



**U.S. CONSUMER PRODUCT SAFETY COMMISSION  
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**STATEMENT OF COMMISSIONER ELLIOT F. KAYE  
REGARDING THE PROPOSED RULE: SAFETY STANDARD ADDRESSING  
BLADE-CONTACT INJURIES ON TABLE SAWS**

**April 27, 2017**

Today, the Commission voted 3-2 to issue a notice of proposed rulemaking (NPR) to address the risk of blade-contact injuries on table saws.

Safe to say, this NPR was long overdue. Before getting into dry topics such as timelines and performance standards and regulatory requirements, it is important to start with the human impact of regulatory inaction. While we hear a lot of fabricated outrage about the impact of regulations, there is far less genuine discussion about the real costs of a failure to act.

On December 19, 2012 – more than five years ago – Josh Ward was in his high school shop class in Sisters, Oregon.

He was helping as a teacher's aid to the woodshop teacher, who had asked Josh to cut a wood board into long strips for a class that taught students how to make guitars. Josh used the school's table saw, which was not equipped with the kind of safety features our rule would require. Something went wrong. Something that happens in American homes thousands of times of year. The board caught in the saw with such force that Josh's hand was pulled into the blade and the board was thrown across the room so strongly that it punched a hole in the wall.

Josh was rushed to the ER, where the doctor called it the worst hand injury he had ever seen, according to Josh's mom, Angela. Josh needed more than 1,000 stitches, endured more than a half-dozen surgeries and lengthy physical therapy, went through 45 two-and-a-half hour hyperbaric chamber treatments, lost all or part of multiple fingers and had his dreams of being a firefighter potentially dashed. He and his family have paid a very heavy price for sure for something that existing technology can and should prevent.

Sadly, Josh's story is not uncommon in the least.

Tens of thousands of consumers each year are treated in hospital emergency departments for injuries associated with table saws. Day after day, week after week, month after month and year after year these incidents keep occurring. What has not been happening, however, is much to genuinely address the hazards table saws present.

The marketplace has spent many years making no across-the-board progress. CPSC staff has been evaluating the possibility of a performance standard to protect consumers who use table saws since at least 2003, when the first flesh-sensing devices were presented in a petition.

The Commission requested its first briefing package in 2006, although even that little bit of progress was stymied by a loss of a quorum at the Commission and political gamesmanship by individuals whose inaction put corporate protection over consumer protection.

Due to the advocacy and hard work of my friend and colleague, Commissioner Robert Adler, the Commission renewed its efforts and focus on this issue and published an Advance Notice of Proposed Rulemaking (ANPR) in 2011.

Contrived budget crises that maintain an artificially limited budget at the expense of consumer health and safety and the need to address other pressing safety issues have all impacted our ability to move forward with rulemaking. Thankfully, CPSC staffed stayed at it and now we have an excellent and thorough performance standard to propose and upon which to seek comment.

It is important to keep in mind that of course this NPR is not a final rule.

The purpose of an NPR is to provide notice to the public of our plans for potential rulemaking and give our stakeholders an opportunity to comment on those plans. Nothing in the Administrative Procedure Act or our own statutes prevents the Commission from publishing an NPR while continuing to work and seek comment on the underlying data.

If any of the issues cited as reasons to vote against publishing this NPR were truly fatal to this entire rulemaking effort, our staff – including our very capable engineers, epidemiologists, economists and lawyers – would never have put it forward for Commission consideration. For the reasons I explain below, this NPR is ripe for publication and comment.

## **Hazards Associated with Table Saws**

We are dealing with a very real hazard that has serious costs to society. As mentioned, CPSC staff injury analyses revealed that an estimated 33,400 table-saw-related emergency department (“ED”) treated injuries occurred in 2015. Ninety-two percent of these injuries were likely related to the victim making contact with the spinning blade. In 2015, 4,700 people experienced an amputation. About half of all amputations associated with workshop products can be attributed to table saws. The annual societal cost associated with medically treated blade-contact injuries exceeds \$4 billion.

Consider that number again: \$4 billion in societal costs. That is a lot of Josh Wards out there, experiencing real and long-term suffering.

We all know saws are dangerous. No one is saying otherwise. But the scenarios and actions that lead to amputations and other injuries are not always intuitive. The ongoing injuries each year tell us that amateur woodworkers clearly do not easily foresee all of the different ways that cut wood can pinch the spinning blade or ride up the blade during a cut and subsequently be thrown forcefully at the operator.

Consumers cannot readily predict the many possible scenarios leading to distraction, such as unfortunate but predicable reflexive motions of the hand into the blade’s path or a loss of balance. Seniors may not realize how their reaction time, balance and eyesight might have deteriorated over time. Even experienced woodworkers may get overconfident in their ability to control a cut and become too relaxed in their safety precautions. All of these scenarios are foreseeable. All of these scenarios keep happening. And the resulting devastating injuries are all preventable.

