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TESTIMONY OF THE INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC TO THE BOARD OF REVIEW INQUIRING INTO THE NATURE AND CHARACTERISTICS OF BABY WALKERS

INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC

Québec

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DÉVELOPPEMENT DES INDIVIDUS ET DES COMMUNAUTÉS

OCTOBER 2006

Institut national de santé publique Québec

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GRAPHIC DESIGN
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LEGAL DEPOSIT 2RD QUARTER 2007
BIBLIOTHÈQUE ET ARCHIVES NATIONALES DU QUÉBEC
LIBRARY AND ARCHIVES CANADA
ISBN 13 : 978-2-550-49940-4 (PRINTED VERSION)
ISBN 13 : 978-2-550-49941-1 (PDF)
ÉDITION ORIGINALE : ISBN : 978-2-550-49098-2 (PRINTED VERSION)
ÉDITION ORIGINALE : ISBN : 978-2-550-49099-9 (PDF)

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1. BACKGROUND

On March 23 2004, on the recommendation of Health Canada, the Governor in Council issued an Order under section 6 of the *Hazardous Products Act* prohibiting the advertising, sale or importation of the product described as:

> baby walkers that are mounted on wheels or any other device permitting movement of the walker and that have an enclosed area supporting the baby in a sitting or standing position so that their feet touch the floor, thereby enabling the horizontal movement of the walker.

In a letter dated May 21, 2004, a distributor of baby walkers requested that the Minister of Health refer the Order to a board of review under section 8 of the *Hazardous Products Act*.

On June 2, 2006, the Minister of Health announced the establishment of a board of review under section 9 of the *Hazardous Products Act*. By virtue of section 9 of the Act, the Board must inquire into the nature and characteristics of the product. The Board must also give the distributor who made the request and other persons affected by the Order a reasonable opportunity to appear before the Board in order to present evidence and make representations.

Persons who intend to participate in the inquiry are required to file a notice of intention to appear and must indicate the reasons why they are affected by the Order within the meaning of section 9 of the *Hazardous Products Act*.

The ***Institut national de santé publique du Québec*** **(INSPQ)** is participating in the inquiry by appearing before the Board, submitting evidence and making representations.

The INSPQ is affected by the Order of the Governor in Council, which prohibits the advertising, sale or importation of baby walkers within the meaning of section 9 of the *Hazardous Products Act,* for the following reasons:

The INSPQ is an organization that was created in June 1998. It is a public health expertise and reference centre for Quebec. Its goal is to contribute to the advancement of knowledge and to propose intersectoral strategies and actions to improve population health and well-being. Trauma is a particular area of focus for the INSPQ. Since baby walkers represent a major safety issue, any legislative change that is likely to increase access to these products is of the highest concern to us.

Moreover, the INSPQ attaches particular importance to one of the objectives of Quebec's national public health program, which is to reduce the morbidity and mortality associated with falls and other injuries in the home by 2012.

Out of concern for the safety of infants and in order to ensure that safety standards established to date are maintained, the INSPQ has decided to appear before the Board in order to emphasize the important public health arguments that need to be taken into account with respect to this issue, as well as to put forward recommendations.

In our testimony, we will examine the reasons that lead parents to purchase walkers for their babies and will seek to determine whether these devices actually promote psychomotor development.

We will then look at the hazards associated with walkers, even those that comply with the American Standards for Testing Materials (ASTM) standard established in the United States in 1997, and will present our position with regard to the need to maintain the Order adopted by Canada in 2004.

2. METHODOLOGY

In dealing with each of these matters, we carried out a standard search of the MEDLINE database using the following key words: walker, baby walker injury, baby walker injuries, injury caused by baby walkers, marchettes (including all the singular and plural variants of these terms). We then examined data derived from the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), particularly the latest CHIRPP Injury Brief issued by the Public Health Agency of Canada.

We completed our research with a review of the following Web sites: Health Canada, Public Health Agency of Canada, U.S. Consumer Product Safety Commission, and Centers for Disease Control and Prevention.

3. WHY DO PARENTS PURCHASE WALKERS FOR THEIR BABIES?

While baby walkers may be found in any home, British studies have found that these devices are most commonly found in low-income households and in underprivileged areas.[1]

Interestingly, when parents are asked about their use of baby walkers, they usually state the following as their primary motivating factors[2]:

- walkers help to quiet infants and are fun for them to use;
- walkers are good for babies since they promote the development of mobility through exercise;
- walkers keep babies safe.

It is difficult to assess the first assertion, although it seems doubtful that placing infants in chairs on wheels is likely to keep them quiet.

It is easier to assess the validity of the other two assertions, namely that walkers promote development and keep infants safe.

4. DO WALKERS PROMOTE DEVELOPMENT?

In its most recent statement on baby walkers, the American Academy of Pediatrics (AAP)[3] declared that walkers do not help infants learn to walk and may in fact delay psychomotor development.

