New Child Passenger Safety Technician Certification Training Revised Curriculum Update

Originally presented at Lifesavers 2019, edited.

Questions, Questions, and more 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 do the new materials look like?

What are the major module changes?

Are there changes to the quizzes and assessments?

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.

Adult Learning Theory

Adult Learning Theory

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

Adult Learners

- Adults are not passive receptacles for the teacher's expertise.
- Adults need to understand why certain concepts are being taught and how it impacts them directly.
- Adults learn by doing – effective instruction is task-oriented.
- Adult learners are problem-solvers and learn best when the topic can be applied immediately.

What will you see?

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

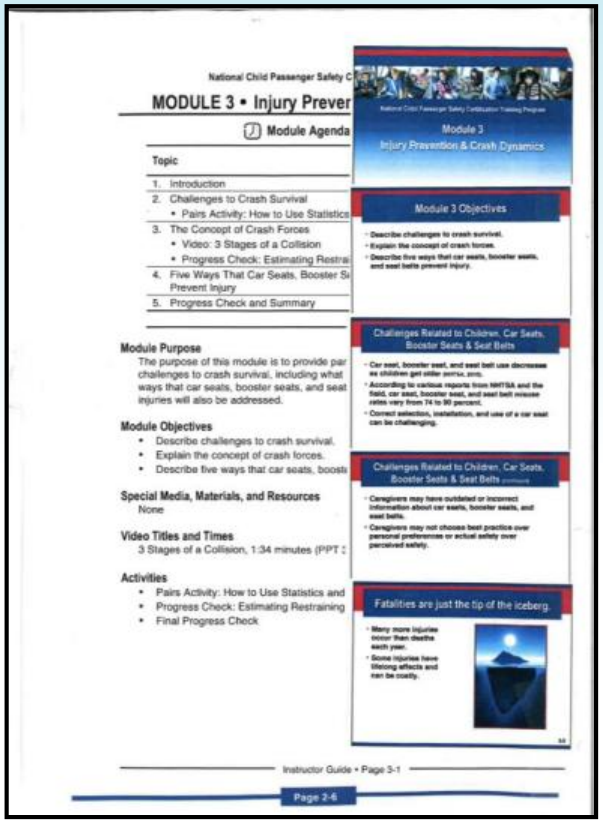
Tips to Achieve Adult Learning

- Respect your students.
- Use humor.
- Facilitate exploration.
- Use “chunking” – breaking big ideas into smaller pieces.
- Use their lives as examples.
- Let learning occur through failure.
- Don’t trick; you will lose trust.

National CPS Technician Certification Training

Instructor Guide, Technician Guide and PowerPoint Slides

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 Restra
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, boosts

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

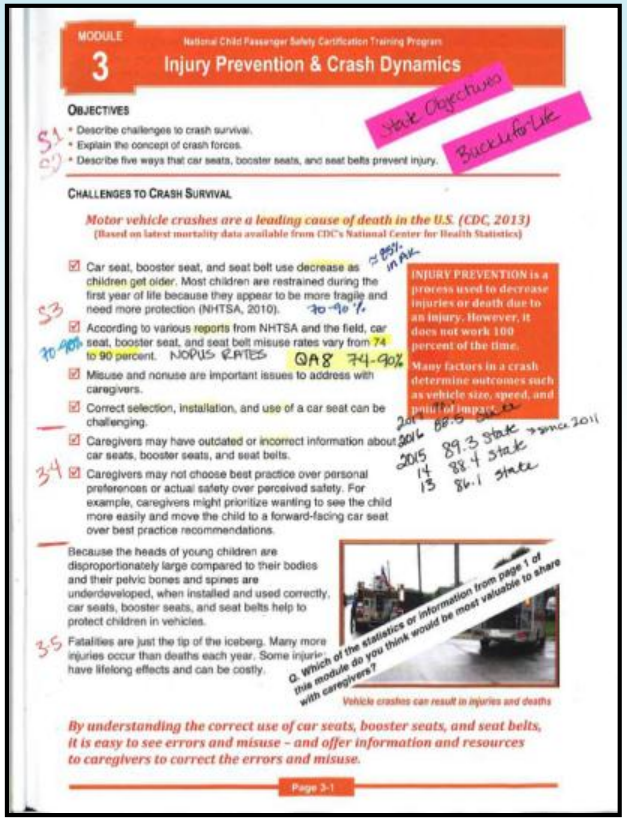
Challenges Related to Children, Car Seats, Booster Seats & Seat Belts

Challenges Related to Children, Car Seats, Booster Seats & Seat Belts

Fatalities are just the tip of the iceberg.

