CPS NEWS

Child Passenger Safety Research Updates: Safety Research Boosts in 2025

By: Rosalie Connell, PhD Assistant Professor of Mechanical Engineering, Lafayette College



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As we wrap up 2025, it's a great time to reflect on this year's progress in child passenger safety. Across the country, researchers have continued advancing our understanding of how children of all ages interact with their car seats, boosters, and seat belts. This work directly supports safer transportation practices and can be applied to our work in the field as CPSTs.

One significant study came from The Ohio State University in collaboration with the Center for Child Injury Prevention Studies (CChIPS). Their research investigated how children change their posture during longer car rides, by creating a realistic vehicle environment in a laboratory setting. This study examined both booster seats and non-ideal conditions where children use the vehicle seat belt alone.

The findings, consistent across ages and sizes, showed that children tended to slouch in their seats over time. Slouching was observed for children who were using booster seats and independent seat belt systems. Slouching was most for the children who were not using a booster seat in the study. Even so, all participating children demonstrated some degree of non-ideal posture change over time.

This study builds on previous research and supports that best practice in booster seats, and even seat belts alone, can be evaluated using the 5-step test. This study further emphasized the importance of the 5th step in the 5-step test, which is that we should continue to monitor correct posture and use of seat belts throughout the entire duration of travel.





What this means for CPSTs:

Child Passenger Safety Technicians can utilize this research when working with families by focusing on the following key takeaways:

- Reinforce the value of boosters, even for older and taller children. Many children who technically can pass some parts of the 5-step test still benefit from the improved belt fit and posture support that boosters provide, especially over long periods of time.
- Use the full 5-step test to evaluate readiness for seat belt use. The test not only determines whether a child fits within the belt system, but can also help identify whether the seating position supports consistent, safe posture. This test can also be used to evaluate whether the booster seat is encouraging proper belt fit.
- Emphasize all five steps of the 5-step test when educating families. Parents often focus on height or age milestones. Encourage them instead to consider posture maintenance throughout the entire ride, especially during long trips when slouching becomes more likely.
- Recommend other appropriate child restraint systems if posture cannot be maintained. If a child frequently slouches or cannot stay upright in a belt-only configuration, suggest returning to a booster or harness system, or trying a different CRS altogether that provides better support and fit.

POINTS OF INTEREST

- Child Passenger Safety Research Updates: Safety Research Boosts in 2025
 By: Rosalie Connell
- Cybex Callisto G 360
 Callisto G 360 Tether
 Incompatibility on
 Certain Car Seats
- Callisto G 360 Tether Shortening Clip Installation Instructions
- TIPP Upcoming Trainings
- Safe Kids Training Portal

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PA Traffic Injury Prevention Project



Cybex Callisto G 360
All-in-One Car Seat: Rear-Facing: 4-40 lbs., Lower Anchors: 30 lbs.; Forward-Facing: 26.5- 65 lbs., Lower Anchors: 35 lbs.;

High-Back Booster: 40-120 lbs. and 4 years of age or older, LATCH can be used in Booster Mode





The Callisto G 360 is a rotating car seat that meets FMVSS 213a and 213b with one installation method for both rear-facing and forward-facing. The car seat is equipped with the SafetyAssure Protection System and SensorSafe Smart Technology. The SafetyAssure Protection System features a reinforced steel frame, Anti-Rebound Base with SecureFix360 Tether, and Linear Side-Impact Protection System (L.S.P.). Cybex recommends using the tether for both rear-facing and forward-facing installations.



Anti-Rebound Base with SecureFix360 Tether



L.S.P. is integrated into the car seat's energy absorbing shell, reducing crash forces on the child in the event of a side impact collision.



SensorSafe Chest Clip alerts you when:

- 1. the child unbuckles the chest clip while the car is still in motion,
- 2. the child is seated for a prolonged period of time,
- 3. the temperature gets too hot or cold, or
- 4. the child is still buckled in the car seat after the driver leaves the vehicle.
 - a. Emergency contacts are notified if no action is taken, sharing the location.

The SafeLock Belt Tensioner



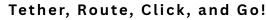














- 2. Open the Safe Lock Belt Tensioner.
- 3. Route the lap portion of the vehicle seat belt under the SafeLock Belt Tensioner and across the Blue Belt Path and buckle the vehicle seat belt.
- 4. Remove slack from the lap portion of the seat belt by pulling the shoulder portion of the seat belt. Do Not Overtighten. Route the shoulder portion of the vehicle seat belt under the SafeLock Belt Tensioner and across the Blue Belt Path, ensuring it lays flat on top of the Lap Portion.
- 5. Close the SafeLock Belt Tensioner. If Belt Tensioner does not lock, slightly loosen Lap and Shoulder Belt.
- 6. Route the shoulder belt behind the Shoulder Belt Guide on the side of the Base. Shoulder Belt Guide may be rotated upward for easier access but MUST be returned to its original position once the vehicle belt is routed.

Callisto G 360 Tether Incompatibility on Certain Car Seats

Callisto G 360 Tether: The early production of the Callisto G 360 car seat had a tether that could not adjust to a length of less than 16 inches, making it incompatible in some vehicles. The tether had long sewn segments and the tether adjuster was not able to slide over these thicker segments, limiting the shortest length of the webbing to about 16 inches. In many vehicles, the tether length will still allow for the tether to be tightened, but could be incompatible in some vehicles when the tether anchor is at the front of the rear deck (shelf located behind the rear seats in a sedan), or high on the back of the vehicle seatback.



