SAFE SKIES: YOUR ULTIMATE GUIDE TO

CHILD PASSENGER SAFETY IN THE AIR

by
Lia Tuso
CPST, CPSAC, STAC

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ABOUT

The Author

Lia Tuso is a nationally certified Child Passenger Safety Technician (aka car seat fitter) in the United States , Canada, Australia and the UK. Additionally, she has specialized training in Safe Transport for All Children (STAC). As a frequent traveler and toddler mom, Lia is passionate about promoting safe air travel for children. She collaborates with the Federal Aviation Administration to provide reliable, up-to-date guidance on child safety and accessibility practices in aviation.

Lia's mission is to empower caregivers with the knowledge and confidence they need to ensure their children's safety during air travel.

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TO BEGIN...

Who Should Fly in a CRS?

A Child Restraint System (CRS) on an aircraft is essential for ensuring the safety of young passengers. Here's who should use a CRS on an aircraft:

- *Infants (Under 2 Years Old):*
  - Infants, especially those under 2 years old, should use a rear-facing CRS while occupying their own seat.

- *Toddlers and Children:*
  - Toddlers and Children under age 7 and approximately 49 inches tall should use a CRS secured in the airplane seat in accordance with the manufacturer's instructions that is appropriate for their weight and size. If your child is over 49" and requires a car seat at your destination, you may consider using it onboard, as it's the safest way to transport it.

- *Children with Special Needs:*
  - Special Considerations: Children with medical conditions may require a CRS for their safe travel, regardless of their age. These systems can provide additional support to the user in an upright position tailored to their specific needs.

Using a CRS for these categories of children ensures that they have the highest level of protection available during air travel, aligning with the safety recommendations of aviation authorities and child safety experts.

The safest place for your child under the age of two on a U.S. airplane is in approved child restraint system (CRS) or device, not in your lap. (FAA)

BUT WHY SHOULD WE USE A

Car Seat?

IT IS THE SAFEST WAY FOR CHILDREN TO FLY

The safest place for your child under the age of two on a U.S. airplane is in approved child restraint system (CRS) or device, not in your lap. (FAA).

1. Safety During the Flight
The Federal Aviation Administration (FAA) strongly recommends the use of a CRS for children on aircraft. This recommendation underscores that a CRS provides a secure, dedicated space for the child, significantly reducing the risk of injury during turbulence, runway emergencies, or accidents.

2. Safest Way to Transport Your Car Seat
The safest way to ensure the safety and integrity of your car seat is by transporting it in the aircraft cabin, instead of as a piece of checked luggage, and using it as intended. When you check a car seat, it may be exposed to damaging conditions. Use it in the car on the way to the airport, on the plane and in the car at your destination.

3. Comfort & Convenience
Your child will likely be more comfortable in a familiar environment. Additionally, having the CRS onboard ensures your child is properly restrained during the flight, offering peace of mind and a smoother travel experience for the whole family.

BUT WHY ARE THEY ALLOWED?

THE REALITY OF

In-Lap Infants

In-lap (lap-held) infants (children under two years old who sit on an adult's lap during the flight) are not a safe option. Every researched aviation agency, including the FAA and International Civil Aviation Organization concludes with the same result: holding an infant in yours or on your lap poses significant risk for severe injuries.

You're probably wondering "If we know it's not safe - why do they allow it?"

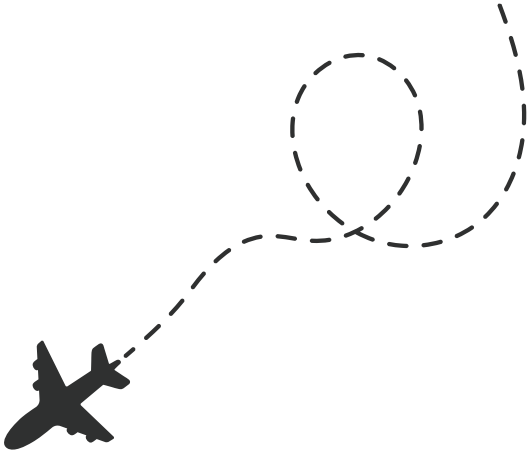
Airlines allow in-lap infants (children under two years old who sit on an adult's lap during the flight) to fly for free. Early regulations allowed lap children, and the cost analysis doesn't support the regulatory change. For instance, if airlines required every passenger to pay for an occupied seat, it increases the price per family (the targeted audience). Price affects consumer decisions, and an increase in the price of a flight might lead families to drive which has an increased risk for injury.

