NATIONAL CHILD PASSENGER SAFETY BOARD

A program managed by the National Safety Council

New Child Passenger Safety Technician Certification Training Revised Curriculum Update

Originally presented at Lifesavers 2019, edited.

CPS BBQ
Big Burning Questions

When will the revised curriculum be released?
How long will the course be?
What are the sources of information?
How will instructors obtain the new materials?
What is adult learning theory?
What do the new materials look like?
What are the major module changes?
Are there changes to the quizzes and evaluations?
How can I instruct a pilot course?

Release Date

Materials are expected to be shipped

Fall 2019

A timeline and transition period
will be announced when available.

Course Agenda
Three vs Four Days

NHTSA requires Instructors have the option of choosing a minimum of three days (24 hours) to teach the new curriculum.

Suggested agendas (3, 3.5 and 4 days) will be provided and instructors will continue have flexibility to best meet the needs of the student and resources.

All communications will be posted to www.CPSBoard.org.

Sources of information and materials:

- Your email and mailing address in your CPS Online Profile (cert.safekids.org) will be used for all communications.
  - Emails will be from from no-reply@cpsboard.org. Be sure this is an approved email so it won't be tagged as spam!
  - Contact information for questions will be contained in the body of the email.
  - Curriculum materials will be mailed to your address on record.

Additional Sources of Information:

- Webinars will be made available and CPSBoard.org and on the National Child Passenger Safety Board Facebook page.
- Read the CPS Express!
- Attend your local CPS Conferences!
- *Everyone is excited for the new curriculum.* ***Please hold your questions and inquires****, everyone will receive updates at the same time. The NCPSB is anxious to share the new curriculum, but procedure must be followed.*

How are instructors going to obtain the new materials?

Is your CPS online profile (cert.safekids.org) information up to date?

It is important that your email and mailing address are correct!

An email will notify you when the color copy spiral bound Instructor Guide will be mailed.
Must be a street address. NO PO Boxes.

Downloads will be available on CPSBoard.org.

Detailed instructions will be provided via email.

ADULT LEARNING

What is it and Why do we need it?

Adult Learning Theory (or Andragogy- "man leading") is the theory that

adult learners have unique and special needs when it comes to learning new content.

- Adults learn differently than children.
- Adults are not passive receptacles for the teachers' expertise.
- Adults need to understand why certain concepts are being taught and how it impacts them directly.

ADULT LEARNING

What is it and Why do we need it? (continued)

- Effective teachers explain their reasons for teaching specific skills.
- Adults learn by doing, so effective instruction is task oriented and not memorization oriented.
- Adult learners are problem-solvers and learn best when the topic can be applied immediately.

CHANGING CULTURE

The overall tone of the training is moving towards a risk reduction model of ‘**good, better, best**’.

It is important for instructors to recognize the benefits of a risk reduction teaching strategy- it doesn’t mean that each technician should not strive for best practice each time, but it allows ‘less than best practice’ to be okay, too.

Communication skills are AS IMPORTANT as technical skills.

HOW WE TEACH NEW TECHNICIANS

- Approximately 70% of adult learning is self-directed, meaning that the individual takes control of their learning.
- Instructors can benefit from understanding how adult students learn material.
- The Board has worked to make the curriculum content more streamlined and easy to follow.

WHAT WILL YOU SEE?

- Language has been simplified and standardized to reduce risk of confusion.
- Flow diagrams have been used to help students visualize content in a more step-wise fashion.
- Concepts have been condensed and combined when possible.
- Pictures and diagrams will be more clear.

TIPS TO ACHIEVE ADULT LEARNING

Never assume your information is important!
Find ways to make it important to them by connecting it with what they already know.

1. Respect your students
2. Use humor
3. Facilitate exploration, not stagnate walkthroughs
4. Challenge through games
5. Use 'Chunking'- Break big ideas down into smaller pieces
6. Make it visually-compelling
7. Use their lives as examples
8. Let learning occur through failure
9. Don't trick, you'll lose trust

HOW WE TEACH CAREGIVERS

Parents come to us for a variety of reasons.
They want to do what is right but are not always motivated by the same things that motivate technicians.

