

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Workshop on the Use of Elastomeric Respirators in Health Care

National Academy of Sciences Building
2101 Constitution Avenue, NW
Washington, DC 20001

AGENDA

Tuesday, May 22, 2018
Lecture Room

OPEN SESSION: 8:30 am to 5:30 pm

8:00 – 8:30 a.m. **Breakfast, Available in NAS Cafeteria**
(Breakfast tickets available for committee and speakers in the Lecture Room – sign the ticket and give it to the cashier)

8:30 – 8:40 **Welcome and Opening Remarks**
Linda Hawes Clever, Committee Co-Chair
Bonnie Rogers, Committee Co-Chair

8:40 – 10:00 **Panel 1—Reusable Elastomeric Respirators: User and Infection Control Perspectives**
Facilitators: Chris Friese and Allison McGeer

8:40 – 9:30 Panel Introductions and Presentations

- Mark Catlin, SEIU
- Louise Dembry, Yale University
- Marguerite Gribogiannis, Advocate Lutheran General Hospital (via web conference)

9:30 – 10:00 Discussion with the committee

Issues for Presentations and Discussion:

- What are the strengths and limitations of elastomeric respirators?
- What have been your experiences or considerations regarding the decontamination of elastomeric respirators?
- What is the impact of elastomeric use by health care workers on the patient? Do elastomerics affect patient interactions with health care workers differently than N95s or other respirators?
- What is the impact on perception of risk? Do health care workers perceive that their risk of infection is different when using elastomerics as compared with N95s? As compared with PAPRs?

10:00 – 11:30 **Panel 2—Reusable Elastomeric Respirators: Research and Hazard Assessment**
Facilitator: Bob Harrison

10:00 – 11:00 Panel Introductions and Presentations

- Quinn Danyluk, Fraser Health

- Mary Bessesen, University of Colorado, Denver
- Andy Palmiero, National Personal Protective Technology Laboratory
- Rachael Jones, University of Illinois, Chicago

11:00 – 11:30 Discussion with the committee

Issues for Presentations and Discussion:

- Provide an overview of the research on elastomeric half-mask respirators regarding communication, comfort, disinfection, and use
- Identify knowledge and research gaps

11:30 – 1:00

Panel 3—Reusable Elastomeric Respirators: Decision-Making and Implementation in Emergencies

Facilitator: Skip Skivington

11:30 – 12:40 Panel Introductions and Presentations

- Joanne McGlown, McGlown LLC
- Jeff Nesbitt, Mayo Clinic
- MaryAnn Gruden, occupational health consultant
- Gloria Graham, Cincinnati Children’s Hospital Medical Center
- Linda Rouse-O’Neill, Health Industry Distributors Association

12:40 – 1:00 Discussion with the committee

Issues for Presentations and Discussion:

- Who makes the decisions on the types of respirators used by your organization? Who has input into the decisions? What are the decision criteria?
- Have elastomeric respirators been considered to be part of your organization’s routine use of respirators? Part of your organization’s emergency plans? What factors were involved in these decisions?
- What impact would moving to a new type of respirator during an emergency or non-emergency situation have on your organization? Impact on clinical care, fit testing, and training/education?
- What recommendations do you have for improving decision-making regarding respiratory protection options?

1:00 – 1:45

LUNCH—NAS Cafeteria

(Speakers and committee members have blue lunch tickets – sign and give to the cashier)

1:45 – 3:15

Panel 4—Reusable Elastomeric Respirators: Communications and Education

Facilitator: Pat Stone

1:45 – 2:45 Panel Introductions and Presentations

- Kathy Eklund, The Forsyth Institute
- Dave DeJoy, University of Georgia
- Barbara Braun, Joint Commission
- Gregg Pane, Association of American Medical Colleges

2:45 – 3:15 Discussion with the committee

Issues for Presentations and Discussion:

- What are the levers for changing the worker safety culture in health care? How can those levers be applied to the use of respiratory protection?
- Are there specific issues for education and training of health care workers (students and practitioners) related to elastomeric respirators?
- What mechanisms (standards, policies, guidelines, etc.) were put in place by dental professionals to ensure the use of face shields, masks, and other personal protective equipment? Are N95 respirators used? What are the plans for pandemic or other crisis management regarding respiratory protection?
- What recommendations do you have for improving training and education efforts on respiratory protection and for improving the worker safety culture?

3:15 – 5:00

Panel 5—Reusable Elastomeric Respirators: Innovation

Facilitator: Sundaresan Jayaraman

3:15 – 4:30 Panel Introductions and Presentations

- Matthew Weinger, Vanderbilt University (via web conference)
- Rodney Wallace, Biomedical Advanced Research and Development Authority
- Sergey Grinshpun, University of Cincinnati (via web conference)
- Alex Birrell and Alex Virr, CleanSpace Technologies (via web conference)

4:30 – 5:00 Discussion with the committee

Issues for Presentations and Discussion:

- What are the key usability issues that need to be considered in improving the design of elastomeric respirators for health care workers?
- What innovations in materials could be explored for moving to a more patient-care-friendly (less industrial) design for health care respirators? What are the materials challenges and how should they be addressed?
- What are the key issues that must be considered in the design of elastomeric respirators to facilitate their easy and effective decontamination and reuse in health care settings?
- What are the engineering and financial barriers to innovations in respiratory protection? Other types of barriers? What are your recommendations for overcoming those barriers and moving to the next generation of respirators for health care workers?

5:00 – 5:30

Public Comments and Closing Discussion

Facilitators: Linda Hawes Clever and Bonnie Rogers

5:30 p.m.

Public Session Adjourns