

# Welcome

Office for State, Tribal, Local and Territorial Support  
*presents . . .*

***CDC Vital Signs***

**Child Passenger Safety: A State and Tribal Perspective**

February 11, 2014

2:00–3:00 pm (EST)



Centers for Disease Control and Prevention  
Office for State, Tribal, Local and Territorial Support

# Agenda

2:00 pm	Welcome & Introductions	<b>Judith A. Monroe, MD</b> Director, Office for State, Tribal, Local and Territorial Support Deputy Director, Centers for Disease Control and Prevention (CDC)
2:04 pm	Presentations	<b>LCDR Erin Sauber-Schatz, PhD, MPH</b> Team Lead, Transportation Safety Team, Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC  <b>Antoinette (Toni) Short</b> Caddo Nation Tribal Motor Vehicle Injury Prevention Specialist and Coordinator, Caddo Nation of Oklahoma  <b>Lisa D. Dawson, MPH</b> Director, Injury Prevention Program, Georgia Department of Public Health
2:30 pm	Q&A and Discussion	<b>Judith A. Monroe, MD</b>
2:55 pm	Wrap-up	
3:00 pm	End of Call	



**CDC**  
**Vital**signs™ Teleconference  
to support STLT efforts and build  
momentum around the monthly  
release of **CDC Vital Signs**





# Restraint Use and Motor Vehicle Occupant Death Rates Among Children Aged 0–12 Years United States, 2002–2011



**Erin K. Sauber-Schatz, PhD, MPH, CPST**  
Transportation Safety Team Leader  
National Center for Injury Prevention and Control  
Centers for Disease Control and Prevention

*Vital Signs* Town Hall  
February 11, 2014

# Vital Signs: Child Passenger Safety

- ❑ Motor vehicle crashes are a leading cause of death among children in the US
- ❑ *Vital Signs*
  - Explore the past decade of child motor vehicle death data
  - Trends over time
  - Detailed picture of the most recent years
  - Differences by
    - Sex
    - Age
    - Race/ethnicity



# Fatality Analysis Reporting System (FARS)

- ❑ 2002–2011 data
- ❑ Motor vehicle occupant deaths aged 0–12 years
  - Race/ethnicity: White, Black, Hispanic
  - Age group: <1, 1–3, 4–7, 8–12; 0–12
- ❑ Passenger vehicles
  - Cars, pickup trucks, vans, and sport utility vehicles
- ❑ US Census Bureau
  - Population counts
  - Same ages and years

# Analyses

- ❑ 2002–2011
  - Annual death rates per 100,000 population
  - Percent changes in death rates
  - Proportion of unrestrained child deaths
- ❑ 2009–2010
  - Age group-specific death rates
    - Sex
    - Race/ethnicity
  - Proportions of child deaths not buckled
    - Age group
    - Race/ethnicity



## Child Passenger Safety

**Buckle up every age, every trip**

**43%** ↓

Motor vehicle deaths among children age 12 and under decreased by 43% in the past decade.

 **9,000**

Still more than 9,000 children age 12 and under died in crashes in the past decade.

**1 in 2** 

Almost half of all black (45%) and Hispanic (46%) children who died in crashes were not buckled up (2009 – 2010).

Motor vehicle crashes are a leading cause of death for children in the US. Buckling up is the best way to save lives and reduce injuries.

Child passenger restraint laws result in more children being buckled up. Only 2 out of every 100 children live in states that require car seat or booster seat use for children age 8 and under.

A third of children who died in crashes in 2011 were not buckled up. We—especially parents and caregivers—can do more to protect children on the road.

### Parents and caregivers can keep children safe by:

- Knowing how to use car seats, booster seats, and seat belts.
- Using them on every trip, no matter how short.
- Setting a good example by always using a seat belt themselves.

→ See page 4

Want to learn more? Visit

[www.cdc.gov/vitalsigns](http://www.cdc.gov/vitalsigns)



# RESULTS

## Results: Child Motor Vehicle Crash Deaths (aged 12 and under); 2002–2011

- 9,182 child motor vehicle crash deaths



## Results: Child Motor Vehicle Crash Deaths (aged 12 and under); 2002–2011

- ❑ 9,182 child motor vehicle crash deaths
- ❑ Child death rates decreased 43%
  - 2.2 deaths per 100,000 population in 2002
  - 1.2 deaths per 100,000 population in 2011

 9,000

43% 

## Results: Child Motor Vehicle Crash Deaths (aged 12 and under); 2002–2011

- ❑ 9,182 child motor vehicle crash deaths
- ❑ Child death rates decreased 43%
  - 2.2 deaths per 100,000 population in 2002
  - 1.2 deaths per 100,000 population in 2011
- ❑ 1 in 3 (33%) child deaths in 2011 were not buckled up



9,000

43% ↓



## Results: Child Motor Vehicle Crash Deaths (aged 12 and under); 2009–2010

- ❑ 1,409 deaths
  - 1.3 deaths per 100,000 population
- ❑ Death rates did not differ by sex or age group
- ❑ Death rates differed by race
  - Black children significantly higher death rate than white children
    - 1.5 versus 1.0 deaths per 100,000 population
  - No significant difference in death rates for Hispanic children

## Results: Child Motor Vehicle Crash Deaths (aged 12 and under); 2009–2010

- Proportion of deaths not buckled differed by race/ethnicity
  - 45% of black children
  - 46% of Hispanic children
  - 26% of white children

**1 in 2**



Almost half of all black (45%) and Hispanic (46%) children who died in crashes were not buckled up (2009 – 2010).

# **DISCUSSION/CONCLUSIONS**

# Disparities in Unrestrained Deaths

- ❑ Racial/ethnic differences
  - Socio-economic status might be a contributing factor\*
  - Further research is needed to better explore and understand difference
- ❑ Age differences in deaths not buckled\*\*



\*Rangel SJ, Martin CA, Brown RL, Garcia VF, Falcone RA. Alarming trends in the improper use of motor vehicle restraints in children: implications for public policy and the development of race-based strategies for improving compliance. *J Pediatr Surg* 2008;43:200–7.

\*\* National Highway Traffic Safety Administration. Traffic safety facts, 2011 data: children. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration; 2013. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811767.pdf>; National Highway Traffic Safety Administration. Traffic safety facts: occupant protection. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration; 2013. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811729.pdf>.

