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# Center for Pet Safety 2015 Pet Travel Seat Pilot Summary Report

Sponsored by Subaru of America

Lindsey A. Wolko Center for Pet Safety

## Scope

In 2015 Center for Pet Safety conducted a pet travel seat pilot study, sponsored by Subaru of America, to determine general crash performance of these popular travel tools for the small dog. A pet travel seat is a portable seat for a companion animal that is typically used in a car to hold or elevate the pet, however it does not offer full containment. Various styles include booster seats, console booster seats and "crash tested" pet travel seats.

## Background

In 2013 Subaru of America was a project sponsor of the Center for Pet Safety Harness Crashworthiness Study that raised travel safety awareness around the globe. In 2015 Subaru once again signed on as a project sponsor to help Center for Pet Safety educate pet owners about travel crate and carrier safety. The pet travel seat pilot study is an extension of the crate and carrier studies, conducted in 2015 by Center for Pet Safety in response to numerous inquiries about the efficacy and safety of pet travel seats. This report details the results for the Pet Travel Seat Pilot Study.

The 2015 Crate Crashworthiness Study can be found here: http://www.centerforpetsafety.org/wp-content/uploads/2015/07/2015\_cps\_crate\_summary\_072215.pdf

The 2015 Carrier Crashworthiness Study can be found here: http://www.centerforpetsafety.org/wp-content/uploads/2015/07/2015\_cps\_carrier\_summary\_072215.pdf

#### Purpose

The purpose of the 2015 Pet Travel Seat Pilot Study is to independently evaluate the overall crashworthiness and general safety of current-state pet travel seat products, and their connection options. The brands selected for this study may or may not have made claims of "testing," "crash testing" or "crash protection".

Pet Travel Seats are touted by manufacturers to reduce driver distraction, which may help to prevent accidents. Many manufacturers believe it is critical for the pet to be elevated and have a view out of the vehicle to improve the travel experience for the pet. From previous studies, Center for Pet Safety has determined that proper pet passenger restraint design is critical for successful crash protection. Pet Travel Seats that are not structurally sound or have insufficient connection strength can directly affect the safety of the pet and place human vehicle occupants at risk of injury should a crash occur. Additionally restraint options for the pet (to anchor to the pet seat and/or vehicle) are examined in this study to determine safety for the pet in the event of a sudden stop or crash.



## About our Team

**Center for Pet Safety** – Center for Pet Safety (CPS) is a 501(c)(3) non-profit research and consumer advocacy organization dedicated to consumer and companion animal safety. Based in the Washington, D.C. Metropolitan area, the Center for Pet Safety's mission is to have an enduring, positive impact on the survivability, health, safety and well-being of companion animals and the consumer through scientific research and product testing. For additional information visit www.CenterforPetSafety.org.

Chris Sherwood, Biocore, LLC. – Chris Sherwood is a former senior research engineer for the Insurance Institute for Highway Safety (IIHS). He is currently employed by Biocore, LLC, a biomechanics consulting and research firm. Mr. Sherwood holds a Master's Degree in Biomechanics and has been actively involved in the research and development of automotive child safety standards. Mr. Sherwood brings his years of passenger safety expertise to the Center for Pet Safety as a passenger safety consultant. He is integral in the development of the CPS Test Protocols and Ratings Guidelines.

**MGA Research Corporation** – MGA Research Corporation, a National Highway Traffic Safety Administration (NHTSA) contracted test facility, located in Manassas, Virginia was hired to perform independent, third party testing of pet travel products. Center for Pet Safety Representatives were on-site to witness testing of all pet travel products.

#### **Test Methodology**

At the time of this study, there are currently no performance or dynamic testing standards for pet travel seats. Pet travel seat manufacturers may claim that they have crash tested their product, however, CPS has concerns about the strategic marketing of these products that may leave the consumer or their pet at risk should a crash occur.

#### Federal Motor Vehicle Safety Standard 213

Center for Pet Safety refers to the Federal Motor Vehicle Safety Standard (FMVSS) 213 crash conditions for child safety seats to establish our dynamic testing procedures for pet travel seats. These conditions include but are not limited to: test pulse, standardized test bench, excursion flags, and the LATCH attachment points.