The AAP states that even though parents believe that walkers help their babies learn to walk, there is no scientific data to support this belief. In particular, the AAP cites a recent study by Siegel et al.,[4] which showed that infants aged 6 to 15 months who use walkers learn to sit, crawl and walk later than control group infants (those without walkers) and score lower on the Bayley psychomotor development scale.

The fact that walkers are not useful should surprise no one, since infants who are put in these devices are not given the opportunity to learn to crawl, which is an important step towards exploring and walking. What is more, walkers encourage children to use the muscles in the back of their legs and toes, instead of both the front and back muscles that walking requires.[5]

5. ARE WALKERS, EVEN THOSE THAT COMPLY WITH THE ASTM STANDARD, SAFE?

A baby in a walker can move at a rate of approximately three feet per second; such rapid movement exposes babies to a number of hazards.[5] [6] They can bump into furniture, access hot surfaces, or pull on appliance cords. Additionally, walkers can tip over or fall down stairways. Such falls can result in serious bodily injury, including head trauma or death.[5]

In the United States, between 12% and 40% of parents whose infants had used walkers reported that their infants had sustained walker-related injuries;[3] in England, this proportion varied between 12% and 50%.[2]

A significant proportion of these incidents involved falls down stairs, resulting in potentially serious injuries. This led the Juvenile Products Manufacturers Association to participate, in 1997, in the development of a voluntary safety standard for baby walkers, under the auspices of the ASTM. This standard requires that baby walkers be designed to prevent falls down stairs by stopping at the edge of a step, or alternatively, that they be of a minimum width that prevents them from passing through a standard-size doorway.[5]

Under the ASTM standard, baby walkers that are greater than 914 mm (36 inches) wide are not required to be equipped with anti-skid strips. Therefore, it remains possible for children to propel themselves down steps or staircases that are wider than standard width.[5]

Furthermore, Health Canada's testing of walkers that comply with the ASTM standard has failed to show that these walkers provide an acceptable level of safety for babies. The tests showed that when moving at speeds below that of the ASTM F 977-00 test, baby walkers were still given to tipping when they reached the end of the test platform.[7]

Health Canada is not alone in thinking that the ASTM standard is inadequate. M. Ridenour has demonstrated major shortcomings in brake systems on walkers manufactured after June 30, 1997, and spoke of the danger inherent in parents' false sense of security with regard to walkers.[8] A study published in 2000-2001 by the U.S. Consumer Product Safety Commission revealed that 14% of injuries caused by walkers falling down stairways involved new models that complied with the standard, while 16% involved walkers of unknown status.[9]

The other major concern regarding walkers that meet the ASTM standard relates to injuries "of proximity." The proximity safety issue refers to the ability of infants in walkers to move around and to reach high areas that are normally inaccessible to them. Walkers may allow babies to reach and pull down any number of items such as hot kettles, lamps and toasters, resulting in burns, abrasions and bruises.[5]

It can be difficult to quantify the number of proximity injuries that occur in countries where legislation is consistent with the new safety standard for walkers, such as Australia, for example. This was in fact the purpose of a retrospective study carried out in that country, a study that reviewed the circumstances of injuries sustained between 1986 and 2000 (based on data from

the South Australian Department of Human Services Injury Surveillance System). The results for that period indicate that 46% of injuries were “proximity injuries,” for which the new standard has no effect![10]

In Canada, the data derived from the CHIRPP system do not permit us to establish a profile of injuries sustained by infants using walkers. The most recent publication on this subject[11] revealed that for injuries surveyed between 1990 and 2003, the proportion of walker-related injuries that required hospitalization was 8.1%. This is higher than the proportion of injuries requiring hospitalization among children of the same age who did not use walkers (5.2%). These results suggest that injuries are more severe when a walker is involved. This is hardly surprising since babies in walkers move faster, can fall more easily and are able to reach higher objects than babies who do not use walkers.

The CHIRPP system data also show that the proportion of stair-fall injuries involving walkers did not vary significantly between 1990 and 2002: falls have consistently accounted for 81% to 93% of walker-related injuries and no reduction has been observed in the most recent years surveyed. One might assume that the introduction of new walkers in Canada, based on the 1997 ASTM standard, would have brought about a reduction in the proportion of fall injuries; clearly, this has not been the case.