Flexibility and Convenience

The policy of allowing in-lap infants provides flexibility and convenience to families, making air travel more accessible. The flexibility allows parents to make decisions based on their individual needs and financial situations.

The FAA has conducted cost-benefit analyses to assess the implications of requiring all children under two to occupy their own seat. The findings highlight the financial impact on families and the potential unintended consequences. According to the FAA's analysis:

- *Financial Burden*: Requiring a separate seat for every infant could significantly increase travel costs for families, potentially leading to fewer families being able to afford air travel.
- *Alternative Travel Risks*: The FAA considered that if air travel became too expensive, some families might choose to drive long distances instead. Statistically, vehicle travel presents a higher risk of injury and fatalities compared to air travel. Therefore, mandating separate seats for infants under two might inadvertently lead to higher overall transportation injuries or death.



“There is a definite hazard inherent in air travel by infants and young children without proper restraint.” (FAA)

Safety Trade-Off

The analysis weighs the relatively low risk of air travel with in-lap infants against the potential increase in risk from increased road travel. The FAA concluded that the overall risk of injury or fatality might increase if families opted to drive rather than fly due to higher costs associated with requiring every passenger to occupy their own seat on planes.

B ISN'T JUST

For Baby

BABY WEARING, BOOSTERS, BEDS, BASSINETS & BELLY BELT LOOPS

Caregivers should understand that certified Child Restraint Systems (CRS) are rigorously tested for safety in various crash scenarios and are designed to protect children during travel. These systems meet strict government standards and are specifically built to withstand forces experienced in motor vehicle or aircraft accidents. In contrast, items like baby wraps, slings, booster seats or carriers are not subjected to the same testing and are not approved for use during critical flight phases, such as taxi, takeoff, and landing. Using untested items like baby wraps can increase the risk of injury, as they lack the structural integrity and restraint systems required to keep a child safe in the event of turbulence or an emergency.

Babywearing is not permitted during take-off, taxi, and landing for this reason. If you are using a baby carrier onboard the aircraft, you should be prepared for the Flight Attendant to request you remove your child from it (although this policy is not always enforced).

Some caregivers will opt to bring a comfort bed on the flight. These are typically inflatable devices, or seat extensions that allow a child the ability to lay horizontally on the aircraft seat. Because of the safety risks involved, some airlines do not permit their use ever. When children are laying horizontally, the aircraft seatbelt is placed across their chest or under their armpits. If the aircraft seatbelt is not worn correctly, it cannot perform as intended.

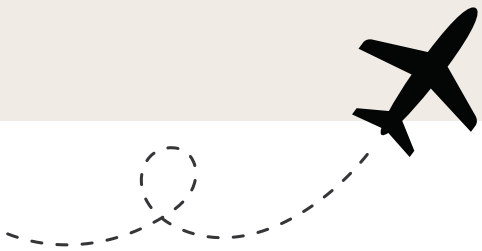
B ISN'T JUST

For Baby

BABY WEARING, BOOSTERS, BEDS, BASSINETS & BELLY BELT LOOPS

Oftentimes, long-haul flights will have a bassinet available for your infant. Usually, the bassinet is reserved at the time of booking, or by calling the airline ahead of your travels. While they're a great option for comfort, they are not Child Restraint Devices. They must be stowed during take-off, taxi, and landing (European Union Aviation Safety Agency). Flight attendants will also ask you to remove your child from the bassinet during turbulence. There are also age and size restrictions for using the bassinet, so if you're considering reserving one for your upcoming travels - be sure to check your airlines website for details. I've put a list of popular airline bassinet policies here.