Two of the pet travel seat manufacturers included in this study reference FMVSS 213 and illustrate those conditions on their websites, make comparison claims on product packaging or promote the testing of associated products (products used with the pet seat) meeting that standard. Therefore CPS feels that these crash conditions have been widely adopted by many manufacturers in the pet products industry and it is reasonable to test these pet travel seats using the crash condition of FMVSS 213.

Because this is an initial examination of pet travel seats, Center for Pet Safety has not yet developed the definition of a successful test outcome for these products.



# Product Selection for the 2015 Pet Travel Seat Pilot Study

- PupSaver (page 03)
- Snoozer Lookout (page 04)
- PetSmart Top Paw Booster Seat (page 05)
- Kurgo SkyBox Booster Seat (page 06)

## PupSaver (Test# V15394)

The following content was sourced directly from the PupSaver.com website:

"The PupSaver small dog safety seat has undergone a series of tests and has successfully contained a 25 Ib. occupant in a 30mph frontal crash test similar to that of FMVSS 213 for child seat testing! PupSaver is, to date, the only rear-facing small dog car seat with this testing credential"

"The PupSaver can be used in the front or back seat and with dogs up to 30 lbs. PupSaver attaches to the seatbelt system in your car using a 5 Point Attachment System. This secures the PupSaver (and your dog) in place and locks the unit into the optimal position for impact, in case of an accident or short stop. Think of it like a rear-facing infant carseat, because that is the style of protection that we tried to emulate when designing the PupSaver."

Test Simulant: The CPS 30 lb. Terrier Crash Test Dog was selected as the simulant for this test.

**Test Results**: The PupSaver rotated upon impact and the pet seat rolled onto its side. One anchor strap released due to a plastic buckle failure and the product sustained some tearing. The 30 lb. test dog remained connected via the collar and PupSaver Tether system.

The test dog in this test was ideally positioned, directly in line with the shoulder belt. This allowed the shoulder belt to carry the majority of the restraining forces because the dog was being loaded near its center of gravity.



If the dog was in other positions (moved laterally in either direction or laying down), the shoulder belt would not be directly loaded by the dog, and the restraining forces would be carried by the connection points on the PupSaver. Even with the ideal loading condition in this test, one of the lap belt connectors failed in the test.

In other dog seating positions, which result in more significant movement of the dog, the collar or walking harness would be loaded, and these are not designed for crash protection.

PupSaver instructions recommend that it be used in the front seat. This is not the safest location in the car for your pet, exposing them to a) airbag deployment, and b) occupant compartment intrusion in frontal crashes.

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#### Snoozer Lookout I Car Seat; Size Medium (Test # V15590)

The following content was sourced directly from the SnoozerPetProducts.com website:

"With a Lookout I Dog Car Seat, your dog or pet enjoys the best seat in the car. Made with a sherpa interior, the Lookout I Dog Car Seat from Snoozer is sure to provide a cozy and safe place. Available in a variety of colors, you find the perfect seat to match your car interior..."

*"Features: Comfortable foam form, Simulated lamb's wool interior, Connection strap included for the seat belt to join the harness, Available in a variety of fabric options."* 

**Test Simulant:** The CPS 25 lb. Terrier Crash Test Dog was selected as the simulant for this test. (The test dog was also secured to the test bench using a backup tether to protect the MGA Research Corporation's test equipment.)

**Test Results:** The Snoozer Lookout Car Seat was secured to the test bench. The 25 lb. Terrier Test Dog was secured (per manufacturer instructions) to the seatbelt system using the anchor strap included with the Snoozer Lookout Car Seat. The anchor strap was connected to a new walking harness. (Manufacturer does not specify the type of harness to use for travel, but only instructs the user not to connect to the dog's collar.)

Upon impact the anchor strap failed and the test dog was fully unrestrained. The Snoozer Car Seat rotated, while secured by the seatbelt system and the test dog rebounded off of the sled bench frame. At the end of the test, the test dog was located adjacent to the Snoozer Car Seat.







