



Making Safety Standard: Getting Involved in Product Safety Standards

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Consumer Participation in Standards Development: Principles and Processes

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Disclaimer: This presentation was prepared by CPSC Staff and may not necessarily reflect the views of the Commission.



Overview

- What is a voluntary standard?
- Why are voluntary standards important?
- How can consumers contribute?



What Is A Voluntary Standard?

- Scope
- Definitions
- Performance Requirements
- Test Methods
- Appendices
- Rationales



Why are Voluntary Standards Important?

Since 1973, CPSC has promulgated roughly 70 mandatory safety standards; CPSC currently participates in roughly 83 voluntary standards.

Voluntary standards --

- can often be developed more quickly – often at less cost
- can be changed and updated more easily
- can get more stakeholder support and less opposition



National Technology Transfer and Advancement Act of 1995 (NTTAA)

- Directs federal agencies in their use of private sector standards and conformity assessment practices.
- Federal agencies directed to use private sector standards, wherever possible, rather than make government standards.
- Directs NIST to bring together federal agencies, as well as state and local governments, to achieve greater reliance on voluntary standards and decreased dependence on government standards.



OMB Circular A-119

Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities (Revised 2016)

- Published to help implement the NTTAA
- Encourages federal agencies to benefit from the expertise of the private sector
- Promotes federal participation in industry consensus standards development



Goals of NTTAA and OMB A-119

- Reduce **cost** of developing government standards
- Decrease the **cost of goods** and burden of complying with regulations
- Promote **efficiency** and competition through harmonization of standards
- Promote reliance on the **private sector** to supply solutions
- Promote collaboration with the private sector on standards that **serve national needs**



Consumer Product Safety Act (CPSA): Section 7(b)(1)

“The Commission shall rely upon voluntary consumer product safety standards rather than promulgate a consumer product safety standard prescribing requirements described in subsection (a) whenever compliance with such voluntary standards would eliminate or *adequately reduce the risk of injury* addressed and it is likely that there will be *substantial compliance* with such voluntary standards.”



American National Standards Institute (ANSI)

MISSION - To enhance the global competitiveness of U.S. business and the American quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems and ensuring their integrity.

A Private- and Public-Sector
Partnership since 1918



ANSI is Not a Standards Developer

ANSI accredits:

- U.S. Standards Development Organizations (SDOs)
- U.S. Technical Advisory Groups (TAG) to ISO
- Conformity Assessment Systems

ANSI safeguards the integrity of the U.S. voluntary consensus standards system

- ANSI Essential Requirements (Openness, Lack of Dominance, Balance, Appeals Process, and Consensus)

ANSI provides regional and international access and offers a neutral policy forum



Consumer Product Safety Standards Development Organizations (SDOs)

ASTM – American Society for Testing and Materials
most child-related products, recreational, sports,
facility, furniture, chemical, and misc. standards

UL – Underwriters Laboratories
electrical products/devices and fire/CO emission
standards

NFPA – National Fire Protection Alliance
National Electric Code and other fire related standards

ISO – International Standards Organization
mattresses, nanotechnology, global harmonization

Many others
ATVs, ROVs, window coverings, pools



What Can You Expect At a Standards Meeting?



Process Principles

Defines *Voluntary Consensus Standards Development Process* to include FIVE elements:

- **Openness** (anyone can contribute)
- **Balance** (no single dominating interest)
- **Due Process** (adequate meeting notices, fair procedures, etc.)
- **Appeals Process** (for impartial handling of appeals)
- **Consensus** (general agreement, but not necessarily unanimity)



Balanced Committees Are REQUIRED

- U.S. Standards Strategy (USSS)
 - Transparency, Openness, Impartiality, Effectiveness and Relevance, Consensus
- ANSI Essential Requirements
 - Balance
- Circular A-119
 - Openness, Balance of Interest, Due Process, Appeals Process



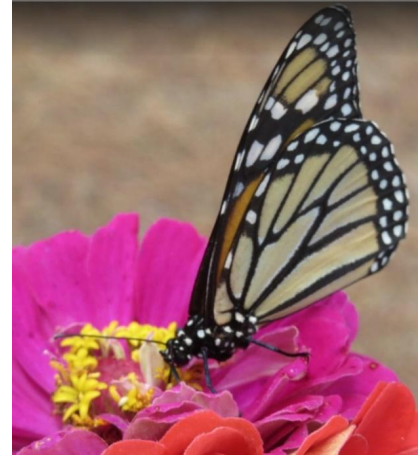
Commission Support of Voluntary Standards May Include --

- Providing engineering, epidemiological, and health science information
- Encouraging the initiation of the development of voluntary standards for specific consumer products
- Identifying specific risks of injury to be addressed in voluntary standards
- Performing staff evaluations of voluntary standards to determine their adequacy and efficacy in reducing risks of injury