Instructor Guide • Page 3-1

Page 2-6



MODULE 3

National Child Passenger Safety Certification Training Program

Injury Prevention & Crash Dynamics

State Objectives

Buckle for Life

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 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.

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.

DRAFT

PPT Slide

Action Item

Action Item

Action Item

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Left-hand Page of Instructor Guide

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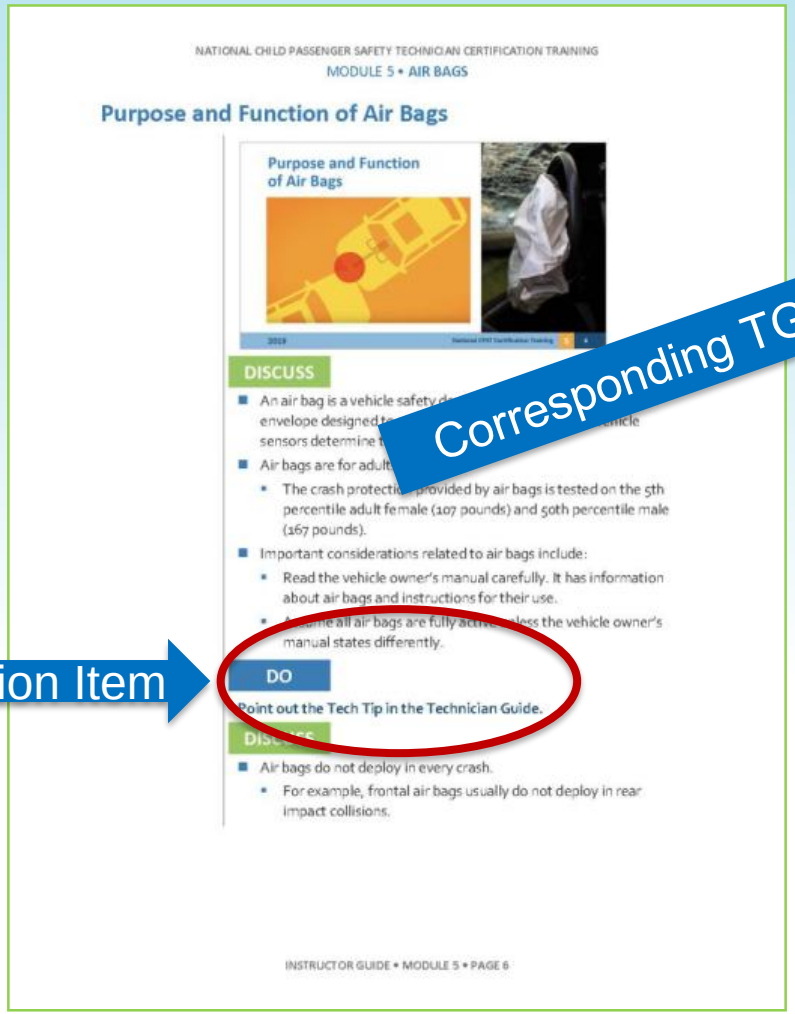
NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