START WITH EMPATHY, KICK THE SHAMING

- The reasons behind why a parent makes a certain choice are **complex**.
- When we do not strive to ***understand*** their reasons, the dynamic between teacher (tech) and parent can go wrong.
- When we do not ***respect*** their choice the dynamic can crumble.
- When we strive for risk management and risk reduction over risk elimination, we will get much further with parents.
- It is critical to teach your students their role is as a facilitator and educator FIRST.

National CPS Technician Certification Training

Technician Guide, Instructor Guide & PowerPoints

www.cpsboard.org

rear-facing • forward-facing • booster seat • seat belts

NATIONAL CHILD PASSENGER SAFETY BOARD

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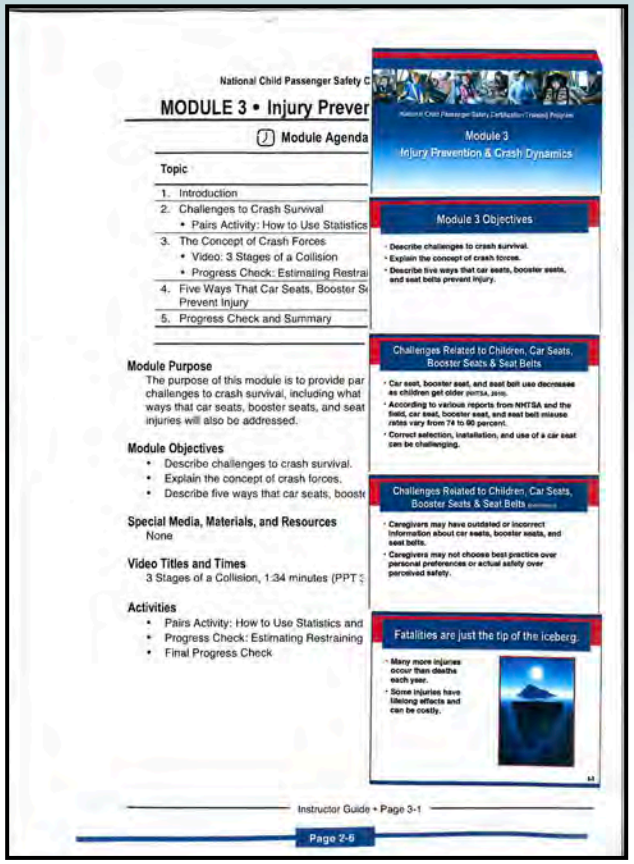
Does this look familiar?
We listened to you!
Thank you for your feedback and input.



National Child Passenger Safety C

MODULE 3 • Injury Prever

Module Agenda

Topic

1. Introduction
2. Challenges to Crash Survival
   - Pairs Activity: How to Use Statistics
3. The Concept of Crash Forces
   - Video: 3 Stages of a Collision
   - Progress Check: Estimating Restrai
4. Five Ways That Car Seats, Booster S Prevent Injury
5. Progress Check and Summary

Module Purpose
The purpose of this module is to provide par challenges to crash survival, including what ways that car seats, booster seats, and seat injuries will also be addressed.

Module Objectives
- Describe challenges to crash survival.
- Explain the concept of crash forces.
- Describe five ways that car seats, booste

Special Media, Materials, and Resources
None

Video Titles and Times
3 Stages of a Collision, 1:34 minutes (PPT

Activities
- Pairs Activity: How to Use Statistics and
- Progress Check: Estimating Restraining
- Final Progress Check

Module 3
Injury Prevention & Crash Dynamics

Module 3 Objectives
- Describe challenges to crash survival.
- Explain the concept of crash forces.
- Describe five ways that car seats, booster seats, and seat belts prevent injury.

