

Personal Protective Equipment and Personal Protective Technology Product Standardization for a Resilient Public Health Supply Chain

Virtual Workshop

WORKSHOP AGENDA

March 1-2, 2023
10:00 a.m. – 4:00 p.m. ET

Workshop Goal: This workshop will examine standards gaps related to personal protective equipment (PPE) and personal protective technology (PPT) and explore innovative approaches and technologies to update and streamline the U.S. standardization system for PPE and PPT in support of supply chain resiliency.

Workshop Objectives: Workshop discussants and participants will have the opportunity to engage and exchange knowledge and ideas among key partners—including policy makers, manufacturers, users, and relevant technical contributors—and to facilitate discussion on opportunities to improve the effectiveness, safety, supply stability, and accessibility of PPE/PPT designed for use by workers and the public exposed to hazardous agents (e.g., wildfire smoke, infectious diseases, nuclear, chemical, or biological warfare) by:

- Examining issues that arose during the COVID-19 pandemic associated with current product standards for PPT and PPE, with a focus on PPE sizing standards;
- Exploring potential supply chain impacts associated with current product and technology standards, including those related to stockpiling of PPE and PPE sizing standards;
- Discussing standards needs for by workers and the public exposed to hazardous agents (e.g., sizing, fit testing), as well as opportunities, barriers, and potential solutions to addressing current PPE limitations;
- Highlighting relevant intellectual property issues related to PPE standardization;
- Considering how standards can improve the effectiveness of PPE without impeding innovation;
- Considering how input received in response to past National Institute for Occupational Safety and Health (NIOSH) Federal Register Notices (FRNs) can inform standards for PPE and PPT.

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WORKSHOP AGENDA

DAY 1 – WEDNESDAY, MARCH 1, 2023

Session 1 Welcome and Overview of the Workshop	
10:00am	Chair Welcome and Opening Remarks <i>Linda Hawes Clever, Workshop Chair</i>
10:10am	National Personal Protective Technology Laboratory (NPPTL) Opening Remarks <i>Maryann D'Alessandro, Director, NPPTL</i>
Session 2 Standards and a Resilient PPE/PPT Supply Chain	
10:20am	Introduction <i>Tener Veenema, Senior Scientist, Johns Hopkins Center for Health Security</i> <i>This panel will lay the foundation of the workshop by discussing the observations made in the report from the National Strategy for a Resilient Public Health Supply Chain Task Force on Product Standardization¹ and what it means to have a resilient supply chain. The session will walk through the process of setting standards along the PPE/PPT supply chain, from raw materials to design and manufacturing through to transportation and storage and distribution to users.</i>
10:25am	Panel Presentations <i>Tener Veenema, Panel Moderator</i> <u>Government Perspective</u> <ul style="list-style-type: none">• <i>Stuart Evenhaugen, Strategy and Policy Analyst, Administration for Strategic Preparedness and Response (ASPR)</i>• <i>Gordon Gillerman, Director, The National Institute of Standards and Technology (NIST)</i> <u>Supply Chain Perspective</u> <ul style="list-style-type: none">• <i>Ozlem Ergun, Professor and Associate Chair, Northeastern University Committee Member of the National Academies Study on Resilient Medical Supply Chains</i> <u>Manufacture/Industry Perspective</u> <ul style="list-style-type: none">• <i>Dan Shipp, Consultant, International Safety Equipment Association (ISEA) (ret.)</i>
10:50am	Panel Discussion / Q&A <i>Tener Veenema, Panel Moderator</i>
Session 3 PPE/PPT Supply Chain and Standards in COVID-19	
11:20am	Introduction <i>Jill Morgan, Critical Care Nurse, Emory University Hospital</i> <i>Participants will discuss how the COVID-19 pandemic impacted all aspects of the PPE/PPT supply chain, from manufacturers all the way through to PPE/PPT users. The session will also note differences in standards and communication for PPE/PPT for workers vs the public.</i>

¹ May also be referred to as “The Product Standardization Task Force” or just “The Task Force.”