You may be exposed to Supplementary Loop Belts (aka Belly Belt Loops) on international airlines. It's important to know that neither the FAA nor Transport Canada permit the use of supplementary loop belts (belly belts) onboard their aircrafts. "When used on an infant, the loop belt rests entirely within the infant's abdominal region, which will likely result in severe internal injuries in an accident. In an accident, the infant acts as an energy absorbing element for the adult's body, which performs a jack-knife movement over the infant. While the impact loads are reduced for the adult, the load on the infant is further increased due to the crushing forces from the adult torso" (FAA). The FAA and Transport Canada recommend the use of an approved child restraint system, which provides the best protection for the infant or child and minimizes the effects of unanticipated turbulence



“We recommend a worldwide harmonisation regarding the following core statement(s)... All passengers, including infants, obtain a seat of their own.”

-INTERNATIONAL CIVIL AVIATION ORGANIZATION

RESOURCES FOR

Research & Data

Helpful and reliable resources for more information.

01

INTERNATIONAL CIVIL AVIATION INDUSTRY

This study on Child Restraint Systems was carried out by TÜV Rheinland Kraftfahrt GmbH, Team Aviation, by order of the European Aviation Safety Agency (EASA). This study addresses injuries caused by turbulence, aborted take-off, hard landings and/or in emergency landing conditions, of children, particularly those 2 or less years old (infants), on board aircraft used for commercial transport of passengers.

Read More ›

02

FEDERAL AVIATION ADMINISTRATION

“Let me be clear, the FAA does not consider lap-infants to be safe should an accident or severe turbulence occur. We agree that the safest place for children is in their own aircraft seat with their own approved CRS.” - Cabin Safety Inspector Catherine Burnett

Read More ›

03

THE AMERICAN ACADEMY OF PEDIATRICS

"If there is turbulence, or worse, it may not be physically possible to protect your baby in your arms. Turbulence is the number one cause of children's injuries on an airplane." - AAP

Read More >

04

NATIONAL TRANSPORTATION SAFETY BOARD

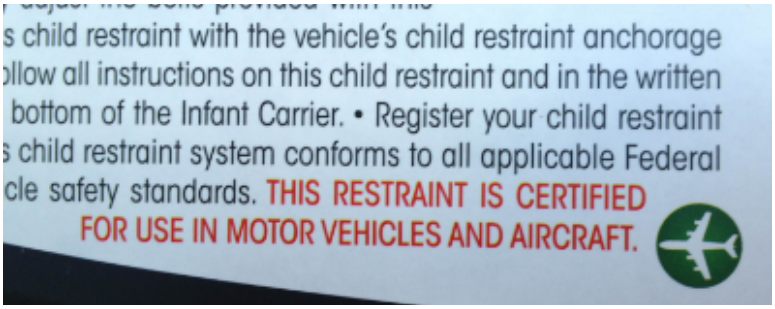
"The NTSB promotes child occupant safety in all modes of transportation with a focus on educating parents and caregivers about ways to keep children safe when traveling."

Read More >

It's important to get your information from reliable sources. Visit the FAA about air travel or consult a Child Passenger Safety Technician.

NAVIGATING

Logistical Complications



Finding the Approval Label

It's important to identify the approval label on your car seat before you fly. Be prepared to locate it should you be asked. When using an FMVSS213 car seat, the labeling must include the text "This child restraint system conforms to all applicable Federal Motor Vehicle Safety Standards" and "This Restraint is Certified for Use in Motor Vehicles and Aircraft," in red lettering.

Flight Attendants

Flight attendants may not always be familiar with the best practices for installing car seats on airplanes. It's important to review airlines policies about the use of a car seat before you fly and watch the FAA's videos to learn how to secure a CRS in an airplane seat. You should also review your car seat manual to confirm your CRS can be properly secured in an airplane seat. If possible, bring your car seat manual (electronically or in paper form) so you can refer to it if you or others have questions.

Aircraft Seat Restrictions

Some aircraft seat configurations, such as those in exit rows, forward and aft of exit rows, and some premium class seats may not accommodate car seats. Check with the airline ahead of time to ensure you can use your car seat in the seat you've booked.

NAVIGATING

Logistical Complications Continued...