# More Can Be Done: Child Safety Seats, Booster Seats, and Seat Belts

- ❑ Child safety seats (CSS) and booster seats are effective
  - CSS reduce risk of death among children
    - Aged <1 by 71%; aged 1–4 by 54%
  - Booster seats reduces risk of serious injury among children
    - Aged 4–8 by 45%, compared with seat belt alone
- ❑ Seat belts are effective for older children and adults
  - Reduce the risk for death and serious injury by ~50%



# What Can Be Done?

## Proven Strategies for States and Communities

- ❑ Community Preventive Services Task Force systematic review found\*
  - CSS laws
    - Decrease deaths
    - Increase CSS use
  - CSS distribution plus education programs
    - Increase CSS possession and CSS use
- ❑ Increasing the required age for CSS/booster seat use\*\*
  - Increases CSS/booster seat use by almost 3 times
  - Decreases the rate of fatal or incapacitating injuries by 17%



\*Zaza S, Sleet DA, Thompson RS, Sosin DM, Bolen JC; Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase the use of child safety seats. *Am J Prev Med* 2001;21(4 Suppl):31–47.  
<http://www.thecommunityguide.org/mvoi/index.html>

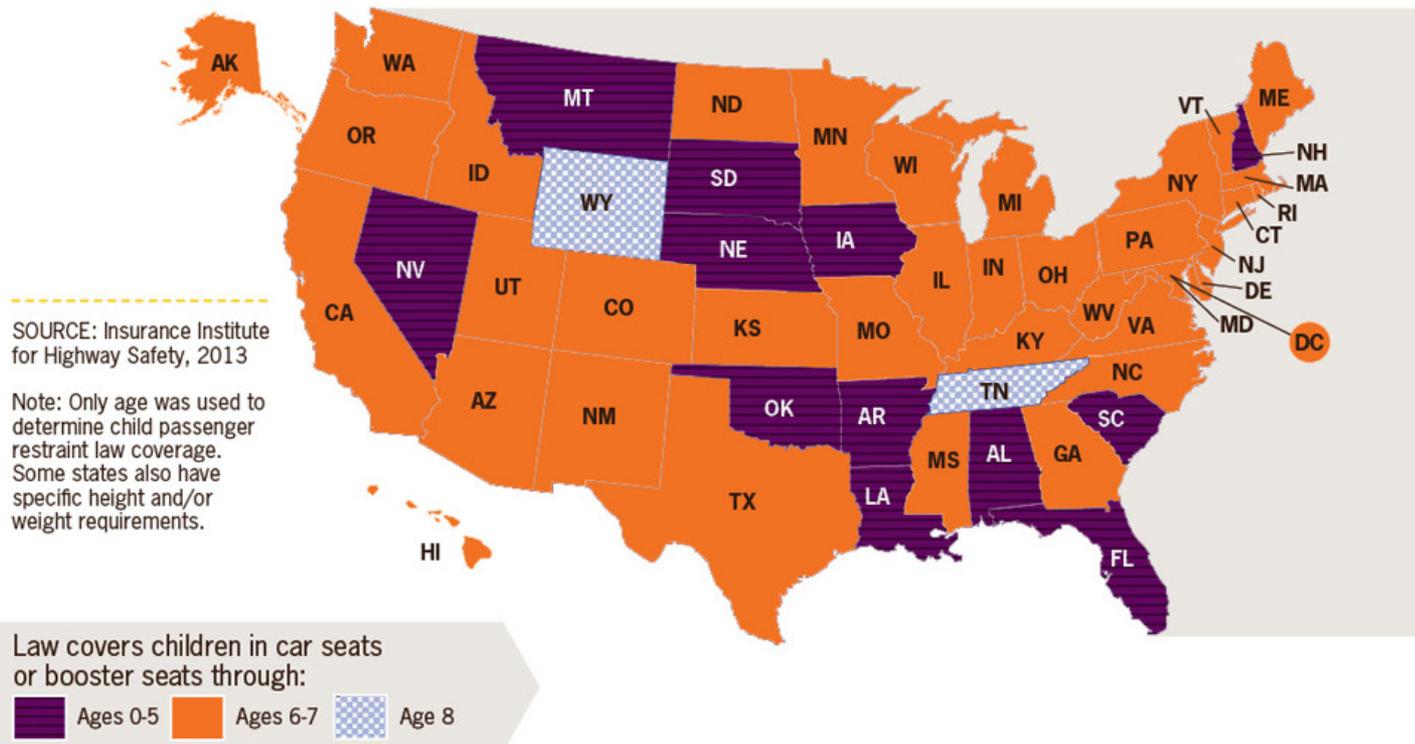
\*\*Echelberger AH, Chouinard AO, Jermakian JS. Effects of booster seat laws on injury risk among children in crashes. *Traff Inj Prev* 2012;13:631–9.

# State Laws September 2013

## Evidence shows that state laws result in more children being buckled up.

Only 2 states (Tennessee and Wyoming) have child passenger restraint laws requiring car seat or booster seat use for children age 8 and under.

Child passenger restraint laws that increase the age for car seat or booster seat use result in more children being buckled up. Among five states that increased the required car seat or booster seat age to 7 or 8 years, car seat and booster seat use tripled, and deaths and serious injuries decreased by 17%.



# What Can Be Done? Health Care Providers Can...

- ❑ Keep up-to-date on child passenger safety
- ❑ Counsel parents and caregivers at each well-child check-up
  - To use age- and size-appropriate car seats, booster seats, and seat belts on every trip
  - About the correct time to move a child to the next seat type or seat belt
- ❑ Counsel patients of all ages about the importance and effectiveness of buckling up

[www.cdc.gov/Motorvehiclesafety/Child\\_Passenger\\_Safety](http://www.cdc.gov/Motorvehiclesafety/Child_Passenger_Safety)  
<http://pediatrics.aappublications.org/content/early/2011/03/21/peds.2011-0213.abstract>  
<http://pediatrics.aappublications.org/content/early/2011/03/21/peds.2011-0215>



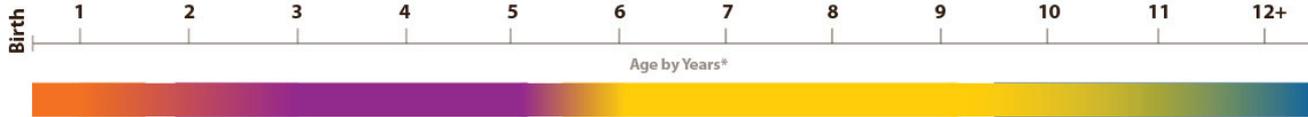
## What Can Be Done? Parents and Caregivers Can...

