



**U.S. CONSUMER PRODUCT SAFETY COMMISSION  
4330 EAST WEST HIGHWAY  
BETHESDA, MD 20814**

**JOINT STATEMENT OF CHAIRMAN ELLIOT F. KAYE AND COMMISSIONER ROBERT S. ADLER REGARDING PETITION CP 16-1: LABELING REQUIREMENTS REGARDING SLIP RESISTANCE OF FLOOR COVERINGS**

**January 5, 2017**

**Background**

On December 3, 2015, the National Floor Safety Institute (NSFI) petitioned the Commission to require manufacturers of floor coverings and coatings to label their products' slip resistance in accordance with an ANSI standard for floor coverings.<sup>1</sup> Under this standard, firms that sell floor coverings would have to test them in accordance with a specific test protocol and then label them with a symbol showing how each material's Coefficient of Friction (COF) tested on a scale from "low" to "high," with the higher COF ostensibly indicating less likelihood of a fall.

The petitioner did not ask that the Commission *mandate* specific COFs for flooring materials, only that firms be required to *inform* consumers of the COF of their particular floor coverings and how they might perform with respect to their slip resistance. The obvious thought is that informing purchasers of the potential for slipping on different flooring materials would lead to more rational and thoughtful decisions when purchasing this product.

By a vote of 3-2, the Commission voted to deny the petition. Although we voted against the denial, we did not necessarily vote to grant the petition. Rather, we voted to direct staff to collect additional information regarding the feasibility of action under

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<sup>1</sup> American National Standards Institute (ANSI) B101.5-2014, *Standard Guide for Uniform Labeling Method for Identifying the Wet Static and Wet Dynamic Coefficient of Friction (Traction) of Floor Covering, Floor Coverings with Coatings, and Treated Floor Covering*.

section 27(e) of the Consumer Product Safety Act (CPSA)<sup>2</sup> to compare the slip resistance of floor coverings.

### **Slips and Falls on Floors Present a Serious Hazard to Consumers, Especially the Elderly**

There is no doubt that slips and falls on floors present an ongoing serious hazard, especially to the elderly. According to data from CPSC's National Electronic Surveillance System (NEISS), during a recent three year period, roughly 570,000 slips on floors resulted in consumers seeking medical treatment at hospital emergency rooms,<sup>3</sup> or about 190,000 emergency room visits per year. The injuries ranged from sprains to dislocations to fractures.<sup>4</sup>

Slips and falls do more than injure; they also kill. Although NEISS data generally do not capture fatalities from slips and falls on floors,<sup>5</sup> it is unquestionable that many such accidents result in death. In fact, falls – a substantial number of which result from slips on floors – constitute the second leading cause of accidental or unintentional injury deaths worldwide.<sup>6</sup> The problem is even starker with respect to the elderly. For this rapidly growing demographic,<sup>7</sup> injury rates from slipping on floors for individuals 75

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<sup>2</sup> 15 U.S.C. § 2076(e). This section states:

The Commission may by rule require any manufacturer of consumer products to provide to the Commission such performance and technical data related to performance and safety as may be required to carry out the purposes of this Act, and to give such notification of such performance and technical data at the time of original purchase to prospective purchasers and to the first purchaser of such product for purposes other than resale, as it determines necessary to carry out the purposes of this Act.

<sup>3</sup> To be precise, from January 1, 2012 to December 31, 2014, 569,266 emergency department-treated injuries were associated with slipping on floors. Staff Briefing Package on Petition CP 16-1: Labeling Requirements Regarding Slip Resistance of Floor Coverings (hereafter, Staff Briefing Package on Floor Coverings), at 15.

<sup>4</sup> Staff Briefing Package at 19.

<sup>5</sup> NEISS data come from emergency room visits. Fatalities typically go directly to a coroner's office or to a funeral home, thus not showing up in NEISS data.

<sup>6</sup> Not all falls result from slips on floors, but a significant number do. Fact Sheet: Falls, World Health Organization, September 2016. See <http://www.who.int/mediacentre/factsheets/fs344/en/>.

<sup>7</sup> Older Americans – those age 65 and over – numbered 46.2 million in 2014, representing 14.5% of the U.S. population. By 2060, this number will more than double to 98 million, representing almost 22% of the population. See "Aging Statistics," Administration on Aging, U.S. Department of Health and Human Services, [https://aoa.acl.gov/aging\\_statistics/index.aspx](https://aoa.acl.gov/aging_statistics/index.aspx).

years and older are more than twice that of those 65-74 and nearly six times that for teens.<sup>8</sup>

In short, slips and falls on floors present a serious public health hazard worthy of concern and attention from agencies like CPSC. Accordingly, we could not vote simply to deny the petition.

### **Coefficient of Friction as a Determinant of Risk of Slips and Falls**

The petitioner proposed to use the Coefficient of Friction (COF) as a comparative measure in providing information to prospective purchasers of flooring materials. Upon careful consideration, staff found this proposed approach to carry some flaws in conveying the risks associated with flooring. Specifically, staff found, “[m]ost scientific studies show that COF, as a single measure, does not predict risk of falls.”<sup>9</sup> We note here that staff did not say that COF is useless as a predictor, only that it does not predict risk of falls as a “single” measure.

They went on to say, “[s]taff believes that more research is needed to determine whether the use of COF values can predict the risk of falling. Additional research would also help to determine whether the use of COF values can predict the risk of falling.” It is here that we part company with our colleagues’ vote. We would take staff at its word and support further research into whether COF values or some other relevant metric or set of metrics can be measured accurately and presented in a way that could enhance safety for flooring purchasers.

