



UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
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Memorandum

May 25, 2010

TO: The Commission

THROUGH: Cheryl Falvey, General Counsel
Maruta Budetti, Executive Director

FROM: DeWane Ray, Deputy Assistant Executive Director
Office of Hazard Identification and Reduction
Patricia Edwards, Project Manager
Directorate for Engineering Sciences

SUBJECT: CPSC Staff Response to Commissioner Moore's Questions of May 20,
2010 on the Draft Final Rule for Infant Walkers

On May 19, 2010, the U.S. Consumer Product Safety Commission (CPSC) staff briefed the Commission about the Draft Final Rule for Infant Walkers. After the briefing, Commissioner Thomas Moore sent a memorandum, dated May 20, 2010, with follow-up questions about the Draft Final Rule for Infant Walkers.

The following is the staff's response to the Commissioner's questions. The questions are shown in bold print, followed by the staff's responses.

- 1. For each year, how many walker-related deaths occurred from 1994 to 2003? Do we know how many were stair falls and how many were due to the child pulling something over onto him/herself?**

RH 5/25/2010

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COMMISSION.

Below is a chart provided by the Directorate for Epidemiology, which tabulates infant walker-related deaths reported to CPSC staff:

Walker-Related Fatalities among Children 15 Months or Younger: 1994-2003

Year of death*	Total Walker-related	Walker-related: falls down stairs	Walker-related: pulling things onto self
1994	3		1
1995	2		
1996	2		
1997	4	2	
1999	1		
2001	2	2	
2002	1		
2003	1**		
Total	16		

Source: All CPSC databases; date of extraction 5/21/10. Jumpers have been excluded.

**No fatalities were reported in years not listed.*

*** Described as "fell while walking"; no stairs mentioned.*

The remaining fatalities resulted from a host of other causes such as submersion in water, thermal burn, electrocution, etc.

2. Are Australia and the U.K. still pursuing walker bans?

Recent email correspondence with our counterparts at the European Commission DG Health and Consumers and the Compliance and Enforcement Group, Product Safety Branch of the New South Wales Government of Australia, has indicated that neither the U.K. nor Australia is pursuing a ban on walkers at this time.

3. What prompted us to propose the European Standard 30 degree incline plane stability test? Did we do any testing ourselves at any time to compare its results to the comparable test in the ASTM standard?

The EN test was proposed as an additional test to compliment the ASTM stability test, not as a substitute for the ASTM test. CPSC staff conducted some EN 30° testing, but not in an attempt to compare it to the ASTM test. The ASTM test is different in principle to the EN 30° test. The ASTM test requires applying a cantilevered 17 lb load to mimic a child reaching for an object, say on the ground while the walker is stationary. The EN test requires testing for stability on an inclined plane. Tipping forces would be the result of the test cylinder weight or the CAMI dummy weight tilted on the incline.

Staff gathered as much information as possible about the 30° test prior to its inclusion in the NPR. According to the European Commission DG Health and Consumers, the 30° incline plane test is a standard stability test which is common in several EN children's product safety standards and that products complying with this test have never given rise to tipping over problems in real life use. At the ASTM Infant Walker subcommittee meeting held the month following the publication of the NPR, an analysis that demonstrated the EN 30° test was not as stringent as the ASTM stability test was presented. The ASTM stability test was shown to have the tendency to tip the walker

more readily than the EN 30° test. Thus, the stability characteristics of a walker are adequately evaluated using only the ASTM stability test. Staff concurred with this analysis and no longer recommends the inclusion of the 30° test.

4. Are any bouncer-walkers currently on the market? Does a bouncing child affect the movement of the walker? Do these types of walkers have any different testing requirements as to stair falls or tipovers?

Staff is not aware of any bouncer-walkers currently being sold in the U.S. However, it is always possible that there is a supplier operating on a small scale or that firms might supply this type of product in the future. The staff believes that this regulation would cover a bouncer-walker sold in the U.S. assuming it met the definition of a walker, which is “a mobile unit that enables a child to move on a horizontal surface when propelled by the child sitting or standing within the walker...” Because this bouncer-walker product is not available to examine or test, staff is not able to comment on its movement due to occupant bouncing or whether or not it should have different performance requirements.

5. The Appendix to the ASTM standard indicates that the 8 pound falling weight in the stair fall test was derived from testing 10 children, ranging in age from 6 ½ to 11 months. Standards usually build in a margin of error or look to the worse case scenario to be most protective. Given that walkers are used by children up to 15 months old (who are likely to generate more force than the children used in the test), and that children are still being injured in stair falls, should we revisit the 8 pound weight in the near future to see if it is protective enough for the uppermost age range of children who use walkers?

The 8 pound falling weight is not as critical as the launching distance. As written in the draft final rule, the launch distance will now be calculated. The most important parameter in the stair fall test is the velocity of the walker at the edge of the test platform, and CPSC staff is comfortable with the 4 ft/s velocity. The launch distance is a key variable to reaching this velocity. If the Commission proposes the staff’s draft final rule, the launch distance would be calculated based on the weight of the CAMI and the walker, and this velocity should be achieved during testing.^[1]

Larger, stronger children may generate more force and it may be beneficial to measure these forces; however, the stair step test method does have some built-in safety margin. The 8 lb falling weight applies a jerk load to the walker after the walker’s friction strips engage the edge of the test platform. This would be equivalent to a hard hit to the walker. For this reason, the test method using a free falling weight is equivalent to giving the walker an extra push at the edge of the step. In real life, a baby does not impact a walker in this manner, and simply increasing the falling weight could result in an overly stringent test.

^[1] This assumes a walker with free-spinning wheels. Wheels with high rolling friction will not achieve a 4ft/s velocity during testing or during actual use.

- 6. The Draft Final Rule adds a parking brake performance test but it does not require infant walkers to have parking brakes. Could this act as a disincentive to manufacturers for producing infant walkers with parking brakes, which is a feature that some comments to the proposed rule suggested would be a desired safety feature?**

The current ASTM standard does not require walkers to have brakes, yet some walkers are equipped with brakes. For this reason, CPSC staff believes that not requiring a feature should not be a disincentive.

A parking brake is a feature that adds another use to the product by turning it into a stationary activity center. If the manufacturer chooses to add this feature, CPSC staff believes that it should work properly and effectively. An inadequate brake feature could allow a child to move into a hazardous area not intended by the caregiver.

- 7. Is the infant walker the type of product that parents may use for several different children or may pass on for use by other family members? If so, could the wear on the friction pad over time make it less effective and thereby less safe for this type of continuous use and how does the Draft Final Rule address this concern?**

Yes, it is foreseeable that a walker may be used for multiple children.

The draft final rule proposes a walker model to be subjected to 18 impacts which will sufficiently subject the sample walkers to abuse (3 directions x 2 configurations with and without vest x 3 replicates). Each impact places a substantial amount of stress on the friction strips, as the friction strips make direct contact with a sharp, 90° table edge. Staff believes this set of tests addresses wear on the friction strips.

In addition, section 9.2.4 of the ASTM standard requires a warning to be included in the instructional literature about cleaning the friction components regularly to maintain stopping performance.