PA Traffic Injury Prevention Project
PA Chapter, American Academy of Pediatrics
Rose Tree Corporate Center II
1400 N. Providence Road, Suite 4000
Media, PA 19063
Phone: 484-446-3008
1-800-CAR BELT (in PA only)
Email: aosterhuber@paaap.org
Website: www.pakidstravelsafe.org

Special points of interest:

- New Booster Seat Research
- CPS Curriculum Updates
- Tech Corner
- CEU Recertification Tips
- Upcoming Trainings

CPS NEWS

New Booster Seat Research

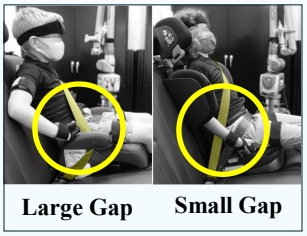
Belt-Positioning Booster (booster) seats work by adjusting the position of the child and/or the position of the seat belt to provide optimal protection. When selecting a booster seat, there are 3 main criteria addressing child fit. They include:

- ✓ The shoulder belt crossing the center of the chest and shoulder,
- ✓ The lap belt low and snug across the hips, upper thighs, and
- ✓ The child can stay properly positioned for the entire ride.

The Insurance Institute for Highway Safety and Consumer Reports evaluate car seats and provide recommendations for booster seats that meet their criteria. The criteria and booster seat recommendations can be found at https://www.iihs.org/topics/child-safety/boosters and https://www.consumerreports.org/products/car-seats-28987/infant-car-seat-28699/view2/

Researchers recently released findings on their booster seat research that looked at the gap between the shoulder belt and lower torso, child posture and belt fit, use of a seat belt retractor instead of the current fixed belt anchors, and whether securing a booster seat with LATCH affects booster performance.

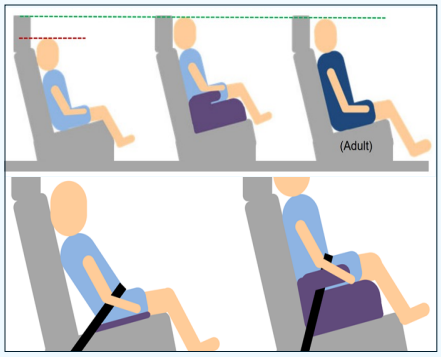
Evaluation of static belt fit and belt torso contact for children on belt positioning booster seats, Baker 2021: https://doi.org/10.1080/15389588.2021.1967337



Preliminary Conclusion:

- The belt gap varies based on booster features, e.g. belt guides.
- Pediatric crash test dummies tend to have larger belt gaps than children.
- Future study: Does the gap affect crash safety?

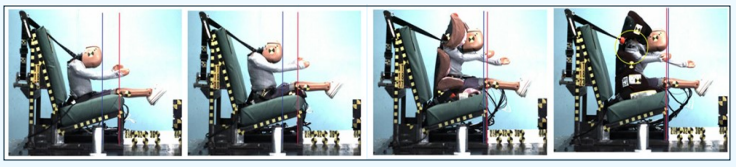
Child Posture and Belt Fit in a Range of Booster Configurations, Jones 2020: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7037749/



Findings:

- Traditional booster seats raise the height of children closer to that of an average adult. (Study included booster heights between 1.8" and 7")
- Side impact crashes: Side curtain air bags appear to be beneficial for properly restrained children.
- Child's posture in the booster seat is important in a crash.
  - Lower height boosters produced postures that were more slouched, with the child's hips further forward. (Boosters that shorten the vehicle seat help with slouching.)
  - Slouching causes the lap belt to route more horizontally, increasing the chance of submarining. Higher height boosters route the seat belt more vertically, keeping the lap belt low on the pelvis and upper thighs.

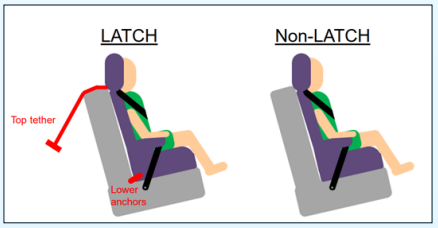
Dynamic Metrics to Differentiate Booster Performance, Klinich 2021: https://www.tandfonline.com/loi/gcpi20



Findings - New metrics to consider:

- Difference between knee and head excursion
- Maximum torso angle
- Lumbar spine force in lateral directions
- Lumbar spine torsion (twist)

Evaluation of LATCH vs. non-LATCH Installations for Boosters in Frontal Impacts, Mansfield 2021: https://pubmed.ncbi.nlm.nih.gov/34379543/



Findings:

- LATCH reduced movement of the booster seat, but did not affect head or heel movement. Suggests that some movement between the booster and the occupant in booster seat that is not secured with LATCH.
- No obvious submarining occurred during crash test.
- Use of tether appeared to reduce shoulder belt crash load.
- Results support current recommendation of optional LATCH use for boosters.

