



Program

Protection of Children in Cars

The Langwieder Conference

December 9 – 11, 2024
Munich, Germany

The Conference

As a long-established international expert forum on child safety, the 22nd conference will provide an overview of trends in safety regulations and standards, will discuss current research findings and showcase safety product developments by CRS and car manufacturers.

The conference contributions will not only address the needs and trends in developed countries, but will also take a global view of CRS markets, field observations, consumer information and safety programs worldwide.

The conference is intended for

- safety engineers and accident researchers
- biomechanics experts, paediatricians, behavioral scientists
- representatives of regulatory bodies and consumer organizations
- promoters of safety campaigns
- specialists in vehicle and CRS rating systems
- scientists working in the field of child safety

Conference language

The conference language will be English.

Workshop

December 9, 2024
14:30 – 17:00

In the afternoon before the conference, we will deepen a particular thematic focus in a special workshop with a panel of speakers, with plenty of time for open dialogue and discussion.

Attendance at the workshop is included in the conference registration fee.

Topic

Advancing child passenger safety by applying user centric approaches to guide

- the design of functional and affordable child restraints
- the development of accurate and reliable assessment tools and
- the communication of information to high risk populations

Chair: Suzanne Tylko, Transport Canada



- > **No additional cost**
- > **Participation is optional**
- > **No need to register in advance**

December 10, 2024

09:15 **Welcome / Opening Remarks**

09:30 **Keynote Speech & Panel Discussion**
Low-cost child restraints for low-income countries: opportunities & challenges
Farid Bendjellal (FR)

Future Transport Challenges

Chair: Kristy Arbogast, The Children's Hospital of Philadelphia

10:15 **Safer Transport of children in buses and coaches (phase 2)**
Marta Anglès Torradeflot, Applus+ IDIADA (ES)

10:40 **Results of a comprehensive research on safety of children transported by bicycle**
Marie Meincke, Gerd Müller, Manfred Thüring, Technische Universität Berlin; Dennis Kirsch, GKB GmbH; Michael Minge, Technische Hochschule Ostwestfalen-Lippe; Matthias Kühn, Unfallforschung der Versicherer (DE)

11:05 Coffee break

11:35 **Repositioning forward leaning child occupants in pre-crash scenarios**
Valentina Graci, Children's Hospital of Philadelphia and Drexel University; Madeline Griffith, Thomas Seacrist, Children's Hospital of Philadelphia (USA)

Standards and Rulemaking

Chair: Jessica Jermakian, Insurance Institute for Highway Safety (IIHS)

12:00 **What's next – ideas around "ISOFIX 3.0"**
Hans Lammers, RDW, representing the Netherlands in GRSG, GRSP (NL)

12:25 **Q10 Interaction with side curtain airbags in Euro NCAP Side Impact Tests**
Costandinos Visvikis, CYBEX GmbH (DE); James Ellway, EURO NCAP (BE)

12:50 Lunch

13:50 **A study on the side impact test repeatability and reproducibility of FMVSS 213a**
Andy Zhu, Goodbaby International Holdings Ltd and Ego Testing and Certification Co., Ltd (CN); Eric Dahle, Evenflo Company Inc. (USA); Phil Przybylo, Cybex GmbH (USA)

Test Procedures, Dummies and Models

Chair: Stephan Schwald, AUDI AG (DE)

14:15 **Chin-to-chest contact in Q-Dummies – Are there practical solutions to overcome the impact on dummy readings**
Heiko Johannsen, Medizinische Hochschule Hannover (DE)

14:40 **Q3 Dummy model development-additional validations to improve model assessment capabilities for CNCAP test conditions**
Apoorva Lakshminarayana, Maria Khopekar, Arie Schmidt, Bernard Been, Martin Dotinga, Olaf van Leeuwen, Humanetics (DE & NL)

15:05 **Preemie body shape models intended for evaluation of child seat and harness fit**
Karin Brolin, Victor Alvarez, August Brandberg, Lightness by Design (SE); Sarah Brooks, Northern Neonatal Network (UK); Siyuan Chen, Xiaogai Li, Royal Institute of Technology (SE); Pia Zimmer, Costandinos Visvikis, CYBEX GmbH (UK)

15:30 Coffee break

Car Seats for Children with Special Needs

Chair: Philipp Wernicke, BMW Group

16:00 **Vision of safer car seats for children with disabilities**
Andrés Moncayo, Markus Jacksch, HERNIK GmbH (DE)

16:20 **Advancing the rights of Australian children and young people to safe transport through influencing standards and laws**
Helen Lindner, Emma Clarkson, Mike Lumley, Mobility and Accessibility Australia Ltd (AUS)

16:40 **Modification to child restraints for children with disability: Investigating safety implications for motor vehicle travel**
Lyndall Cook, Tom Whyte, Lynne E. Bilston, Neuroscience Research Australia (AUS)