What has been observed, however, is a reduction in the proportion of walker-related injuries in relation to overall injuries reported in the CHIRPP system between 1990 and 2002 (from 6.5% to 2%). This reflects a trend also observed in the United States, where the number of injuries associated with walkers has gone down because the number of walkers in circulation has also gone down. Following the adoption of the ASTM standard in the United States, a reduction in the number of walker-related injuries was in fact observed. According to the U.S. Consumer Product Safety Commission, the awareness efforts of pediatricians regarding the hazards of walkers have had an impact on the number of walkers being used (a reduction of approximately 25% since the AAP began its official campaign). This reduction in the number of walkers in use constitutes a plausible explanation for the significant reduction in the number of walker-related injuries that occurred between 1981 and 2002.[12]

Another explanation put forward is that the marked reduction in walker-related injuries observed in the United States after 1994 (but before the introduction of the ASTM standard in 1997) coincided with the introduction of stationary activity centres for infants, which suggests that parents are turning to this alternative to walkers.[13] [14]

6. IS LEGISLATION (OR ITS MAINTENANCE) NECESSARY?

The position of the INSPQ is that the Order prohibiting walkers in Canada since April 7, 2004 must be maintained for the following reasons:

- It has clearly been established that walker-related injuries occur frequently and can result in serious injury or death.
- Adoption of the ASTM standard has not entirely resolved the problem of fall injuries, as studies from Health Canada and the U.S. Consumer Product Safety Commission have shown. Moreover, this standard does nothing to prevent proximity injuries; as seen in Australia, such injuries can account for a significant proportion of walker-related injuries.
- Walkers do not contribute to the psychomotor development of children and may in fact delay such development (in addition to being dangerous).
- Walkers, even those that comply with the new standard, offer a false sense of security to parents, leading them to relax supervision and vigilance.
- Even with the adoption of the ASTM manufacturing standard, it is important to note that many Asian and European models (that do not comply with the ASTM standard) are still being sold in flea-markets or by travelling salespersons. If the sale of walkers were to be authorized once again, it would be difficult to provide accurate information to the public with regard to the risks associated with various models. Complete prohibition minimizes any confusion in this area.
- A number of credible organizations are also calling for the banning of walkers, including a number of American bodies, such as the American Academy of Pediatrics (AAP).
- According to the U.S. Consumer Product Safety Commission, the efforts made by the AAP to warn parents about the hazards associated with walkers have had an impact on the number of walkers in use (a reduction of approximately 25% since the AAP began its official campaign). This reduction constitutes the most plausible explanation for the marked reduction in walker-related injuries observed between 1981 and 2002,[(12)] along with the use of alternative devices, such as stationary activity centres.[(13)]
- In Canada, the most recent data from the CHIRPP system suggest that here too the reduction in the proportion of walker-related injuries, in relation to the overall number of injuries sustained by children, is associated with a reduction in the number of walkers in use, whereas the adoption of new manufacturing standards has not brought about any change in the percentage of (generally serious) injuries associated with stair falls.
- Finally, many parents still believe that walkers are useful and safe, despite all the information at their disposal. It is also important to recall the fact that earlier studies have shown that baby walkers are more commonly used by low-income families.[(1)] Any weakening of the legislation in force would likely place the families most affected by child injuries at even greater risk.

BIBLIOGRAPHY

1. Kendrick D., Illingworth R. et al. Promoting child safety in primary care: a cluster randomised controlled trial to reduce baby walker use. British Journal of General Practice 2005; 55:582-588.

2. Kendrick D., Illingworth R. et al. Baby walkers: health visitors' current practice, attitudes and knowledge. Journal of Advanced Nursing 2003; 43(5): 488-495.

3. American Academy of Pediatrics. Injuries associated with infant walkers. Pediatrics 2001; 108:790-92.

4. Siegel A.C., Burton R.V. Effects of baby walkers on motor and mental development in human infants. J Dev Behav Pediatric 1999; 20:355-361.

5. Order Amending Part I of Schedule I to the Hazardous Products Act (Baby Walkers). Canada Gazette (2004) Part II, Vol. 138, No. 7:191-197.

6. Cassel O.C., Hubble M., et al. Baby walkers: still a major cause of infant burns. Burns 1997; Vol. 23, No. 5:451-453.

7. Health Canada (2002). Testing of Baby Walkers: Test Report. Health Canada Web site.

8. Ridenour M. How effective are brakes on infant walkers? Perceptual and Motor Skills 1997; 84:1051-1057.

9. Jacobson B.J. Briefing package: rulemaking proceeding on baby walkers (2002). Web site of the U.S. Consumer Product Safety Commission.

10. Thomson P.G. Injury caused by baby walkers: the predicted outcomes of mandatory regulations. MJA 2002; 177(3): 147-148.

11. CHIRPP Injury Brief: Injuries associated with baby walkers 1990-2002, ages 5-14 months. Public Health Agency of Canada (2006).

12. Rodgers G.B., Leland E.W. An evaluation of the effectiveness of a baby walker safety standard to prevent stair-fall injuries. Journal of Safety Research 2005; 36:327-332.

13. Shields B.J., Smith G.A. Success in the prevention of infant walker-related injuries: an analysis of national data, 1990-2001. Pediatrics 2006; Vol. 117(3): e453-e459.

14. Dilillo D., Damashek A.D., Peterson L. Maternal use of baby walkers with young children: recent trends and possible alternatives. Injury Prevention 2001; 7:223-227.

N° de publication : 626