

## Irish innovation tops baby crash test

A new Irish child suit has come out top in a child car seat crash test carried out in conjunction with Trinity College Dublin. Road deaths are the leading cause of child mortality in Ireland with road traffic collisions accounting for 36.7% of all child deaths. Two out of five children killed are passengers.

If correctly installed and used, child restraints reduce deaths among infants by approximately 70% and deaths among small children by between 54% and 80%



The Cosynest baby wrap, invented by Irish mother Christine Carolan, ensures a better connection between the child and the safety restraints of car seats compared with a conventional snow suit.

In high-speed crash tests carried out on the two products at the UK's Transport Research Laboratory in February, the Cosynest came out as the safest product.

In the case of the snow suit, one of the child restraints partly came off during the test, which greatly increases the risk of ejection. Both restraints remained in place with the Cosynest as the design ensures the restraints fit closer to the body as there is less fabric in between.

The crash test, funded by Enterprise Ireland with tailored conditions designed by Trinity College Dublin's School of Engineering, took place over 200 milliseconds.

Said Dr Ciaran Simms, TCD's Associate Professor Biomechanical Engineering, Trinity College Dublin: "We slightly modified the standard R129 crash test to take into account the fact that belts are often slack in real world use. Retaining the child in its car seat is crucial to the child's safety.

"If the child is ejected they risk severe neck and head injuries and are more likely to be hit by sharp objects, leading to a much more serious outcome. The Cosynest showed a better capacity to retain the child in the seat than a conventional snow suit."

Christine Carolan, a mother of two from Dublin, has been designing, refining and testing the Cosynest for over two years to ensure that it is of the highest quality and safe for babies.

Christine developed the Cosynest concept with her babies' safety in mind

"A jacket on a baby is bulky material. The car seat strap may seem snug on the baby, however in an accident this material compresses, making the gap between the baby and the car seat strap greater. Our Cosynest allows the car seat straps to be as snug and safe as possible, while keeping the child warm and cosy."

She added: "We've created prototype after prototype and last year we ran our first production run where we sold over 1,200 Cosynests throughout Ireland. We are delighted to say that Irish mums love the product and have even suggested some tweaks to our design."