MODULE 5 • AIR BAGS

Purpose and Function of Air Bags

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Dis…

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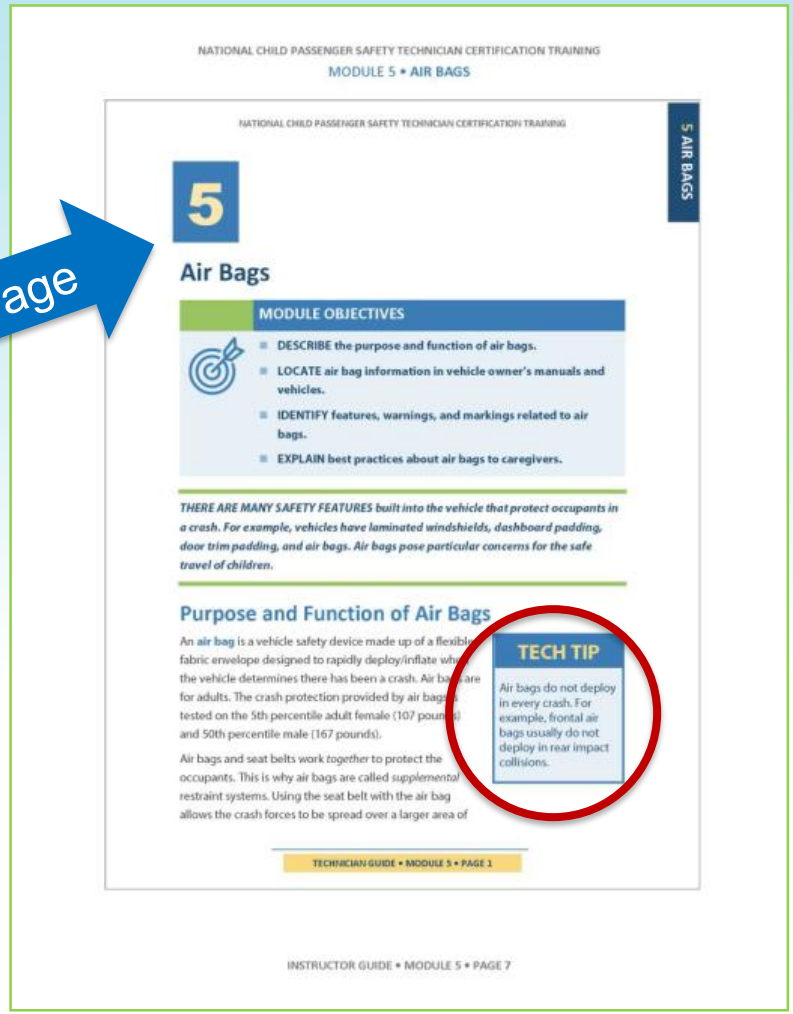
INSTRUCTOR GUIDE • MODULE 5 • PAGE 6

Corresponding TG Page

Action Item


NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

MODULE 5 • AIR BAGS

NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

5 AIR BAGS

5

Air Bags

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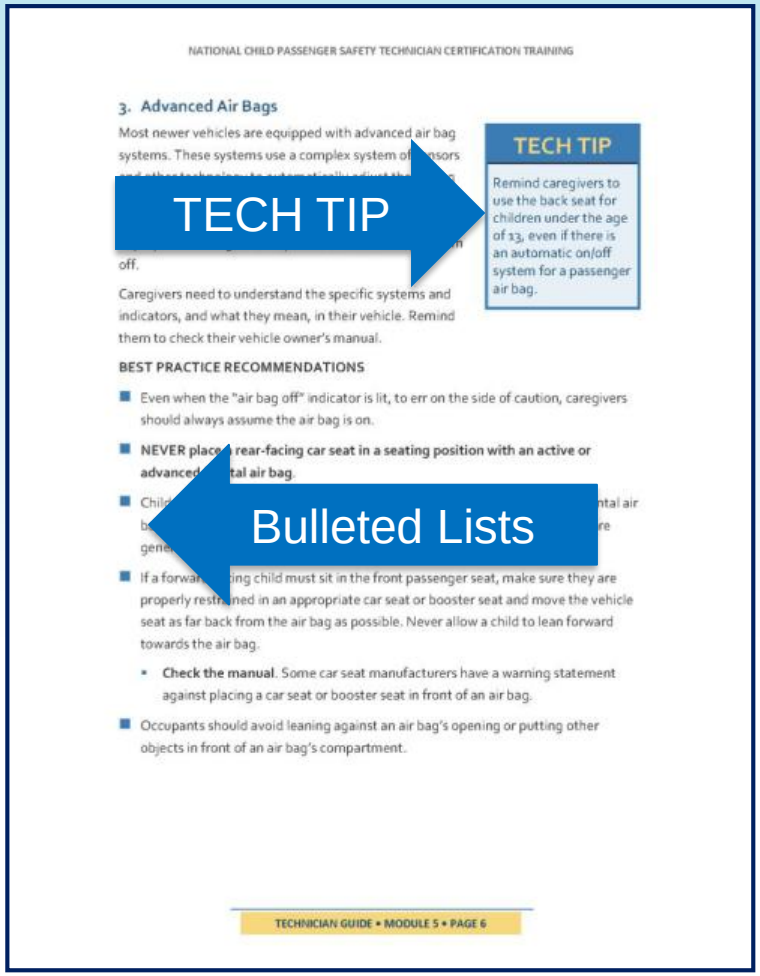
TECHNICIAN GUIDE • MODULE 5 • PAGE 1

INSTRUCTOR GUIDE • MODULE 5 • PAGE 7

Left-hand Page of Instructor Guide

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

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.