Oversold Flights

In the event of an oversold flight, an airline cannot force you to hold your child in-lap when you've paid for a seat (and have an approved car seat). They can, however, place your child on the involuntary deny boarding list. The involuntary denied boarding list refers to situations where passengers are bumped from an overbooked flight against their will, typically when the airline sells more tickets than there are seats available. Caregivers, especially those traveling with children, should visit the U.S. Department of Transportation (DOT) Consumer Protection website for more details on their rights and options in such situations.

Single Caregiver Traveling with Multiple Children

Traveling alone with multiple children can be daunting. Plan ahead by requesting assistance from the airline and using strategies like babywearing or portable car seat carts through the airport. Practice your luggage set-up at home, to find a comfortable configuration before you travel.

DID YOU KNOW?

Air carriers must make available on their website the width of the narrowest and widest passenger seats in each class of service for each airplane make, model and series of aircraft they operate. This provides information so you will know if your CRS will fit in an airplane seat.

THE COMPLEXITIES OF

International Travel

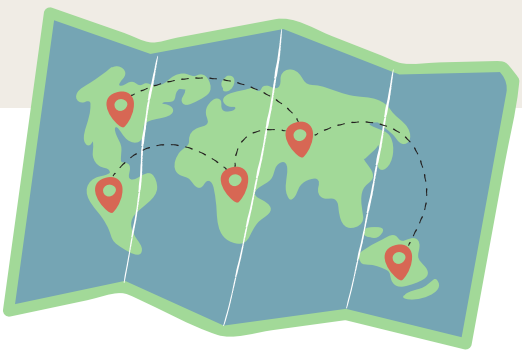
Traveling internationally with young children requires a lot of planning, and one of the most daunting aspects can be the logistics of car seats. Countries have different regulations and safety standards, and navigating these can be tricky.

When traveling to different countries, it's important to know that car seat laws and standards vary widely. For example, Europe uses the ECE R44/04 or R129 regulations, while the U.S. follows the FMVSS 213 standard. This means that your car seat may not be legally accepted in other countries. Despite having the same brand names, (like Doona and Joie for example) there are currently no American and/or Canadian car seats that are legal for use in the UK and EU. On the contrary, countries like Malaysia, Chile, Singapore and Mexico may recognize FMVSS 213 car seats. Given the complexities of global car seat laws, I encourage you to speak with a Child Passenger Safety Technician if you have questions related to your travels.

The reality is that our industry of Child Passenger Safety Technicians has not seen a single documented case of someone being ticketed or fined for using a foreign car seat while traveling. This isn't to say that it has never happened or won't happen in the future, but rather to reassure you that the chances of being fined are quite low.

Despite its illegality, using your own seat may sometimes be the safest and most reliable option. Renting a foreign car seat is generally not recommended, as an unfamiliar installation may the risk of misuse.

Some argue that using a foreign seat could void your insurance, but that would require both getting into an accident and someone disclosing the use of the foreign seat to your insurance. Ultimately, in the event of an accident, you would want a seat you trust and know how to install correctly to protect your child. I encourage you to speak with a Child Passenger Safety Technician before you travel to discuss these international logistics.



THE COMPLEXITIES OF

International Travel

Airline policies on car seats can vary significantly depending on the carrier and the country of travel. While many airlines, including international carriers, allow FAA-accepted car seats and the FAA CARES Harness onboard, some prohibit the use of Child Restraint Systems (CRS) entirely. In addition, certain airlines have restrictions on rear-facing car seats, with some allowing them only in specific seating classes or rows, or not at all.

To avoid any surprises, always verify the car seat policies of your airline ahead of time. Most airlines provide detailed guidelines on their websites, but some require you to call customer service to get your car seat approved for use during the flight.

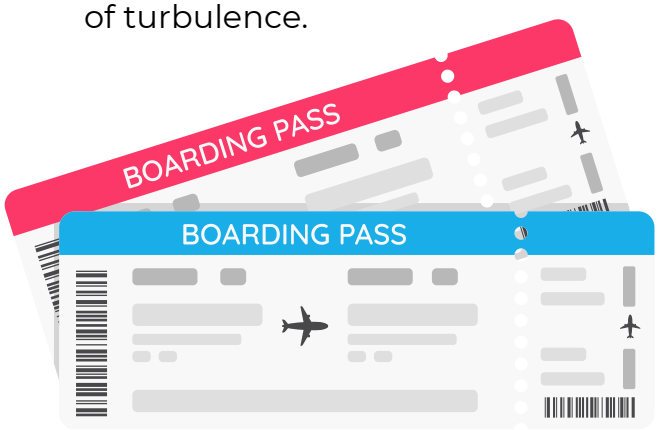
Many airlines only permit car seats if you've purchased a separate seat for your child, so it's essential to book an additional seat if you plan to use a CRS. By confirming these details in advance, you can ensure a smoother and safer journey for your child.

