



HEALTHIER WORKPLACES | A HEALTHIER WORLD

July 21, 2021

James Frederick
Acting Assistant Secretary of Labor for Occupational Safety and Health
U.S. Department of Labor

AIHA Comments on Improving OSHA's Emergency Temporary Standard on Occupational Exposure to COVID-19

Docket No. OSHA-2020-0004

Dear Mr. Frederick:

AIHA, representing approximately 8,500 occupational and environmental health and safety professionals, supports the Occupational Safety and Health Administration's (OSHA) issuance of an emergency temporary standard (ETS) on occupational exposure to COVID-19. As the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety in the workplace and community, below are our recommendations for how OSHA can improve the ETS. Please note that recommended new text is underlined and may be bolded to enhance clarity.

Patient Screening and Management

1910.502(d):

Given that the language of the standard indicates that employers need to "Screen and triage all clients, patients, residents, delivery people and other visitors, and other non-employees entering the setting", we recommend changing the title of this section:

- From "Patient screening and management" to "**Non-employee** health screening and management"

We further recommend OSHA add to this (or another section) that in the event of an exposure to a confirmed or suspected COVID-19 case, there needs to be an investigation of the exposure, including whether workplace conditions contributed to the risk of exposure. The ETS should then require the employer to address/correct the hazard/conditions that resulted in the exposure (if found to be present).

Employee Screening

1910.502(l):

Given that this section covers employee screening, we recommend changing the title of this section:

- From “Screening” to “**Employee health screening and management**”

1910.502(l)(1)(ii):

We recommend specifying that not only must the employer provide testing at no cost to the employee, but the testing must also be performed/conducted during paid time (i.e., during the workday). Thus, we recommend the following change to the standard:

- “If a COVID–19 test is required by the employer for screening purposes, the employer must provide the test to each employee at no cost to the employee **during paid time.**”

Also, in order to stay current with the changing science and to address the vaccination status of workers (something employers will clearly have to deal with given that, nationally, over 50% of U.S. adults have been vaccinated), we recommend adding the following two provisions to section 1910.502(l) of the standard:

- “Vaccinated employees do not need to be tested routinely for purposes of screening (unless there was a confirmed or suspected exposure to a COVID-19 case and/or the vaccinated employee is symptomatic).”
- “Unvaccinated employees may be tested periodically for purposes of screening”

We further recommend adding the following text regarding testing requirements:

- “Symptomatic unvaccinated employees should be tested, regardless of whether there is a known exposure or not.
- Unvaccinated employees should be tested after an exposure.
- Vaccinated employees should be tested after an exposure if they develop symptoms (as defined in section 1910.502(l)(1)(ii)).
- Unvaccinated employees should be tested on an outbreak setting (e.g., 3 or more employees within a 14-day period).
- All employees should be tested if there are 20 or more employee COVID-19 cases in an exposed group within a 30-day period. The 30-day period is subject to change to a shorter time period of 15 days based on the evolving nature and virulence of COVID-19 variants.”

We also recommend adding the following text regarding testing:

- “Testing must be provided/conducted and the results communicated in a manner that ensures employee confidentiality.”
- “Regarding testing approaches, response times, and test types, employers are encouraged to follow the CDC Interim Guidance on Testing Healthcare Personnel for SARS-CoV-2¹ and use one of the FDA’s authorized COVID-19 tests (see FDA’s list of In Vitro Diagnostic Emergency Use Authorization webpage for more information about specific FDA authorized tests).”

¹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/testing-healthcare-personnel.html>

1910.502(l)(3)(i)(A):

We believe that OSHA should remove the text regarding making notification of a close contact to a confirmed or suspected COVID-19 case being dependent on whether or not an employee was wearing personal protective equipment (PPE). Essentially, this notification should occur regardless of whether the employee was wearing a respirator and other required PPE. PPE is not an iron shield and may give a false sense of protection to the employee. This puts undue burden on the employee. This is also unduly burdensome for the employer who will have to (1) identify which employees were wearing PPE and which weren't on the date of interest (i.e., date of close contact), and (2) the notification of a close contact may occur many days after the exposure and the employee might not recall if they wore PPE or not on that particular day.