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#### PetSmart Top Paw Booster Seat (Test # V15591)

Observation: Upon close examination, Center for Pet Safety believes the PetSmart Top Paw Booster Seat is a private label of the Solvit Pet Products Pet Safety Seat (http://www.solvitproducts.com/page/products/pet-safety-seat) due to overall materials used and product construction.

The following content was sourced directly from the PetSmart.com website:

"Offer your pampered pup a luxury place to ride while on the move – perfect for the Pet Parent that stays on the go. The Top Paw Large Booster Seat is sure to provide a safe, soft, comfy place for your pet to ride without anxiety and in style! A PetSmart exclusive. Features: Elevated base frame

Includes: 1 Large Booster Seat, 1 safety tether Pet Size: Small and Medium Capacity: Fits dogs up to 30 lbs. Dimensions: 22 in L x 17 in W x 17 in H..."

"Caution: For pet and Pet Parent safety, always secure your dog in the rear seat of the vehicle. Never leave your dog in a vehicle unattended. This item is intended for dogs only, under close supervision. Check the tension of the booster seat regularly."

Test Simulant: The CPS 30 lb. Terrier Crash Test Dog was selected as the simulant for this test.

**Test Results:** The PetSmart Top Paw Booster Seat was secured to the test bench. The 30 lb. Terrier Test Dog was secured (per manufacturer instructions) to the anchor strap included with the PetSmart Top Paw Booster Seat. The anchor strap was connected to a new collar purchased from the retailer. (Image on the product box shows dog connected to the booster seat by the collar.)

Upon impact the wire connection hardware experienced significant deformation. At the time of impact the test dog was fully unrestrained. The Booster Seat remained fully restrained on the test bench.





# Kurgo Skybox Booster Seat (Test # V15901)

The following content was sourced directly from the Kurgo.com website:

"Give your pup his own comfortable car seat where he can see out the window and enjoy the ride. Our award-winning Skybox Booster Seat gets Fido off your lap where he could interfere with your driving and cause an accident. In the front or in the back, your pup is just a safe reach away. All too often we see those little pups riding in people's laps; happy, head out the window, tail wagging with excitement. But mini Fido in your lap is not safe for you OR him.

This dog car seat has a waterproof exterior with a padded, machine washable liner, making it easy to keep fresh and clean. It collapses for easy storage. It includes a tether that works with the Kurgo Tru-Fit Smart Harness to secure your pup.

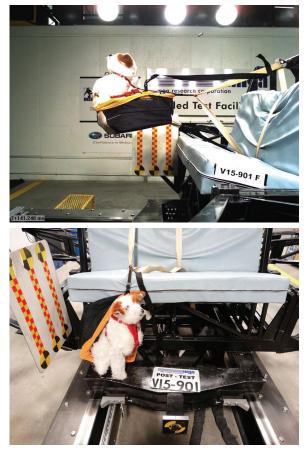
Take a load off while driving – and put him in his own special seat.

- Holds up to 30 lbs.
- Waterproof exterior
- Machine washable liner and reversible pad keeps seat fresh and clean
- Metal supports for structural integrity
- Collapsible for easy storage when not in use
- Installs quickly and securely on either the front or back of a bucket seat or the smaller side of a 60/40 split bench seat
- Adjustable dog seat belt tether easily attaches to any dog harness to keep your pup in his seat
- Recommended for use with the Kurgo Tru-Fit Smart Harness (sold separately)
- Dimensions: 12"D x 16"W x 8"H

**Test Results:** The CPS 30 lb. Terrier Crash Test Dog was selected as the simulant for this test.

**Test Results:** The Kurgo Skybox Booster Seat was secured to the test bench. The 30 lb. Terrier Test Dog was fitted with a size: Medium Kurgo Tru-Fit Smart Harness purchased from a local retailer. The test dog was secured to the Kurgo Skybox Booster Seat (per manufacturer instructions) to the anchor strap included with the Kurgo Skybox Booster Seat and to the seat belt.

Upon impact the seat connections failed and the Kurgo Skybox Booster Seat became a fully unrestrained projectile. The Skybox metal frame experienced significant deformation. The test dog remained connected to the Kurgo Skybox Booster Seat anchor strap and the Tru-Fit Smart Harness.