I've put together a list of popular airlines that have rear-facing car seat restrictions or limitations, click here to read more.

LET'S TALK ABOUT

Turbulence

The increase in turbulence experienced during flights is largely attributed to climate change. Research indicates that severe turbulence has increased by as much as 55% from 1979 to 2020. This surge is primarily due to the rising temperatures in the atmosphere, which intensify wind shear—a sudden change in wind speed or direction over a short distance—especially at cruising altitudes. Climate change has also been linked to the strengthening of jet streams, further contributing to the frequency and severity of turbulence.



It's not just a media trend, research shows it is increasing.

Projections suggest that incidents of clear-air turbulence, which are harder for pilots to detect and avoid, could become four times more common by 2050 if current climate trends continue. These developments underscore the need for child restraint systems to ensure passenger safety. (Smithsonian Magazine) (Nature) (Phys.org).

QUOTE BY LIA TUSO

"Child safety should always be a top priority... even at 30,000 feet."

WHAT TO KNOW ABOUT

Checking a Car Seat

Checking a car seat is not recommended.

Simply put, there is no way to guarantee your seat will arrive without damage, or that it'll even arrive at all.

If you must check your car seat - ensure it is protected appropriately.

When flying with children, many parents opt to check their car seat, either at the ticket counter or at the gate. While this can be a convenient option to avoid lugging a bulky seat through the airport, it's important to consider the potential risks involved.

According to the Manufacturers Alliance for Child Passenger Safety (MACPS), a car seat that has been checked as luggage is not automatically considered compromised or the same as being in a crash. However, it's crucial to recognize that there is a possibility for damage during transport. Furthermore, a possibility it may not show up at baggage claim at all.

WHAT TO KNOW ABOUT

Checking a Car Seat

Unfortunately, some damage may be tough to noticeable but can affect the seat's ability to perform in the event of an accident.

What Can You Do?

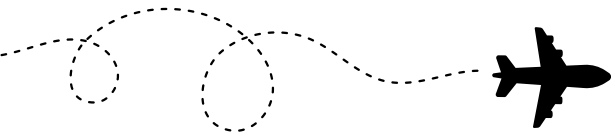
- **Consider Gate-Checking:** If you need to check your car seat, gate-checking is typically a safer option than checking it with your luggage.

- **Use a Protective Bag or Box:** Investing in a padded travel bag can help protect the car seat from external impacts. Many of these bags are designed with wheels, making it easier to transport your seat through the airport as well. Manufacturers may suggest checking your seat in the original cardboard box it was delivered or purchased in.

- **Inspect Your Car Seat After the Flight:** After retrieving your checked car seat, always inspect it for visible damage. If you notice any cracks, stress marks, or other signs of damage, contact your manufacturer to discuss if a replacement is needed.

- **Whenever Possible, Use the Car Seat Onboard:** Using your car seat on the plane is the safest way to ensure its integrity throughout the journey. Not only does this eliminate the possibility of damage during baggage handling, but it also provides your child with a safer way to travel in the air.

While checking a car seat might not be considered the same as crash exposure, understanding the risks and taking protective steps can help ensure that your child's seat remains safe and effective for use after travel.



THE 411 ON

Renting Car Seats

Renting car seats is also not recommended for the following reasons:

- they're typically not cleaned according to the manufacturer guidelines
- they may be missing pieces including inserts
- you do not know the crash history
- you may be given a car seat not suitable for your child's age/weight/height (i.e. given a booster seat for an infant)
- unfamiliar seats pose a higher risk for misuse and incorrect installation
- renting may actually be more expensive than some car seats

SHOULD I RENT A CAR SEAT?

