Submission of the National Consumers League

Consumer Product Safety Commission.

Supplemental notice of proposed rulemaking

**Standard Addressing Blade-Contact Injuries on Table Saws**

**MISSION 16 CFR Part 1264**

**[CPSC Docket No. 2011-0074]**

Introduction:

The National Consumers League welcomes the opportunity to provide comments to the Consumer Product Safety Commission on thesupplemental notice of proposed rulemakingfor Safety Standard Addressing Blade-Contact Injuries on Table Saws**.** The matter of table saw safety has been an ongoing concern of the National Consumers League for more than a decade. On October 11, 2011, CPSC published an Advanced Notice of Proposed Rulemaking to consider whether to promulgate a mandatory performance standard to address the unreasonable risk of injury associated with table saws.

In response, the National Consumers League, joined by Consumer Federation of America, Consumers Union, Public Citizen, and U.S. PIRG, submitted comments urging the Commission to move forward with the rulemaking.

[Sally Greenberg testifying before CPSC: Table Saws, ATVs, Fire Hazards](https://nclnet.org/ncl_s_greenberg_testifying_before_cpsc_table_saws_atvs_fire_hazards/)

The CPSC itself has been considering taking action to mitigate table saw injuries for two decades.

**To summarize the CPSC’s history, as noted in the CPSC package outlining this proposed rule:**

* On *April 15, 2003*, Stephen Gass, David Fanning, and James Fulmer, *et al.* requested that the CPSC require performance standards for a system to reduce or prevent injuries associated with contact with the blade of a table saw.
* On *October 11, 2011*, the Commission published an advanced notice of proposed rulemaking (ANPR) to consider whether there may be an unreasonable risk of blade-contact injuries associated with table saws.
* On *May 12, 2017*, the Commission published a notice of proposed rulemaking (NPR) to address blade-contact injuries associated with table saws. 82 FR 22190.
* Following publication of the NPR, CPSC staff completed a Special Study of table saw injuries that occurred in 2017.
* On December 4, 2018, the Commission announced the availability of - and sought comment on - the study. 83 FR 62561. The Commission received written comments on the study results from the public, which are available at regulations.gov, under docket number CPSC-2011-0074.
* In September 2019, CPSC staff submitted a Table Saw Update to the Commission with staff’s analysis of NEISS data through 2018, including a discussion of the 2017 Special Study. Among the conclusions, was this finding:

**A 15- year trend analysis (from 2004 to 2018) of table saw injuries reported in the September 2019 update showed no reduction in table saw injuries from 2010 to 2018, despite the fact that a voluntary standard that became effective in 2010 required new table saws to be equipped with modular blade guard systems.**

* On September *20, 2023,* the CPSC published a supplemental notice of proposed rulemaking, which was adopted by a vote of the Commission, 3-1 on October 18, 2023. See CPSC vote, [CPSC Minutes of Commission Meeting on Table Saws](https://www.cpsc.gov/s3fs-public/Comm-MtgMinutes-Table-Saws-Supplemental-NPR%20-Decisional.pdf?VersionId=276FH.c1BTSXguiswhfw4qMjhhu91Jh6)
* See 2023 NCL press release, [NCL Applauds CPSCs vote on a historic table saw safety rule](https://nclnet.org/ncl-applauds-cpscs-vote-on-a-historic-table-saw-safety-rule-that-could-save-up-to-2-32-billion-and-prevent-50000-grave-table-saw-injuries-each-year/)

Two important conclusions come from this important history. First, despite the adoption in 2010 of a voluntary standard developed by the industry requiring table saws to be equipped with blade guards, no reduction in table saw injuries resulted. This SNPR also analyzed updated incident data through 2021. The data confirm the 2019 analysis and suggest no reduction in table saw injuries despite the fact that the relevant voluntary standard has required table saws to include modular blade guards since 2010.

Secondly, had CPSC been able to act in 2003 to mitigate table saw injuries, to do some simple math based on the data in the CPSC’s package, 20 years of injuries multiplied by 49,176 injuries a year, by CPSC’s estimate, could have prevented 983,520 or *nearly a million* injuries. Again, using CPSC’s estimates of cost savings of $1.28 billion to $2.3 billion per year, a table saw safety standard could have saved from $25.6 billion to $46 billion over twenty years. Since 2004, table saws have been available in the U.S. market with AIM capabilities that mitigate injuries when a hand or finger makes contact with a rotating saw blade.