(16 CFR § 1031.7)



Typical Process



Identify
Need

Form
Group

Draft
Proposal

Review
Proposal

Vote and
Resolve



Typical Timelines

- Standards development (from initiation to publication) can take from 1 to 5+ years (highly variable, difficult to predict)
- Revisions to existing requirements in a standard are typically developed much faster (4 to 6 months)
- Many industry standards are under constant revision (groups meet at least once a year to review and update)
- Reviewed for revision every 5 years (depending on organization)



What to Expect at a Standards Development Meeting

- Multidisciplinary participants (engineers, lawyers, scientists, consumer advocates, victims)
- Minutes, task group reports
- Discussions, wordsmithing
- Motions, voting
- Robert's Rules of Order
- Quarterly to yearly timelines



Data Reviews

- National Electronic Injury Surveillance System (NEISS) incidents
- Injury type, rates
- Market data
- Hazard description, classification
- Failure modes
- Human factors: user expectations and behaviors
- Industry benchmarks and history



The Safety Hierarchy:

- Eliminate hazards



Most Effective

- Guard against hazards



Somewhat Effective

- Warn of hazards

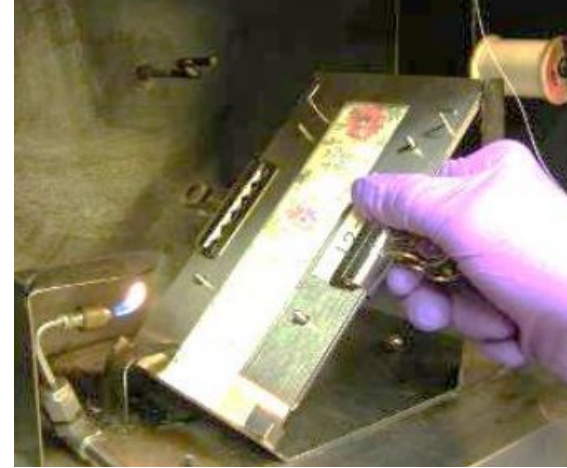


Least Effective



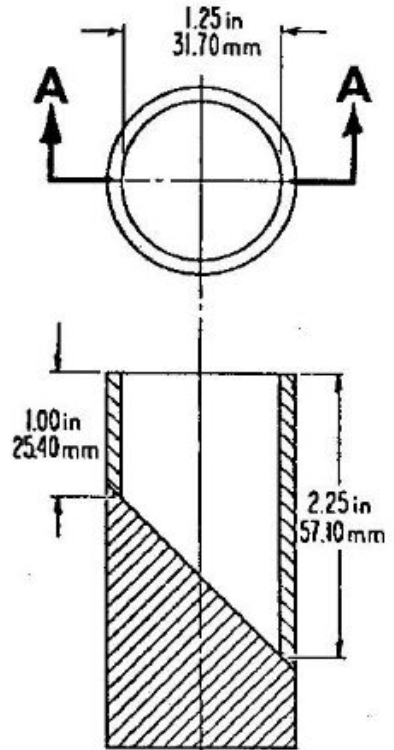
Focus on Performance Requirements, Not Design

- A set of specific, observable measures that an product should (or should not) display under controlled, repeatable circumstances.
- Not prescriptive characteristics which specify how the performance should be achieved.
- It doesn't matter how you design the product as long as you pass the test.
- This promotes innovation.



Test Methods Should Be Straightforward

- Valid, Applicable, Repeatable
- Cost effective
- Availability of materials; off-the-shelf parts
- Time to set up and execute
- Number of repetitions
- Lifecycle testing
- Number of samples
- Testing sequence

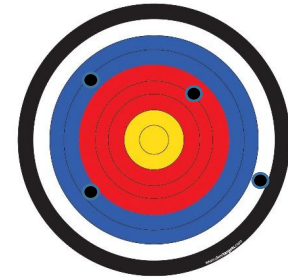
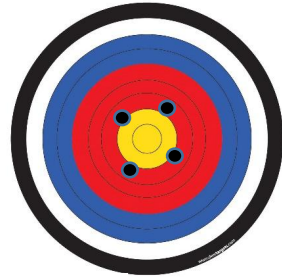
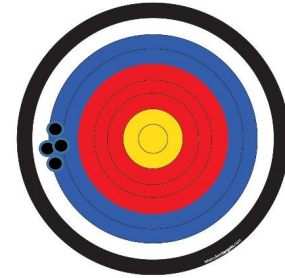
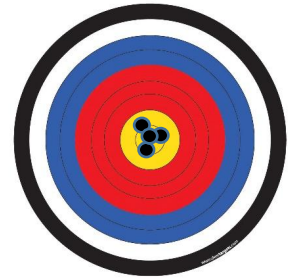


Small Parts Test Fixture



Test Methods should Be Effective

- Repeatability (precision)
 - Tolerances
 - Material properties
 - Measurement variation
 - Inter-operator reliability
- Accuracy (validity and correctness)
 - Do tests ensure safety?
 - Do tests differentiate safe from hazardous products?
 - Do tests address all known hazard scenarios?
 - Do tests represent the entire user population?



