



Large study sheds light on infant deaths in sitting devices

by Alyson Sulaski Wyckoff, Associate Editor

Every year, several hundred infants fall victim to sleep-related deaths in sitting devices like car seats, bouncers or swings used improperly for routine sleep.

A 10-year study of 11,779 infant sleep-related deaths showed that 348 (3%) babies died in sitting devices, in most cases while in car seats. More than 90% of the time, the car seats were not being used as directed. The median age at death was 2 months.

The results are reported in "Infant Deaths in Sitting Devices," (Liaw P, et al. *Pediatrics*. May 20, 2019, <https://doi.org/10.1542/peds.2018-2576>).

About 3,700 infants die every year from sleep-related deaths, which include sudden infant death syndrome, accidental suffocation and strangulation in bed, and other ill-defined deaths.

Although sitting devices are designed for activities such as transportation, feeding and playing, parents may inappropriately rely on them as an alternative to a crib or bassinet. When the devices are not used as directed, infants can fall, fall from an elevated surface on which the device was placed, or flip onto a soft surface and suffocate. They also can be injured or killed with improper buckling of car seat straps.

The AAP recommends that babies be placed for sleep in a supine position for every sleep by every caregiver until the child reaches 1 year of age. Loose bedding and soft objects must be kept out of the sleep area. Sitting devices should not be used for routine sleep.

Study details

Using fatality data from a large U.S. case reporting system, and reflecting data from 45 states, researchers compared risk factors for sleep-related infant deaths in both sitting and non-sitting devices to better understand the factors surrounding fatalities in sitting devices.

The following were classified as sitting devices: car seats, strollers, bouncers, swings and other infant seats (infant slings/carriers not in this category). Non-sitting devices included cribs and bassinets. Researchers considered primary caregiver at time of death, setting, bedsharing, objects in the environment and additional risk factors.

The majority of deaths in sitting devices occurred at home and under the supervision of a parent. However, when compared to other (non-sitting device) deaths, babies who died in sitting devices "had higher odds of having a child care provider or babysitter as the primary supervisor at the time of death," the study noted.

Over three-fourths of those who died in any sitting device also had at least one risk factor, and more than half had two or more risk factors.

"The main take-home message is not the combination of risk factors so much as it is (the problem of) using car seats as replacements for cribs or bassinets," said study co-author Jeffrey D. Colvin, M.D., J.D., FAAP.

Hazardous products

More than 4 million Rock 'n Play Sleepers from Fisher-Price recently were recalled after the deaths of at least 32 infants were reported by Consumer Reports. Four days after the AAP called on the U.S. Consumer Product Safety Commission (CPSC) to immediately recall the sleepers - receiving extensive media coverage - the CPSC



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relented.

Some of the infants who died in the Rock 'n Play Sleepers rolled over while unrestrained; others were unable to breathe because of their position.

Babies should not be placed on an incline to sleep. With the head elevated, an infant is in a position that could lead to asphyxia. The straps on such products also can strangle infants. In addition, the AAP does not recommend any products for sleep that require restraining a baby, especially if the product also rocks.

The *Pediatrics* study and recent events are reminders of the need to educate parents and families about safe sleep environments, experts say.

"While car seats are always the best place for babies when they are being transported in a vehicle, that doesn't mean they are the safest place when they're sleeping outside of the car," Dr. Colvin said. Parents should bring along a portable crib or bassinet for sleeping when they arrive at their destination.

"It's not only that doctors - pediatricians - need to educate their families, the parents of their patients. They also need to have parents educate anyone who is taking care of their infant, whether it's a grandparent, babysitter or child care provider, that car seats are not substitutes for cribs and bassinets," he said. "The same is true for bouncers, swings and strollers."

Resources

- [AAP policy "SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment"](#)
- [Information for parents from HealthyChildren.org on safe sleep for babies](#)