



Booster In a Bag

A Pandemic Community Innovation

Reaching the Hard to Reach

Life Savers Conference: 2025: Child Passenger Safety Track
March 10, 2025

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Our community and academic partners, student volunteers and parents.

AAP-OC: Committee on Injury, Violence and Poison Prevention.





Clinic in the Park •Connect •Screen •Educate

Founded in 2011 at the Orange County Great Park, Irvine, CA (former El Toro Marine Base)
70+ partners: community and faith based, academic, public and private entities and students.

Connect our visitors to services, provide free screenings, and deliver health education, along with essential safety equipment. www.clinicinthepark.org

<https://www.youtube.com/channel/UC7e-oOYrSulsDUxUQSubsQ/videos>



CA State Senator Umberg with Dr. Geeta Grover: Books in a Bag

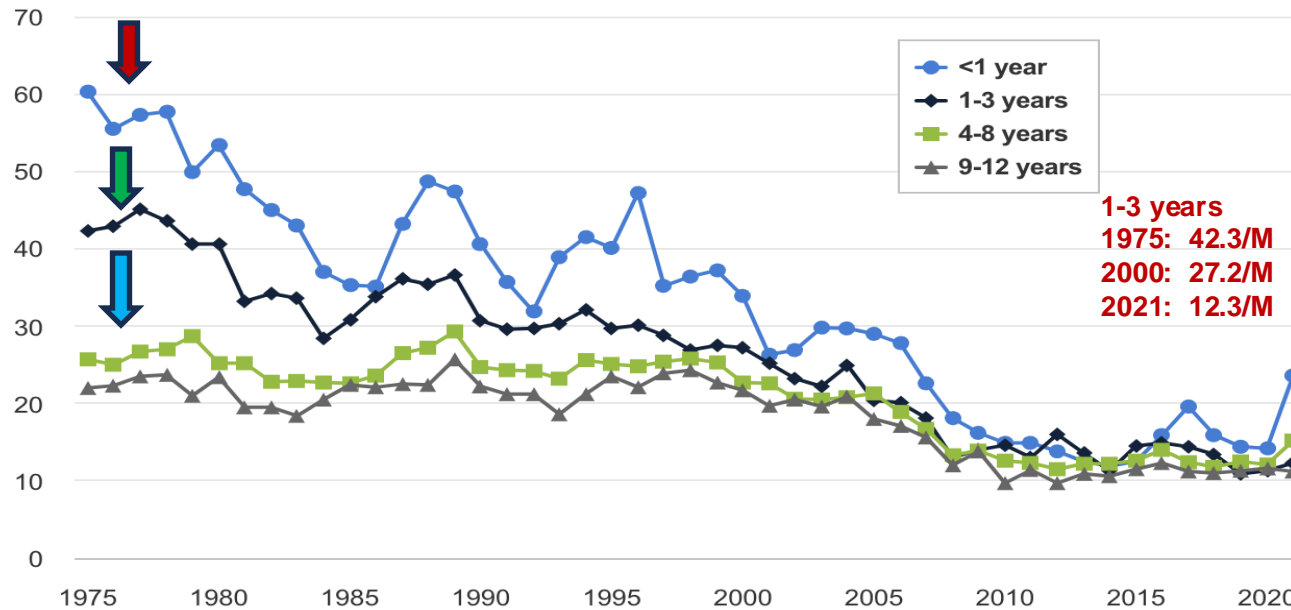


Progress with CPS Laws

All 50 states have laws

But **gaps** in booster seat laws and utilization

Passenger vehicle child occupant deaths per million children by age, 1975-2021



Fatality Facts 2021 Insurance Institute of Highway Safety. <https://www.iihs.org/topics/fatality-statistics/detail/childrenFat>

Overview

Trends

Age and sex

Restraint use

When they died



Tom Lankard, CA
OTS Director:
(1977-1983)



Injuries and Restraint Use of Motor Vehicle Occupants in California, 2015-2021

CA Data: Children 0-7 years

Table 1. Injury Severity by Restraint Use among Motor Vehicle Occupants (MVOs) aged 0-7 involved in a fatal motor vehicle crash in California, 2015-2021.