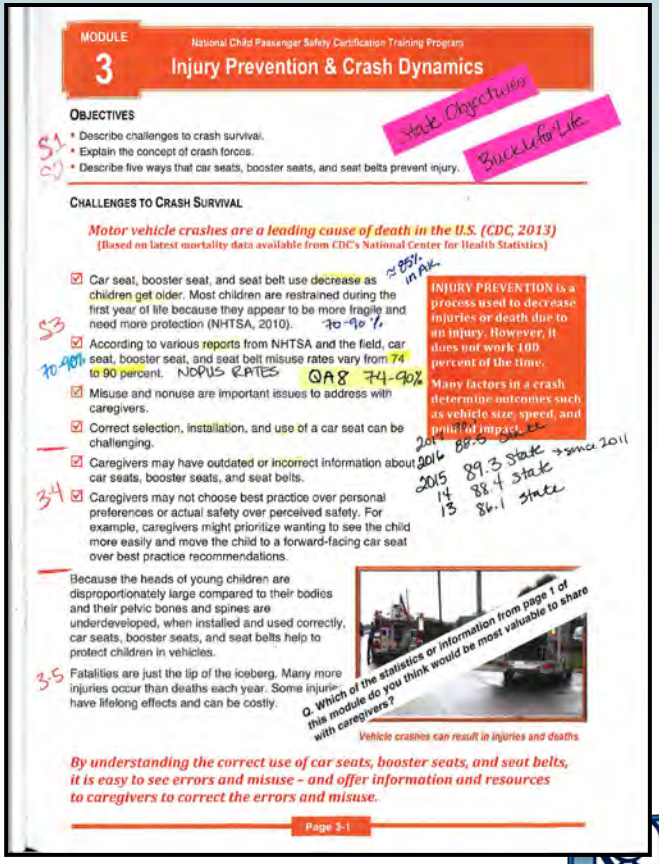
Challenges Related to Children, Car Seats, Booster Seats & Seat Belts
- Car seat, booster seat, and seat belt use decrease as children get older (NHTSA, 2010).
- According to various reports from NHTSA and the field, car seat, booster seat, and seat belt misuse rates vary from 74 to 90 percent.
- Correct selection, installation, and use of a car seat can be challenging.

Challenges Related to Children, Car Seats, Booster Seats & Seat Belts
- Caregivers may have outdated or incorrect information about car seats, booster seats, and seat belts.
- Caregivers may not choose best practice over personal preferences or actual safety over perceived safety.

Fatalities are just the tip of the iceberg.
- Many more injuries occur than deaths each year.
- Some injuries have lifelong effects and can be costly.

Instructor Guide • Page 3-1

Page 2-6



MODULE 3
National Child Passenger Safety Certification Training Program
Injury Prevention & Crash Dynamics

OBJECTIVES
- Describe challenges to crash survival.
- Explain the concept of crash forces.
- Describe five ways that car seats, booster seats, and seat belts prevent injury.

State Objectives
Buckle for Life

CHALLENGES TO CRASH SURVIVAL

Motor vehicle crashes are a leading cause of death in the U.S. (CDC, 2013)
(Based on latest mortality data available from CDC's National Center for Health Statistics)

- Car seat, booster seat, and seat belt use decrease as children get older. Most children are restrained during the first year of life because they appear to be more fragile and need more protection (NHTSA, 2010).
- According to various reports from NHTSA and the field, car seat, booster seat, and seat belt misuse rates vary from 74 to 90 percent.
- Misuse and nonuse are important issues to address with caregivers.
- Correct selection, installation, and use of a car seat can be challenging.
- Caregivers may have outdated or incorrect information about car seats, booster seats, and seat belts.
- Caregivers may not choose best practice over personal preferences or actual safety over perceived safety. For example, caregivers might prioritize wanting to see the child more easily and move the child to a forward-facing car seat over best practice recommendations.

INJURY PREVENTION is a process used to decrease injuries or death due to an injury. However, it does not work 100 percent of the time.

Many factors in a crash determine outcomes such as vehicle size, speed, and point of impact.

Because the heads of young children are disproportionately large compared to their bodies and their pelvic bones and spines are underdeveloped, when installed and used correctly, car seats, booster seats, and seat belts help to protect children in vehicles.

Fatalities are just the tip of the iceberg. Many more injuries occur than deaths each year. Some injuries have lifelong effects and can be costly.

Q. Which of the statistics or information from page 1 of this module do you think would be most valuable to share with caregivers?

Vehicle crashes can result in injuries and deaths.

By understanding the correct use of car seats, booster seats, and seat belts, it is easy to see errors and misuse – and offer information and resources to caregivers to correct the errors and misuse.

Page 3-1

Instructor Guide (IG) DRAFT

Purpose and Function of Air Bags

DISCUSS

- An air bag is a vehicle safety device made up of a flexible fabric envelope designed to rapidly deploy/inflate when the vehicle sensors determine there has been a crash.
- Air bags are for adults.
  - The crash protection provided by air bags is tested on the 5th percentile adult female (107 pounds) and 50th percentile male (167 pounds).
- Important considerations related to air bags include:
  - Read the vehicle owner's manual carefully. It has information about air bags and instructions for their use.
  - Assume all air bags are fully active unless the vehicle owner's manual states differently.