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11:25am

Panel Presentations

Jill Morgan, Panel Moderator

Manufacturing Perspective

- *Nicole McCullough*, Vice President of the Global Application Engineering and Regulatory for the Personal Safety Division, 3M

Distribution Perspective

- *Susan Gorman*, Associate Director for Science, ASPR- Strategic National Stockpile (SNS)
- *Corey Worden*, Safety Advisor, Houston Health Department
- *John Fleming*, Public Health Preparedness Bureau Chief, Houston Health Department
- *Sean Kice*, SNS Coordinator, Tennessee Department of Health

End User Perspective

- *Daniel Gerard*, President, International Association of EMS Chiefs (IAEMSC)
- *Jennifer Kiger*, Director of the COVID-19 Division, Houston/Harris County Public Health Department

11:50am

Panel Discussion / Q&A

Jill Morgan, Panel Moderator

12:20pm

BREAK

Session 4

Standards and PPE Design

12:50pm

Introduction

Stephanie Holm, Director, Western States Pediatric Environmental Health Specialty Unit
Assistant Clinical Professor, University of California San Francisco
Public Health Medical Officer, Children's Environmental Health Center, CA EPA

This session is the first of a series that is aimed at discussing the PPE/PPT standards around specific components of the supply chain. Here, this panel is going to examine the standards impacting the design and manufacturing of PPE/PPT.

12:55pm

Panel Presentations

Stephanie Holm, Panel Moderator

Design Standards - PPE for Occupational Use

- *Jessica Tredinnick*, Manager, 3M Global Standards Development
- *Joe Worple*, Senior Design Engineer, Milwaukee Tool

Design Standards - PPE for Public Use

- *Victoria Jaqua*, Medical Community Lead, Open Source Medical Supplies (OSMS)
- *Nicholas Smit*, former Executive Director, AMMA

Innovative PPE Design

- *Jennifer Schneider*, Professor and Chair of the Eugene H. Fram Applied Critical Thinking in Program, Rochester Institute of Technology
- *Susan Sokolowski*, Professor and Founding Director of the Sports Product Design Program, University of Oregon

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WORKSHOP AGENDA

1:20pm

Panel Discussion / Q&A

Stephanie Holm, Panel Moderator

Session 5 Standards and PPE Manufacturing Capacity

1:50pm

Introduction

Michelle Feinberg, Owner & Creative Director, New York Embroidery Studio

The next session in the series aimed at discussing the PPE/PPT standards around specific components of the supply chain will focus on discussing the standards around PPE/PPT manufacturers, specifically manufacturing capacity. Here, this panel is going to examine how standards can impact PPE/PPT manufactures' capacity, both as a means to facilitate increasing capacity and as a potential barrier.

1:55pm

Panel Presentations

Michelle Feinberg, Panel Moderator

Manufacturing Standards - PPE for Occupational Use

- Dan Glucksman, Public Affairs Director, ISEA
- Claudio Dente, President and CEO, Dentec

Manufacturing Standards - PPE for Public Use

- Brent Dillie, Managing Director, Premium-PPE

Innovative PPE Manufacturing

- Paul Dillinger, Vice President and Head of Global Production, Levi Strauss & Co.
- Andrew Moy, Chief Executive Office and Board Member/Founder, Aegle

2:20pm

Panel Discussion / Q&A

Michelle Feinberg, Panel Moderator

Session 6 Day 1 Wrap-Up

2:50pm

Chair's Reflection and Preview of Day 2

Linda Hawes Clever, Workshop Chair

3:00pm

ADJOURN DAY 1

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DAY 2 – THURSDAY, MARCH 2, 2023

Session 7 Welcome and Recap of Day 1	
10:00am	Chair Welcome and Opening Remarks <i>Linda Hawes Clever, Workshop Chair</i>
Session 8 Conformity, Certification, and Continued Product Performance	
10:15am	Introduction <i>Jill Morgan, Critical Care Nurse, Emory University Hospital</i> <i>The last session in the series aimed at discussing the PPE/PPT standards around specific components of the supply chain will review standards gaps related to conformity testing, certification, and maintaining the integrity of the product (e.g., storage, decontamination, reuse). Discussion will also occur around how conformity testing and certification processes differ by product type/use scenario.</i>
10:20am	Panel Presentations <i>Jill Morgan, Panel Moderator</i> <u>Government Perspective</u> <ul style="list-style-type: none">• <i>Jon Szalajda, Deputy Director, NPPTL</i>• <i>Gordon Gillerman, Director, Standards Coordination Office at NIST</i> <u>Academic Perspective</u> <ul style="list-style-type: none">• <i>Lisa Brosseau, Professor, University of Illinois at Chicago (ret.)</i> <u>Manufacturing/Industry Perspective</u> <ul style="list-style-type: none">• <i>Jeff Stull, President, International Personnel Protection, Inc</i> <u>Market and Supply Chain Economics Perspective</u> <ul style="list-style-type: none">• <i>David Simchi-Levi, Professor of Engineering Systems, Massachusetts Institute of Technology</i>
10:50am	Panel Discussion / Q&A <i>Jill Morgan, Panel Moderator</i>
Session 9 Marketing, Stockpiling, and Distribution	
11:20am	Introduction <i>Tinglong Dai, Professor, Johns Hopkins Carey Business School</i> <i>Continuing our path along the supply chain, this session is aimed at discussing the standards around PPE/PPT marketing, stockpiling, and distribution. Here, this panel is going to examine how standards can impact the ability of different entities' abilities to market, stockpile, and distribute PPE/PPT particularly in times of high demand.</i>