Injury Severity	Frequency of Restrained MVOs	%	Frequency of Unrestrained MVOs	%
No Apparent Injury	879	53.7%	37	17.1%
Possible Injury	148	9.0%	15	6.9%
Suspected Minor Injury	289	17.7%	39	18.1%
Suspected Serious Injury	150	9.2%	67	31.0%
Fatal Injury	170	10.4%	58	26.9%

Total N = 1,852
 Restrained N = 1,636
 Unrestrained N = 216

 Restraint Use = 88%

If restrained 20% serious or fatal injury ←

If unrestrained 58% serious or fatal injury ←

Background

30.4% of 4-7-year-olds unrestrained or in seat belt (US Dept of Transportation. Survey of Booster Seats. May 2021)

CA Law (Child Restraint Use)

<8 years must be properly buckled into a child restraint in the back seat (VEH27360)

Permits children 8 years & older to use safety belt if fits properly (VEH 27360.5)

No Child Unrestrained: Reaching the Hard to Reach with Booster Seats

- Pre-COVID-19 in-person events
- Target: **Low-income** communities severely impacted by pandemic
 - °85% Hispanic/Latino
 - °**Nearly 70% did not have booster seats**
 - °Using poorly fitted adult seat belts or unrestrained
- No child properly restrained using expanded definition
- **Expanded definition** of selection, direction, location, installation, harnessing, and ***proper restraint use all the time in all vehicles in which the child travels***

Methods (Pandemic Innovation)

- Created **self-guided online** 15-minute HIPAA-compliant educational module
 - English and Spanish
 - Content: age/size-appropriate child occupant protection devices, data, fitting, current CA state law
- Established **neighborhood distribution hubs**
 - Staff training & technical assistance
 - Custom QR-code postcard for each site
 - Provided booster in a bag, tool kit, liability waiver signed at pickup
- Conducted **3-month follow-up** electronic survey
- Pilot Successful: Continued as a post pandemic option for booster seat distribution with 10 sites.

Child Passenger Safety Mini-Grant Opportunity

Did you know, most children need to use a booster seat until age 10-12?

Learn how to identify children in need of a booster seat, how to provide virtual education to the family and how to distribute no-cost booster seats.



To participate in the program,
your organization must:

- Serve low-income Orange County families
- Identify at least two staff to complete virtual training and orientation on (date of training)
- Identify children in need of a no-cost booster seat
- Provide education to caregiver via bilingual (English/Spanish) virtual curriculum
- Distribute booster seats following current COVID-19 guidelines
- Comply with all tracking, evaluation and reporting requirements
- Cost Share



Please email info@clinicinthepark.org

For our cost share grant program.

For questions, call (949) 269-7818.

FREE online workshop!

Your child may qualify for a free booster seat!



Did you know most children need to use a booster seat until age 10-12 years?

Step 1: Complete an online workshop by scanning code or visit <http://bitly.ws/k8FL> or click [HERE](#)

Step 2: To receive a free booster seat*

- Child must be between ages 5-12 years old
- Child must weigh between 40-100 pounds
- Vehicle must have lap and shoulder seatbelts and headrests

Step 3: For questions, please contact (949) 764-6551

Available in Spanish



OPEN YOUR CAMERA



AIM IT AT THE QR CODE



TAP THE BANNER

California Laws to Keep Children Safe In and Around Vehicles







Children under 8 years must be buckled into a car seat or booster seat in the back seat.

The Right Seat
American Academy of Pediatrics: Orange County, CA & Indiana & Automotive Safety Program Riley Children's Hospital
7 languages
Download pdfs
<https://www.aap-oc.org/child-passenger-safety/>

The Right Seat Flyer

- The Right Seat_Arabic
- The Right Seat_English
- The Right Seat_Farsi
- The Right Seat_Korean
- The Right Seat_Spanish
- The Right Seat_Simplified Chinese
- The Right Seat_Traditional Chinese
- The Right Seat_Vietnamese

The Right Seat
Fits the child - fits the vehicle - is used correctly on every trip