Based on the foregoing data, the National Consumers League strongly supports the CPSC’s proposed rule and finally and simply, for this reason: **The Commission now expects that the proposed rule would prevent or mitigate the severity of an estimated 49,176 injuries treated in hospital emergency departments or other medical settings per year. The Commission further estimates that net benefits would range from approximately $1.28 billion to $2.32 billion per year.**

The estimated benefits from the rule requiring the AIM technology on table saws, in both the NPR and SNPR, significantly exceed the estimated costs. Aggregate net benefits, using a 3 percent discount rate, range from about $504 million to $1,327 million for bench saws, $241 million to $365 million for contractor saws, and $536 million to $629 million for cabinet saws.

**What the Proposed Rule Will Do**

The proposed rule states that it would limit the depth of cut of a table saw to 3.5 mm or less when a test probe, acting as surrogate for a human finger or other body part, contacts the spinning blade at an approach rate of 1 m/s. CPSC staff estimated that the proposed rule would prevent or mitigate the severity of 54,800 medically treated blade-contact injuries annually.

The CPSC Proposed Rule Meets the Extremely Rigorous Test for Final Rule Required Under the Consumer Product Safety Act

Under section 9(f)(3) of the CPSA, to issue a final rule, the Commission must find that the rule is “reasonably necessary to eliminate or reduce an unreasonable risk of injury associated with such product” and that issuing the rule is “in the public interest.”

Additionally, if a voluntary standard addressing the risk of injury has been adopted and implemented, the Commission must find that the voluntary standard is not likely to eliminate or adequately reduce the risk of injury, or substantial compliance with the voluntary standard is unlikely.

The Commission also must find that expected benefits of the rule bear a reasonable relationship to its costs.

The Table below from the CPSC’s NEISS data tells the story of why this final rule is needed.

**Table 1. NEISS Estimates for Table Saw Blade-Contact Injuries,**

**2010-2021**

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| **Table Saw Blade Contact Injury Estimates** |
| **Year** | **N** | **Estimate** | **CV** | **95% Confidence Interval** |
| 2021 | 655 | 30,000 | 0.10 | 24,100-35,900 |
| 2020 | 689 | 34,600 | 0.10 | 27,800-41,300 |
| 2019 | 627 | 30,300 | 0.09 | 24,900-35,700 |
| 2018 | 649 | 31,300 | 0.09 | 25,500-37,100 |
| 2017 | 654 | 31,300 | 0.09 | 25,800-36,700 |
| 2016 | 646 | 30,000 | 0.09 | 25,000-35,000 |
| 2015 | 642 | 30,800 | 0.09 | 25,100-36,500 |
| 2014 | 631 | 30,300 | 0.08 | 25,300-35,300 |
| 2013 | 662 | 29,500 | 0.09 | 24,500-34,500 |
| 2012 | 648 | 29,500 | 0.09 | 24,100-34,900 |
| 2011 | 362 | 29,600 | 0.09 | 24,300-35,000 |
| 2010 | 657 | 30,100 | 0.10 | 24,000-36,200 |

Source: U.S. CPSC: NEISS

**Impact On Table Saw Manufacturers**

The power tool industry, which manufactures table saws, has been aware of the magnitude of injuries and has known that the 2010 voluntary standard has not reduced injuries year over year: in fact, there is a steady drumbeat of the same number of injuries each and every year, despite the requirement of blade guards since 2010. As the package notes, a total of 23 firms supply table saws to the U.S. market and have been identified by the CPSC.

The Power Tool Institute (PTI) estimates that its member companies account for 80 percent of all table saws sold in the United States (PTI, 2012). As the CPSC proposed rule notes, most of the companies are large, diversified international corporations with billions of dollars in sales, such as Stanley Black and Decker, Robert Bosch, Makita, Tooltechnic Systems (TTS), and Techtronic Industries Co., Ltd. These five large, diversified firms currently supply most of the table saws to the U.S. market. However, **table saws make up a relatively small part of their revenues, probably less than one percent.** PTI members tend to represent the mass market bench table saw manufacturers, while many of the smaller suppliers primarily serve the cabinet and contractor saw market segments.

