ORAL TESTIMONY ON BEHALF OF THE

AMERICAN COLLEGE OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE

Thank you for this opportunity to testify. I am Robert McLellan, an occupational and environmental physician, a Professor Emeritus at the Geisel School of Medicine at Dartmouth, and a past president of the American College of Occupational and Environmental Medicine (ACOEM). Today, on behalf of ACOEM, I am testifying in ***opposition*** to OSHA's proposed rule changes that would relax medical evaluation requirements for workers using filtering facepieces (abbreviated as FFRs) and powered air-purifying respirators (abbreviated as PAPRs).

ACOEM is the national medical society representing more than 3,000 occupational medicine physicians and other health professionals dedicated to worker health, safety, and environmental protection. Our members have **decades of experience** performing medical evaluations for respirator use, including FFRs and PAPRs, and several have conducted **foundational research** on respirator tolerance, physiologic effects, and psychological impacts.(1-2) Two ACOEM members have also just published the widely used Guide to the Medical Evaluation for Respirator Use, now in its second Edition.(3) Note that except for this book, I have submitted copies of the research that I cite during this testimony.

Today, I will explain why ACOEM **disagrees** with OSHA's rationale for eliminating medical evaluations. I will emphasize existing medical evidence of intolerance to these respirators and the risks posed to vulnerable workers, which require medical accommodations or

denial. I will also outline ACOEM's recommendations for targeted modifications supported by research and the input of a panel of experts and relevant stakeholders to refine the medical evaluation process. As well, ACOEM recommends strengthening enforcement of 1910.134.

(I will now provide) ACOEM's Comments on the Key Points Listed in OSHA's Review of Current Science

1. *OSHA cites a lack of large-scale epidemiological evidence*

   We agree with OSHA that there is an absence of large epidemiologic studies on adverse effects of FFRs and PAPRs. **In fact, we have repeatedly called for them.(2,4)** However, **major changes** to occupational health practice should be guided by the **presence**—not **the absence**—of evidence. Relaxing protections while awaiting large-scale data risks preventable harm.

2. *Workers are already using these respirators without medical evaluations*

   OSHA states it is unaware of adverse effects among workers who use FFRs and PAPRs without required medical evaluations. Violations of 1910.134 are consistently among OSHA's top 10 citations. These citations often include **multiple deficiencies** in respiratory protection programs, as well as missing medical evaluations. Workers in poorly functioning programs are less likely to report adverse effects due to inadequate training, pressure not to report, or lack of awareness. The fact that many workers use respirators without required evaluations **reflects enforcement gaps—not evidence** that evaluations are

unnecessary. **We are deeply concerned that eliminating aspects of the medical evaluation rule may create a broader failure of respiratory protection.**

3. *Dramatic increase in the number of people not covered by OSHA using FFRs and PAPRs*

   OSHA cites widespread public use of these respirators without medical evaluations as evidence of safety. However, public use was **unregulated, not formally reviewed, often incorrect, and highly variable**. Media images showed respirators worn upside down, inside out, or on the chin. Mixed messaging about N95 effectiveness likely led many people experiencing discomfort to stop using them or switch to less protective masks.

   No large-scale epidemiologic studies have examined adverse effects among the general public. Studies of historical examples of widespread lay use of respirators—such as gas mask distribution during World Wars and Israel's civilian respirator program—show good recall of mask skills training but were not designed to find evidence of the absence of adverse health effects.(5-6)

   Some deaths have been reported in community settings due to incorrect respirator selection. Eliminating medical evaluations may incentivize employers to provide FFRs or PAPRs even when inappropriate for the hazard.

4. *Physiologic burden of FFRs and PAPRs*

   We agree with OSHA that studies have demonstrated minimal physiologic burden of

these respirators. However, “physiologic burden” should be interpreted more broadly to include **symptoms impacting comfort** that are likely to drive many workers to be intolerant of FFRs and thereby threaten their health. Symptoms without a formal diagnosis—such as heat, dermal pressure, or anxiety—drive intolerance. Discomfort, communication or visual limitations, and underlying disease status such as asthma or pre-existing dermatologic conditions can significantly affect tolerance and compliance.(7) Field evidence shows many healthcare workers could not tolerate FFRs for extended periods, even with breaks.(8) Reductions of visual field and impaired communication create safety hazards that require training to mitigate.(9) Even short-duration use of FFRs commonly results in dermatologic conditions that reduce compliance.(10) Systematic reviews and meta-analyses of healthcare workers using FFRs demonstrated associations with occupational dermatoses as well as other symptoms that can drive FFR intolerance. (11-12) Medical evaluations can address these many considerations.