DO

Point out the Tech Tip in the Technician Guide.

DISCUSS

- Air bags do not deploy in every crash.
  - For example, frontal air bags usually do not deploy in rear impact collisions.

NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

5 AIR BAGS

5

Air Bags

MODULE OBJECTIVES

- DESCRIBE the purpose and function of air bags.
- LOCATE air bag information in vehicle owner's manuals and vehicles.
- IDENTIFY features, warnings, and markings related to air bags.
- EXPLAIN best practices about air bags to caregivers.

THERE ARE MANY SAFETY FEATURES built into the vehicle that protect occupants in a crash. For example, vehicles have laminated windshields, dashboard padding, door trim padding, and air bags. Air bags pose particular concerns for the safe travel of children.

Purpose and Function of Air Bags

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Air bags and seat belts work *together* to protect the occupants. This is why air bags are called *supplemental* restraint systems. Using the seat belt with the air bag allows the crash forces to be spread over a larger area of

TECH TIP

Air bags do not deploy in every crash. For example, frontal air bags usually do not deploy in rear impact collisions.

Technician Guide (TG) DRAFT

NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

3. Advanced Air Bags

Most newer vehicles are equipped with advanced air bag systems. These systems use a complex system of sensors and other technology to automatically adjust the air bag deployment during a crash, based on the front seat occupant. The system may have variable levels of air bag deployment strength or may even turn the air bag system off.

Caregivers need to understand the specific systems and indicators, and what they mean, in their vehicle. Remind them to check their vehicle owner's manual.

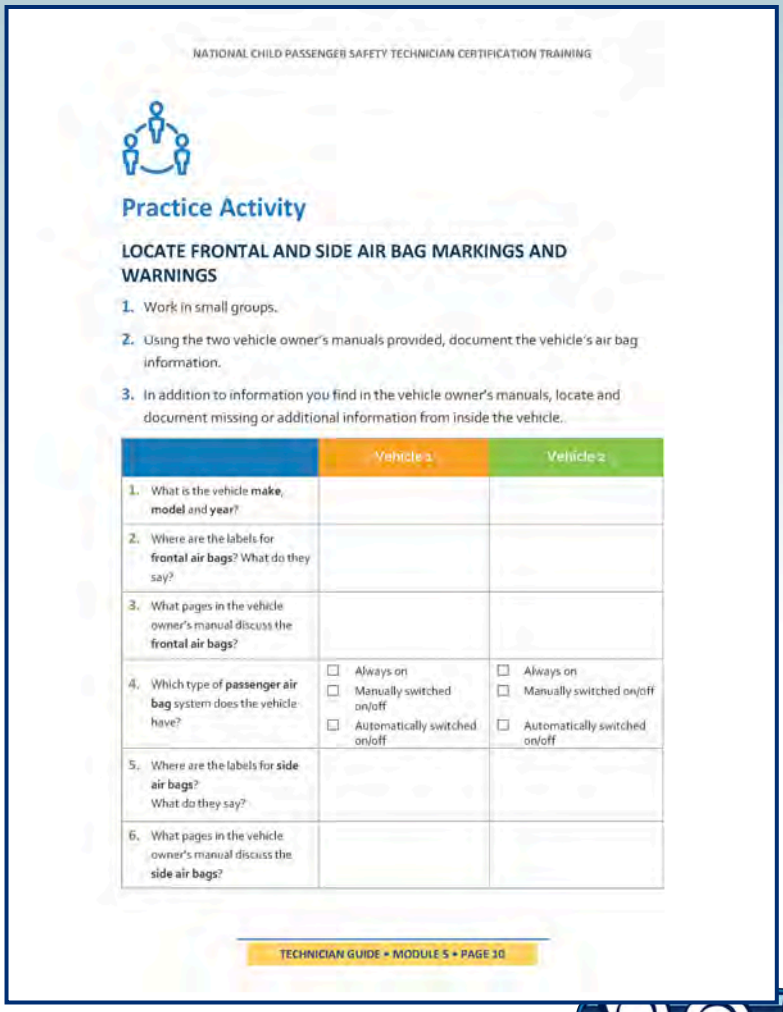
TECH TIP

Remind caregivers to use the back seat for children under the age of 13, even if there is an automatic on/off system for a passenger air bag.