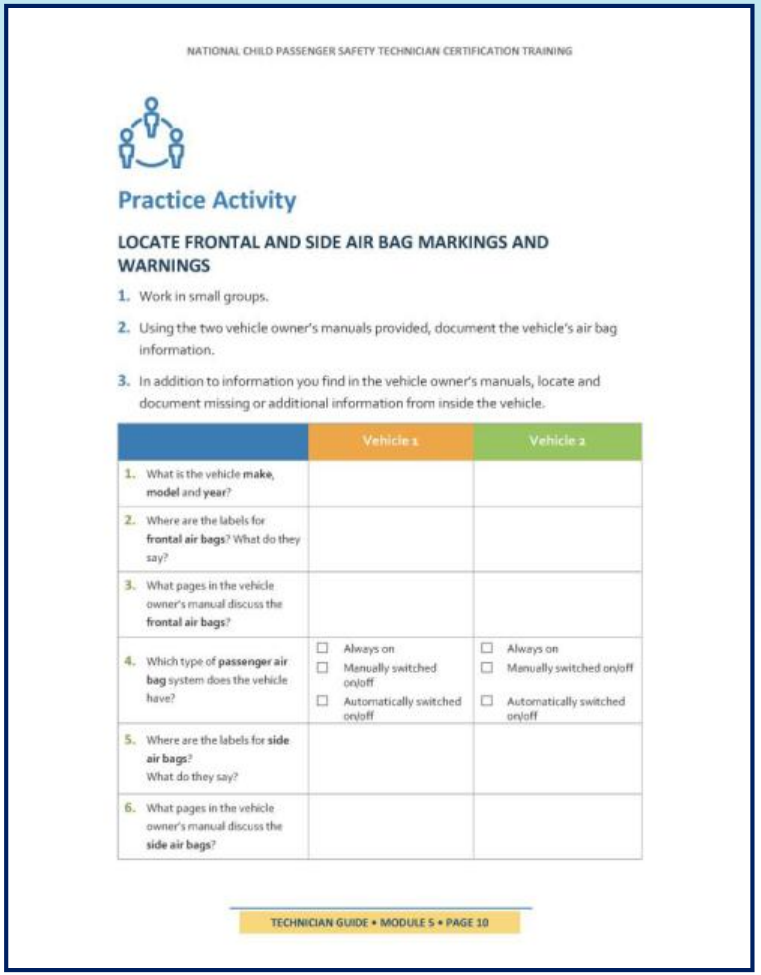
BEST PRACTICE RECOMMENDATIONS

- 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 tal air bag.**
- Child ntal air b re gene
- If a forwa ing 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

TECH TIP

Bulleted Lists



NATIONAL CHILD PASSENGER SAFETY TECHNICIAN CERTIFICATION TRAINING

Practice Activity

LOCATE FRONTAL AND SIDE AIR BAG MARKINGS AND WARNINGS

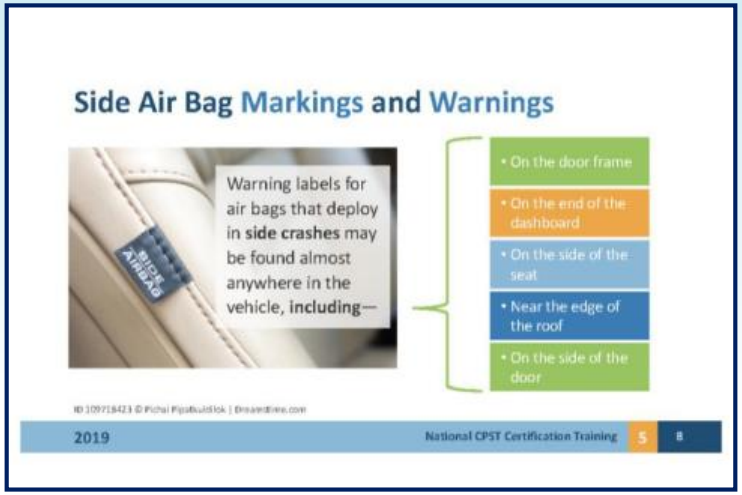
1. Work in small groups.
2. Using the two vehicle owner's manuals provided, document the vehicle's air bag information.
3. In addition to information you find in the vehicle owner's manuals, locate and document missing or additional information from inside the vehicle.