We also believe that employee vaccination status should be addressed in this section, and that confidentiality should be expressly stated here. Thus, we recommend the following changes to this section of the standard:

- “Notify each employee **regardless of vaccination status** who was not wearing a respirator and any other required PPE and has been in close contact with that person in the workplace. The notification must state the fact that the employee was in close contact with someone with COVID-19 along with the date(s) that contact occurred **in a confidential manner that does not reveal the COVID-19 cases' personal identifying information.**”

1910.502(l)(3)(i)(B):

As noted above, we believe that OSHA should remove the text regarding making notification of a close contact to a confirmed or suspected COVID-19 case being dependent on whether or not an employee was wearing PPE. Essentially, this notification should occur regardless of whether the employee was wearing a respirator and other required PPE.

We also believe that employee vaccination status should be addressed in this section, and that confidentiality should be expressly stated here. Thus, we recommend the following changes to this section of the standard:

- “Notify all other employees **regardless of vaccination status** who were not wearing a respirator and any other required PPE and worked in a well-defined portion of a workplace (e.g., a particular floor) in which that person was present during the potential transmission period.”
- “The notification must specify, **in a confidential manner that does not reveal the COVID-19 cases' personal identifying information,** the date(s) the person with COVID-19 was in the workplace during the potential transmission period.”

As noted above, we further suggest moving the following definition of the transmission period to the definitions section at the beginning of the standard.

- “The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated.”

1910.502(l)(3)(i)(C):

As noted above, we believe that OSHA should remove the text regarding making notification of a close contact to a confirmed or suspected COVID-19 case being dependent on whether or not an employee was wearing PPE.

We also believe that employee vaccination status should be addressed in this section, and that confidentiality should be expressly stated here. Thus, we recommend the following changes to this section of the standard:

- “Notify other employers whose employees, **regardless of vaccination status**, were not wearing respirators and any other required PPE and have been in close contact with that person, or worked in a well-defined portion of a workplace (e.g., a particular floor) in which that person was present, during the potential transmission period.”
- “The notification must specify, **in a confidential manner that does not reveal the COVID-19 cases’ personal identifying information**, the date(s) the person with COVID-19 was in the workplace during the potential transmission period and the location(s) where the person with COVID-19 was in the workplace.”

As noted above, we further suggest moving the following definition of the transmission period to the definitions section at the beginning of the standard.

- “The potential transmission period runs from 2 days before the person felt sick (or, for asymptomatic people, 2 days prior to test specimen collection) until the time the person is isolated.”

1910.502(l)(4)(i):

We recommend the following edit to the standard text:

- “If the employer knows an employee meets the criteria listed in paragraph (l)(2)(i) of this section, then the employer must immediately remove that employee **from the workplace** and keep the employee removed **from the workplace** until they meet the return to work criteria in paragraph (l)(6) of this section.”

1910.502(l)(4)(iii)(A):

We suggest addressing vaccination status in this section (given that section B below it addresses vaccination status):

- “If the employer is required to notify **an unvaccinated** employee of close contact in the workplace to a person who is COVID-19 positive in accordance with paragraph (l)(3)(i)(A) of this section, then the employer must immediately remove that **unvaccinated** employee and either:

1910.502(l)(4)(iii)(B):

Regarding 1910.502(l)(4)(iii)(B)(2), there is no justification why OSHA included a prior COVID-19 diagnosis and then 3-month recovery. OSHA needs to specify how employers are expected to verify this. Do they rely on the honor system? Require a note from a doctor? This is the only place in the ETS where OSHA discusses employees with a prior COVID-19 diagnosis. Other considerations are, what if an employee had a mild case of COVID, recovered and then might not have built enough immunity? How is an employer supposed to evaluate this?

Thus, we recommend OSHA either (1) include a discussion of why 3 months was chosen here, (2) include the prior COVID-19 diagnosis and 3-month recovery provision elsewhere in the standard, or (3) remove this provision all together. A summary of the standard text is included below for illustrative purposes.