BEST PRACTICE RECOMMENDATIONS

- Even when the "air bag off" indicator is lit, to err on the side of caution, caregivers should always assume the air bag is on.
- **NEVER place a rear-facing car seat in a seating position with an active or advanced frontal air bag.**
- Children under 13 years of age should ride in the back seat away from the frontal air bag whenever possible. Seated properly and wearing a seat belt, teenagers are generally big enough for the air bag to protect them.
- If a forward-facing child must sit in the front passenger seat, make sure they are properly restrained in an appropriate car seat or booster seat and move the vehicle seat as far back from the air bag as possible. Never allow a child to lean forward towards the air bag.
  - **Check the manual.** Some car seat manufacturers have a warning statement against placing a car seat or booster seat in front of an air bag.
- Occupants should avoid leaning against an air bag's opening or putting other objects in front of an air bag's compartment.

TECHNICIAN GUIDE • MODULE 5 • PAGE 6



NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

Practice Activity

LOCATE FRONTAL AND SIDE AIR BAG MARKINGS AND WARNINGS

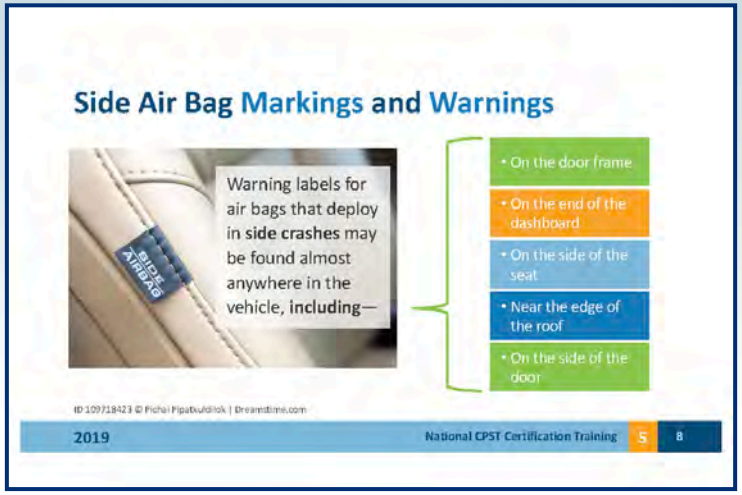
1. Work in small groups.
2. Using the two vehicle owner's manuals provided, document the vehicle's air bag information.
3. In addition to information you find in the vehicle owner's manuals, locate and document missing or additional information from inside the vehicle.

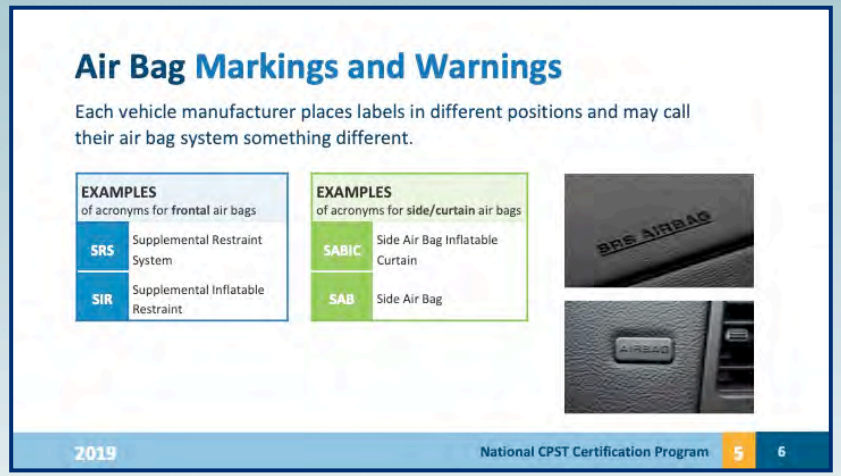
	Vehicle 1	Vehicle 2
1. What is the vehicle **make, model** and **year**?		
2. Where are the labels for **frontal air bags**? What do they say?		
3. What pages in the vehicle owner's manual discuss the **frontal air bags**?		
4. Which type of **passenger air bag** system does the vehicle have?	☐ Always on ☐ Manually switched on/off ☐ Automatically switched on/off	☐ Always on ☐ Manually switched on/off ☐ Automatically switched on/off
5. Where are the labels for **side air bags**? What do they say?		
6. What pages in the vehicle owner's manual discuss the **side air bags**?		