5. *Workers can remove respirators if symptoms arise without risk of adverse effects*

Hazard evaluations that demonstrate the need for FFRs or PAPRs indicate significant respiratory exposure risks. Brief lapses in protection may be acceptable for some hazards, such as the chronic effects of wildfire smoke. However, some workers, for example persons with asthma, and some use settings, such as protection from mycobacteria aerosol in patient care, can cause serious adverse effects even with brief exposures. As well, vulnerable workers—including those with pulmonary or cardiovascular disease, anxiety disorders, pregnancy, or

immunosuppression—may experience significant harm even from short exposures. Relying on workers' judgment shifts risk from employers to individuals.

6. *Few workers are denied respirator use for medical reasons*

   While few workers are denied respirator clearance, this does not diminish the value of evaluations. **Even a 2% denial rate, applied across millions of evaluations**, represents a large number of workers who would otherwise face preventable harm. Recent studies show that although examiners rarely deny all respirator use, they **often recommend accommodations**—such as PAPRs instead of N95s, limits on duration of use, or restrictions from certain environments.(4) Employers often rely on medical recommendations to provide PAPRs or adjust duties appropriately. **Medical evaluations identify risks and guide safe accommodations, even when clearance is granted.**

(I Will Now Outline) ACOEM Recommendations

As follows, ACOEM supports **modifying—but not eliminating**—the medical evaluation requirement. We recommend:

1. For now, maintain the existing medical evaluation requirement covering FFRs and PAPRs. Given persistent, widespread noncompliance with 1910.134, eliminating medical evaluations risks further erosion of respiratory protection programs.

2. Maintain and emphasize employers' obligation to refer workers for evaluation for existing OSHA triggers in 1910.134(e)(7)(i–iv).

3. Given widespread noncompliance, OSHA should conduct a National Emphasis Program to increase adherence to 1910.134.

4. Continue strong support for the National Personal Protective Technology Laboratory (NPPTL). This NIOSH lab ensures respirators meet strict quality and performance standards. Funding should support research to improve comfort, safety, and long-duration acceptance.

5. Expand the use of online and automated questionnaire review. Automated systems can reduce the burden and cost for employers and workers while maintaining safety.

6. Support the funding of large-scale epidemiologic studies. Recent research by ACOEM members proposes improved questionnaires and study designs.(2,4) Larger studies will inform evidence-based refinement of medical evaluations.

7. Convene a panel to assemble researchers, clinicians, and other relevant stakeholders to develop targeted, evidence-based modifications.

8. One example of targeted modifications would account for conditions and symptoms that have been demonstrated to drive intolerance: skin trauma, anxiety, communication, sensory, and perceptual hazards; work environment conditions; intensity of effort; and other PPE; as well as underlying medical conditions that increase risk.

9. Another example of a modification would be to:

   Require medical evaluations for workers using FFRs or PAPRs when use is extended; other PPE is worn concurrently; environmental conditions could increase symptoms; or brief removal could cause serious harm.

   Alternatively, expand OSHA's current expectation that respiratory symptoms during fit testing trigger medical evaluation. An abbreviated questionnaire could also be used at initial and annual fit testing, with positive responses prompting medical evaluation. Example trigger questions, which would not involve the fit tester probing of protected health information include:

   • Do you have medical problems or symptoms that may limit respirator use?

   • Have you been told you should be medically evaluated?

   • Are you concerned that work conditions will impair safe respirator use?

   • Have you previously had problems wearing an N95 or PAPR?

   • Do you want to speak with a health professional about respirator use?

(In) Conclusion

ACOEM **agrees** that modernization of the medical evaluation process is warranted. But eliminating medical evaluations without further input would place vulnerable workers at increased risk and undermine respiratory protection programs. We urge OSHA to adopt targeted, evidence-based modifications, support needed research, and strengthen enforcement to ensure workers remain protected.

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