- ❑ Know how to use car seats, booster seats, and seat belts
- ❑ Use them on every trip, no matter how short
- ❑ Install and use seats according to the owner's manual
- ❑ Get help installing seats from a certified Child Passenger Safety Technician
  - Find one at: <http://cert.safekids.org/Home/SeatCheckLocations.aspx>
- ❑ Recognize the safest way to buckle up changes as a child grows
- ❑ Buckle children age 12 and under in the back seat



# Car Seat Graphic

Using the correct car seat or booster seat can be a lifesaver: make sure your child is always buckled in an age- and size-appropriate car seat or booster seat.



## REAR-FACING CAR SEAT

### Birth up to Age 2\*

Buckle children in a rear-facing seat until age 2 or when they reach the upper weight or height limit of that seat.



## FORWARD-FACING CAR SEAT

### Age 2 up to at least age 5\*

When children outgrow their rear-facing seat, they should be buckled in a forward-facing car seat until at least age 5 or when they reach the upper weight or height limit of that seat.



## BOOSTER SEAT

### Age 5 up until seat belts fit properly\*

Once children outgrow their forward-facing seat, they should be buckled in a booster seat until seat belts fit properly. The recommended height for proper seat belt fit is 57 inches tall.



## SEAT BELT

### Once seat belts fit properly without a booster seat

Children no longer need to use a booster seat once seat belts fit them properly. Seat belts fit properly when the lap belt lays across the upper thighs (not the stomach) and the shoulder belt lays across the chest (not the neck).

**Keep children ages 12 and under in the back seat. Never place a rear-facing car seat in front of an active air bag.**

*\*Recommended age ranges for each seat type vary to account for differences in child growth and height/weight limits of car seats and booster seats. Use the car seat or booster seat owner's manual to check installation and the seat height/weight limits, and proper seat use.*

Child safety seat recommendations: American Academy of Pediatrics.  
Graphic design: adapted from National Highway Traffic Safety Administration.

# Acknowledgements

## □ Co-authors

- Gwen Bergen, PhD, MPH, MS
- Bethany West, MPH

## □ Communications

- Michele Huitric, MPH
- Jennifer Pressley, MPH



# More Can Be Done Lives Saved

- ❑ Observational studies vs. Death data
  - Child passengers aged <1
    - 2% observed unrestrained\*
    - 22% of deaths unrestrained\*\*
- ❑ NHTSA Lives Saved by CSS use\*\*\*
  - 3,308 children aged 0–4 saved by CSS use during 2002-2011
  - 837 more lives could have been saved with 100% CSS use among children aged 0–4

\* National Highway Traffic Safety Administration. The 2011 national survey of the use of booster seats. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration; 2013. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811718.pdf>.

\*\*National Highway Traffic Safety Administration. Traffic safety facts, 2011 data: children. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration; 2013. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811767.pdf>.

\*\*\*Marc Starnes, National Highway Traffic Safety Administration, personal communication, 2013; National Highway Traffic Safety Administration. Lives saved FAQs. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration; 2009. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811105.pdf>.

Thank you!  
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E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: <http://www.cdc.gov>

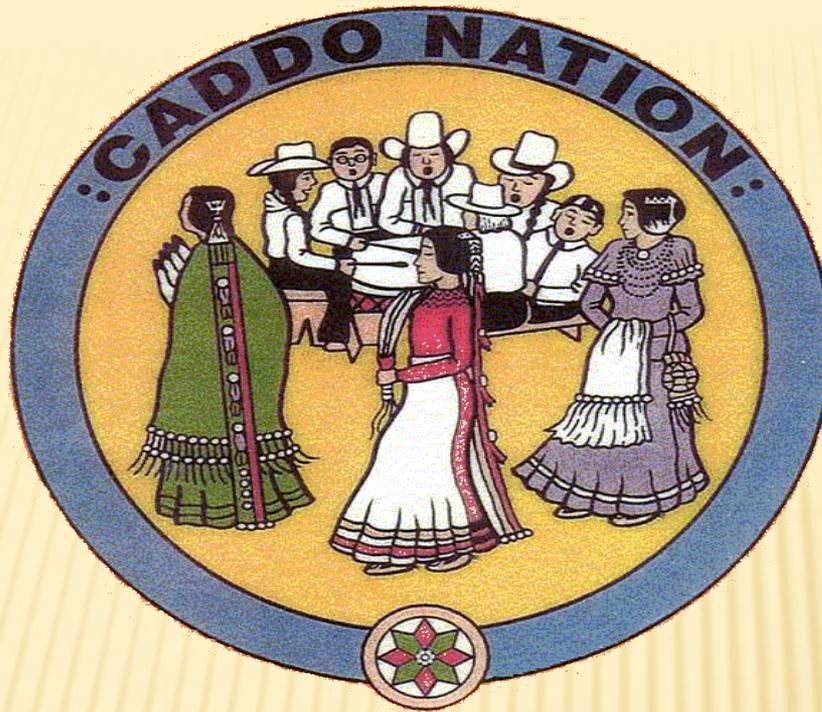
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



National Center for Injury Prevention and Control

Division of Unintentional Injury Prevention





# Caddo Nation of Oklahoma

Antoinette (Toni) Short

## TRIBAL MOTOR VEHICLE INJURY PREVENTION PROGRAM

# BACKGROUND INFORMATION

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## Present government structure

- ✓ Federally recognized tribe
- ✓ Operates by a Tribal Council (eight member board)
- ✓ Tribal headquarters is located five miles east of Binger, Oklahoma
- ✓ Caddo tribal membership—5,058