# Center for Pet Safety 2015 Pet Travel Seat Pilot Study Report Summary

Upon completion of scientific testing of Pet Travel Seats that may or may not claim "testing", "crash testing" or "crash protection" CPS has concluded the following:

- While the PupSaver prevented the test dog from being ejected in the frontal crash test, the product is <u>not recommended</u> by Center for Pet Safety for the following reasons:
  - The manufacturer's recommendation of placing the product in the front seat.
  - The manufacturer's recommended connection to the dog's collar or walking harness.
  - The risk of product performance variability based on the companion animal's position in the product.
  - The risk of connection failure in a crash from any other trajectory.
- A dog's collar or walking harness is not a suitable or safe connection option for any pet travel product and its use as a crash safety device places your pet at significant risk of injury or death in the event of a crash.
- Using a "crash tested" harness as a connection to a structurally unsound product or a product with ineffective connection options does not increase the safety of the pet or the safety of the human vehicle occupant.
- A Pet Travel Seat may offer distraction prevention, but it will not likely not offer crash protection.
- Smaller dogs in an elevated pet seat are at a greater risk of injury or ejection in the case of a crash than a small dog in a 2015 Top Performing Carrier.
- Pet Travel Seat manufacturers need to improve product quality and complete ample product testing to ensure both human and pet passenger safety.

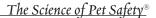
# Based on the Center for Pet Safety collection of scientific test evidence (2011 – 2015), the safest travel options for pets:

Center for Pet Safety recommends that small dogs and cats travel in one of the 2015 Top Performing Carriers. Larger Dogs should travel in a 2015 Top Performing Crate, or in a Center for Pet Safety Certified Harness.

The 2015 Crate Crashworthiness Study can be found here: http://www.centerforpetsafety.org/wp-content/uploads/2015/07/2015\_cps\_crate\_summary\_072215.pdf

The 2015 Carrier Crashworthiness Study can be found here: http://www.centerforpetsafety.org/wp-content/uploads/2015/07/2015\_cps\_carrier\_summary\_072215.pdf

Center for Pet Safety Certified: http://www.centerforpetsafety.org/cps-certified





# About the Sponsor: Subaru of America

Center for Pet Safety is grateful to Subaru of America for their sponsorship of this important effort to educate pet owners on pet passenger safety and select the top performing crates on the market.

## **About Center for Pet Safety**

Center for Pet Safety (CPS) is a registered 501(c)(3) non-profit research and advocacy organization dedicated to companion animal and consumer safety. Our mission is to have an enduring, positive impact on the survivability, health, safety and well-being of companion animals and the consumer through scientific research and product testing.

CPS is an independent safety science entity leading a unique mission for companion animals and their owners. Through the scientific study of pet products, we establish criteria to ensure acceptable product performance.

- CPS does not use live animals in our crash testing.
- CPS is not affiliated with the pet products industry.
- CPS does not endorse products.



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# **Revision History**

Date:	Revision:	By:
100715	Removed Side Impact Investigative Test (Test # M15010)	CPS



# Appendix

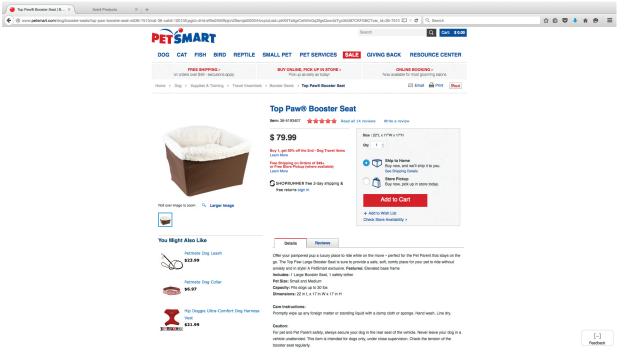
## Solvit Pet Products Pet Safety Seat

http://www.solvitproducts.com/page/products/pet-safety-seat



#### PetSmart Top Paw Booster Seat

http://www.petsmart.com/dog/booster-seats/top-paw-booster-seatzid36-7510/cat-36-catid-100135?var\_id=36-7510&\_t=pfm%3Dcategory



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