the project as possible.

Sincerely,

Matthew Cook

Matt Cook President Riley Children's at Indiana University Health

Riley Administration

705 Riley Hospital Drive Indianapolis, IN 46202

T 317.944.4093 F 317.944.3404 rileychildrens.org

WVUMedicineChildren's

December 24, 2019

Dia Gainor MPA, Executive Director National Association of State EMS Officials 201 Park Washington Court Falls Church, VA 22046-4527

Re: Letter of Support

Dear Ms. Gainor,

On behalf of West Virginia University Hospitals, Inc. ("WVUH"), a quarternary care teaching hospital in Morgantown, West Virginia, supporting West Virginia University and its Health Sciences Schools and programs, I am pleased to provide this letter of support for the National Association of State Emergency Medical Services Officials ("NASEMSO") initiative known as "Safe Transport of Children in Ground Ambulances: Proposal for Testing Child Restraint Devices".

WVUH Children's' Hospital has long sponsored programs designed to promote, encourage, and facilitate the safe transportation of newborns, infants, neonatal, and pediatric patients. Through the development of new testing methods, the proposed project offers to move our industry closer to ensuring neonatal and pediatric patient safety during ground ambulance transport, a known gap in the safety net for these populations. Accordingly, WVUH is excited to offer its wholehearted support for the project.

In addition to this letter of support, WVUH would be pleased to collaborate in this effort with NASEMSO and other supporting organizations, subject to our standard internal review processes and approval by our senior leadership and Boards as necessary. Should there be an opportunity for our participation, kindly let us know.

Please accept this letter of our enthusiastic support, along with our best wishes for success, and count WVUH among those organizations standing with NASEMSO in this effort.

Sincerel

Cheryl Jones/RN, MSN, MÉA-BC Vice President, Nursing WVU Medicine Children's



WVUkids.com