We will not respond to the reasons PTI members have offered to argue that this rule is unfair or illegal, because the CPSC package discusses them at length. However, we note that the one objection that has been consistently raised -and we feel deserves mention here - is that AIM requirements will require the use of patented technology, which is not available or affordable for the bulk of the industry.

CPSC addresses this issue in the package: The purpose of the draft proposed rule is to significantly mitigate or eliminate table saw blade contact injuries while providing options to industry to minimize adverse impacts. This rule does not require the use of specific AIM technology. Firms can develop their own technology to meet the performance standards set by the performance measures in this draft proposed rule. Two firms other than SawStop have developed AIM technology, and a 36-month effective date is being proposed to allow other firms to become competitive suppliers. Finally, CPSC lacks authority to mandate licensing of TTS’s SawStop technology to their producers.

The CPSC proposal also notes that SawStop reportedly has more than 100 other table saw patents granted and more pending, and it is unknown to what extent

these other patents would impede other manufacturers from producing table saws with AIM technology. If those patents are linked to the original patents, they may expire at the same time. Current evidence suggests that these patents are not impeding other firms’ efforts in development of AIM technologies as Felder Group has developed another version of the AIM system.

Since the introduction of AIM technology into the US market in 2004, and now two decades later, PTI and its member companies have consistently argued against a mandatory safety standard for table saws without a defensible rationale. Instead of devoting its considerable resources to adopting and incorporating a proven safety technology that will all but do away with table saw injuries, PTI has instead spent the better part of nearly 20 years fighting CPSC’s and consumer advocates’ efforts to enact a safety standard for table saws that has been proven to be feasible and effective. This includes going to Congressional appropriators and asking them to bar the CPSC, one of our critical federal product safety agencies, from working on table saw safety.

We regret this use of resources. We also note that woodworkers themselves – as demonstrated on this YouTube video - are clear about their desire for safe table saws. Below are but a few examples from the 2,400 comments posted:

* The SawStop table saw is the heart of my workshop. In this video we run a hotdog through it to test out the tool's flesh sensing technology. This could save your finger!
* My father cut all four of his fingers off with a Radial arm saw years ago. Three fingers are bolted back together so he can only move them at the knuckle, the index finger was lost due to infection. He had to have a skin graft on all his fingers which was pulled from his thigh, so they now all grow hair so he has to shave them otherwise they grow hair. In airports he always sets off the metal detectors. When I was looking at table saws about 8 years ago it was between the SawStop contractor (hybrid wasn't out yet) and Powermatic 3hp cabinet. My father was with me at the time while I was a teenager at woodcraft. One look at his hand and it was obvious which saw I walked out with. 8 years later I still use the SawStop contractor saw, and it looks just like when I bought it, it’s a fantastic investment and probably the only one that is relatively easy to justify to your wife.
* I’ve heard of the Stop Saw but now seeing it in action, this will be on my, “save money for new woodworking equipment” list. My dad lost the first digits of three fingers during a kick back four years ago. In the blink of an eye, they were gone, and he is very safe in his wood shop. It just shows you that it could happen to anyone. Thank you for sharing this video.
* Cannot say enough good things about this saw. We have 5 where I work. Hands down one of the nicest saws I've used in 30+ years. I have the exact saw on my shopping list to replace my current cabinet saw.
* Back in November I had wood jump, and my fingers went across the blade and I'm still recovering today (thankfully all digits are attached just can't put too much pressure on them). A saw like this would have saved me money in the long run (3-4K in hospital bills so far) and I joke that this is the saw I should have bought.
* [YouTube SawStop Hotdog Demo](https://www.youtube.com/watch?v=gOReKxH5NlA)

In addition to these testimonials from woodworkers who have experienced working with a safe table saw, there are also tens of thousands of victims whose lives have been ruined by catastrophic injuries from table saws. Here are what a few of them have had to say about the need for a table saw safety standard:

**Curtis Harper, a Utah firefighter, and sole proprietor of a cabinetmaking business wrote in a letter to Senator Mike Lee (R-UT),**

*“I had a table saw accident in October 2007 as I was notching out a corner on a piece of oriented strand board. As I grabbed the waste piece to throw it in the waste bin, it slipped out of my hand. As it fell, I saw it dropping directly on to the blade and I was afraid the waste piece would hit the blade and kick back at*

