

# Carry kids safely

Best Buy and Don't Buy child car seats, plus how good is the fitting advice parents get?

**W**hich? has campaigned hard to improve safety for children travelling in cars and there have in the past few years been signs of improvement.

Some companies have begun to use our rigorous tests as the standard when designing child car seats.

And nearly three years ago, it became illegal for under-12s to travel without a child seat appropriate to their height and weight.

## Safety standard still too low

However, the basic standard for a child seat to go on sale in the EU is still too low, meaning that parents may buy a seat that offers inadequate protection in a crash. The standard doesn't require a seat to be tested for what happens to it if a car is hit from the side.

## Better advice

We also think that parents should be able to get better advice on whether a child

seat is suitable for their car and how to correctly fit it. Some shops will give help and you should be able to get advice on correctly installing a seat from your local council's highways department, trading standards or traffic police.

However, we know of just three areas in England where parents can get the full services of a Child Car Seat Centre, including regular drop-in days giving advice on buying and using seats.

The only Child Car Seat Centres we know of are: Wigan in Lancashire, Bromley in Kent and Rayleigh in Essex. The last two also run training programmes for shops that sell child car seats.

## Which? says

Very few UK parents can currently get guaranteed, professional fitting advice. We want to see far more councils follow the example of forward-thinking Bromley, Rayleigh and Wigan.

We want to see a nationally recognised training standard for shops that sell child car seats – to whom most parents have to turn for vital buying advice.

## Best Buys

In this article, we show our latest tested seats plus top-rated currently available seats in each weight group. There are also two Don't Buy seats that we recommend you avoid.

And don't forget that full results for all 68 available seats that we've tested are shown at [www.which.co.uk/childseats](http://www.which.co.uk/childseats).



## Q&A Are children safer due to the new rules?

### How Essex police are enforcing the new safety law

Since 2006, all children under 12 and less than 135cm tall, must ride in a child seat that suits their size and weight – or else the parents can be fined or face prosecution.

Finding out how effective these changes have been isn't easy as police forces across the country monitor it in different ways.

We spoke to Adam Pipe, Casualty Reduction & Operational Performance Manager, Essex Police, to find how they enforce it.

### Q Has the change of rules improved things?

**A** The change has raised the awareness of child safety in cars. At first, parents were confused and we worked with highway agencies to educate drivers at the roadside. To be fair, I'd say our own officers are perhaps still on a learning curve with regards to the law changes.

### Q Can you quantify the changes/improvements?

**A** Essex child casualty figures have declined since 2006 (see table, right). Much of this has

been down to an increased emphasis on road safety by Essex Police and increased exercises such as roadside checks involving county council safety officers engaging with a far higher number of drivers than previously.

### Q What has your approach been to policing the issue?

**A** It has been very much about education and advice as opposed to prosecution. We and our partners are keen to further this approach. Our schools officers are often asked by parents to clarify the law.

### Child safety figures in Essex

	2006	2007	2008
Children (0-15yrs) killed or seriously injured	95	94	60
Fines for children (under 3) not wearing a seat belt <sup>a</sup>	65	56	72
Fines for children (over 3 but under 14) not wearing a seat belt <sup>a</sup>	0	1	56

<sup>a</sup> Driver received a £30 fixed penalty notice



## ROOM FOR FIVE?

**Samantha Cassidy**

Essex Child Car Seat Centre in Rayleigh, runs twice-weekly open advice sessions. When we visited, we found Samantha Cassidy looking for advice on how to carry her five young children safely in the family car, a Volvo XC90.

Samantha has two-year-old twin girls, five-and-a-half-year-old twins – a boy and a girl – and a son aged eight. The younger twins, Libby and Gracie, ride in Group 1 Maxi Cosi Priori seats. The older twins, Daisy-Mae and Max, use Group 2/3 Graco Junior boosters.

Samantha told the advisers her eight-year-old, Alfie, is taller than the 1.35m legal limit and so uses the adult seat belt.

The advisers found that the Maxi Cosi seats fitted satisfactorily only in the middle row, but the Graco seats fitted snugly on the rearmost seats. They advised her to re-fit the high seat-backs to the Graco seats. She had been using them without, which would give no protection in a side crash. Samantha said she would, as soon as she got home.

**The best solution**

Samantha should fold the middle row, middle seat down to give access to the third row. The Graco seats can be placed in the third row, so the older twins can get in through the gap in the middle row. The younger twins' seats fitted in the middle row outer seats, with easy reach for Mum to get them strapped in. When it's just Mum and the kids, Alfie, Samantha's eldest son, can travel in the front, though the centre advises the passenger seat should be placed in its rearmost position in this case.

