

Should Adults Use Add-Ons to Adjust Safety Belt Positioning?

There are products on the market which claim to improve belt fit for pregnant women. With data from a study using pictograms, researchers found that only 3.5% of North American women were wearing their safety belts correctly during pregnancy. For many years, SafetyBeltSafe U.S.A. has had a brochure, in English or Spanish, Protect Your Baby Now...And Later, to address this. However, we turned to a long-time researcher, Suzanne Tylko of Transport Canada, to give technical support to our grave concern about adding products to safety belts to re-direct the location and potentially introduce slack in the belt in the event of a crash. We want to share the response we received with its picture of a real crash-test dummy.

“Thank you for your excellent question. We do not test any aftermarket product that will re-direct the vehicle lap belt into regions of the crash test dummy that cannot measure the risk of injury. All crash test dummies used in frontal and side impact crash testing have a pelvis that is moulded and fixed into an upright seated position.



The dummies are designed this way to increase the likelihood that the dummy will always be placed in a similar way. The downside of this good repeatability is that the pelvis will not behave like a human pelvis and cannot be used to detect possible injury to the major blood vessels that are present in this region in a human (i.e., femoral arteries).

Seatbelts, which form part of the restraint system are designed to work in combination with several other restraint features in the vehicle, including the pre-tensioners, the load limiters, the airbags and the seat itself. Any device that alters the path of the belt may therefore interfere with the performance of the restraint system.

It is important to remind people, whether pregnant or not, to always take a moment to check that the lap belt is tucked below the belly and snug.”