

NASEMSO Safe Transport of Children (STC) Ad Hoc Committee

MEETING RECORD

August 18, 2016 1:00 PM EDT

Attending – Eric Hicken, Chair (NJ), Katherine Schafer (NM), Matt Maltese (Philadelphia Children's Hospital), Teresa Merk (AAMS), Amy Haughn (AAMS), Steve McCoy (FL), Cindy Wright-Johnson (MD), Manish Shah (TX Children's Hospital), Theresa Morrison Quinata (EMSC), Paul Phillips (KY), John McDonald (GSA), Dr. Marilyn Bull (Riley Hospital for Children), Jim Green (NIOSH), Dr. Brian Moore (UNM), Stephanie Busch (VT), Sailesh Tangirala (Ferno), Kjelsey Polzin (MN), Sandy Sinclair (NHTSA), Mary Hedges (NASEMSO)

Call to Order and Call Roll – Eric Hicken, Chair, called the meeting to order at 1:02 PM EDT.

Review and Approve July 27th Meeting Record – The meeting record was approved as submitted.

Introduction of New Member – Matthew Maltese, Ph.D., Director, Biomechanics Research, Children's Hospital of Philadelphia, explained his background and interest in the committee. He formerly worked for NHTSA in crashworthiness research and presently does the same thing at Children's Hospital Philadelphia.

Federal Partner Comments/Update – There were no federal partner comments/updates.

Update on Albuquerque Ambulance Crash with Infant - Katherine Schafer and Dr. Brian Moore shared information about the recent ambulance crash. Katherine said she was unable to speak with anyone from the ambulance service (an inter-facility service) but the event occurred at an intersection notorious for these types of crashes. She understands that the driver had limited experience and was running with lights and sirens when he failed to clear the intersection. The ambulance was broadsided and rolled. The infant, who was not secured in the incubator, was ejected inside the vehicle. It took several minutes to find the baby due to all the equipment. The baby survived but will likely suffer brain damage. The neonatal team and other providers in the ambulance sustained injuries but are okay.

<u>Code 1 Response (lights and siren)</u> - Dr. Brian Moore added there are very few instances where running lights and siren makes a difference in the patient's outcome. Eric Hicken added that the trend is to discourage the use of lights and siren except in the rare cases where it is appropriate.

<u>Incubator safety</u> - Dr. Bull said that it is not common practice to use any type of restraint system in incubators, but there has been some work in this area in the European market. Amy Haughn added

there have been a few studies about what occurs when an incubator detaches from the base in an ambulance. Dr. Bull said that a prototype incubator was published in SAE 5 to 6 years ago following a crash in Pennsylvania. Steve McCoy added that he is on the Minimum Model Uniform Crash Criteria (MMUCC) Advisory Committee and he has proposed that they add criteria to address this type of occurrence. Dr. Brian Moore commented that air ambulance companies often utilize whatever they feel is appropriate. He believes it may be advisable to have conversations with CAAS and AAMS to recommend appropriate restraints. (Dr. Bull mentioned that incubator is a generic term but isolette is a brand name.)

<u>Crash testing</u> - Matt Maltese questioned if there has been discussion of crash testing with incubators. Dr. Bull referred to her past work in this area. Jim Green said we know how to address this, because we have developed test standards but we need to identify funding sources in order to conduct the needed testing. Sailesh Tangirala agreed that we know how to develop the test requirements to improve the equipment we have now, but the standards need to be adopted and enforced. There is a very small market for incubators used for transport in ambulances. Drager manufactures isolettes®. (See http://www.draeger.com/Sites/enus_us/Pages/Hospital/TI500-Globe-Trotter.aspx). International Biomedical also makes the Airborne transport incubator.

Original funding for the crash testing came from NIOSH, USFA and the Department of Homeland Security, First Responder Group. Manufacturers partnered with NIOSH to provide engineering expertise and equipment. We have not yet had contact with the incubator manufacturers. Jim Green said that NIOSH does not have the funding to do this additional work. Eric Hicken asked if it would be reasonable to write a letter to large corporations requesting funding, including insurance companies. It was agreed that this will be a future project which will be on the agenda for the September meeting.

National Cooperative Highway Research Program (NCHRP), Transportation Research Board (TRB) Problem Statement (attached) – Mary Hedges reported that she, Jim Green and Dr. Marilyn Bull wrote the problem statement which was submitted earlier this month to the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Highway Safety. The document describes a potential research project, which if selected could be the topic of a request for proposals. If it is selected, it would be a 2018 NCHRP research project.

Planning for September 19 Meeting, Albuquerque – Eric asked for suggestions for the STC Committee Meeting on September 19 in Albuquerque. Jim Green asked if there would be value in combining the presentations previously given in Bethesda last April. Members agreed this would be helpful, especially for the new members. Dr. Bull and Matt Maltese will be in Hawaii at the Society of Automotive Engineers (SAE) conference but will try to call in and join the meeting.

Adjourn - The meeting adjourned at 2:03 P.M. EDT.

Next Meeting - September 19, Albuquerque, 1:00 - 3:00 PM Mountain time

The meeting record was respectfully submitted by NASEMSO Program Manager Mary Hedges.