**Crash video**

See the difference in protection offered by a booster and a high-back booster at [www.which.co.uk/childseattest](http://www.which.co.uk/childseattest).

Our multi-agency road checks have enabled a higher degree of intervention from police and road safety officers providing roadside checks.

**Q** What is the standard procedure when you find someone breaking the rules?

**A** A fixed penalty (£30) non-endorsable ticket (that is, no points on the driver's licence).

**Q** What has been learned from the changes brought about by the 'new' 2006 rules?

**A** The new legislation has reinforced our understanding that children are all too often left vulnerable through the inaction of others. Most parents make a conscious effort around the safety of their children and are genuinely interested in finding out more in order to comply with legislation.

**Q** Where do you think we should go from here?

**A** I'd like to see continued efforts promoting the legislation both locally and nationally and a higher profile

on general in-car safety and the protection of all occupants, including adults.

All too often we see people thrown from vehicles involved in a collision because they aren't wearing a seat belt.

There's still a hardcore of people who fail to recognise the risks they expose themselves to should they be involved in a crash.

Perhaps consideration should be given to increased penalties around the wearing of seat belts.





A still from our crash test video showing the Renolux 360° child car seat in a front crash

# Child seats tested

**W**hich? runs the only independent comparative crash test of child car seats in the UK. We regularly find big differences in how safe they are. We have tested 15 new seats and show here how they compare against the previous best seats for different sizes of children.

We've found one new Best Buy, from Mamas and Papas, and other seats that performed well. However, there are also two Don't Buys.

## WEIGHT GROUPS EXPLAINED

**GROUP 0** 0-10kg (from birth to about nine months)

**GROUP 0+** 0-13kg (from birth to about 12 months)

**GROUP 1** 9-18kg (about nine months to four years)

**GROUP 2** 15-25kg (about four to six years)

**GROUP 3** 22-36kg (about six to 12 years)

### GROUP 0 0-10kg (from birth to about nine months)

## 77% Britax Baby-Safe Sleeper £180

This is the first 'lie-flat' child restraint we've tested that protects the child well in a crash. The baby travels lying down (this cot doesn't offer a seated travelling position) and it's suitable for babies up to 10kg, so you'll need to buy another seat earlier than if you chose a Group 0+ seat.

All lie-flat devices we've tested previously have been tricky to install and have been Don't Buys. This one is still quite complicated compared with a

conventional seat but it has clear instructions and good warning labels, minimising the danger of it being fitted incorrectly.

The system sits across the rear seat of the car and is secured using the three-point seat belt. It offers five-star protection if the car is hit from the front or side.

The cover is easily removed and machine washed – useful in dealing with the normal spills and leaks you get with newborns.

**WE LIKE** The baby travels in a well-padded and comfortable restraint.



### GROUP 0+ 0-13kg (from birth to about 12 months)

## 82% Maxi Cosi Cabriofix with Easyfix base £185

When we first tested the Cabriofix in 2006 it was a Best Buy. We have since introduced tougher testing standards and have re-tested the seat. The result is that it still comes through as our top-scoring Group 0+ seat. Crash protection is excellent, the instructions are clear, it's easy to

install correctly and it's straightforward for you to strap the child into the seat.

However, the Cabriofix isn't a Best Buy when secured using seat belts. If you want a seat to use this way, visit [www.which.co.uk/childseats](http://www.which.co.uk/childseats) to find a model that is a Best Buy in both modes.

**WORTH KNOWING** This seat is a clear winner when fitted using Isofix, but it performs only adequately when secured with a seat belt.



## 75% Mamas & Papas Primo Viaggio Isofix £225

This Isofix seat is the first Best Buy in the Primo Viaggio range. It protects your child well in a crash and is quick and easy to install.

We've previously tested two versions of the Primo Viaggio IP. They are both secured using the adult seat belt (one with a base you click the seat in to and out of quickly and conveniently). They're

not bad, but they're not Best Buys. Adding Isofix mounts keeps the seat stable in accidents – front crash protection is excellent, and it's good in a side crash.

Good padding means that head- and leg-support are first rate. Buckling up is easy, but installing the seat in the car in the first place is trickier than some Isofix seats.