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11:25am

Panel Presentations

Tinglong Dai, Moderator

Purchasers Perspective

- *Barbara DeBaun*, Improvement Advisor, Cynosure Health
- *Skip Skivington*, Vice President of Health Care Continuity and Support Services, Kaiser Permanente

Government Perspective and Public Distribution Networks

- *Chris Tang*, Professor and Chair in Business Administration, University of California Los Angeles (UCLA) Anderson School of Management
- *Colleen Miller*, Deputy Branch Chief, Conformity Verification and Standards Development Branch, NPPTL
- *Sean Kice*, SNS Coordinator, Tennessee Department of Health

Commercial Perspective and Private Distribution Networks

- *Anne Miller*, Executive Director, Project N95

11:50am

Panel Discussion / Q&A

Tinglong Dai, Moderator

Session 10

Communication + Education

12:20pm

Introduction

Amrita John, Critical Care & Infectious Disease Physician, University Hospitals Cleveland Medical Center and
Carolyn Sheridan, Founder & Executive Director, Ag Health and Safety Alliance

The last stop on the supply chain is the user. This session is aimed at discussing the standards around communicating and educating those who use PPE/PPT. Here, this panel is going to examine how standards and guidance can differ and have different impacts on if the users are in an occupational setting or members of the public.

12:25pm

Panel Presentations

Amrita John and Carolyn Sheridan, Panel Moderators

Underserved Worker Perspective

- *Alexis Guild*, Director of Health Policy and Programs, Farmworker Justice (FJ)
- *Elizabeth Royal*, Assistant Director for Healthcare Workforce Strategy, Service Employees International Union (SEIU)

Communication

- *Andy Levison*, Director for the Directorate of Standards and Guidance, Occupational Safety and Health Administration (OSHA)
- *Sarah Coefield*, Air Quality Specialist, Missoula City-County Health Department

12:50pm

Panel Discussion / Q&A

Amrita John and Carolyn Sheridan, Panel Moderators

1:20pm

BREAK

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Session 11	Approaches to Prioritizing Standards Gap Filling
1:50pm	<p>Introduction <i>Tener Veenema, Senior Scientist, Johns Hopkins Center for Health Security</i></p> <p><i>This panel will bring the focus of the workshop full circle by reflecting on the standards gaps and issues raised throughout the previous session and how they tie into the observations made in the Product Standardization Task Force report. In a roundtable format, panelists will discuss ways to focus efforts on priority issues for PPE/PPT standards.</i></p>
2:00pm	<p>Panel Discussants <i>Tener Veenema, Panel Moderator</i></p> <p><i>Participants</i></p> <ul style="list-style-type: none">• <i>Ozlem Ergun, Professor and Associate Chair, Northeastern University</i>• <i>Lisa Brosseau, Professor, University of Illinois at Chicago (ret.)</i>• <i>Andrew Moy, Chief Executive Office and Board Member/Founder, Aegle</i>• <i>Bonnie Rogers, Director and Associate Professor, University of North Carolina- Chapel Hill, Stone Turn Consultants</i>• <i>Sundaresan Jayaraman, Professor and Founding Director Kolon Center for Lifestyle Innovation, Georgia Institute of Technology</i>• <i>Mark Shirley, Director of Integrated Resiliency Management, Sutter Health</i>
Session 12	Roundtable Discussion: A Cohesive and Complex Standards System for a Resilient Supply Chain
2:30pm	<p>Introduction <i>Linda Hawes Clever, Workshop Chair</i></p> <p><i>This final panel will close the workshop by discussing what it means to have a resilient PPE/PPT supply chain and how a systems approach to setting PPE/PPT standards can help protect the health and safety of workers and the public.</i></p>
2:35pm	<p>Panel Discussion <i>Linda Hawes Clever, Panel Moderator</i></p> <p><i>Planning Committee Members</i></p>
Session 13	Day 2 Wrap-Up (25 min)
3:30pm	<p>Chair's Reflection and Closing Remarks <i>Linda Hawes Clever, Workshop Chair</i></p>
3:45pm	<p>Final Words <i>Maryann D'Alessandro, Director, NPPTL</i></p>
3:55pm	ADJOURN

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