2020 National Child Passenger Safety (CPS) Certification Curriculum Updates and Terminology Changes

Many CPS technicians may not be aware of the recent changes made to the CPS certification curriculum. Revisions made to the curriculum are provided below. Although some changes may be minor, the new information should be used to update your educational messages as you work with families and the community.

Good • Better • Best

Child Passenger Safety Technicians must understand and respect caregiver choices as long as the car seat instructions, vehicle manual guidance, and State laws are followed. Caregiver choice can be categorized when the caregiver secures the child in the car seat meeting the following criteria:

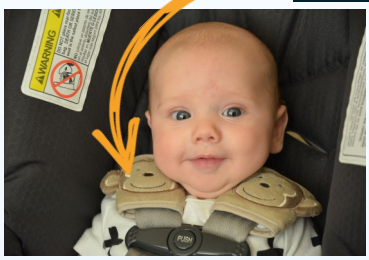
Minimum weight or height provided by the car seat manufacturer and following **State law requirements**.

Within the weight or height range provided by the car seat manufacturer and **meets or exceeds State law requirements**.

Maximum weight or height provided by the car seat manufacturer and **meets and exceeds State law requirements.**

Terminology Change

Non-Approved



Aftermarket Products
was changed to
Non-Regulated Products
and now to
Non-Approved Products

Adding Inserts, Canopy Covers, Toys & Vehicle Seat Protectors

- Only products approved by the car seat manufacturer for use with a particular car seat or booster seat model are acceptable to use.
- Check both the car seat instruction manual and the manufacturers' website for information on use of these products.

Terminology Change

Dynamic Locking Latch Plate
is now called a
Dynamic Latch Plate

Terminology Change

Used Car Seats
are now called
Secondhand Car Seats and Boosters

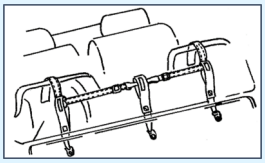
LATCH & Pick Up Trucks Updates

Direct Routing Tether Systems: Commonly found in larger pickup trucks.

- Tether routes directly to a tether anchor located behind the vehicle seat.
- Tether anchor might be on the wall, vehicle seat, or floor
- To access the tether anchor, the vehicle:
  - Seat back may need to be folded forward, or
  - Seat cushion must be folded up.

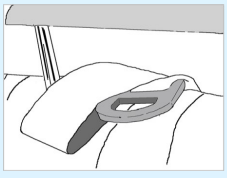
Indirect Routing Tether Systems

- Found in both small and large pickup trucks.
- Tether goes through a router behind the vehicle seat and then attaches to a tether anchor located elsewhere, often an adjacent vehicle seat.



Reminder - Router designs vary by manufacturer.

- Closed loop – Tether hardware must pass through loops.
- Open system – Allows webbing to slide through.



Webbing Loop
(with metal ring)

Wire Loop

Open Wire

Technician Corner: Reminders for CPSTs in the Field

Troubleshooting Locking Latch Plates

Locking latch plates will lock a seat belt when the latch plate lays parallel to the webbing. On occasion, the angle of the locking latch plate remains tilted when installing a car seat, preventing the latch plate from locking the seat belt. To address this challenge, there are 3 approved fixes that may change the angle of the latch plate, allowing the seat belt to lock and hold the car seat in place.

Note: If none of the 3 approved fixes lock the seat belt to achieve a tight installation, try another seating position.

Fix 1: Flip the Latch Plate

Flipping the latch plate may align the latch plate and seat belt allowing the latch plate to lock.

- Always check the vehicle owner's manual to see if the vehicle manufacturer permits flipping the latch plate.
- If the vehicle owner's manual does not prohibit flipping the latch plate, then this fix is allowed.

1. Buckle and tighten the seat belt.
2. Unbuckle the seat belt and flip the latch plate over.
3. Buckle the seat belt.
4. Confirm the latch plate is locked by pulling up on the lap belt.

Fix 2: Twist the Buckle Stalk

Twisting the buckle stalk will shorten the webbing to lower the buckle away from the belt path to remedy when the latch plate is in the belt path of the car seat or interferes with the lock-off.

- Always check the vehicle owner's manual to see if the vehicle manufacturer permits twisting the buckle stalk.
- If the vehicle owner's manual does not prohibit twisting the buckle stalk, then this fix is allowed.

