



Publisher of Consumer Reports

DOT Docket Management
National Highway Traffic Safety Administration
U.S. Department of Transportation
Room PL-401
400 Seventh Street, SW
Washington, D.C. 20590-0001

RE: Docket No. NHTSA-2001-10359

**COMMENTS OF CONSUMERS UNION OF UNITED STATES, INC.
TO THE
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ON
THE VIEWS OF THE PUBLIC ON THE USE AND
EFFECTIVENESS OF BOOSTER SEATS
49 CFR Part 571**

Consumers Union¹ (CU) appreciates the opportunity to offer comments to the National Highway Traffic Safety Administration (NHTSA) on the issue of improving the use and effectiveness of booster seats. CU tests and evaluates child restraints, including booster seats, and publishes the results of those tests in *Consumer Reports*. Our comments reflect our experience with testing and our strong belief that booster seats and toddler/booster combination seats are important for protecting the safety of children who have outgrown infant seats.

1. NHTSA's survey on use of booster seats needs updating:

NHTSA's survey results were collected in 1998 or prior to 1998, and may not accurately represent the current usage rate discussed in the request for comments.

Since 1998, we believe that usage rates may have improved for the following reasons:

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- State laws have helped improve knowledge among consumers with respect to booster seat use.
- Buckle-up campaigns are popular in many states.
- The Boost America campaign and publicity by other non-profit organizations may have had a positive impact.
- Manufacturers of booster seats have expanded the availability of combination toddler/booster seats. Vehicle manufacturers have included center seat shoulder belts in shoulder belt/lap belt systems and they have included instructions in the manual for their use. This expands the options available to parents and caregivers using booster seats from two backseat seating choices to three.

Recommendation: We believe these efforts should be continued or expanded and a new survey conducted.

2. Inadequate number of safe booster seats on the market:

Consumers Union believes that there too few sufficiently safe booster seats or combination toddler/booster seats presently on the market. This is based on CU's recent tests of nine combination toddler/booster seats and three booster seats. Only one combination toddler/booster seat when used in booster seat mode was recommended. That seat is no longer available; the manufacturer stopped manufacturing child restraint seats. The three booster seats were recommended.

Recommendation: We would like to see NHTSA continue to urge parents to use these products, which could encourage manufacturers to introduce a greater variety of safe combination toddler/booster seats or booster seats.

3. Older vehicles are often incompatible with proper use of booster or combination toddler/booster seats:

Older vehicles are likely to be equipped with vehicle rear-center belt systems, which do not permit correct use of booster seats or combination toddler/booster seats in booster seat mode.

Recommendation: We would like NHTSA to urge child restraint manufacturers to produce seats with internal harness systems for children over 40 pounds. Those seats should be adequately secured with the vehicle lap belt only.

4. Shield booster seats should be evaluated to determine if they meet safety standards under FMVSS 213 of children in the appropriate weight and size for which they were designed:

Guidelines from the American Academy of Pediatrics recommend against shield boosters for children under 40 pounds (18 kg). In addition, changes to FMVSS 213 that require testing with a 6-year-size dummy effective September 1996 have made it

virtually impossible to reliably meet both its head excursion and acceleration criteria in order to certify a shield booster for children over 40 pounds.

All current models of shield booster seats are labeled as usable with children up to 40 pounds due to the changes in FMVSS 213 in 1996.

However, the **NHTSA Standardized Child Passenger Safety Training Program** manual (Spring 2001 Edition) states that no current models of shield booster seats pass head excursion requirements with the 6-year dummy. Currently, there are no circumstances where best practice recommends the use of a shield booster in a vehicle seating position that contains a lap/shoulder belt. Other organizations also recommend against shield boosters at this time.

Recommendation: Consumers Union recommends that NHTSA assess the safety of shield booster seats for children up to 40 pounds (Testing for safety of children over 40 pounds shouldn't be necessary since changes to FMVSS 213 that require testing with a 6-year-size dummy effective September 1996 have made it virtually impossible to reliably meet both its head excursion and acceleration criteria in order to certify a shield booster) and adjust the standard to eliminate any gaps in protection.

5. CU's test data recommendations:

Based on its laboratory crash test data, Consumers Union offers the following suggestions:

Recommendation: Include requirements in certification tests of combination toddler/booster seats and belt positioning boosters (BPBs) with dummies representing the smallest user through largest user, and the inclusion of the shoulder belt guide and each shoulder belt guide position. Test configurations should include the use of actual vehicle seat belt retractors and pre-tensioners where applicable.

6. Top tethers reduce injuries and should be required in using booster seats:

The use of top tethers has produced positive results in reducing head excursion in laboratory crash tests of front-facing seats. Currently, top tethers are not required for front-facing seats for children over 40 pounds. Manufacturers have not been consistent in their recommendations of tether use with booster seats or combination toddler/booster seats used in booster seat mode.

Recommendation: Consumers Union suggests that the top tether be required to be used in the booster seat mode of combination toddler/booster seats and that such seats be designed for use with top tethers.

7. Side Impact testing:

Currently, side-impact test requirements are not part of certification testing.

Recommendation: Consumers Union suggests that side-impact tests be developed and that booster seats or combination toddler/booster seats be tested for side-impact protection.

8. Convertible seat labeling:

Recommendation: Convertible seats should have a label that informs parents that once the child no longer fits the convertible seat, a BPB should be used.

9. Prevention of submarining:

Some seats permit a child in a BPB to partially sub-marine under the lap belt portion of the vehicle belt system during a crash.

Recommendation: Consumers Union suggests that a future standard include a requirement that limits the height of the belt track, i.e., the vertical clearance between the compressed seat pan to a horizontal line that represents the track of the lap belt portion. This is estimated to place the lap belt portion more appropriately over the upper thighs of a child. Based on laboratory crash tests, the suggested clearance should not exceed three inches.

October 17, 2001

Respectfully submitted,

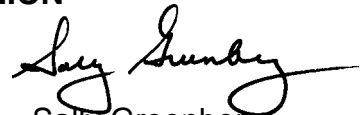
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