



April 5, 2021

Senator Chuck Riley, Chair
Committee on Labor and Business
Oregon Senate

Doernbecher
Children's Hospital

School of Medicine
Division of General Pediatrics

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Chair Riley and Members of the Committee,

My name is Dr. Ben Hoffman. I am a pediatrician at Doernbecher Children's Hospital, a professor of pediatrics at OHSU, and the Medical Director of the Tom Sargent Safety Center. I am a nationally recognized expert in child injury prevention, and currently serve as the Chair of the American Academy of Pediatrics (AAP) Council on Injury, Violence and Poison Prevention.

I am writing to express my strongest possible support for HB 3379 on behalf of OHSU, the OHSU Tom Sargent Safety Center, and the Oregon Pediatric Society. This bill would ban the marketing, distribution and sale of crib bumpers in our state. Crib bumpers are an inherently dangerous product that represent a real and present threat to the lives of infants, and have no significant, demonstrable benefit. They have no place in a safe sleep environment, and should be banned.

The CDC estimates that every year in the U.S. there are about 3,600 U.S. cases of Sudden Unexpected Infant Death, or SUID. This includes sudden infant death syndrome, accidental suffocation in a sleeping environment, and other deaths from unknown causes. Accidental suffocation occurs when the airway of an infant is fully or partially obstructed by an object. Nationally, around 25% of all infant sleep-related deaths are attributed to this cause.

Oregon has higher rates of SUID than surrounding states, and our rate of accidental suffocation deaths for infants is 50% higher than that of the U.S overall, and it is increasing.

An increasing number of unregulated sleep products that provide no added safety benefit to infants, and in fact can pose a risk for suffocation, can be found on the market. Soft objects such as pillows and pillow-like toys, quilts, comforters, sheepskins, sleep positioning products, and loose bedding such as blankets and nonfitted sheets can obstruct an infant's nose and mouth, posing a risk of suffocation, entrapment, or SIDS. As a pediatrician specializing in injury prevention and safe sleep, I am concerned by the proliferation of products that are not only unnecessary for safe infant sleep, but dangerous.





Infants are uniquely vulnerable in their early stages of development, when immature cardiorespiratory or arousal systems can lead to a failure of the protective responses that older children exhibit. Because of these developmental differences, a sleeping environment that is perfectly safe for an older child can pose potentially fatal risks for infants. Safe sleep guidelines, as outlined by the AAP, require placing babies alone, on their back, and on a flat, firm surface with no loose fabric or soft bedding nearby.

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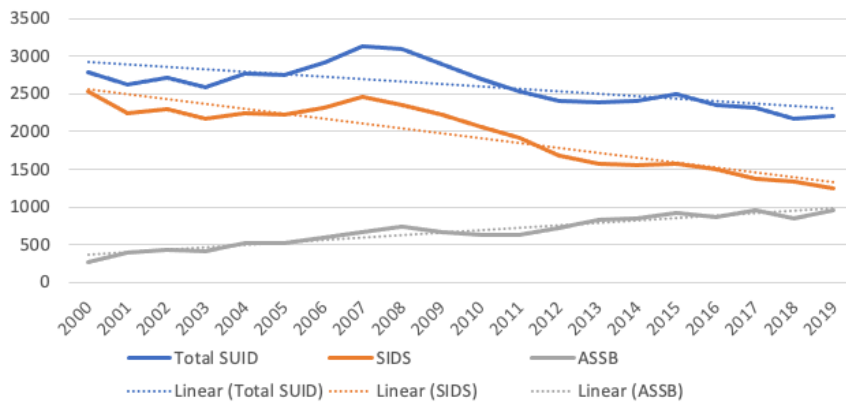
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While much progress was made on SUID early in the efforts of AAP and governmental partners, like the U.S. Consumer Product Safety Commission, in promoting safe sleep practices, we have seen this progress in reducing SUID plateau for the last decade. As you can see from the figures below, while overall SIDS rates are decreasing, rates of suffocation have been increasing, both nationally, and in Oregon. Further, there is a critical equity issue here, as infants from African-American and American Indian/Alaska Native communities. In the U.S., compared to non-Hispanic white infants, Black infants have a 2-fold greater overall SIDS rate, and American Indian-Alaska Native babies die almost 2.5 time more often. Looking just at sleep related infant deaths due to accidental suffocation, both Black and American Indian/Alaska Native babies have a 2.2-fold increased rate. The Oregon Legislature is in a unique position to help address the public health problem of SUID through this bill.