Elements of Effective Warnings

- Signal word – to get attention
- Identification of the hazard – in plain language
- Explanation of the consequences if exposed to the hazard
- Directions for avoiding the hazard
- User testing for conspicuity, comprehension, and tolerance



Common Topics in Safety Standards

- Simplicity vs. Comprehensiveness
- Cost of testing vs. Reliability/Validity of testing
- Protecting intellectual property vs. Sharing solutions
- Liability concerns vs. Protectiveness of consumers
- Intervention vs. Prevention

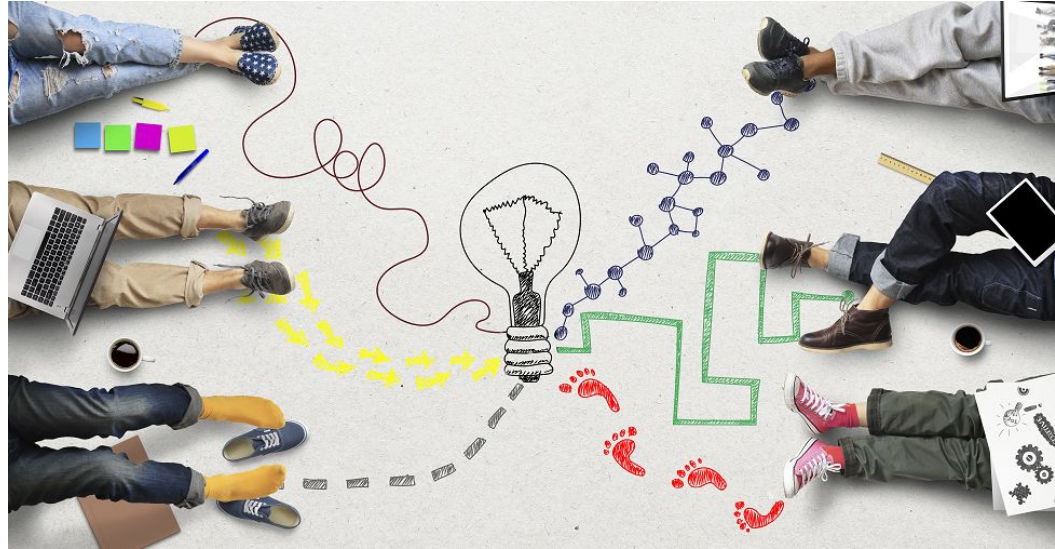


How Can Consumers Contribute?



The Value of a Consumer Perspective

- Real-world experiences
- Critical incidents
- Foreseeable uses/misuses
- User expectations
- Clarity of language
- Focus on objectives
- Credibility from stakeholder balance
in consensus process



How To Prepare For A Meeting

- Get to know the committee leader
- Request past meeting minutes prior to meeting
- Request a mentor
- Ask about specialized jargon, acronyms, current projects
- Ask about active task groups
- Pull data from NEISS online
- Give proposals to committee leader ahead of meeting



Facilitating Consumer Participation

- Outreach
- Collaboration spaces
- Training materials
- Mentors
- Scholarships or grants
from SDOs



Consumer Participation Fund

- The **Consumer Participation Fund** provides resources to support consumer participation in the development of standards, with an initial focus on health and safety standards.
- Given the importance of consumer participation, ANSI has established the fund with the support of five founding sponsors from the ANSI membership community—ASTM International, the International Association of Plumbing and Mechanical Officials (IAPMO), NSF International, UL Standards & Engagement (ULSE), and the Toy Association. The website is:
 - <https://www.ansi.org/outreach/consumers/consumer-fund>
- **If you have questions about how to apply for support or want more details, please contact Cleo Stamatatos at ANSI:**
cstamatos@ansi.org.

Consumer Ombudsman Resources

- Networking and referrals
- Information gathering
- Explanations in plain language
- Educational materials
- A dedicated point of contact
- Outreach campaigns



Contact:

www.cpsc.gov

www.saferproducts.gov

<https://cpsc.gov/Research--Statistics/NEISS-Injury-Data> -

<https://cpsc.gov/Research--Statistics/Clearinghouse-Online-Query-Tool>

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Thank you.



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