## Caddo Nation TMVIPP

- ✓ Brenda Edwards, Chairperson
- ✓ Toni Short, Program Director and Coordinator



# CDC TMVIPP FUNDING CYCLE 2010–2014

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- ✓ Caddo Nation awarded in June 2010
  - ✓ Caddo Tribal Motor Vehicle Injury Prevention Program (TMVIPP) is one of eight CDC funded tribes in United States
  - ✓ The purpose of the program is to tailor, implement, and evaluate American Indian and Alaska Native (AI/AN) community-based strategies with demonstrated effectiveness for preventing motor vehicle injuries
    - ✓ Increase use of child safety seats among low use groups among the Caddo tribal members, other AI/AN in Caddo County, Oklahoma

# TMVIPP CHILD RESTRAINT OBJECTIVES

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- ✓ Partnership with Safe Kids Oklahoma
- ✓ Coalition with state, federal, and tribal organizations
- ✓ Distribution and education of child safety seats
- ✓ National Certification of Child Passenger Safety (CPS) technicians
- ✓ SNAP (Safe Native American Passenger) for Community & CPS certification
- ✓ Education and Awareness in the community
- ✓ Data Collection & Child Safety Seat (CSS) Observation
- ✓ Develop a comprehensive campaign that accomplished the objective of Caddo TMVIPP

# ACCOMPLISHMENTS IN CHILD RESTRAINT

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- ✓ SNAP Course
  - ✓ 4 Instructors
  - ✓ 26 students attended
- ✓ CPS Certification
  - ✓ 3 Native American Indian CPS Instructors in SW, OK
  - ✓ 58 new CPS Technicians
- ✓ National Child Passenger Safety Week
  - ✓ Annual National Car Seat Campaign Checks
  - ✓ Various Car Seat Checks
    - ✓ Caddo County, Grady County, and Comanche County