Rear-Facing Only and Convertible Seats	Forward Facing Seats with Harnesses	Booster Seats	Adult Size Seat Belts
<ul style="list-style-type: none"> • Never in front of an airbag • Use 4-5 lbs to 22-50 lbs • Rear-face until child reaches upper weight or height limit of car seat set by manufacturer • Harness snug and at or below shoulders • Chest clip at armpit level • Attach to vehicle with seat belt or lower anchors • Don't add anything extra 	<ul style="list-style-type: none"> • Use 5-point harness to upper weight or height limit of seat • Up to 40-65 pounds • Harness snug and at or above shoulders • Chest clip at armpit level • Attach to vehicle with top tether strap and seat belt or lower anchors • Check the side of the car seat for the highest weight allowed to use lower anchors 	<ul style="list-style-type: none"> • Until 4' 9" and 8-12 years • Always use lap/shoulder seat belt • Never put shoulder belt behind back or under arm • Use highback booster for vehicle seats without a headrest 	<ul style="list-style-type: none"> • Back straight against vehicle seat and knees bent at seat edge • Shoulder belt across chest, not neck or throat • Lap belt low and snug across upper thighs, not stomach • Children younger than 13 should always ride in back seat
			

Always read car seat and vehicle manuals for specific directions.

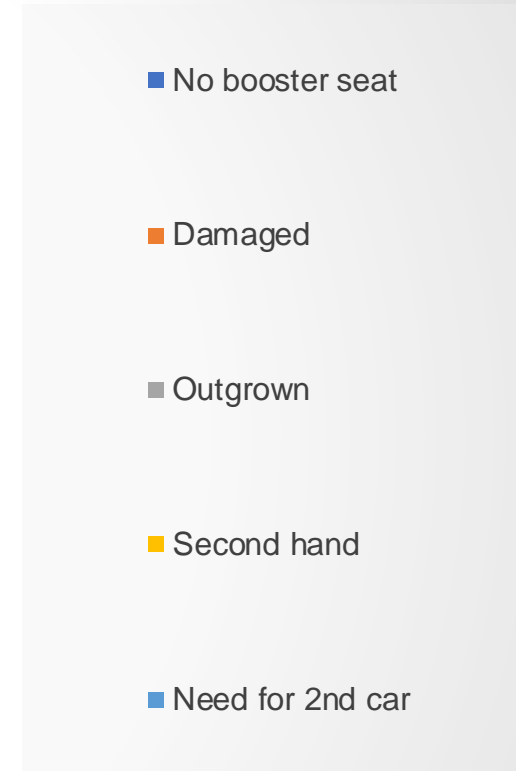
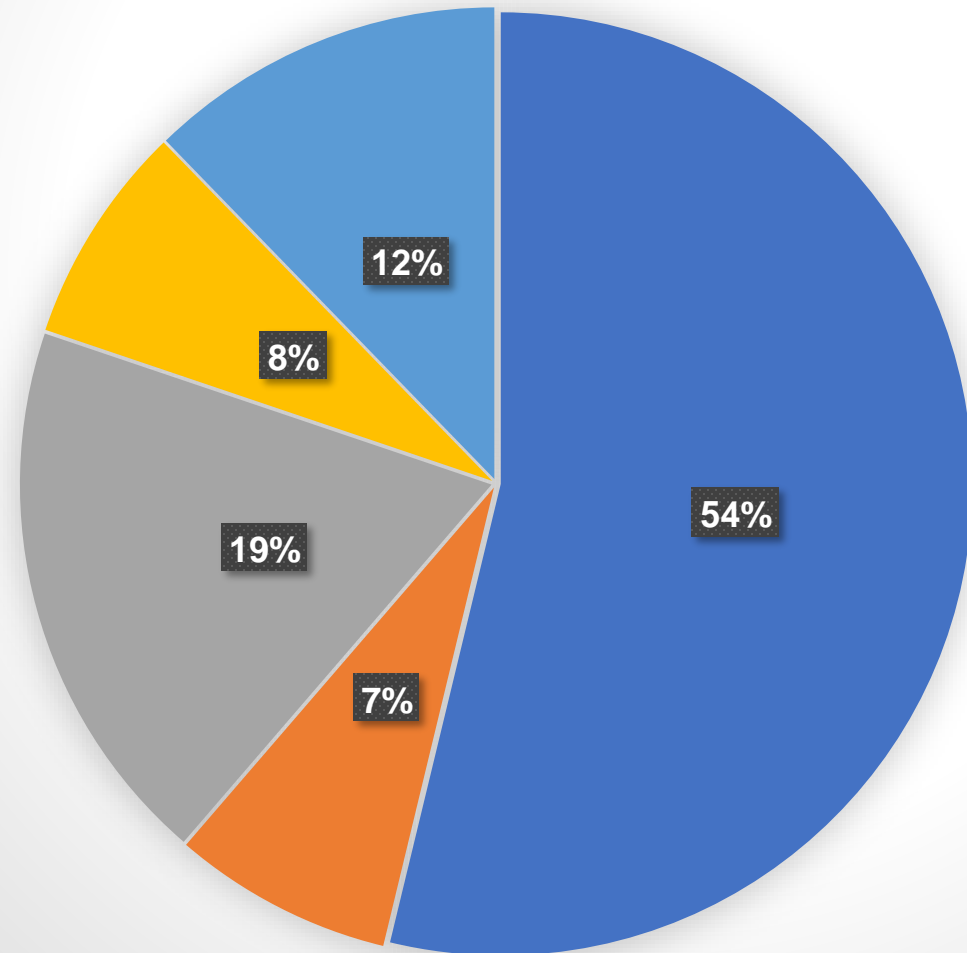
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<https://www.aap-oc.org/child-passenger-safety/>
<https://www.iaap.org/>
 Last reviewed 02/23/2024

