

## HICPAC Isolation Precautions Guideline Workgroup Call

September 29, 2022, 2:00 pm ET

### Participants

Workgroup: Sharon Wright, Mike Lin, Elaine Dekker, Judith Guzman-Cottrill, Anu Malani, Mark Russi, Connie Steed, Julie Trivedi, Deborah Yokoe

CDC: Mike Bell, Darian Bishop, Sydney Byrd, Abigail Carlson, Mylaica Conner, Marie de Perio, Ryan Fagan, Jamesa Hogges, Fernanda Lessa, Melissa Schaefer, Devon Schmucker, Christine So, Erin Stone, Matt Stuckey, Laura Wells

### Agenda

- ASTM Performance masks
  - Presentation by Jon Szalajda, Deputy Director, National Personal Protective Technology Laboratory, NIOSH
  - Q&A
- N95 vs. mask targeted review
  - Erin's presentation of results
  - Q&A
- Continued review of precautions table
- Wrap up and discussion of prework for the next meeting

### Discussion Summary

#### ASTM Performance masks

After Dr. Wright gave a recap of the previous meeting, the group listened to a presentation from Jon Szalajda, Deputy Director, National Personal Protective Technology Laboratory, NIOSH.

- Background: OSHA requested NIOSH comment on a report by aerosol scientists wanting to promote the adoption of this standard by the government.
  - NIOSH reported that these masks are not respirators or surgical masks; however, as a source control device, they reduce the risk of infection by preventing droplet transmission and reducing airborne transmission.
- Mr. Szalajda reviewed the different types of ASTM masks, how they have been tested, filtration efficacy, fluid resistance, and how they are expected to be used in the workplace.
  - Information can be found here: [Making Masks for the Workplace | NIOSH | CDC](#)
  - A list of masks that conform with the standard can be found here: [FaceCoverings \(cdc.gov\)](#)
- There are at least three manufacturers: 3M, Armbrust, and Grove Biomedical
- There have not yet been clinical trials around acceptability and ease of use, but NIOSH is looking at doing more studies as part of its Healthcare Strategic Plan.
- O&A:
- Can these masks be worn in place of a respirator?
  - They are a better barrier for source control than a surgical mask because they are designed to fit better, and the filtration efficiency is better.
  - It is not a respirator and does not meet the requirements, so if a respirator is needed, an N95 needs to be worn.
  - More research needs to be done to quantify the amount of ventilation protection.
  - These masks may be suitable for use as PPE, but more testing and research is needed.
- Do these masks require a fit test?
  - It does not; the user instructions would provide what the wearer needs to ensure a proper fit.

- If CDC were to recommend the ASTM 3502 in place of a well-fitted medical or surgical mask for seasonal coronavirus, what issues might arise?
  - The risk assessment of why that decision was made would need to be clear.
  - It does have a requirement for fit (leakage assessment), which is a positive.
  - These masks are readily available.
- N95s meet the surgical mask requirements for splash and sprays. Are there plans to create a version of this mask that meets those requirements?
  - The standard does not prohibit adding that, so a manufacturer could add fluid resistance.
  - The masks probably meet the fluid resistance requirements but have not been tested.
  - They would have to meet fluid resistance requirements to be approved by the FDA as a medical device.
- Are the masks labeled and marketed as workplace performance vs. workplace performance plus?
  - Yes, the three manufacturers listed above are labeling and marketing this way.
- A member provided a link and comment in the chat: [Infection Control: Severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) | CDC](#)
  - The new IC guidelines on COVID-19 website are referring people to this information. I do think HCF are going to be having a lot of questions on this topic. They provided a link to a list of manufacturers and product names that is shared in Marie's message above. Source control options for HCP include:
    - A NIOSH-approved particulate respirator with N95 filters or higher;
    - A respirator approved under standards used in other countries that are similar to NIOSH-approved N95 filtering facepiece respirators (Note: These should not be used instead of a NIOSH-approved respirator when respiratory protection is indicated);
    - A [barrier face covering that meets ASTM F3502-21 requirements including Workplace Performance and Workplace Performance Plus masks](#); OR
    - A well-fitting facemask.

#### N95 vs. mask targeted review

Ms. Okasako-Schmucker from the Office of Guidelines and Evidence Reviews (OGER) discussed the literature review results distributed to the group before the meeting.

- The COVID-19 data is still being reviewed, so the information discussed today is from studies on multiple respiratory viruses and influenza.
  - Overall, there was no difference in effectiveness for surgical masks compared to N95s, except for bacterial infections.
- Q&A:
- Did any of these studies determine if transmission occurred between the healthcare worker and the patient vs. outside the healthcare setting?
  - One study looked at contact tracing, and others adjusted for other exposures but did not investigate each case.
- Have clinical trials been conducted on the new ASTM masks?
  - So far, the NIOSH studies have been lab-based.
- Did studies look at compliance?
  - Yes, most did, and the compliance rate was similar for N95 and surgical masks.
- The group discussed how this information could be applied to this guideline update.
  - If the data does not show that the N95 provides better protection, then it may be that an N95 is only needed for particular situations.

- A member expressed concern about the new workplace performance and workplace performance plus masks' fluid resistance, and the production and availability of these masks.
  - These masks may provide better respiratory protection than a surgical mask but are not yet approved for the fluid resistance standard.
  - If the group determines they are the best option, the market will respond and increase production.
- A member commented in the chat: one way forward is to leave this as 'well-fitted facemask' and allow for evolving guidance about what that means based on new data and tolerability. ASTM 3502 is one option, but today's literature review gives us some scientific evidence to confidently allow med-surg facemasks for resp viruses, including seasonal flu

#### Wrap up and discussion of prework for the next meeting

- Continued discussion of the precautions table will be moved to the next meeting.
  - The group will think about today's discussion and how this information can be applied to the table.
- The group will start to move into the contact precautions discussion next meeting.
- Pre-reading material on enhanced barrier precautions will be sent out before the next meeting.

The call adjourned at 3:02 pm with no additional comments or questions.  
The next Workgroup call is scheduled for October 13th, 2022, at pm ET.