



# Transporting Children Safely

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Standardizing Testing  
Requirements for  
Pediatric Transport  
Devices



# Who is SAE?

- SAE stands for the Society of Automotive Engineers
- SAE writes and publishes consensus test methods for:
  - Ground vehicles: cars, trucks, buses and now ambulances (a form of a truck)
  - Airplanes
  - Trains



# Why use SAE?

- SAE consensus test methods are referenced in US and international regulations and standards
- SAE provides industry leaders with opportunities to improve products collaboratively
- SAE provides GSA, NFPA and CAAS with access to independent vehicle engineering expertise
- Ambulance manufacturers have built a strong relationship with SAE and now have SAE's confidence

GSA = General Services Administration

CAAS = Comm on Accreditation of Ambulance Services

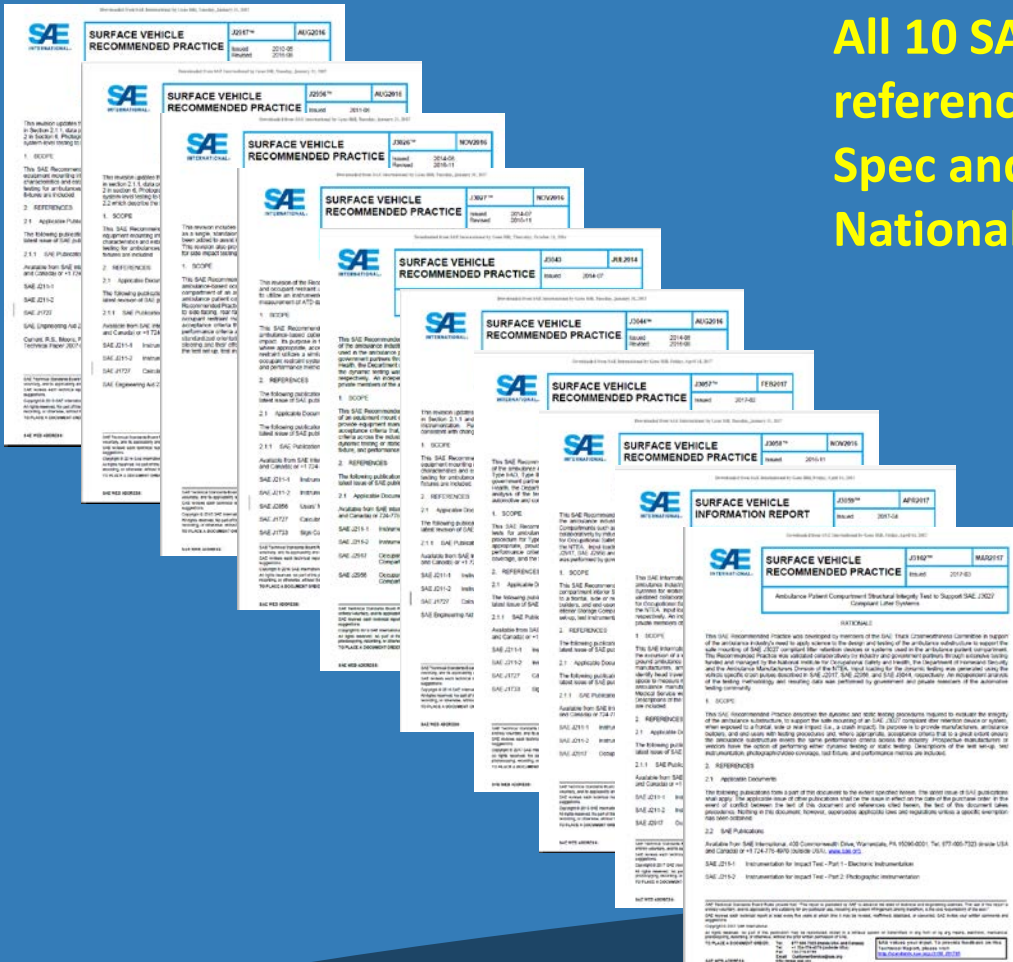
NFPA = National Fire Protection Association