**WE FOUND** Parents with messy babies won't appreciate the 'handwash-only' seat cover.

**GROUP 1** 9-18kg (about nine months to four years)**78% Kiddy InfinityPro** £130

This seat carries the child facing forwards and is designed so that the adult seat belt feeds over and through a body shield which is designed to spread more evenly the loads transmitted to the child in a crash, so reducing potential injury.

Its front crash rating is good, with the child well protected from the risk of serious injury. It does even better in a crash from the side, where this seat scores top marks for protecting the child.

Only one other Group 1 seat we've tested does as well in a side-impact crash.

The InfinityPro is easy to fit, light and easy to handle. Feeding the seat belt over and through the seat's body shield is straightforward, as is buckling it up with the child in position. It has excellent padding, while leg and head support are very good. The seat cover is machine washable and the overall finish quality is sound.

**WE LIKE** The instructions are very clear and minimise the risk of it being fitted incorrectly.

**GROUP 2 and 3** 15-36kg (about four to 12 years)**77% Britax KidFix (Isofix)** £127

Whether you choose to secure this seat with the Isofix mounts or, if you don't have these, an adult seat belt, this model is a Best Buy.

It gives slightly better side crash protection in Isofix mode and is generally easier to use.

Another advantage of the Britax KidFix is that, as it is fitted to Isofix points, it's secured in

position even when it is unoccupied – so it won't be thrown around on the back seat when empty.

The seat belt version, the Kid Plus, isn't held to the car except when the belted child sits in it.

The KidFix is slightly heavier than the Britax Kid Plus (belted) version which makes it a little less convenient for moving between cars.

**WORTH KNOWING** We first tested this seat as the Evolva 2-3 Isofix. The name change hasn't affected its performance.

**HOW WE TEST**

We test what happens if a car is hit from the front at 40mph or the side at about 18mph. The legal standard uses much lower loads and doesn't test what happens to a seat if a car is hit from the side. We base our crash test standard on Euro NCAP which tests on behalf of European consumers and shows how well cars protect occupants in severe crashes. Our testing is similar for child seats as we feel they should have equal protection. We propel a Vauxhall Astra body down a track, stopping it sharply and filming the effects on a dummy in the seat. The dummy is wired to record crash loads on the head, neck, chest and pelvis to show the likely effect on a child.

**Ease of use**

The legal standard doesn't check how easy a seat is to use. We check instructions are clear and the seat's easy to install and adjust in a range of cars. A difficult-to-install seat is more likely to be fitted incorrectly.

**DON'T BUY GROUP 0+1****24% Renolux Next Confort** £150**20% Renolux 360°** £150

These two seats performed so poorly in our tests that we recommend you steer clear of them.

Both are combined Group 0+1, so they're for carrying children from birth to 13kg rearward-facing, or children weighing about 9kg to 18kg, facing forwards.

You can rotate the Renolux 360° from rear- to forward-facing without removing the seat, allowing you to easily position it while strapping the child in place. The trouble is, it offered woeful protection in our front crash test. The seat shell was thrown forward and twisted on its axis, and the child would have collided with the seat in front, had one been installed in our test car.

You can't rotate the Next Confort, but it protects pretty well when installed correctly – as good as the best in class in a front crash. But it's so complicated to install our testers think the risk of fitting it wrongly is too great. Renolux isn't well known in the UK, but one of its other seats won a 'Gold' award from *Mother and Baby* magazine.

**WORTH KNOWING** If you have either of these seats, remember that using any child seat is better than none.



Renolux Next Confort (top) and Renolux 360° seats are Don't Buys

# What are Isofix car seats?

If you have an Isofix car seat and Isofix mounts in your car, forget messing about with belts to secure the seat.

Isofix is the standard system for all new cars and child seat manufacturers. It's designed to make installing a child car seat easy. Parents worry about incorrect fitting: with Isofix just 'plug in' a compatible car seat to fixed mounting points.

Using Isofix is more secure than using a seat belt, so a child is less likely to be thrown clear of the seat in a crash.

## 2-POINT/3-POINT ISOFIX

Most modern cars have two fixing points, and many newer cars have three where the top tether attaches to a mount behind the rear seat to stop it tipping forward in a crash.

Two-point fixing is generally much better than using seat belts to secure a seat. Using three-point Isofix should work even better because it holds the child car seat even more securely. Some child seats provide resistance to the tipping movement by using an



extra support leg that mounts between the seat base and car floor. This works well on cars with a solid floor. You may not be able to use this type of seat if there is under-floor storage. Refer to car and seat manufacturers to see which seats can be used in your car.