U.S. Data (CDC):

The Rate of Accidental Suffocation or Strangulation in Bed is Increasing in the US





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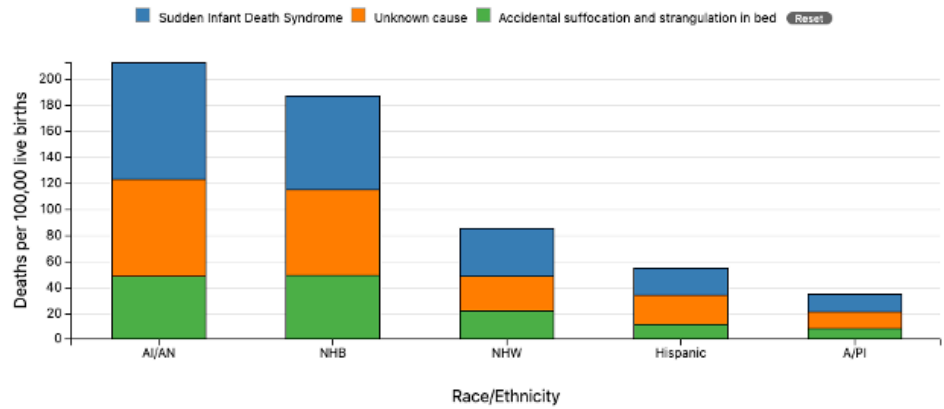
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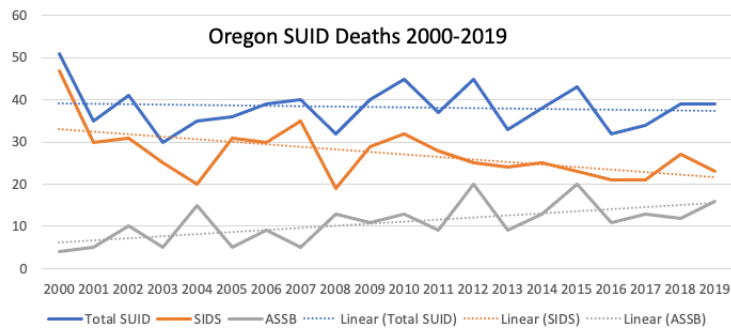
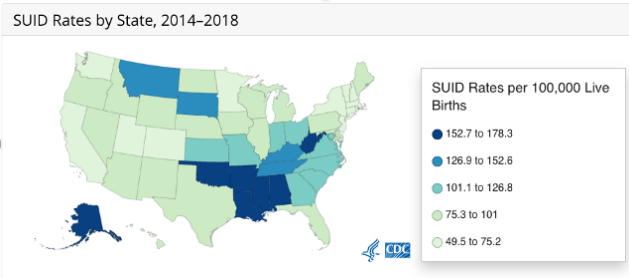
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Sudden Unexpected Infant Death by Race/Ethnicity, 2014–2018



AI/AN = American Indian/Alaska Native; NHB = Non-Hispanic Black; NHW = Non-Hispanic White; A/PI = Asian/Pacific Islander

Oregon Data (CDC):





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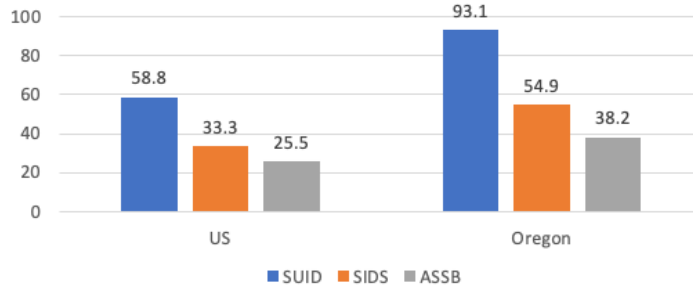
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SUID Rates in Oregon are Higher than the US, 2019



The AAP warns against the use of many different kinds of soft bedding, largely because of the risk of accidental suffocation, entrapment, and strangulation. While the peak age range for SUID is between the ages of 1 and 4 months, newer evidence shows that soft bedding continues to pose hazards to babies who are 4 months and older and is indeed the predominant sleep-related death risk factor for this age group.

CPSC data show that pillows are associated with many accidental suffocation incidents when placed under or close to a sleeping infant. Bumpers, quilts, comforters, sheepskins, and other soft bedding have also been associated with an increased risk of sudden infant death. Therefore, the AAP recommends that infants should be placed on a firm sleep surface covered by a fitted sheet with no other bedding or soft objects to reduce the risk of SIDS and suffocation. As AAP and the CPSC have said many times, Bare is Best.

That is why this bill, which would ban the marketing, sale and distribution of crib bumpers, is so important. Bumper pads have been implicated in injuries and deaths attributable to suffocation, entrapment, and strangulation and, with new safety standards for crib slats, are not necessary for safety against head or limb entrapment. In 2016, the AAP Task Force on Sudden Infant Death Syndrome released its most recent recommendations for a Safe Infant Sleeping Environment. These updated recommendations reiterate unequivocally that bumper pads have no place in a safe sleep environment. Their continued presence in the marketplace jeopardizes the clarity of AAP and CPSC’s messaging on safe sleep and puts infants at unnecessary risk.