Caregivers should avoid renting car seats. But, if renting is the only option, sourcing from a Rental company that employs a CPST versus a car rental company is typically the better choice.

HOW TO GET FROM

Point A to Point B

Here are the three most common ways caregivers can transport their car seat during travel.

1. The Stroller Method

Notably the most convenient method, Infant carriers can click right into compatible strollers. When your little transitions to a convertible seat, you may consider using bungee cords or carabiner clips to attach your car seat to your stroller.

2. The Bag Method

You can grab a backpack style bag off Amazon, a luggage bag with wheels...or the manufacturer bag.

3. The Dolly Method

This method is great for heavier car seats.

WHAT TO KNOW ABOUT THE FAA

CARES HARNESS

The CARES Harness is the only FAA Approved harness and is manufactured by AmSafe, Inc.

For children who weigh 22-44lbs and under 40inches

The CARES harness works by securing around the airplane seat and then attaching to the aircraft's seatbelt. It does not affect the tray table or TV screen of the passenger behind you.

While the CARES harness offers significant convenience, it's important to note that it is not a substitute for a car seat in vehicles. Parents still need a car seat for ground travel at their destination.

Additionally, the CARES harness does not fit children appropriately until they're closer to the 44lb maximum. You may use a thin rubber shelf liner or yoga mat to help prevent your child from slipping underneath the harness.

Oftentimes, the CARES Harness is outgrown by height before weight, meaning caregivers will need to switch back to using a car seat on the aircraft.

POPULAR (BUT NOT ALL)

FAA Accepted Infant Car Seats

DOONA

Infant height: up to 32 in / 81.3 cm

Infant weight: 4 - 35 lbs / 1.8 -15.8 kg

Product Weight: Approximately 17.2lbs

NUNA PIPA URBN

Infant Height: up to 29 inches

Infant Weight: 4-22lbs

Total Weight: Approximately 9 lbs

EVENFLO SHYFT DUALRIDE

Infant Height: 15.7 - 32.0 in

Infant Weight 3.0 - 35.0 lbs

Product Weight: Approximately 20lbs with stroller

Some of the links above are affiliate links, meaning I may earn a commission if you make a purchase, at no extra cost to you.

POPULAR (BUT NOT ALL)

FAA Accepted Convertible Car Seats

COSCO SCENERA EXTEND

Child Weight: 5-40lbs RF / 30-50lbs FF

Child Height: 19-40 inches RF / 34.4-44 inches FF

Product Weight: Approximately 7lbs

MAXI COSI ROMI

Child Weight: 5-40lbs RF / 30-50lbs FF

Child Height: 19-40 inches RF / 34.4-44 inches FF

Product Weight: Approximately 9lbs

GRACO CONTENDER

Child Weight: 5-40lbs RF / 26.5-65lbs FF

Child Height: head must be at least 1" below headrest adjustment handle RF / 49inches FF

Product Weight: Approximately 16lbs

Some of the links above are affiliate links, meaning I may earn a commission if you make a purchase, at no extra cost to you.

POPULAR (BUT NOT ALL)

FAA Accepted Forward-Facing Car Seats

COSCO FINALE

Child Weight: 30-65lbs

Child Height: 32-49 inches

Product Weight: Approximately 7lbs

Converts to booster: YES

WAYB PICO

Child Weight: 22-50lbs

Child Height: 30-45 inches

Product Weight: Approximately 8lbs

Converts to booster: NO

SAFETY 1ST COMFORT RIDE

Child Weight: 30-65lbs

Child Height: 34-49 inches

Product Weight: Approximately 12lbs

Converts to booster: YES

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MORE GOOD THINGS

Freebies for you!

GET MY FREE PACKING LIST!

Traveling with baby is stressful! Packing doesn't have to be. Use my list as a guide for your next trip. CLICK HERE

SHOP MY FAVORITE TRAVEL PRODUCTS!

All my favorites in one place! Find everything you need to travel with your child on my Amazon and LTK accounts! CLICK HERE

KNOW BEFORE YOU GO!

Read about family seating policies, the boarding process, bassinet measurements and much more on my website! CLICK HERE

THANK YOU

Wishing you Happy and Safe Travels

xoxo, Lia

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