## NEW TO THE UK

**Some well-known seats are in the shops under a new name**

The Besafe name is new to the UK, though it used to sell some seats under the Mamas & Papas badge.

It has had good success under its own name elsewhere in the EU and has launched its Besafe iZi range here. Some are improved versions of Mamas & Papas seats we've tested previously.

For example, the iZi UP scored 69%, just below being a Best Buy. Its predecessor, the Mamas & Papas Pro-Gro, scored just 46%. The difference is mainly in improved side crash performance.

MODEL	SPECIFICATION					WHICH? TEST				
	PRICE (£)	WEIGHT CAPACITY (KG)	BELTED (B) OR ISOFIX (I)	PART OF A TRAVEL SYSTEM	WEIGHT OF SEAT/BASE (KG)	FRONT CRASH	SIDE CRASH	OVERALL CRASH SAFETY	EASE OF USE/ COMFORT	AVOIDING INCORRECT INSTALLATION
CHILDREN BIRTH TO 13KG (GROUP 0 AND 0+)										
1 <b>MAXI COSI</b> Cabriofix	185	0-13	I	✓	3.5/8.7	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
2 <b>BRITAX</b> Baby Safe Sleeper	180	0-10	B	✓	6	★★★★★	★★★★★	★★★★★	★★★★	★★★★
3 <b>MAMAS &amp; PAPAS</b> Primo Viaggio Isofix	225	0-13	I	✓	5	★★★★★	★★★★★	★★★★★	★★★★	★★★★
4 <b>BESAFE</b> iZi Sleep (Isofix)	250	0-13	I	✓	6.0/7.0	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
5 <b>MUTSY</b> Traveller	72	0-10	B	✓	4	★★★★	★★	★★★	★★★	★★★
6 <b>COSATTO</b> Cabi	72	0-13	B	✓	4	★★★★	★★	★★★	★★★★	★★★★
CHILDREN UP TO 18KG (GROUP 0+ AND 1)										
7 <b>KIDDY</b> InfinityPro	130	9-18	B		5	★★★★	★★★★★	★★★★★	★★★★	★★★★★
8 <b>MAXI</b> Cosi Tobi	135	9-18	B		9	★★★★	★★★★★	★★★★★	★★★★★	★★★★★
9 <b>BRITAX</b> King Plus	176	9-18	B		11	★★★★	★★★★★	★★★★★	★★★★★	★★★★★
10 <b>BRITAX/VOLVO</b> Fixway (Rear-facing Isofix)	250	0-18	I		7.6/5.3	★★★★★	★★★★★	★★★★★	★★★★	★★★★
11 <b>MAXI COSI</b> AXISS	200	9-18	B		11	★★★★	★★★★	★★★★	★★★★★	★★★★★
12 <b>RECARO</b> Polaric (Rear-facing Isofix)	120	9-18	I		14	★★★★★	★★★★	★★★★★	★★★★	★★★★★
13 <b>RENOLUX</b> Next Comfort	150	0-18	B		10	★★★★★	★★★★★	★★★★★	★★★★	★★
14 <b>RENOLUX</b> 360°	150	0-18	B		11	★	★★★★★	★★	★★	★
CHILDREN 9 TO 36KG (GROUPS 1, 2 AND 3)										
15 <b>BRITAX</b> KidFix Isofix	127	15-36	I		8	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
16 <b>BESAFE</b> iZi UP	95	15-36	B		7	★★★★	★★★★★	★★★★★	★★★★★	★★★★★
17 <b>KIDDY</b> DiscoveryPro	115	15-36	B		7	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
18 <b>KIDDY</b> ComfortPro	175	9-36	B		7	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
19 <b>CHICCO</b> 2-3	90	15-36	B		5.3	★★★★	★★★★	★★★★	★★★★★	★★★★★



Besafe's other UK launch is the Group 0+ iZi Sleep – an Isofix seat which is again just below being a Best Buy, but offers great crash protection and is easy to use. It's the previous Mamas and Papas Pro Sleep IP.

Late last year, we reported on the InfinityPro, a Group 1 seat that was the first seat sold in the UK by German firm Kiddy and was a Best Buy. It's a brand that has sold in its home country for some time. It's launched two more – the Kiddy DiscoveryPro for children between 15 and 36kg (Group 2 and 3) and the ComfortPro which spans three weight groups (1, 2 and 3), for children 9-26kg. Both are pretty safe, but miss being Best Buys.