The data show that bumper pads and similar products attaching to crib slats or sides are frequently used with the thought of protecting infants from injury – and indeed, bumper pads were initially developed to prevent head entrapment between crib slats. But given the current safety standards requiring crib slat spacing to be less than 2 3/8 inches, head entrapment is no longer a risk, and padded crib bumper are completely unnecessary. These products provide no





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benefit, pose a real clear and present danger in many of the nation's infant sleep environments and should be eliminated.

Researchers have concluded that, at best, the use of bumper pads may only prevent minor injuries. There is little to no data on the extent of those limb and head injuries, but knowing what we know about child development and physiology, as a pediatrician I am certain they would be very minor. Any potential benefits of preventing minor injury with bumper pad use are far outweighed by the risk of serious injury or death. Again, this can occur due to entrapment between the mattress and crib bumpers, strangulation from loose ties or other parts of the product, suffocation when an infant's head is pressed against the product, compressing the nose and mouth and obstructing the airway, and asphyxia when an infant's position on or near the product leads to rebreathing expired air.

Our qualitative research with mothers of infants has found that the primary reason that parents purchase crib bumpers are that they are cute and parents believe that the crib bumpers will prevent serious injury, largely from head trauma and limb entrapments.

With regards to head trauma, I would like to take everyone back to their high school physics class, where we learned the formula $F=ma$, force = mass x acceleration. The force needed to incur major head trauma, such as a concussion or worse, requires either a large mass or a large acceleration, or both. The 50th percentile for weight for a 6 month old is 6.5 kg, or approximately 14 lb. The reason that I am using the example of a 6 month old is that the crib bumper manufacturers warn against usage of their product once the infant is 6 months old, and a 6 month old would weigh more – or have more mass – than a younger infant. One estimate of the force required to sustain a concussion is approximately 95 g- forces, or in newtons, which is the universal unit for force, 931 newtons. Using that estimate, for a 6.5 kg baby to generate enough force to sustain a concussion, he or she would need to strike the crib at a speed of 30 miles per hour. I think that all of us would agree that that is out of the realm of possibility for human infants.

The second concern that parents have is limb entrapment. The majority of these entrapments are reported after the age of 6 months, which is past the age limit for crib bumper use. Most infants begin to roll over between the ages of 4-6 months, and pull to stand by 9-12 months. These motor skills would be prerequisites for limb entrapment. Therefore, if the product is used according to manufacturer instructions, then the product should not even be in the crib with these infants and therefore would not prevent limb entrapment. Even if we consider crib bumper use after the age of 6 months, I think that all of us would agree that, although they cause momentary distress on both the part of the infant and the caregiver, and while significant for both of them, this remains a fairly benign condition, especially compared to an infant death.

These products are wholly unnecessary for a safe crib, and the real and



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substantial risks of death outweigh any minor to negligible safety benefits. 3 other states (Maryland, Ohio and New York have instituted bans similar to that proposed in this bill, as has the city of Chicago. In 2020, the CPSC issued and intent to issue a federal ban on crib bumpers. While this is good news for infants, it will be years before this rule can be implemented, and we cannot afford to allow Oregon's families to wait.

Educational and intervention campaigns are often effective in altering practice, and pediatricians continue to engage in such education campaigns. Since the 1990s, concerted education efforts by CPSC, AAP, and other partners have led to tremendous progress in decreasing infant sleep-related fatalities. However, warnings against crib bumpers are frustrated when unsafe products, like crib bumpers are promoted in the media and in stores. Most parents are aware now that babies should sleep on their back, but fewer than 50% are aware that babies should not sleep with soft bedding. We believe that this is largely because of the confusing messages that parents receive by seeing bumpers available for sale. They see advertisement after advertisement for cozy bedding, including crib bumpers, and thus believe that they are not good parents unless they provide a soft, comfortable sleep environment for their infant. Unfortunately, these good intentions often end up being deadly.

We believe that when crib bumpers are available for sale it confuses the safe sleep message for parents. I cannot tell you how many times I have heard from a parent the belief that "if they sell them, they must be safe." A surprising number of parents believe that there is an agency out there that tests all infant products before they are sold to make sure that they are safe – in other words, an FDA for infant products. Unfortunately, there is no such agency.

Just in the past several years, we have seen the consequences of products that are marketed and purported to be safe for infant sleep, but run contrary to AAP safe sleep guidelines. Popular infant inclined sleep products like the Rock 'n Play Sleeper were recalled, but only after over 70 infant deaths had been associated with the products. Tragedies like this are preventable, and the Oregon has the chance to protect infants from sleep-related products that are not safe for sleep and pose a fatality risk.

When parents purchase a product for the baby or child, they understandably may assume that it is safe to use. We continue to send parents a dangerous message by allowing crib bumper products that have been associated with infant deaths to remain on store shelves and online marketplaces.

I, in addition to OHSU, the Oregon Pediatric Society, The Oregon Academy of Family Physicians, the Oregon Academy of Emergency Physicians and the Oregon Medical Association, urge you to take swift action so that these deadly products are no longer available,

Sincerely,





A handwritten signature in black ink, appearing to read "Benjamin Hoffman", written in a cursive style.

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