*me, so I grabbed for the piece. Unfortunately, my hand was on top of the board as I grabbed the piece, and my hand came across the full length of the blade.*

*The cut went up through and between my little finger and ring finger, severing all the ligaments, tendons, and nerves to the little finger, which was later amputated….*

*I was so pleased when the CPSC decided to work on a safety standard to require injury mitigation technology on every table saw sold in the U.S…. I believe that*

*if the government mandated new safety technologies for table saws, it would save millions of dollars, maybe billions, in healthcare costs, insurance costs, pain and suffering and permanent disability.”*

**Michael Bankester, who owns a cabinet shop in Alabama, had a similar experience. He wrote,**

*“In 2016, I lost the tip of my left thumb along with the end knuckle on my middle finger and I severely cut through my pinkie and ring finger as a result of an accident on a table saw. My livelihood is building cabinets and other wood products, but you can't do any of that without both hands. It took a year before my hand was back close to normal and it never will be 100%. Accidents like mine happen no matter if you are a beginner or have used one as long as I have, which is 31 years. After the accident, I replaced the saws in my shop with SawStop saws, which are equipped with safety technology that prevents the kind of injuries I suffered. I wish all saws could have this kind of safety built in.*

*Since I purchased SawStop saws, we have had a number of incidents in our shop that could have turned into tragedies but didn’t. One incident occurred when one of our employees was ripping wood. When ripping narrow strips of wood,*

*you can't use a guard that covers the blade because there's not enough room for it. So, you either have to rely on your own skill or a SawStop saw to make sure you don't lose your fingers. Our employee was ripping wood for 1/4" trim and got too close to the blade, made contact, but only got a very small scratch. If it had been a regular table saw, he would have lost his thumb. He's a young man and it would have been awful for him to have a handicap like that for the rest of his life. Because of the SawStop technology he didn't have to worry about it, he was able to just go back to work. In another case, an employee was ripping with a push block and his hand slipped off, striking the blade. He got bloodied, but only needed a band-aid to cover the cut. He could have lost most of his hand and his guitar playing would have been over for life. But he got another chance.”*

 As Mr. Bankester says, AIM-equipped SawStop blades saved his young employee’s hand, preventing an unnecessary, lifelong tragedy. Sadly, this is not always the case. Below is testimony from Josh Ward, a college student who lost several fingers on his left hand in a high school shop class accident:

*Josh Ward is from Sisters, Oregon. In 2012, he was a junior at Sisters High School. In wood shop class, he was instructed to make a series of unsupervised cuts to a piece of plywood using an older model table saw.*

*Unfortunately, the plywood caught and kicked back, violently drawing his left hand in to the spinning blades, severing three of his fingers, and breaking multiple bones in his hand. After extensive surgery and treatment, his surgeons were able to save one out of the three fingers. He has struggled mightily, undergoing seven surgeries, and fighting multiple infections for months at a time. His medical bills topped $350,000.*

*Needless to say, this incident and injury has had a devastating effect on Josh. He had to give up his lifelong dream of becoming a firefighter. But Josh is a fighter. While undergoing his extensive treatment, he saw the valuable work done by the health care providers and has now set his sights on a career in nursing.*

*Josh strongly supports the enactment of a national standard that would require table saws to be equipped with safety technology that would prevent what happened to him from happening to anyone else. He knows the safety technology exists. In fact, Josh’s school bought a safer table saw after his incident. But a national standard is needed to protect all table saw users from these foreseeable, painful and permanent injuries.*

**Conclusion:**

**This** **Standard Addressing Blade-Contact Injuries on Table Saws** is a welcome, comprehensive, scientific, and economically based and long overdue proposal. Technology has now been available for two decades and is in use in hundreds of thousands of saws to prevent table saw injuries. Yet, the vast majority of table saw manufacturers have resisted implementing this safety technology. As CPSC Commissioner Rich Trumka, himself a woodworker,

observed in his comments “…the rule would provide the greatest net benefit to society of any rule in the agency’s history that I’m aware of—up to a $2.32 billion net benefit every year.”

The National Consumers League fully supports this Proposed Rule and greatly appreciates the years of dedication and work from the CPSC’s lead engineer on this project, Caroleene Paul, and the many the statisticians, economists, and others who have made this such a strong proposal. We thank them for their dedication and professionalism.

Sally Greenberg

Chief Executive Officer

National Consumers League

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