1. Twist the buckle stalk one full turn each time.
2. Use the minimum number of twists, with a maximum of three full twists.
3. Be sure the buckle release button is facing away from the car seat and easily accessible.

Fix 3: Use a Locking Clip

Lock the seat belt with a locking clip when flipping the latch plate and/or twisting the buckle stock is not permitted or does not lock the seat belt.

- Only use a locking clip on a lap -and-shoulder belt that is one continuous piece of webbing.

Note: Locking clips may be provided with the car seat by the manufacturer. Check the car seat instructions to locate the locking clip. If a locking clip is not available, contact the car seat manufacturer. Car seat manufacturers may provide one locking clip for free.

Recertification Tips

There are many questions for both new and seasoned technicians regarding how to go navigate the recertification process. Here are some basic tips and a list of online Child Passenger Safety Continuing Education Unit (CPS CEU) opportunities.

Username and Password: You will need your log in information. A personalized letter from Safe Kids and several emails are sent starting about 2 months in advance of your certification expiration. Log in and make sure that your CPS online profile **(http://cert.safekids.org)** is accurate.

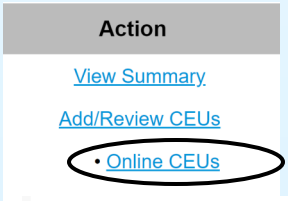
If you have misplaced your username or password, contact customer service at 202-875-6330 or CPScert@safekids.org.

If you forgot your password, go to the login page and select "Forgot Password". Enter the name and email address associated with your account, then click Submit. A link will be sent that allows you to reset your password. If your email has changed, email CPS Certification at CPSCert@safekids.org or call 202-875-6330 for help.

Child Passenger Safety Technicians (CPSTs) are required to earn 6 CPS CEUs during the two-year certification cycle. Many may be earned at any time and for free. CPSTs are required to keep personal written proof of the type and content of their earned CEUs. A random sample of CPSTs will be audited. The purpose of the audit is to verify the existence of the documentation that CEUs were completed. CEU documentation is to be kept during the certification cycle and for at least three months after recertification is completed. If you are audited, you will be required to submit the certificates of participation.

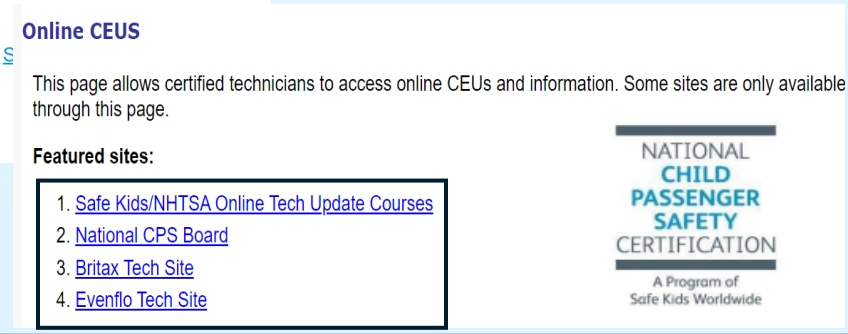
Online Options to Earn CPS CEUs: You can earn 6 CEUs online (Category -Webinars/online courses)

- **Links through CPS Online Profile**: Log in and select the "Online CEUs" link in the Recertification section.



Safe Kids/NHTSA Online Updates (http://training.safekids.org/): After completing the course, take the online quiz and earn a CEU by scoring at least 80%. The certificate will be emailed to you.

National CPS Board (www.cpsboard.org): After watching the video, take the online quiz and earn a CEU by scoring at least 80%. Be ready to print your certificate.



Child Passenger Safety Trainings

The **CPS Certification** course provides the training necessary 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.

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.

The **TIPP CPS Technical Update** class has been pre-approved for 6 CEUs towards recertification. Please contact TIPP if you are interested in hosting an Update class for CPS technicians in your area.

For questions on how to create a personal profile or register for a class, please go to https://cert.safekids.org/resources-faqs/how-to.

Certification Courses

PA202112091107
Date: March 23, 24, 30, 31, 2022
Time: 8:30 am - 4:30 pm
King of Prussia Volunteer Fire Company
170 Allendale Road
King of Prussia, PA 19406
Contact: Teresa Rychlak
Phone: 484-446-3078
Email: trychlak@paaap.org

PA202111231062
Date: April 26 - 29, 2022
Time: 9:00 am - 5:00 pm
Meadville Fire Department
Conference/Training Room
850 Park Avenue
Meadville, PA 16335
Contact: Mary Lakari
Phone: 814-838-9971
Email: mlakari@paaap.org

