

Ask Dr. Sue your health and safety questions



— **Pacifiers** —

Children who use pacifiers may get more ear infections than thumb suckers. In a study performed in Finnish child care programs and reported in November 1995, use of pacifiers was a significant risk factor for recurrent ear infections.

The researchers studied 845 children who were attending child care centers full time for a year. They asked parents to record the symptoms and signs of illness, visits to doctors, diagnoses, medications, and days of absence from child care for their children. For the purpose of the study, they identified an episode of ear infection as one which was diagnosed by a physician at least three weeks from a previous episode.

By matching the parents' reports of the sucking behaviors of the children throughout the study and the episodes of ear infections, the researchers found a statistical association between having more than three episodes of ear infections and using pacifiers.

About half of the children were over four years of age when the study began. The parents reported that

Facts Are Better Than Fiction — Pacifiers and Walkers

by Susan S. Aronson, MD

just over half of the children had previously used a pacifier and a little more than a fourth of the children were using a pacifier during the study period.

Among the children less than two years of age, more than two-thirds were using a pacifier at the beginning of the monitoring period. This youngest group made up 15% of the 845 children. More than half of the next youngest children, those two to three years of age, were reportedly using a pacifier at the beginning of the study.

In the analysis, the researchers looked at other factors thought to be associated with an increased risk of ear infections. These included lack of breast feeding (using bottles), smoking parents, and social class of the family.

The use of a pacifier did not contribute to ear infection risk for children who were over four years of age. However, for younger children, use of a pacifier statistically increased the risk of having more than three episodes of ear infection.

Short duration of breast feeding and having parents who smoked more than ten cigarettes a day were risk factors also.

The researchers suggest several mechanisms for the increased risk from pacifier use.

The pacifiers could change the type of infectious disease agents in the child's mouth and throat because the pacifier is often in touch with other surfaces when not in the child's mouth.

Normal opening and closing of the drainage tube of the middle ear helps to keep the middle ear free of infection. Frequent sucking on a pacifier could change the way the Eustachian tube functions and increase the risk of ear infection that way.

Thumb sucking does not seem to have this effect. Perhaps there is something different about thumb sucking and pacifier sucking habits.

The bottom line from this study is clear — weaning children off their pacifiers sooner is better than later.

— **Walkers** —

Baby walker injuries are so common that the U.S. Consumer Product Safety Commission is considering regulating them. New devices are on the market which allow children to entertain them-

selves in an upright position, with safely limited mobility.

There are treadmill devices, push toys, stand-up toys with unsteady saucer bottoms, frames with wheels and fabric-sling seats, circular rings on wheels with a sling seat in the middle, bouncer seats on wheels, and devices that allow the child to turn around in the seat and to turn the seat around an axle on a platform. The latter seems to be the best, since it provides stability, limitation of movement within the room, and maximum mobility in the device.

Several companies are selling replacement devices for the unsafe walker. The newer designs provide a generous counter for toys, allow the infant to turn around in the seat, and have a bottom platform to walk the seat around while the whole device stays in one place.

The ASTM is a national standard-setting organization that brings manufacturers and the public together to frame voluntary standards. At this time, the ASTM is working on a walker standard that defines a walker as a "mobile unit that enables a child to move on a horizontal surface when propelled by the child sitting or standing within the walker, and which is in the manufacturer's recommended use position. Both direction of movement and distance traveled are determined by the child."

The ASTM specifies the details for the warning labels that should be on the walker. These include never leaving the child unattended or out of adult view while in the walker; not using the walker for a child who can walk unassisted; limitations of height, weight, age, or a combination for using the walker; and never using the walker where there are

stairs, steps, thresholds, or on uneven surfaces.

Of the more than 28,000 annual injuries of infants in walkers, most are from falls down stairs. Some are from the child pulling or touching objects that the adult did not realize the child could reach from the walker. Others are from tipovers and collisions. The new standards must address all these problems and try to control them.

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If you have a child care health question you would like Dr. Sue to answer in a future column, write to her c/o Exchange, PO Box 2890, Redmond, WA 98073-2890.