Employers are not required to remove any employee who would otherwise be required to be removed under paragraph (i)(4)(iii)(A) of this section if the employee does not experience the symptoms in paragraph (l)(2)(iii) or (iv) of this section and has:
1910.502(l)(4)(iii)(B)(1)

Been fully vaccinated against COVID-19 (i.e., 2 weeks or more following the final dose); or

1910.502(l)(4)(iii)(B)(2)
Had COVID-19 and recovered within the past 3 months.

1910.502(l)(4):

We further recommend that OSHA add the following text to the 1910.502(l)(4) section (or another relevant section):

- “Employers do not need to require fully vaccinated people without COVID-19 symptoms to quarantine, be removed/restricted from the workplace or be tested following an exposure to someone with suspected or confirmed COVID-19. However, these vaccinated employees should still monitor themselves for symptoms of COVID-19 for 14 days following exposure to a confirmed or suspected case.”
- “Fully vaccinated employees do not need to be tested or quarantined or removed from work following close contact with a confirmed or suspected COVID-19 case, unless they have COVID-19 symptoms.”

We further recommend that OSHA also add to these standard provisions regarding what employers are required to do (testing, contact tracing, enact COVID-19 CDC guidelines, etc.) in an outbreak setting.

Recordkeeping

1910.502(q):

Regarding recordkeeping, we recommend that OSHA not only require employers to maintain a COVID-19 log, but also require employers to report to OSHA all COVID-19 cases from a workplace in which 3 or more workers have been found to be infected within a 14-day window, whether or not the employer thinks that the cases are work-related.

Best Practices and Behaviors

The OSHA ETS outlines best practices and behaviors that can reduce the risk of transmission in the workplace, including physical distancing, cleaning, and disinfecting, hand hygiene, and proper handling and disposal of PPE. The requirements for employees are spread out

throughout the ETS. We don't have specific recommendations for the ETS on this topic; however, having clear communications regarding employee behavior in the workplace is important. As a result, we suggest adding **Employees** to the Roles and Responsibilities section in the model plan that outlines all the best practices mentioned in the ETS that the employee must comply with.

Cleaning and Disinfecting

The ETS has a section dedicated to Cleaning and Disinfection which is an important layer in the mitigation of COVID-19 in the workplace. We believe there is no need for healthcare settings to require any additional cleaning or disinfection in the OSHA ETS for COVID-19 beyond current infection control and prevention guidelines.

Hand Hygiene

AIHA is pleased to see that hand hygiene is included in the ETS, as it is an effective method of reducing the transmission of SARS-CoV-2. We would like to see a note added to the standard that hand sanitizer is not effective against visibly soiled hands. We also suggest the employer include in its workplace evaluations regarding the availability of handwashing facilities. The employer should also encourage proper handwashing as well as allow time for proper and frequent handwashing and define handwashing to last at least 20 seconds as a good practice. In addition, since the ETS covers work-related activities in vehicles, we recommend providing hand sanitizer in vehicles (stored out of the sunlight).

COVID-19 Plan

AIHA appreciates and sees immense value in the ETS regarding the employer requirements for COVID-19 plans. We believe that providing a model plan assists employers with achieving compliance and applaud OSHA's adding this useful tool. We also agree that COVID-19 plans need to be site-specific to account for differing risks. We recommend that plans include the following requirements, which are in other sections of the ETS, but don't appear to be listed in the required employer plan in section 1910.502(c): (1) Communicate the hazards of COVID-19; (2) Provide COVID-19 training on both the disease and the plan (even though training has its own section in the ETS, it should explicitly be listed in the plan as it is an important part); (3) Provide a means to report hazards or issues without reprisal; (4) Provide information on how to access testing and vaccinations; (5) Include information on how to respond and handle positive cases or close contacts in the workplace.

Aerosol Transmission

In the preamble, the OSHA ETS recognizes that transmission by inhalation of very small infectious particles (aerosols) is possible for SARS-CoV-2. This is commendable since aerosol scientists have been calling attention to this mode of transmission from the beginning and throughout the pandemic. The CDC "How COVID-19 Spreads" website also recognized transmission by inhalation early in the pandemic; the most recent version of this guidance

(May 2021) states that “COVID-19 spreads when an infected person breathes out droplets and very small particles that contain the virus. These droplets and particles can be *breathed in* by other people or land on their eyes, noses, or mouth” (emphasis added).