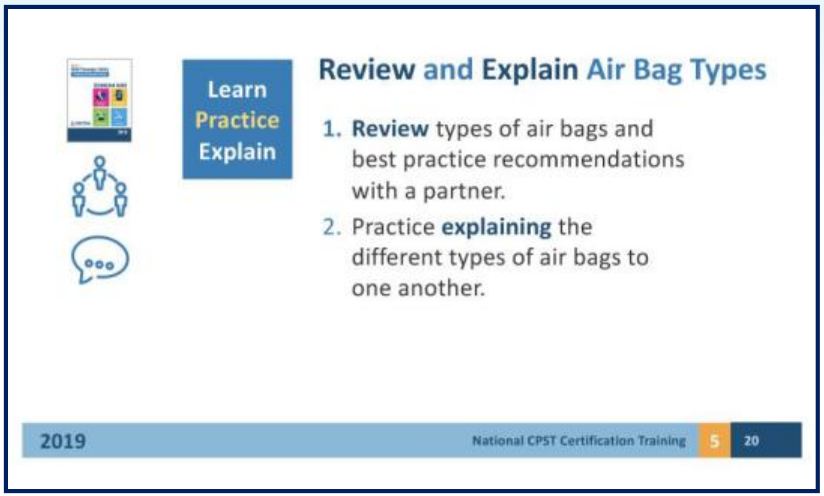
	Vehicle 1	Vehicle 2
1. What is the vehicle **make, model** and **year**?		
2. Where are the labels for **frontal air bags**? What do they say?		
3. What pages in the vehicle owner's manual discuss the **frontal air bags**?		
4. Which type of **passenger air bag** system does the vehicle have?	☐ Always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





Side Air Bag Markings and Warnings

DRAFT

Warning labels for air bags that deploy in **side crashes** may be found almost anywhere in the vehicle, **including**—

- On the door frame
- On the end of the dashboard
- On the side of the seat
- Near the edge of the roof
- On the side of the door

Curriculum Revisions

Overall Curriculum Revisions

- **Title Change**:
  National
  Child Passenger Safety
  Technician
  Certification Training
- **Audience**: Students
- **Emphasis**:
  Learn-Practice-Explain

Overall Curriculum Revisions

- **Training Length**
  - No major changes
  - 3, 3.5 & 4 day options
- **Additions to the Technician Guide**:

  CPST Code of Conduct

  Glossary

Curriculum Revisions: Introduction

Module 1

- Bubble Wrap video added

- Statistics from Modules 1 & 3 condensed/simplified into Module 1
- Resources for statistics moved from Module 3

Curriculum Revisions: CPS Technician Role

Module 2

- Icebreaker activity added

  Students will:

  - Install a randomly selected car seat.
  - Record activity with cell phone.
  - Review video at end of the training.

  Estimated Time: 5 minutes

  Goal: Engage students.

- Good-Better-Best introduction
- Reference to CPST Code of Conduct added

Curriculum Revisions: Crash Dynamics

Module 3

- "Ride Down" explained
  - Video added
  - “Catching an egg" analogy added
- Statistics moved to Module 1
- Resources for statistics moved to Module 1

Curriculum Revisions: Seat Belt Systems

Module 4

- Flowchart for lockability check added
- Retractors introduced before latch plates
- Locking latch plate video added
- Terminology updated to dynamic latch plate
- Inflatable seat belts moved from Module 5
- Belt shortening clip instruction removed
- ELR/ALR videos removed

Curriculum Revisions:
Air Bags

Module 5

- Knee air bags added
- Seat cushion air bags added
- Reminder to sign up for vehicle recall notices added
- Inflatable seat belts moved to Module 4

Curriculum Revisions: LATCH

Module 6

- Reorganized into:
  - LATCH System – Vehicles
  - LATCH System – Car Seats
- "Tether Routing and Head Restraints" added
- "Lower Anchors for Center Seating Positions" added
- "Lower Anchor Weight Limits" added
- "Tether Anchor Weight Limits" added
- "Tether Anchors and Pickup Trucks" section added

Curriculum Revisions: Introduction to Car Seats & Booster Seats

Module 7

- Updated reference guide (parts and functions) with line art drawings
- All-in-one car seats added
- Terminology updated to secondhand car seats
- Terminology updated to non-approved products
- Special transportation needs information condensed

Curriculum Revisions: Children in Rear-Facing Car Seats

Module

- All-in-one car seat added as type of rear-facing seat
- "Other Considerations: Carry Handles" added
- Reference to rear-facing being 5X safer removed
- Video with Dr. Bull updated to remove reference to 5X safer
- Special transportation needs information removed

Curriculum Revisions: Children in Forward-Facing Car Seats

Module 9

- All-in-one car seat added as type of forward-facing seat
- Reference to large medical seats removed
- “Vests and Harnesses” included