Cybex has developed a fix for the tether length incompatibility. The kit includes a metal plate with two slots and instructions that allow the tether to be tightened. Cybex will provide the clip and instructions to solve the incompatibility upon request. If the tether fix is needed, contact Cybex at 877-242-5676 to obtain the kit.

Note: Cybex has redesigned the Callisto G 360 tether to eliminate this issue. The Cybex tether shortening method is for use only on certain Callisto G 360 car seats and only when necessary. Always contact the car seat manufacturer when an incompatibility is found when installing a car seat.

Callisto G 360 Tether Shortening Clip Installation Instructions: See page 3 to review the instructions that Cybex will send.





Callisto G 360 Tether Shortening Clip Installation Instructions

@cybex

In vehicle installations where the tether anchor location requires the top tether to be shorter than 16" for proper installation, please use the tether clip supplied and follow these instructions when installing.

This tether clip has been tested and approved by Cybex for installation on the Caliisto G 360 car seat.







First Fold the tether at white tag (~ 10 ").



Pull the loop tight.





Next thread the end of the loop down through the clip from top to bottom in the slot furthest from you.





Take the end of the loop and thread it back down through the bottom slot in the clip, pulling it all the way through.

3



Slide clip all the way to the back of the car seat base holding the end of the loop firmly in one hand.





Verify clip and webbing routing match photo. Note: Loop location behind base anti-rebound bar.





Rotate clip to upright position. Take the end of the loop and thread it up through the open top slot in clip.

8

You can now adjust the tether strap to the appropriate length for your vehicle installation.

Child Passenger Safety Trainings

Certification Courses

The CPS Certification course provides the training ssary to become a certified CPS technician. This four-day course establishes CPS certification for a two-year cycle. The fee is \$95. To register, go to cert.safekids.org.

Washington County*

Course ID: PA202510301018 Date: April 7 - 10, 2026 Time: 9:00 am - 5:00 pm Peters Fire Department 245 E. McMurray Road McMurray, PA 15317 Contact: Kristen Urso Phone: 412-885-0266 Email: <u>kurso@paaap.org</u>
*Controlled class: Contact lead instructor before registering for class.

Renewal Courses

The CPS Renewal course is for CPS technicians with an expired certification. The one-day course allows recertification for a two-year cycle. The fee is \$95.

To register, go to cert.safekids.org.

Washington County* Course ID: PA202511051052 Date: April 10, 2026 Time: 9:00 am - 5:00 pm Peters Fire Department 245 E. McMurray Road McMurray, PA 15317 Contact: Kristen Urso Phone: 412-885-0266

Email: <u>kurso@paaap.org</u>
*Controlled class: Contact lead instructor before

registering for class.

PA TIPP Child Passenger Safety Technical Update Classes

Class is pre-approved for 6 CEUs toward CPS Recertification. Contact your TIPP regional coordinator if you are interested in hosting or attending a CPS Technical Update.

PA TIPP instructors are approved as Emergency Medical Services Continuing Education Providers. EMTs can receive 6 EMS continuing education credits for attending the class.

PA TIPP CPS Technical Update

Course ID:

Please RSVP if you plan to attend one of the following courses.

Beaver County

Date: January 14, 2026 Time: 9:00 am - 3:00 pm Brighton Township Fire Department

84 Grange Road Beaver, PA 15009 Contact: Kristen Urso Phone: 412-885-0266 Email: <u>kurso@paaap.org</u> Philadelphia County

Date: March 31, 2026 Time: 9:00 am - 3:00 pm CHOP Karabots Pediatric Care Center 4865 Market Street Philadelphia, PA 19139

Contact: Teresa Rychlak Phone: 484-446-3078 Email: trychlak@paaap.org



Safe Kids Training Portal

Looking for CEUs for child passenger safety technician recertification? Safe Kids Worldwide has relaunched their CPST Training Portal. Visit training.safekids.org to see webinars and trainings opportunities and check back for webinars that will be added.

To log in, use your existing username from the certification site (https://cert.safekids.org/) as your login name. If this is your first time visiting the site, select "Forgotten your details?" to request a new password for this site. For assistance with login or certificates, contact mlouzon@safekids.org.

The site has online videos valued at 1 CEU each. To earn the CEU, watch the video, take the online quiz scoring a minimum of 80%, and print out the certificate as verification if you are audited.

CPS Continuing Education Certificates from an in-person or certified CEU event for recertification: Follow the checklist:

- 1. Obtain and keep the certificate of attendance.
- 2. Enter the correct CEU ID number into your profile in the Safe Kids Certification portal (<u>https://cert.safekids.org/</u>) for the correct recertification cycle.
- 3. If you do not receive a certificate, contact the organizer to request one.

Note: Records should be kept for at least 3 months after you recertified. Consider keeping a digital or physical folder for all CEU documents. This can save time when preparing for recertification or audit requests. Should any questions arise about audits, email cpsaudit@safekids.org.

CPST Audit: When you receive an email that you have been selected for an audit, submit the certificates for the CEUs that were completed for your recertification to cpsaudit@safekids.org . Emailing the required documentation for the 6 CEUs within a month after receiving the email, satisfies the requirement.

New Required Instructor Course: This requirement will go into effect on February 1, 2026. The required instructor course will be available at training.safekids.org and must be completed by all instructors once during every certification cycle. For questions related to the course or implementation of the requirement, please reach out to Cass Herring cherring@safekids.org.