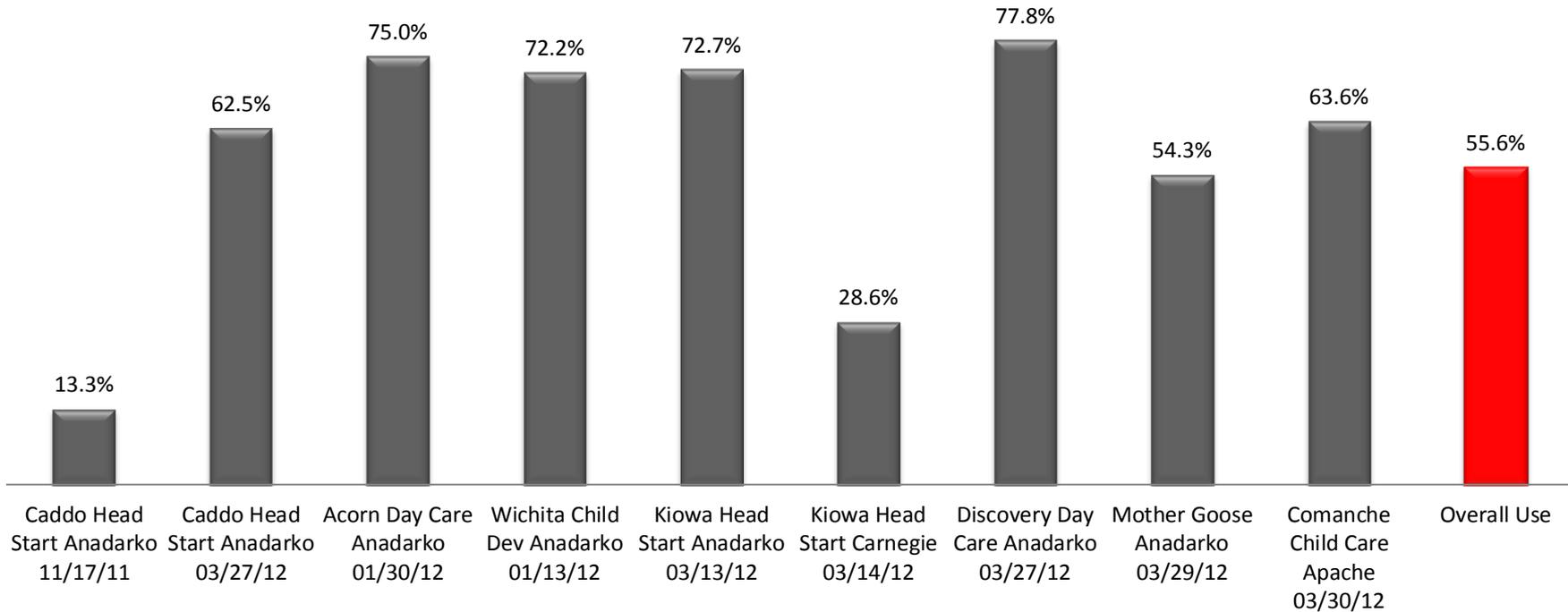
# ACCOMPLISHMENTS IN CHILD RESTRAINT

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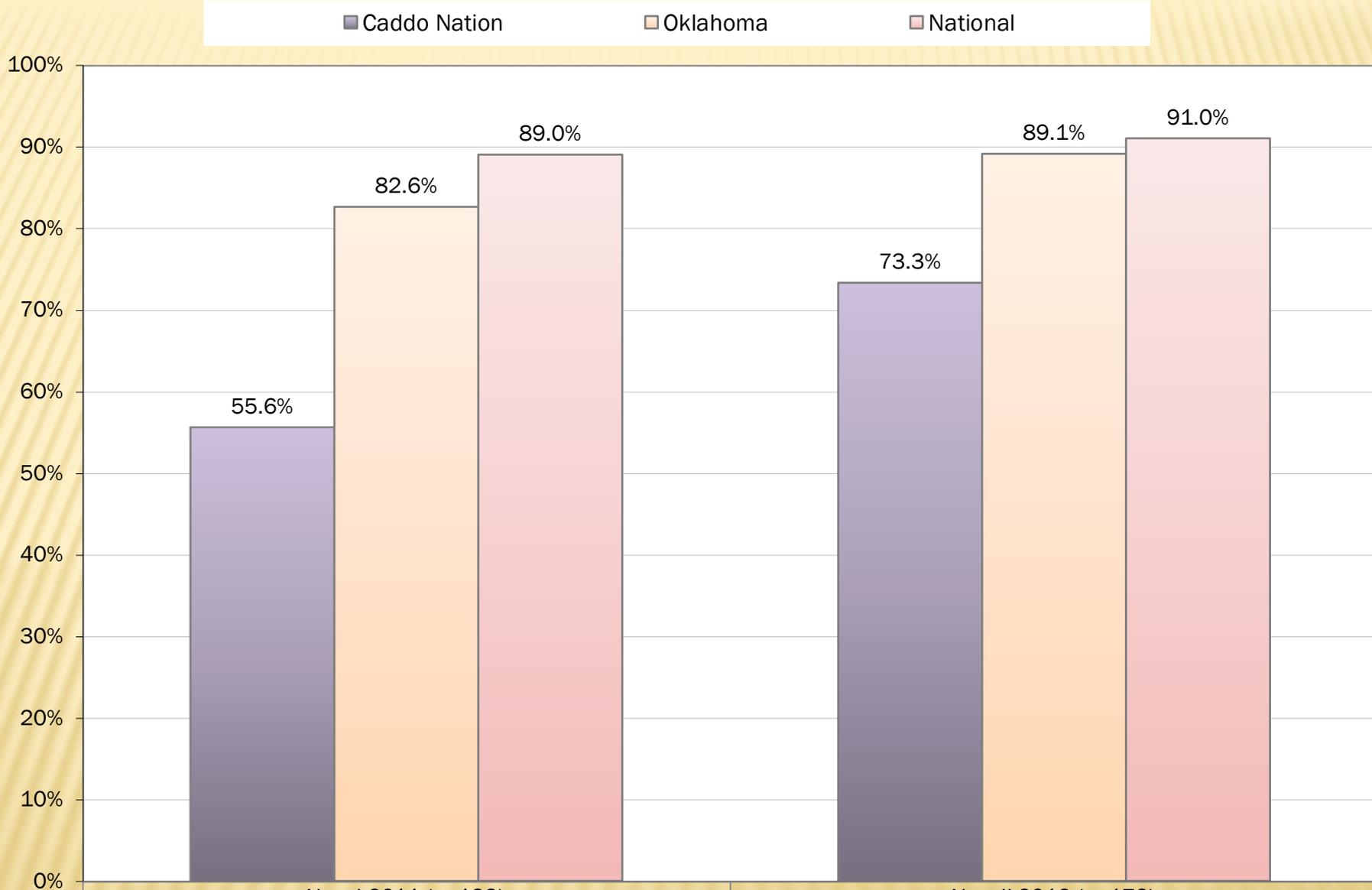
- ✓ Community Educational Car Seat Checks
  - ✓ Anadarko Fire Department
  - ✓ Binger Fire Department
  - ✓ Caddo Tribal Complex
  - ✓ Anadarko gym, Anadarko, Carnegie Indian Clinic, LIHS
- ✓ Car seat checks at WCD/WIC
  - ✓ Hinton, Anadarko, Carnegie
- ✓ Ride Safe Project—CSS Distribution & CSS Observations
  - ✓ Caddo Nation & Kiowa Tribe Head Start—Binger/Anadarko
- ✓ One-on-one office visits with tribal members and other tribes

# CHILD SAFETY SEAT OBSERVATIONS

**2011–2012 Child Passenger Safety Seat Usage in Caddo County at Tribal Head Starts and Day Care**



**Figure 2. Caddo Nation, State of Oklahoma, and National Child Safety Seat Use, 2012–2013**



	Year I-2011 (n=133)	Year II-2012 (n=172)
Caddo Nation	55.6%	73.3%
Oklahoma	82.6%	89.1%
National	89.0%	91.0%

# MEDIA CHILD RESTRAINT

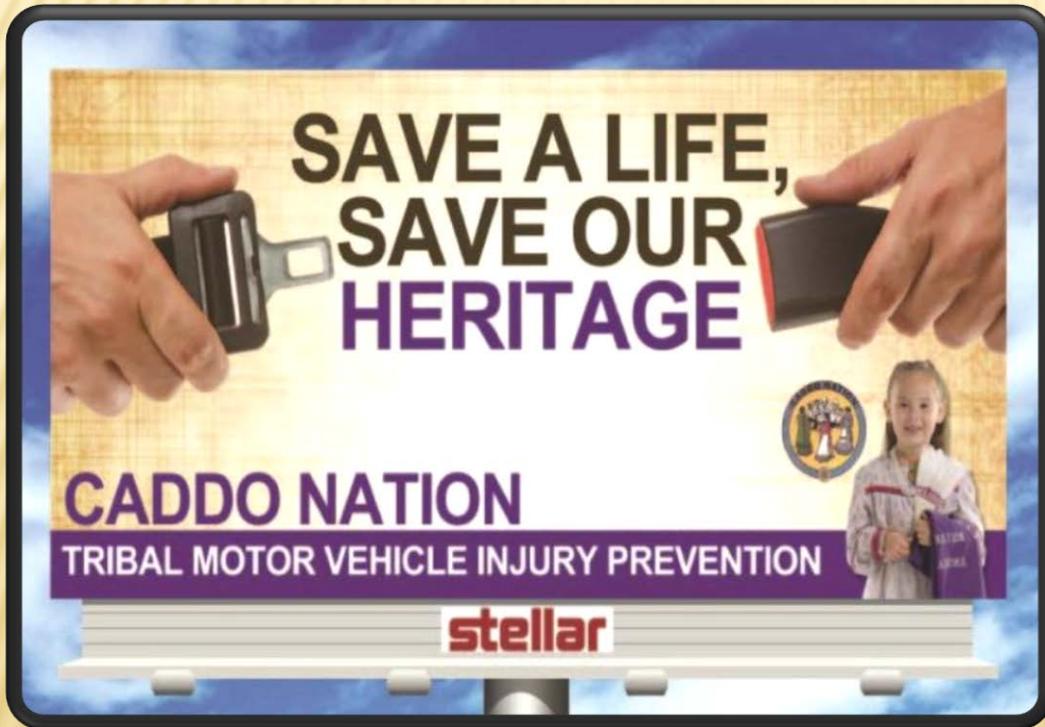
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- ✓ Outdoor and Broadcast Media
  - ✓ Oklahoma Highway Safety Office
    - ✓ Media—OHSO—Alice Collinsworth, Communication Manager
    - ✓ Justin HySmith, Website Manager
    - ✓ Law Enforcement Liaisons
    - ✓ Oklahoma Highway Patrol Troop G
    - ✓ Law Enforcement CPS Technicians
  - ✓ Anadarko Daily News and Settles Studio
    - ✓ Newspaper