The ETS incorporates controls that address aerosol transmission, such as ventilation and respiratory protection. There are several control options, however, that will *not* limit aerosol inhalation, such as physical barriers. Physical distancing may play some role in limiting aerosol inhalation near a potential source but will play a very minimal role over time as particles are distributed throughout a space and concentrations increase.

The preamble also notes that the time course of infectiousness starts 2-5 days before symptom onset, peaks just at or soon after symptom onset, and tapers off by days 8-10 after symptom onset. Thus, infected people without symptoms or just developing symptoms, which can be mild, are the most likely to be generating primarily small infectious particles during breathing, talking, singing, etc. (and not coughing or sneezing).

The requirement for respirators for healthcare workers caring for suspect or confirmed COVID-19 patients is thus appropriate and commendable and agrees with the current scientific understanding of aerosol transmission and the CDC guidelines for infection prevention and control in healthcare settings.

What is missing, however, is the recognition that, given the strong possibility for pre- or asymptomatic transmission in healthcare settings, all healthcare workers can be at risk for inhalation exposure. This will be true, in particular, during close, hands-on medical care or medical procedures with a patient who has not been tested or when in contact with coworkers who are not undergoing frequent (daily) testing. Symptom screening will not be effective at preventing all such close contact exposures and every close-contact encounter with an unvaccinated, non-tested patient or coworker has a high potential for aerosol transmission. Where such contacts are required and other appropriate controls, such as telehealth or ventilation, cannot be implemented or do not minimize exposure, every healthcare worker, including those with short but close non-patient care contacts such as environmental services workers, should be wearing respiratory protection.

Published epidemiology studies in healthcare settings highlight the importance of protecting every healthcare worker from aerosol transmission. Where healthcare workers have been wearing respiratory protection the rates of SARS-CoV-2 transmission have been relatively low. In all other healthcare settings, the rates of transmission are much higher and cannot be explained by community transmission. For example, Shields et al.² (2020) found higher rates of seropositivity (24-34%) in housekeeping, admissions, general internal medicine, OB-GYN, outpatient³ and support services personnel, who were wearing surgical masks, versus much lower rates (13-15%) in those wearing respirators, such as general surgery, emergency

² Shields, Adrian, et al. "SARS-CoV-2 seroprevalence and asymptomatic viral carriage in healthcare workers: a cross-sectional study." *Thorax* 75.12 (2020): 1089-1094.

³ Oksanen, Lotta-Maria AH, et al. "Healthcare workers high COVID-19 infection rate: the source of infections and potential for respirators and surgical masks to reduce occupational infections." medRxiv (2020).

department and intensive care units. Oksanen et al. found a similar pattern of infection rates, with no work-related infections in healthcare workers wearing respirators and 64% of work-related cases in those wearing only surgical masks. Healthcare workers had 15 times greater infection rates than in the community. Barrett et al.⁴ found 18 times higher prevalence of infection in healthcare workers compared to the community. The highest positivity rates were in nurses (11%), emergency department personnel (8%) and operating room personnel (10%). The lowest rates were in attending physicians and in the intensive care unit (2%).

A meta-analysis of 97 studies by Gomez-Ochoa et al.⁵ (2021) found high rates of positive PCR (11%) and antibodies (7%) in healthcare workers. Nurses and *healthcare personnel in non-emergency departments* were the most likely to be positive. A study of positivity prevalence in 4 U.S. healthcare systems by Jacob et al.⁶ found rates 3-12% higher than in the community. The highest prevalence of seropositivity (5-7%) was in environmental services, patient care technicians, nursing assistants, nurse technicians, radiology, phlebotomists, dialysis assistants, nurses, and respiratory therapists. All of these healthcare systems were following the CDC guidelines for respiratory protection for care of suspected and confirmed COVID-19 patients and 3 implemented universal masking of all healthcare providers.