Accordingly, the issue is whether it is possible to develop an approach to measuring COF or some other safety metric and informing the public about it in a way that can assist purchasing decisions. We think it is. Section 27(e) of the CPSA, in particular, provides ample authority to the Commission to require additional qualifying language, data, or pictures to place safety metric information in appropriate context. If supplying warning symbols only is insufficient, we have no problem providing additional information. What we do have a problem with is simply dismissing the petition because further work might be necessary.

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<sup>8</sup> Staff Briefing Package, *supra*, at 17, n. 2.

<sup>9</sup> *Id.* At 8.

## **A Simplified Safety Metric Could Provide Helpful Guidance to Consumers**

We find ourselves unpersuaded by many of the objections we have heard to the petition. In a nutshell, many opponents of the petition, although raising valid objections to COF determinations, seem to us to carry their objections to unsupported extremes. To pick a typical objection, one group criticized the petition by pointing out the number of variables that can affect traction. They stated:

[COF] does not take into account grout joints, macroscopic texture, slope, drainage, cleanliness, and maintenance, among other things, all of which can have a greater effect on traction than COF. COF is just one physical property, among many, used by industry professionals along with design and maintenance parameters to specify appropriate flooring. As manufactured, COF does not equal traction or slipperiness of the flooring surface, and therefore it cannot be used as a measuring stick for safety.<sup>10</sup>

Carried to its full conclusion, this logic would bar any regulatory agency from ever establishing a uniform test protocol for comparing product performance. The problem is that every real world protocol must limit the variables that affect its tests in some significant way. We can think of few, if any, standards that have escaped criticism on this point – from alcohol content in wine and liquor<sup>11</sup> to EPA’s gas mileage testing.<sup>12</sup> Notwithstanding this, federal agencies and others continue to publish and rely on comparative data with respect to the products consumers buy and use – from nutrition facts<sup>13</sup> to tire ratings (including traction grading!)<sup>14</sup> to sunscreen information.<sup>15</sup>

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<sup>10</sup> Tile Council of North America, Inc., *Public Comments of the Tile Council of North America regarding Petition for Labeling Requirements Regarding Slip Resistance of Floor Coverings; Request for Comments (Docket No. CPSC-2015-0033* (quoting from Section 6.2.2.1.10 of ANSI 137.1)).

<sup>11</sup> See, e.g., Roberto Ferdman, *The Big Wine Lie*, The Washington Post (Wonkblog) (January 6, 2016) (arguing that the “percentages reported on bottles aren’t the precise measurement consumers likely believe them to be”) and Dave McIntyre, *Alcohol Content is Tricky to Label*, The Washington Post (August 6, 2013) (noting that “the alcohol level stated on a wine label isn’t necessarily accurate”).

<sup>12</sup> See, e.g., J Shaw, *The EPA’s gas mileage testing standards don’t work. At all*, at <http://hotair.com/archives/2016/07/20/the-epas-gas-mileage-testing-standards-dont-work-at-all/> (July 20, 2016) and John O’Dell, *Here’s why real-world MPG doesn’t match EPA ratings*, at <https://www.edmunds.com/fuel-economy/heres-why-real-world-mpg-doesnt-match-epa-ratings.html> (November 20, 2012).

<sup>13</sup> See, e.g., Food and Drug Administration, *How to Understand and Use the Nutrition Facts Label*, at <http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm274593.htm> (May 25, 2016).

## **Notwithstanding the Inherent Difficulties of Conveying Warnings, Further Research Seems Warranted**

We find ourselves in substantial agreement with the Human Factors staff about the inherent challenges facing agencies in conveying warnings to the public. As they note, for warnings to be effective, consumers must: (1) notice the warning, (2) process the message, and (3) be motivated to change behavior in response to the warning. Each of these steps presents difficulties in getting safety messages to the public. Should a message fail on any of these dimensions, it will fail altogether. For these reasons and many others, we maintain a healthy skepticism regarding information and education as the primary approach to product safety. In fact, we would apply the same cost-benefit analysis currently in force for CPSC safety rules to education campaigns. We suspect that few would pass such rigorous scrutiny.

While we generally agree with staff's concerns, we do not find them sufficiently compelling for us to vote to deny the petition. Given the extremely serious risks associated with slips and falls on floors, we believe they warrant further research and study. As with all of the other points raised regarding the petition, we have no problem acknowledging the challenges in developing an appropriate warning label. The central objection seems to be that such labels might not convey sufficient information to be extremely helpful. That is not a basis for denying the petition. To the contrary, we think that further research would be quite likely to lead to the use of warning symbols plus information handouts that explain the merits and demerits of relying on COF data or some other scientifically supported safety metric.

## **Conclusion**

We regret the Commission's decision to deny the petition on floor coverings. We see a serious problem, which unfortunately seems likely to increase as the population ages, that now will not be addressed by the agency. Given the hundreds of thousands of injuries and deaths annually from flooring slips and falls, even a small percentage change in these statistics from improved warnings seems easily justifiable.

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<sup>14</sup> See, e.g., *How to Read the Writing on Your Tire Walls*, Consumer Reports (January 2017) at 54 (describing the comparative information given about tires that give load index, speed rating, treadwear grade, and traction and temperature grades)

<sup>15</sup> See, e.g., Meredith Melnick, *Top sunscreens, ranked by two consumer health groups*, at <http://healthland.time.com/2011/05/24/top-sunscreens-ranked-by-two-consumer-health-groups/> (May 24, 2011).