Curriculum Revisions: Children in Booster Seats and Seat Belts

Module 10

- Expanded time allotment
- All-in-one car seat added as type of booster
- Integrated (built-in) boosters included
- Steps for booster seat use aligned with Modules 8 & 9
- “Seat Belt Positioner” included

Curriculum Revisions: Other Vehicles

Module 11

- Pickup truck information removed and incorporated in other modules
- "Emergency Transportation" reorganized
  - Ambulances
  - Law Enforcement Vehicles
- CPS enrichment trainings promoted
  - Ambulances
  - School Buses

Curriculum Revisions: Interacting with Caregivers

Module 12

- "Effective Communication Techniques" added:
  - Keep it Simple
  - Keep it Short
  - Keep it Positive
  - Keep it Real
- "An Example of Opportunity for Positive Education: Social Media" added
- Caution about using fear-based messaging added

Curriculum Revisions:
Using and Maintaining Your New Skills

Module

- Focus of module updated to engage new Technicians in CPS activities post-training
- Action Plan activity added
- Emphasis on building skills added
- How to conduct a checkup event information minimized

Quizzes & Skills Evaluations

Curriculum Revisions:

Written Quizzes

1, 2, & 3

- All questions have been reviewed and updated as needed.
- Open book
- 50 questions (42/50 to pass)
- Updated Testing Protocols

Curriculum Revisions:

Skills Evaluations

- Terminology updated to Skills Evaluations
- Updated Testing Protocols

Curriculum Revisions: Vehicle Systems

Skills Evaluation

- No major changes

Curriculum Revisions:
Select and Install Car Seats & Booster Seats

Skills Evaluation

2

- Use of dolls, dummies, or stuffed animals to represent children is **required** for “Inside: Selection and Harnessing” portion.

Curriculum Revisions: Putting It All Together

Skills Evaluation

- Classroom-based
- Full color photos
  - Perforated pages in Technician Guide
  - Standardized format
- Questions provided separately
- 34 questions (31/34 to pass)
- Estimated Time: 30-45 minutes

Skills Evaluation #3
Putting It All Together

SAMPLE QUESTION

(not actual testing scenario)

Seat belt routed correctly?

- ❑ YES
- ❑ NO

Skills Evaluation #3
Putting It All Together

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!

SAMPLE

(not actual testing scenario)

Curriculum Revisions: Checkup Event

Skills Evaluation

- Newly renamed
- Event guidelines remain the same
  - Minimum of 2 hours (excluding set-up and breakdown)
  - Open to the public or appointment-based
    - If by appointment, allow 45 minutes per seat check.
  - Strongly encouraged to have someone outside of instructor team arrange, promote and manage the checkup event

Curriculum Revisions: Checkup Event

Skills Evaluation

- Teams of ≤ 3 students
  - Each student will be the lead Technician (primary educator) on at least seat check during the event.
  - Other team members will assist as needed, e.g. scribing.
- Instructor team member will supervise each team of students.
  - Complete an evaluation form for each student.

Curriculum Revisions: Checkup Event

Skills Evaluation

- Students must successfully:
  - Engage the caregiver in the education process, utilizing Learn-Practice-Explain.
  - Encourage best practice but accept “good” or “better”.
  - Demonstrate knowledge of CPS state laws and how they relate to good, better, best.
  - Refer to car seat labels, instruction manuals and Technician Guide as needed.
  - Correct misuse errors.
  - Demonstrate active listening skills.

Pilot Courses

Pilot Courses

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

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

- Course must be registered on cert.safekids.org.
- Instructor team has varying levels of experience.
- Course length is four days.
- Students have varied backgrounds.
- Current or past NCPSB members are not included on the instructor team.

Information and Materials

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 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.
    - *Must be a street address. NO PO Boxes*.

How are instructors going to obtain the new materials?

Instructor Guide

The Instructor Guide will be mailed directly to you.

- An email will be sent when the Instructor Guide will be mailed.
- Confirm that you have a street mailing address in your certification profile at cert.safekids.org.

PowerPoint Slides

The PowerPoint slides will be available to download from CPSBoard.org.

- Detailed instructions will be provided via email.
- Confirm that your email is current in your certification profile at cert.safekids.org.

Additional Sources of Information:

- Webinars
- www.CPSBoard.org
- National Child Passenger Safety Board Facebook page
- *CPS Express*
- CPS Conferences

Thank you!

The National Child Passenger Safety Board
(a program managed by the National Safety Council),
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.