For questions call 1-800-KID-N-CAR
<https://preventinjury.medicine.iu.edu>

<https://www.clinicinthepark.org/resources/child-passenger-safety/>



Results (partial)
Why is child in need of a booster seat?
N=106
10 Sites
2022-2023



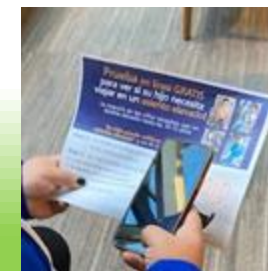
Results (partial)

2022-2023: 10 sites

3-Month Follow-up Electronic Survey 102/106 = Respondents	
92%	Children were using the booster seat always. (2 no response; 2 most of time)
96%	Parents stated the lap/shoulder belt fit better with the booster seat
96%	Agreed that “children may need to ride in a booster seat until 10-12 years of age” (2 no response) Pre-education 61%

Conclusions: Booster Seats In A Bag: A Pandemic Innovation

- Virtual platform
 - Convenient
 - Efficient
 - Cost-saving
 - Eliminates parent access barriers
 - Value added service for neighborhood sites
 - Option to in-person post-pandemic family health days and classes
 - Supplements in-person options
- Pandemic lessons learned:
 - Successful model (requires retraining and new staff training)
 - Scale-up
 - Hybrid Model can be used at in-person events



Key Takeaway Messages



Education with Distribution

- °Beneficial
- °Multiple Outreach Models
- °Virtual options
- °Use local data to create new models
- °Share your successes and ideas
- °Remember children with special transportation needs

Increase use of booster seats

- °Enhance Public Awareness
- °Law is not always best practice
- °Child restraint systems should be regarded as essential child safety equipment and should be regarded as a health equity issue

Systems & Strategies



What are the systems?

That allow kids:

- To live in poverty
- Be homeless/housing insecure
- Be food insecure
- Have insufficient access to comprehensive health care and supplementary services such as therapies
- Suffer learning losses magnified by the COVID-19 pandemic

**To die or be disabled for life
from a preventable injury**

Winning in Fast Time

Should children be able to live, work, learn, access services, and play in their own community?

- Identify the **centers of gravity** - and pull the levers for change
- What needs to **change**?
- Who is **accountable** for change?
- Should child **safety equipment** - a car seat or crib for safe sleep be provided for all children?

How do all child health providers connect to policy makers to transform the system?

Prevention is cost savings

TBI (Traumatic Brain Injury)

- Costs: Medical; Caregiving; Educational; Lost productivity; Emotional & psychological cost; Misc: adaptive technology; home modifications, equipment such as **special car seat and vehicle** to transport child
- **Moderate TBI**
 - **\$50,000** care costs/yr.
 - \$3.7 million annuity (by age 75 yrs)
 - Total: \$400,000 -\$2 M
- Severe TBI
 - \$100,000 care costs/yr
 - \$7.5 M annuity (by age 75 years)

Booster Seat

- For child 6-10 years or older
- Cost of low back \$20
- Cost of high back \$50
- Convertible car seat \$150
- Every \$1 dollar spent on a booster seats saves \$2,737 in costs of injury
- \$50,000 would buy
 - 2,500 low back booster seats
 - 1,000 high back booster seats
 - 333 convertible car seats

Thank You!



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