# BILLBOARDS IN CADDO COUNTY



# BILLBOARDS AND POSTER



# MAKING A RADIO PSA



# CHALLENGES

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- ✓ Head Start Programs
  - ✓ Ride Safe Projects and Scheduling
- ✓ School Participation
  - ✓ Scheduling
- ✓ WCD Programs
  - ✓ Appointments
- ✓ IHS (Indian Health Service) Clinics
  - ✓ Scheduling
- ✓ CPS Re-certification

# LESSONS LEARNED

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- ✓ Improved feedback with Caddo Tribal Council
- ✓ Continued need for more data
- ✓ Greater overall awareness in Caddo County
- ✓ Provide accessible times and places for activities and events
- ✓ Positive relationships created statewide
- ✓ Improved communication with community leaders
- ✓ Certify law enforcement officers in CPS
- ✓ Continued partnership in Oklahoma

# CONTACT INFORMATION

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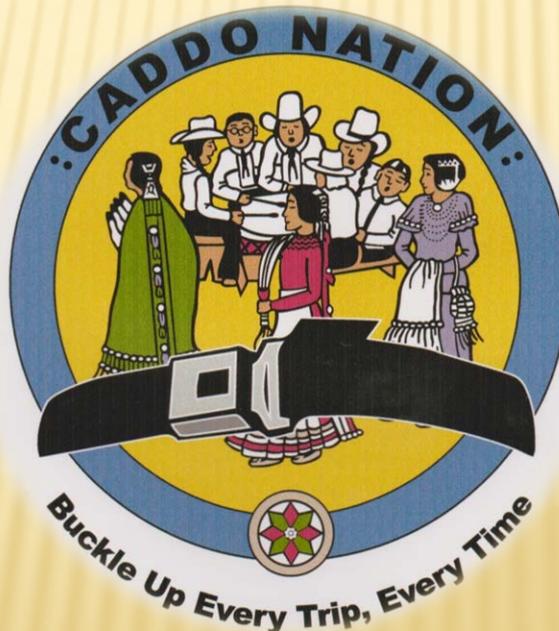
## Toni Short

Caddo Nation Tribal Motor Vehicle Injury Prevention

Specialist and Coordinator

Caddo Nation of Oklahoma

[tshort@caddonation.org](mailto:tshort@caddonation.org)





*Georgia Department of Public Health*

# Overview of Georgia Child Safety Seat Legislative Initiatives

Centers for Disease Control and Prevention  
*Vital Signs* Town Hall

**Lisa Dawson, MPH**

Director, Injury Prevention Program at the  
Georgia Department of Public Health  
Co-Director of Outreach at Emory Center for Injury Control

February 11, 2014



*We Protect Lives.*

# Leading Contributing Factors for Fatality Crashes in Georgia

		Driver Age			
		<15	15-19	20-24	25-34
Rank	1	Failure to keep in Proper Lane	Failure to keep in Proper Lane	Failure to keep in Proper Lane	Failure to keep in Proper Lane
	2	Illegal Driving on Shoulder, Ditch, Median	Failure to Yield Right of Way	Illegal Driving on Shoulder, Ditch, Median	Illegal Driving on Shoulder, Ditch, Median
	3	Failure to Yield Right of Way	Illegal Driving on Shoulder, Ditch, Median	Overcorrecting	Failure to Yield Right of Way
	4	Improper or Erratic Lane Changing	Overcorrecting	Failure to Yield Right of Way	Under the Influence of Alcohol, Drugs, Medication
	5	Failure to Obey Traffic Lights/Signs	Failure to Obey Traffic Lights/Signs	Under the Influence of Alcohol, Drugs, Medication	Overcorrecting

Source: FARS 2008-2012

# Leading Contributing Factors for Fatality Crashes in Georgia

		Driver Age			
		35-44	45-54	55-64	65+
Rank	1	Failure to keep in Proper Lane	Failure to keep in Proper Lane	Failure to keep in Proper Lane	Failure to Yield Right of Way
	2	Illegal Driving on Shoulder, Ditch, Median	Illegal Driving on Shoulder, Ditch, Median	Failure to Yield Right of Way	Failure to keep in Proper Lane
	3	Failure to Yield Right of Way	Failure to Yield Right of Way	Illegal Driving on Shoulder, Ditch, Median	Illegal Driving on Shoulder, Ditch, Median
	4	Following Improperly	Overcorrecting	Failure to Obey Traffic Lights/Signs	Failure to Obey Traffic Lights/Signs
	5	Pedestrian, Pedal Cyclist, Other Non-Motorist	Following Improperly	Following Improperly	Following Improperly

Source: FARS 2008-2012

# Legislative Analysis

- Departments introduce few bills
- Relevant legislation is analyzed for financial and general impact on
  - The Department or Division
  - The state population
  - Specific segments of the population
- No position is listed; however, arguments for and against the measure should be articulated

# Introduction of Legislation



- Advocacy organization
- Sponsor
- Committee assignments
- Votes in Senate and House, Conference
- Governor's signature

# Child Passenger Restraint Law Changes

- July 1, 1984
  - 4 years of age or younger
- 2004–HB 217
  - Increased age **from** 4 years of age or younger **to** under age 6
- 2011–SB 88
  - Increased age **from** under age 6 **to** under age 8

# Current Georgia Child Passenger Safety Law (Under Age 8) 40-8-76

Requires children age 7 and younger (until 8<sup>th</sup> birthday) must be properly secured in an approved Child Restraint System (CRS)