17:00 **End of first conference day**

Evening Event

December 11, 2024

09:00 **SAFER's contribution to enhancing child safety in cars: Overcoming design barriers for future mobility and advancing human body modeling acceptance for evaluation**
Katarina Bohman, Lotta Jakobsson, Volvo Cars / SAFER Vehicle Research Centre at Chalmers University (SE); Kristy B. Arbogast, The Children's Hospital of Philadelphia (USA); Jessica Jermakian, IIHS (USA); John Bolte, Ohio State University (USA) representing the full SAFER workshop attendees

Accident Research and Biomechanics

Chair: Bernd Lorenz, Federal Highway Research Institute BAST

09:25 **Assessing the tensile and flexion behavior of the neck of the PIPER pediatric human body model**

Francisco J. Lopez-Valdes, Manuel Valdano, MOBIOS-Mobility, Universidad Pontificia Comillas; Sergi Ferris, SAFEDSIGN S.L.; Ivan Tomasi, Dario Scaldaferrò, L'Inglesina Baby S.p.A (ES)

09:50 **Experience in Chile as a pediatrician promoting child passenger safety and reviewing CRS use in the Practice**

Sergio Rendich, Chilean Society of Pediatrics (CL)

10:15 **Paediatric vehicle occupant traffic crash injuries in Al Ain**

Muhammad Uba Abdulazeez, Kassim Abdullah, Aminu Abdullahi, David Alao, United Arab Emirates University (AE); Sjaan Koppel, Monash University (AUS)

10:40 Coffee break

11:10 **Merit Award/Special Lecture**
Looking back on many years dedicated to child safety

Barbara Birkenshaw, Volkswagen Group of America (USA)

Consumer Information and Rating Systems for CRS

Chair: Costandinos Visvikis, CYBEX GmbH

11:20 **Rear Seat protection – Update of the geometrical assessment of the curtain airbag coverage**

Céline Adalian, Kateřina Kaňková; Michal Veselý, IDIADA Group (FR & CZ)

11:45 **Enhancing child safety in India via introduction of Bharat NCAP**

Divyan R. Jaju, Dileep D. Kulkarni, Rahul Mahajan, The Automotive Research Association of India (ARAI) (IN)

Development of Safety Products by CRS and Car Manufacturers

Chair: Heiko Johannsen, Medizinische Hochschule Hannover

12:10 **Novel rotating CRS designs and their potential to reduce misuse – a first look at field data**

Eric Dahle, Sarah Haverstick, Evenflo Company; Matthew R. Maltese, MRM Analysis LLC (USA)

Field Observations

Chair: Sjaan Koppel, Monash University

12:35 **Proposal of harmonized misuse classification and rating**

Philippe Lesire, LAB PSA/RENAULT (FR); Gerd Muller, TU Berlin (DE); Christophe Ramon, Prévention sécurité routière (FR); Jacques Saade, CEESAR (FR); Uwe Meissner, Collision Research (USA); Lotta Jakobsson, Volvo Cars (SE)

13:00 Lunch

14:00 **Increasing misuse of child car seats with age: Psychological triggers and potential interventions**

Alice Dona Mitu, Centre Hospitalier Reine Astrid (BE) and Children Car Safety Foundation (RO); Roxana Elena Sotresanu, Children Car Safety Foundation; Tatuc Costin, Car Safety Specialist (RO)

14:25 **Investigation of the Crashworthiness of retrofitted „ISOFIX“-Anchors**

Darius Friedemann, HTW Berlin (DE)

14:50 **The challenges of direct importation of child restraint systems in Europe**

Joan Forrellad, Jané Group and AESVI Safety Child in Road Spanish Alliance; Juan José Alba, University of Zaragoza and AESVI; Javier Castillo, Play, S.A (ES)

15:15 **Resumé, Outlook and Farewell**

Program Committee

- **Andreas Ratzek**, ADAC e.V. (DE)
- **Stephan Schwald**, AUDI AG (DE)
- **Philipp Wernicke**, BMW Group (DE)
- **Bernd Lorenz**, Bundesanstalt für Straßenwesen (DE)
- **Farid Bendjellal**, retired Britax Child Safety (FR)
- **Kristy Arbogast**, Children's Hospital of Philadelphia (USA)
- **Costandinos Visvikis**, CYBEX GmbH (DE)
- **Joachim Fausel**, Daimler AG (DE)
- **Ives Deul**, DEKRA Automobil GmbH (DE)
- **Jessica Jermakian**, Insurance Institute for Highway Safety (IIHS) (USA)
- **Heiko Johannsen**, Medizinische Hochschule Hannover (DE)
- **Sjaan Koppel**, Monash University (AUS)
- **Jiří Socha**, TÜV SÜD Czech s.r.o. (CZ)

Chairs

Philippe Lesire, LAB PSA/RENAULT (FR)
Suzanne Tylko, Transport Canada (CA)

Registration & Information

www.tuvsud.com/akademie/protection-of-children-in-cars



Conference Registration Fee

890,00 € plus VAT (if applicable)

50 % discount for members of universities.

The conference registration fee includes digital conference documentation, lunch, snacks and beverages during breaks as well as the evening event.

Conference Venue

TÜV SÜD

Headquarter

Westendstr. 199

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