An outbreak was described by Klompas et al.⁷ (2021) at a Boston hospital resulting from an index patient with a history of lung disease and 2 negative COVID-19 patients who spent 11 days in the hospital before testing positive for COVID-19. Those infected included 11 patients and 27 staff, including physicians, nurses, patient care assistants and environmental services workers. These investigators found 2 clear cases of infection from the patient where healthcare workers were wearing a surgical mask, eye protection and gloves. No aerosol-generating procedures (AGPs) were performed during their exposure periods.

Studies of household member infections from healthcare workers by Shah et al. (2020⁸; 2021⁹) are particularly illuminating. Prior to healthcare worker vaccination, household members living with patient-facing healthcare workers were twice as likely to be hospitalized with COVID-19 as those without a healthcare worker in their household. After healthcare worker vaccination, rates of infection among household members of healthcare workers dropped by 30%.

⁴ Barrett, Emily S., et al. "Prevalence of SARS-CoV-2 infection in previously undiagnosed health care workers in New Jersey, at the onset of the US COVID-19 pandemic." *BMC infectious diseases* 20.1 (2020): 1-10.

⁵ Gómez-Ochoa, Sergio Alejandro, et al. "COVID-19 in health-care workers: a living systematic review and meta-analysis of prevalence, risk factors, clinical characteristics, and outcomes." *American journal of epidemiology* 190.1 (2021): 161-175.

⁶ Jacob, Jesse T., et al. "Risk Factors Associated With SARS-CoV-2 Seropositivity Among US Health Care Personnel." *JAMA Network Open* 4.3 (2021): e211283-e211283.

⁷ Klompas, Michael, et al. "A SARS-CoV-2 cluster in an acute care hospital." *Annals of internal medicine* (2021).

⁸ Shah, Anoop SV, et al. "Risk of hospital admission with coronavirus disease 2019 in healthcare workers and their households: nationwide linkage cohort study." *bmj* 371 (2020).

⁹ Shah, Anoop SV, et al. "Effect of vaccination on transmission of COVID-19: an observational study in healthcare workers and their households." *medRxiv* (2021).

These are just a few of the increasing number of publications clearly demonstrating the importance of considering and controlling the exposure of *all* workers in healthcare settings from COVID-19. **Facemasks, physical distancing and physical barriers are not adequate controls for protecting healthcare workers from aerosol inhalation.**

Hierarchy of Controls

The preamble opines in detail about the importance of applying the hierarchy of controls and using layered approaches to preventing COVID-19. **The rule, however, never mentions either of these, even in the context of developing a COVID-19 plan. In fact, the standard describes controls in an order that does not illustrate nor require implementation as one might expect for the hierarchy,** which would include proceeding from elimination and substitution to isolation, engineering, administrative controls, and, finally, to personal protection. Rather, the order presented in the standard is as follows:

- Patient screening and management
- Standard and Transmission Based Precautions
- Personal protective equipment
 - Facemasks
 - Face shields
 - Respirators and other PPE
- Aerosol-generating procedures
- Physical distancing
- Physical barriers
- Cleaning and disinfection
- Ventilation
- Health screening and medical management
- Vaccination
- Training

From the perspective of aerosol transmission, the standard should list and mandate controls in the order of the hierarchy and highlight the importance of using multiple controls (a layered approach). The more appropriate order for aerosol transmission would be:

1. Vaccination
2. Employee health screening
3. Patient screening
4. Physical distancing
5. Ventilation
6. Personal protective equipment - respiratory protection

Cleaning and disinfection are only important for contact transmission. CDC guidelines state that this is a very unimportant mode of transmission for COVID-19. Certainly, surface cleaning and disinfection are important in healthcare settings for many reasons and are already fully addressed in current infection control and prevention guidelines. **There is no need for healthcare settings to require any additional cleaning or disinfection in the OSHA ETS for COVID-19.**

Aerosol-generating procedures are important from the perspective of aerosol transmission; however the ETS should recognize that people emit high concentrations of particles even in the absence of such medical procedures. The standard's requirements for limiting the number of people present and conducting such procedures in negative-pressure airborne infection isolation rooms are appropriate. **However, respirators with higher protection factors, such as full-facepiece elastomeric or powered air purifying respirators should be required, not just recommended, for AGPs.**

Facemasks should be required only as a means of source control and only on patients or vaccinated and/or frequently-tested healthcare workers. They are not appropriate as personal protection from aerosol inhalation for healthcare workers, as illustrated by the high rates of infection discussed above among all healthcare workers.