**Effective: July 1, 2011**

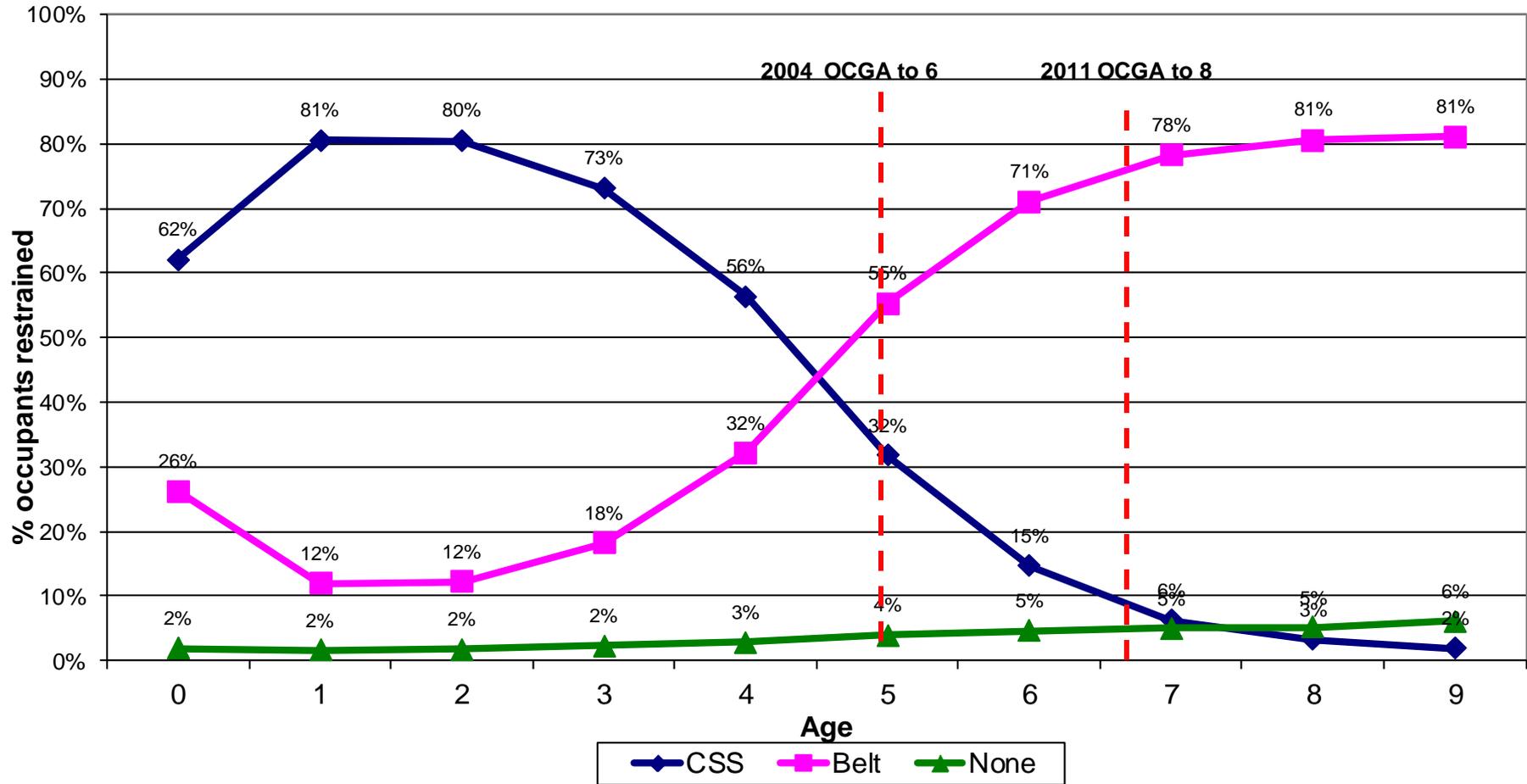


# Data

## Method

- 2003–2006 linked crash, inpatient, and emergency department data
- Ages 0–4, 5–9
- Vehicle type
  - Exclude pedestrians, motorcyclist, moped, ATV, go cart, and farm/construction equipment
- Restraint use
  - CSS, belt, none