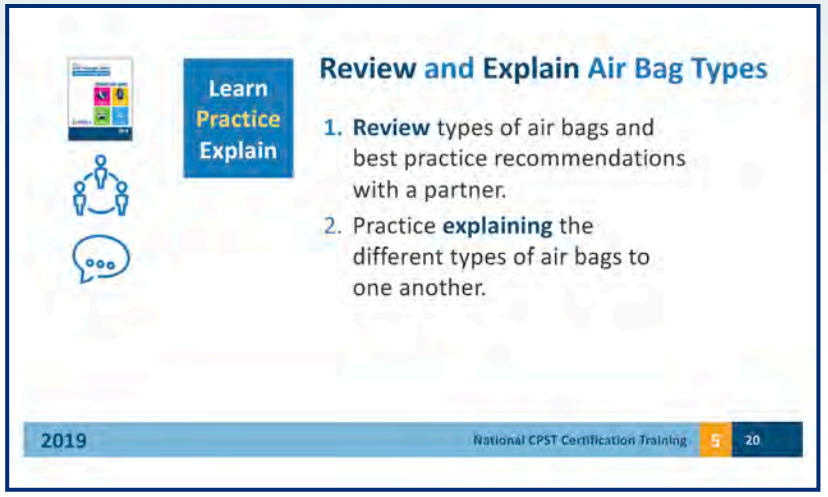
TECHNICIAN GUIDE • MODULE 5 • PAGE 10

Power Point Slides

DRAFT







Modules 1 – 3

MAJOR CHANGES

- **Overall:**
  - Participants will now be student and the National Child Passenger Safety Certification Training Program will now be the National Child Passenger Safety Technician Certification Training.
- **Module 1: Program Introduction**
  - New Bubble Wrap Video
- **Module 2: The CPS Technician Role**
  - Icebreaker activity, students will install a randomly selected car seat and record it with a cell phone or simply observe. Looking to provide a very short (5 Minute) introduction to engage students.
  - Introduction of Good-Better-Best idea
- **Module 3: Injury Prevention & Crash Dynamics**
  - Video: understanding "Ride Down" and the addition of the "catching an egg" analogy when describing how a car seats work

Modules 4 – 5

MAJOR CHANGES

- **Module 4: Seat Belt Systems**
  - No longer teaching BSC belt shortening clip
  - Order of instruction of retractor types updated to ELR, ALR, Switchable, no retractor
  - Changed focus from how to lock different types of retractors/latchplates to how to step-by-step check for lockability of the retractor and latchplate
  - Added flow charts for lockability for ALT (Adult Learning Theory)
  - Eliminated ALR/ELR videos
  - Added locking latchplate video

- **Module 5: Air Bags**
  - No major updates

Module 6

MAJOR CHANGES

- **Module 6: Lower Anchors and Tethers for CHildren**
  - Additional details in SPECIAL CONSIDERATIONS section
    - Lower Anchor Weight Limits
    - Tether Anchor Weight Limits
    - Tether Anchors and Pickup Trucks
  - Label examples show RF & FF child weight capacity
  - Vehicle owner's manual example of lower anchor capacity
  - Additional and clarifying information
    - lower anchor capacity has been applied to tether anchors as well
    - direct and indirect tether routings in pick-up trucks, including video as trucks with loops are not always available at all classes for hands on

Modules 7 and 8

MAJOR CHANGES

- **Module 7: Introduction to Car Seats and Booster Seats**
  - Non-regulated is now non-approved

- **Module 8: Children in Rear-Facing Seats**
  - No longer state RF is 5 times safer as this research was shown to be flawed
  - Dr. Bull's RF video updated with the reference to 5 times safer removed
  - All-In-One has been added as a type of car seat and booster seat
  - More LPE activities
  - Duplication of special needs information has been removed

Modules 9 - 10

MAJOR CHANGES

- **Module 9: Children in Forward Facing Seats**
  - All-In-One has been added as a type of CRS