The iZi Sleep offers great protection and is easy to use

The iZi Up just missed being a Best Buy

## Contacts

**Besafe** 0844 557 2985  
www.gro.co.uk

**Britax** 01264 386027  
www.britax.co.uk

**Chicco** 01623 750870  
www.chicco.co.uk

**Cosatto** 0870 050 5900  
www.cosatto.com

**Kiddy** www.kiddy.de

**Mamas & Papas** 0845 268 2000  
www.mamasandpapas.co.uk

**Maxi Cosi** 0208 263 0707  
www.maxi-cosi.com

**Mutsy** 01509 816444  
www.babystyle.co.uk

**Recaro** 01926 484111  
www.recaro.com

**Renolux** 01902 494905  
www.renolux.co.uk

### OTHER USEFUL CONTACTS

**Bromley Borough Council Road Safety** 020 8313 4546  
www.bromley.gov.uk/transportandstreets/roadsafety

**Child Accident Prevention Trust** 0207 608 3828; www.capt.org.uk

**Child Car Seat Advice** 0121 248 2000  
www.childcarseats.org.uk

**Essex County Council 'Try before you buy' scheme** 01268 297593  
www.essexcc.gov.uk

**Rear Facing: The Way Forward** www.rearfacing.co.uk

**Royal Society for the Prevention of Accidents (ROSPA)** 0121 248 2000; www.rospa.com

**Wigan Road Safety Car Seat Centre** 01942 488250

PERFORMANCE				SCORE (%)
FITTING IN CAR	INSTRUCTIONS	COMFORT FOR CHILD	EASE OF CLEANING	
★★★★★	★★★★★	★★★★★	★★★★★	82
★★★★	★★★★	★★★★★	★★★★★	77
★★★★★	★★★★★	★★★★★	★★★★	75
★★★★★	★★★★★	★★★★★	★★★★★	67
★★★★	★★★★	★★★★★	★★★★	49
★★★★	★★★★★	★★★★★	★★★★★	45
★★★★★	★★★★★	★★★★★	★★★★★	78
★★★★★	★★★★★	★★★★★	★★★★	67
★★★★★	★★★★★	★★★★★	★★★★★	66
★★★★	★★★★★	★★★★	★★★★	59
★★★★	★★★★★	★★★★★	★★★★	59
★★★★	★★★★★	★★★★	★★★★★	59
★★★★	★★★★	★★★★★	★★★★	24
★★	★★★★	★★★★★	★★★★	20
★★★★★	★★★★★	★★★★★	★★★★★	77
★★★★★	★★★★★	★★★★★	★★★★★	69
★★★★★	★★★★★	★★★★★	★★★★★	68
★★★★★	★★★★★	★★★★★	★★★★★	67
★★★★★	★★★★★	★★★★★	★★★★	52

## COMING SOON

'There is no single child seat that fits all cars. Your best option is to buy at a shop that will 'test install' a seat to ensure it fits your car.' Want to find out more? *Baby and Toddler Essentials* is packed with 224 pages of advice on what to look out for in new and second-hand equipment.

To order at the special price of £9.99 including FREE p&p (RRP £10.99), call 01903 828557 and quote BEW0609. This offer will close on 20 June 2009.



### USING THE TABLE

We tested latest models from leading brands. The more stars the better.

### Specification

**Price For Best Buys**, we give the cheapest, widely available high-street price. If we couldn't find them at major high-street shops, we give the most common online price. However, we advise against buying a child car seat online, as this usually doesn't allow you to try out the seat first. Prices for other models are a guide. **Travel system** Can be used in conjunction with a pushchair or a pram and transferred to the car as required.

### Test performance

We consider all configurations the instructions recommend for each seat. We show scores for the worst-case mode of use for each seat. **Front crash/Side crash** We simulate crashes with forces used in Euro NCAP tests to reflect what happens in serious front and side crashes. **Overall crash safety** Includes seat design, head support and stability of the child seat in the car seat, as well as front and side crash performance. A front, side or overall crash score of one star limits the total test score a model can achieve. **Ease of use/comfort** Includes how easily the

belt threads through the seat and how easy it is to strap the child in securely. **Avoiding incorrect installation** We check how well designed the seat is to avoid inadvertent misuse. Incorrect installation will affect how well a seat performs in a crash. **Fitting in car** How easy it is to install and adjust the seat correctly in a car. **Instructions** How comprehensible and clear the instructions and labels are that come with each child car seat.

### Score

This ignores price and is based on:  
Safety 60%  
Ease of use 40%