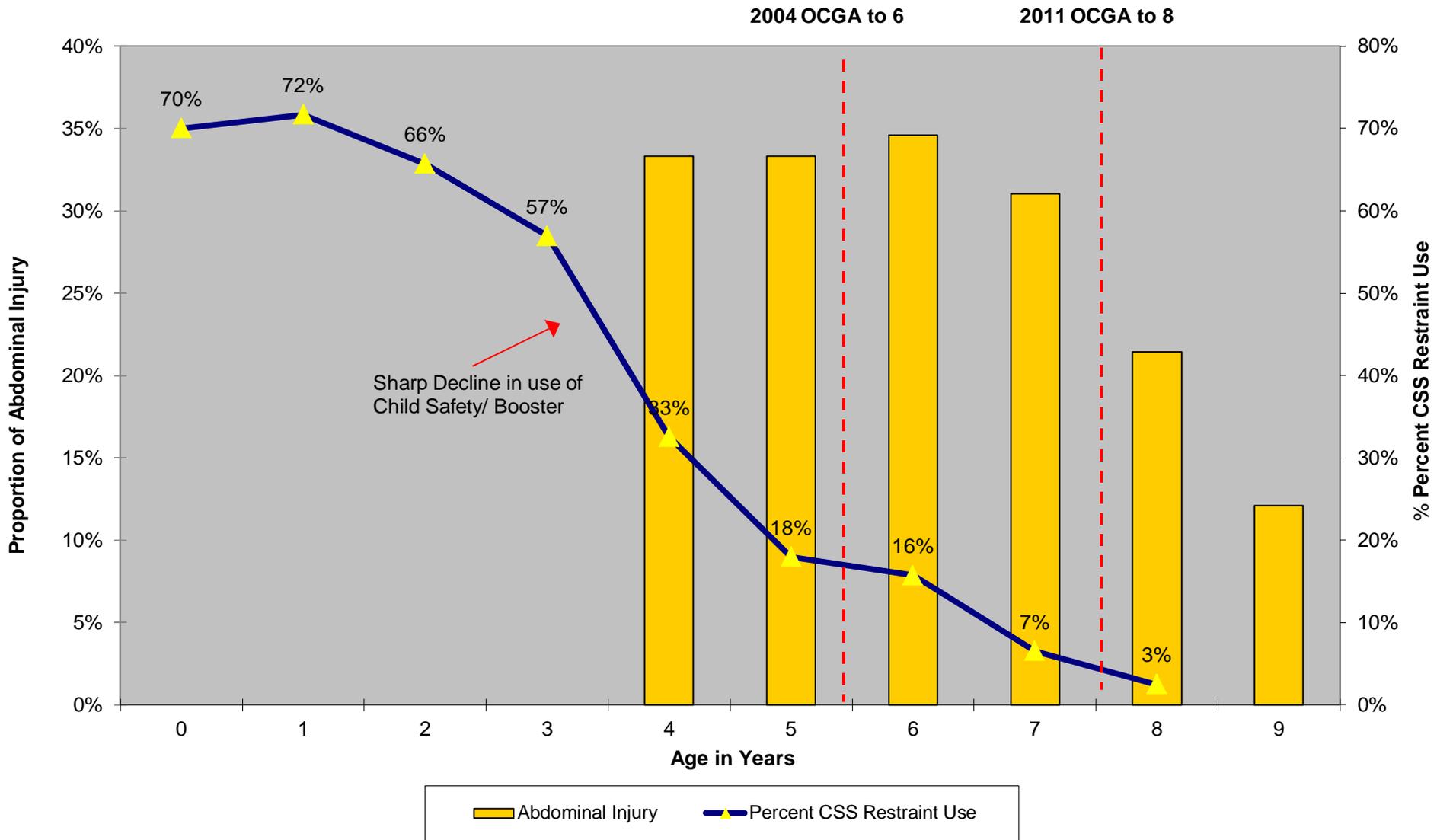
# Restraint Use by Age



Source: Georgia Accident Crash Reporting Data 2003-2006

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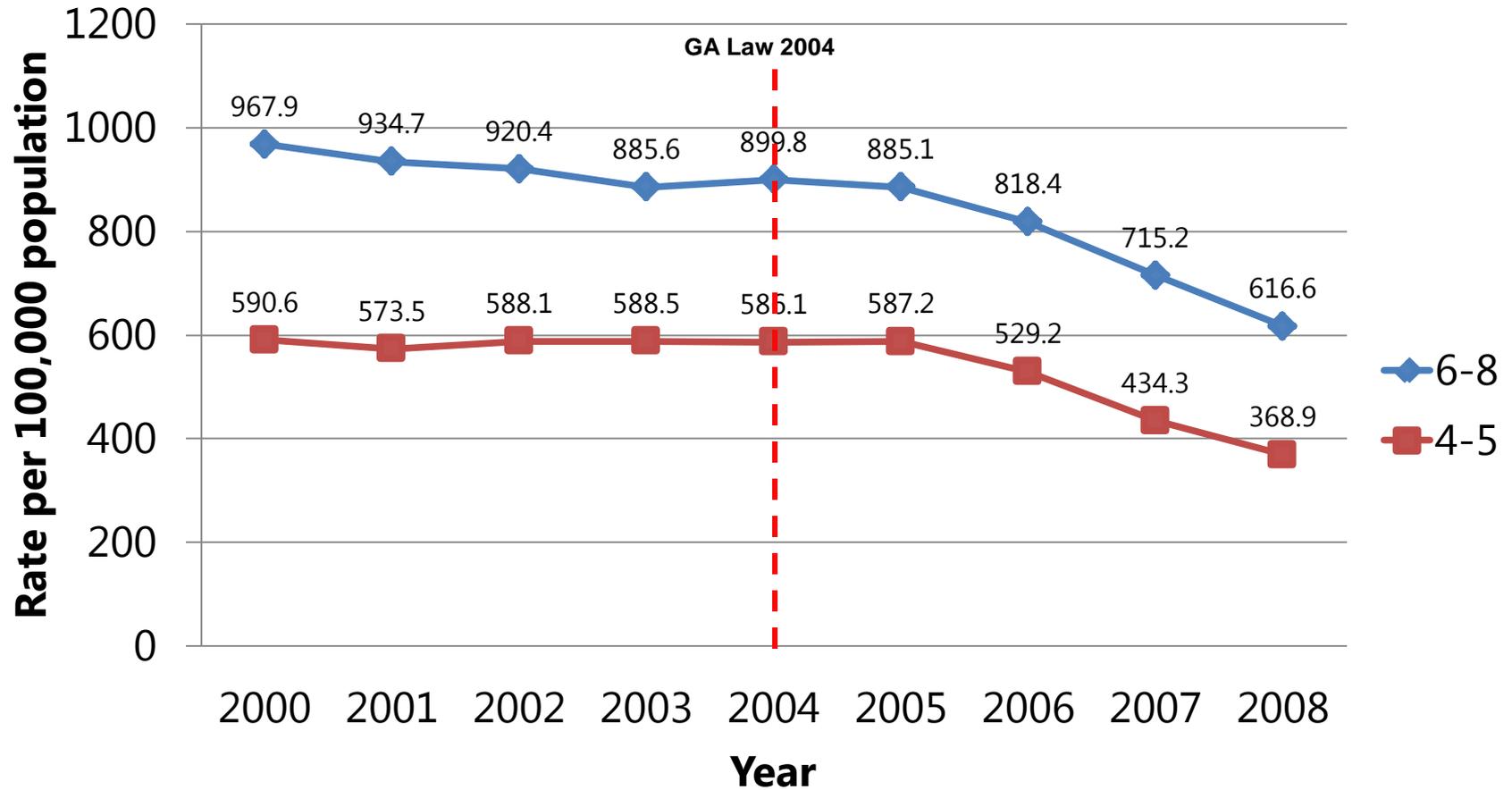
# As Use Goes Down, Injury Goes Up



Source: Georgia Accident Crash Reporting Data linked with Georgia Hospital Inpatient Discharge Data 2003-2006

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# Crash Injury Rates for Children 4 to 8



# Contact Information

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This presentation was made possible thanks to Carol Ball, Ibaad Jiwani, and Denise Yeager on the GA DPH IPP staff.

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*Vital Signs* interactive buttons and banners

[www.cdc.gov/vitalsigns/SocialMedia.html](http://www.cdc.gov/vitalsigns/SocialMedia.html)

# Public Health Practice Stories from the Field

- ❑ Stories about the implementation of Public Health Practice Stories from the Field



[www.cdc.gov/stltpublichealth/phpracticestories](http://www.cdc.gov/stltpublichealth/phpracticestories)

**Provide feedback on this teleconference:**

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Please mark your calendars for the next  
***Vital Signs Town Hall Teleconference***

**March 11, 2014**

**2:00–3:00 pm (EST)**

**For more information, please contact Centers for Disease Control and Prevention.**

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The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



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