## **Inadequate Voluntary Standards**

Ideally, an adequate voluntary standard would have been developed long ago and would be substantially complied with. And today’s vote would not be necessary. Clearly, however, the voluntary standards process has failed and today’s vote was necessary. Through the years, saw manufacturers have attempted to improve the blade guarding systems through the consensus processes available in ANSI-approved standards development. These efforts made modular blade guards common on the latest generation of table saws.

In addition, riving knives and splitters are intended to help prevent work pieces from catching on the blade and throwing them at the table saw user and anti-kickback pawls are supposed to catch work pieces before they are thrown. Many of us had hoped that these safety devices would have been effective. But they have not. Despite the introduction, for instance, of modular blade guards in 2009, staff’s most recent analysis

of table saw injuries in NEISS data shows no discernible change in the number of injuries or the level of risk associated with table saw injuries from 2004 to 2015. Clearly, we can and must do better.

### **CPSC's Proposed NPR**

In the absence of an effective voluntary standard, CPSC staff has produced an excellent and thorough briefing package that proposes a performance requirement based on the maximum depth of the laceration (3.5 mm) made to a surrogate finger moving at 1 m/s into a spinning table saw blade. The proposal is about as broad a performance standard as could be developed. The method of stopping the blade is not restricted in any way by this proposal, nor is any particular test method required to show compliance.

Given the technological advancements of the last decade, it seems reasonable to employ automatic injury mitigation systems in table saws to prevent these foreseeable and debilitating amputations and lacerations that cost so many so dearly.

### **Benefits-Costs Associated with the NPR**

As expected, the cost of designing a saw with such technologies is not insignificant. But prices should decrease as more units are ordered and technology advances. And staff's analysis shows that the potential benefits far outweigh the costs associated with table saw injuries. There is just no valid reason why we should not move as expeditiously as possible toward innovative solutions that could alleviate, and in most cases completely prevent, the pain and suffering endured by tens of thousands of people every year.

As for the argument that the benefit-cost analysis is somehow incomplete or unreliable because staff did not have information allowing them to hyper-parse the injury data by type of saws (bench, contractor, or cabinet), I can only strenuously disagree with the logic of the detractors, both about the need for that level of specificity and with the criticality of the analysis. Detractors of this NPR, with dramatic exaggerations, tout grave data gaps as a fatal flaw. In reality, the analysis before us includes a thoughtful and statistically accepted breakeven analysis that overwhelmingly points to incredible benefits to society.

Based on strength of the results of this sensitivity analysis in support of moving forward with rulemaking, the lack of information about saw types involved in the incidents is not a limitation to merely proposing a rule. This issue is not a red herring. It is a school of crimson mackerel.

## **Intellectual Property Concerns**

There is one final false issue that needs to be addressed and that is the intellectual property concerns raised today. Most new technological advancements are accompanied by intellectual property issues.

But most of the patent and antitrust concerns being raised in this discussion are a distraction, at best. They have little bearing on the issue of safety and are largely outside of the Commission's jurisdiction. As discussed above, the NPR proposes a performance requirement, not a design specification. A manufacturer's method of stopping the blade is not restricted in any way by this proposal, nor is any particular test method required to show compliance.

To the extent intellectual property issues may affect the benefit-cost analysis, these issues are already raised and addressed in the NPR.

It is, at best, baffling why anyone would buy into the false notion that we need to arbitrate patent issues as part of our rulemaking. We are the wrong agency, and it is the wrong stage of the process.

## **Conclusion**

I am very impressed with and proud of the thoughtful proposal that CPSC staff has put forward and want to thank the CPSC's table saw team for their hard work and perseverance on this issue. I also would like to commend Commissioner Adler for his commitment to solving this problem.

My principal criticism for those who opposed this rule is I have seen no Plan B from you, nothing at all to suggest any alternative to rulemaking that would genuinely address these hazards. "Defer to the market" is not anything close to an injury prevention strategy. If it were, Congress would not have felt compelled to establish the Consumer Product Safety Commission. If you have a genuine Plan B, let's hear it now. There has been enough inaction, enough harm done, enough pain suffered by the Josh Wards. We owe it to them to see this through and end these tragic, life-altering injuries.

One final comment and that is to offer a specific, well-deserved thank you. Special assistants to Commissioners work in the background without much fanfare. Their work is critical to what we do yet the public is not aware of their specific contributions. I want to thank Dottie Yahr and Boaz Green for their perseverance and commitment to finding a path forward these past few weeks. Dottie and Boaz, well done.