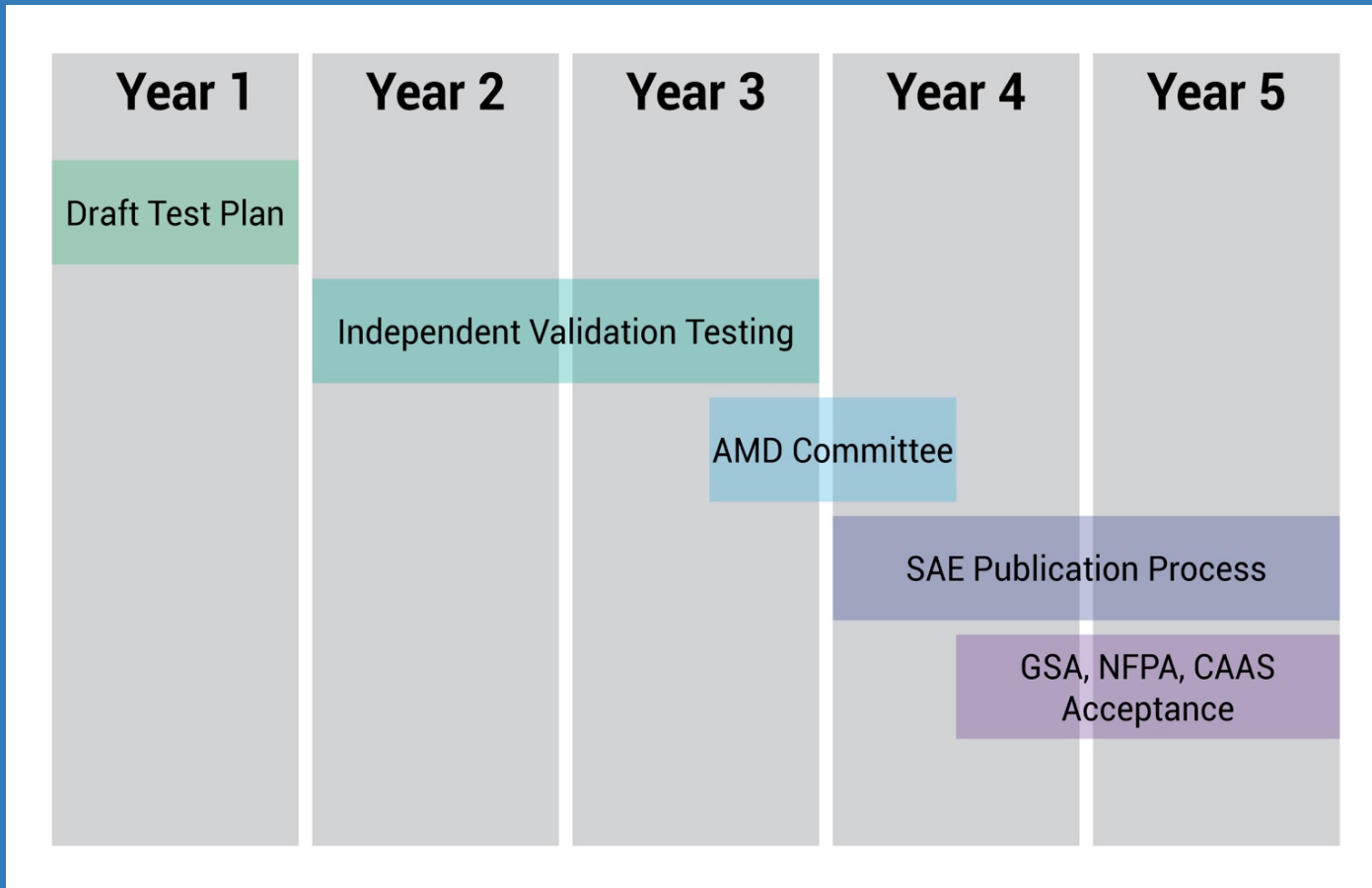
# Standardized Testing Improves Safety: The Process Works!

All 10 SAE test methods are now referenced in the GSA Purchase Spec and the NFPA & CAAS National Ambulance Standards

More importantly, manufacturers have now built and tested new products to meet all 10 new SAE test methods!!



# Program timeline for a each test method



# Committee Composition

- Independent test labs
- Product manufacturers
- Ambulance builders
- Government regulators
- EMS practitioners



# Committee responsibilities

- Draft a step-by-step testing procedure to include:
  - Component definitions and scope
  - Patient positioning (seated or supine, fwd or rear facing, cot fowler angle)
  - Patient weight ranges
  - Test loading requirements (front, side, and rear impacts?)
  - The range of crash test dummies to be used
  - Pass/fail criteria – will this include NHTSA published Injury Assessment Reference Values by dummy size?





# Validation testing – what is it?



- We will test each draft test method in an independent test lab
- Product manufacturers will be asked to provide their products for testing
- Our first tests will likely reveal needed changes to both the test method and the products tested

# Publishing process & activities

- NASEMSO has already met with SAE to make them aware of our program
- NASEMSO will not move a “draft” test method to SAE until we are satisfied with the draft language **AND** have products that have passed the test
- SAE is an independent consensus body with representatives from across the transportation community
- SAE’s review will likely identify areas we must address
- SAE review and publishing process will last 1 – 2 years



# Adoption of SAE Test Methods

- Once published, each SAE test method must be referenced by a national standard: GSA, CAAS, and/or NFPA
  - GSA's Purchase Specification is updated annually
  - CAAS and NFPA are both currently updating their standards every 3 years
- ***Ultimately, for the SAE test method to become “effective” individual state regulators must adopt one or more of these national standards***

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# Current Activities

- NASEMSO Executive Director Dia Gainor leading a team to develop complete proposal package
- Seeking support from like-minded associations and industry and government partners
- Developing funding partnerships now and in coming months
- Targeting program kickoff with first subcommittee meetings in Fall 2019 at EMS World



# Questions and Contacts

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