Renewal Courses

PA202111041005
Date: December 22, 2021
Time: 9:00 am - 5:00 pm
Moon Township Police Department
1000 Beaver Grade Road
Coraopolis, PA 15108
Contact: Kristen Urso
Phone: 412-885-0266
Email: kurso@paaap.org

PA202111041006
Date: January 7, 2022
Time: 9:00 am - 5:00 pm
Peter's Township Fire Department
245 E. McMurray Road
McMurray, PA 15317
Contact: Kristen Urso
Phone: 412-885-0266
Email: kurso@paaap.org

PA202111231063
Date: March 31, 2022
Time: 9:00 am - 3:00 pm
UPMC NW .Seneca Place
Northwest Conference Room
3163 State Route 257
Seneca, PA 16346
Contact: Mary Lakari
Phone: 814-838-9971
Email: mlakari@paaap.org

PA TIPP Child Passenger Safety Technical Update Classes: Please RSVP if Planning to Attend

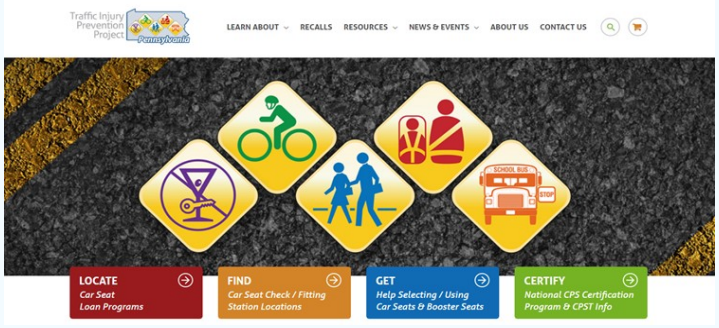
Please contact TIPP if you are interested in hosting a CPS Technical Update class for CPS technicians in your area.

- CPS Technical Update is pre-approved for 6 CPS CEUs. Contact your TIPP regional coordinator to schedule a presentation in your region and earn 6 CPS CEUs toward recertification.
- PA TIPP instructors are approved as Emergency Medical Services Continuing Education Providers. EMTs can receive 6 EMS continuing education credits for attending the 2019 edition of the PA TIPP technical update class.

Cambria County
Date: TBD March 2022
Time: 9:00 am - 3:00 pm
Richland Police Dept
Johnstown, PA
Contact: Kelly Whitaker
Phone: 814-943-3360
Email: kwhitaker@paaap.org
+Please email if interested and class details will be shared.

Erie County
Date: March 22, 2022
Time: 9:00 am - 3:00 pm
Perry Hi Way Hose Company.
Training Room
8281 Oliver Road
Ere, PA 16509
Contact: Mary Lakari
Phone: 814-838-9971
Email: mlakari@paaap.org

Warren County
Date: April 12, 2022
Time: 9:00 am - 3:00 pm
Youngsville Police Dept.
Boro Conference Room
40 Railroad Street
Youngsville, PA
Contact: Mary Lakari
Phone: 814-838-9971
Email: mlakari@paaap.org



www.pakidstravelsafe.org

Visit the PA TIPP website to view:

- Upcoming CPS Certification, Renewal, and Technical Update classes scheduled throughout Pennsylvania.
- Community fitting stations and loan programs listed by county.
- Educational flyers/brochures and videos.
- Information on Bicycle Safety, Car Seats, Pedestrian, School Bus, Special Needs and Young Drivers.
- List of Car Seat Recalls

Traffic Injury Prevention Project
Pennsylvania

The PA TIPP regional outreach and training coordinators are available to support your efforts in preventing traffic related injuries. Some of the programs we offer include:

- CPS Certification and Renewal classes,
- CPS Technical Update class (classes can be in-person or virtual),
- Medical Community: CPS presentations approved for continuing education credits (CME/CEU) through the University of Pittsburgh,
- Organization/Parent presentations: Traffic safety education for community groups. Presentations can be customized to meet the interest and needs of the group,
- School bus/school transportation: Programs available for schools, preschools, head start and organizations that transport young children,
- Special Needs Transportation.

TIPP Contact Information

- **Statewide: Angela Osterhuber**
  1-800-CAR-BELT / 484-446-3036
  aosterhuber@paaap.org
- **Central PA: Kelly Whitaker**
  814-943-3360
  kwhitaker@paaap.org
- **Northeast PA: Cathy Connors**
  570-471-3026
  cconnors@paaap.org
- **Northwest PA: Mary Lakari**
  814-838-9971
  mlakari@paaap.org
- **Southeast PA: Teresa Rychlak**
  484-446-3078
  trychlak@paaap.org
- **Southwest PA: Kristen Urso**
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  kurso@paaap.org