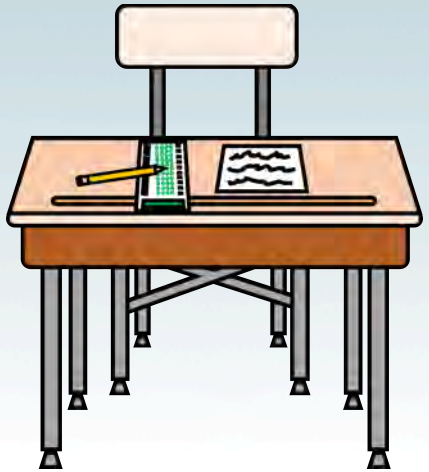
- **Module 10: Children in Booster Seats and Seat Belts**
  - Expanded the time allotted for module to encourage instructors to spend a proper amount of time on the module and not rush
  - Included new products

Modules 11 - 13

MAJOR CHANGES

- **Module 11: CPS In Other Vehicles**
  - Pick-Up truck information moved to module 6
- **Module 12: Installation and Communications**
  - no major updates
- **Module 13: Using Your New Skills**
  - Change in scope
    - Minimized the information on how to organize/conduct a checkup event and refer student's to resources
    - Focus changed to engaging new technician in CPS activities in their community post class including an opportunity to develop an action plan to use their new CPS skills

Quizzes & Skills Evaluations



Written Quizzes

- All questions reviewed, lots of new ones!
- 3 open book quizzes, total 50 questions
- Must get 84% to pass

Skills Evaluations

- **Skills 1 and 2:** No major revisions.
- **Skills 3 and 4:** Big changes!

Skills 3 – Putting It All Together

- Classroom-based
- Should take about 30 minutes but 45 is recommended for scheduling
- Standardized format
- Asks specific questions about photos

Example

Full color full sized pictures will be provided in TG as tear-out sheets, questions will be provided on ***separate*** *Skills 3 form provided by the instructor to the students.*

Sample Question:
(not actual testing scenario)

Seat belt routed correctly?
- ❑ YES
- ❑ NO

Sample Questions:
(not actual testing scenario)

Lap belt positioned correctly on child?
- ❑ YES
- ❑ NO

Shoulder belt positioned correctly on child?
- ❑ YES
- ❑ NO

Our model Charlotte was MUCH happier with the belt used correctly!

Lead Instructors

- Slides will be in the TG
  - Full color
  - Perforated pages
  - No copying necessary!
- Not available as a power point to standardize testing.
  - Everyone gets high quality copies of photos.
  - Projector quality varies greatly.

Skills 4 – Check Up Event

- The checkup event should be a minimum of two hours (excluding set up and break down).
- The event may be open to the public or appointment-based. If by appointment, allow a 45 minutes per seat.
- It is strongly encouraged to have a someone not on the course instructor team arrange, promote and manage the checkup event**.**
  - **It is essential that the checkup event/inspection station have parents/ caregivers.**

Skills Evaluation 4

- This evaluation requires working as a team.
- Each student will be the lead Technician (primary educator) on **at least** one car seat during the event. The other members of the team will assist as needed, e.g. completing the check form, looking up recalls, etc.
- To pass Skills Evaluation 4, you must successfully demonstrate each item on your Skills Evaluation 4 form.

What are we looking for?
(examples: answer sheet)

- ❑ Engaged the caregiver in the education process, utilizing Learn-Practice-Explain principles.
- ❑ Encouraged best practice but accepted “good” or “better”.
- ❑ Demonstrated knowledge of CPS state laws and how they relate to good, better, best.
- ❑ Referred to car seat labels and instruction manuals as needed.
- ❑ Corrected misuse errors.
- ❑ Demonstrated active listening skills.

What does this mean for you?

- Skills 3 will take less time to set up and run.
- Advance efforts, planning and promotion for a well-attended Skills Evaluation 4 is critical.

Pilot Courses

The NCPSB will contact lead instructors to use the revised curriculum as a pilot course.

Emailed requests to host a pilot course will not be considered.

Deliberations for potential courses will be based on the following criteria:

- Course must be registered on cert.safekids.org
- Instructor Team should be varied with experienced and newer instructors
- Course length is four days
- Students have varied backgrounds
- No current or past board members are included on the instructor team

Thank you.

The National Child Passenger Safety Board, NHTSA and Safe Kids Worldwide have collaboratively and exhaustively worked to ensure the curriculum revision is thoughtful and meets the needs of future CPS Technicians.

Your input, patience and support is a valued part of the process.