Physical distancing will only be important for a short period of time and does not take into account the distribution of infectious particles that occurs throughout a space over time or the increase in concentration that occurs both near and far from the source over time. Physical barriers are not a replacement for an inability to physically distance.

Face shields are not an appropriate replacement or solution to an inability to wear a respirator. The OSHA respiratory protection standard does not allow this option in any workplace with a hazardous aerosol exposure. The only use for a face shield should be to protect the face or eyes from liquid splashes or sprays and never for the prevention of aerosol inhalation.

It is not possible to ignore the likelihood of aerosol inhalation in favor of droplet transmission, or vice versa – the 2 modes of transmission must be considered concurrently and equally likely.

Physical Barriers

The July 9, 2020 World Health Organization scientific brief, "Transmission of SARS-CoV-2: implication for infection prevention precautions" **does not list physical barriers** as a method of preventing transmission of COVID-19 between persons. However, WHO **does** recommend "ensuring good environmental ventilation in any closed setting."¹⁰ The CDC lists "improvements to building ventilation," in conjunction with "physical distancing, wearing facemasks, hand hygiene and vaccination" as the layered approach to control COVID-19.¹¹ While it is reassuring that OSHA also mentions the layered approach in the preamble, OSHA includes a control in the ETS that is **not** listed by WHO and the CDC as a recommended method to reduce exposures to SARS-CoV-2: physical barriers.

¹⁰ Transmission of SARS-CoV-2: implications for infection prevention precautions." World Health Organization. 9 July 2020. <https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>

¹¹ COVID-19 - Ventilation in Buildings: Summary of Recent Changes – Updates as of June 2, 2021." Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>

In the preamble, OSHA acknowledges “COVID-19 is considered capable of spreading through multiple routes of transmission, including airborne”. Barriers are intended to prevent deposition of large droplets onto exposed mucous membranes, but do not prevent airborne transmission of SARS-CoV-2. Large droplets settle out of the air within minutes. The smallest droplets and their nuclei, in the form of aerosols when those droplets dry out, can be suspended in the air for minutes and up to hours. **The controls listed in the ETS must match OSHA’s acknowledgement of the likely airborne transmission of COVID-19.**

Air flow inside the workplace is important to optimize dilution and reduce concentrated pockets of aerosols at the source of generation (near an individual). Without adequate dilution, smaller particles travel along air currents and build in concentration over time. **Barriers, while establishing a potential sense of security for members of the workforce and general public, effectively decrease the mixing of air in any room where they are erected.** It is likely that barriers will create eddies and pockets, interrupting the air flow that can be protective for individuals in that workspace¹². The Facility Guidelines Institute Guidelines for Design and Construction of Residential, Health, Care and Support Facilities currently recommends a minimum ceiling height of 8 feet. OSHA’s current guidance in the “COVID-19 Healthcare ETS – Frequently Asked Questions,” question 31 states that where the height of the individuals in the space is unknown, “OSHA will accept as compliant a barrier that extends to **at least 6 and a half feet** above the surface on which both people are standing” (emphasis added). That leaves only 1 and a half feet for air to mix near the ceiling of any room above a barrier that follows this minimum requirement.

Ventilation

The CDC states that “protective ventilation practices and interventions can reduce the airborne concentrations and reduce the overall viral dose to occupants.” Table B.1 in Appendix B of the CDC Guidelines for Environmental Infection Control in Health-Care Facilities (2003) lists the air changes per hour and required time for airborne-contaminant removal by efficiency. This table is widely used in healthcare settings to help control the transmission of pathogens classified under either droplet and/or airborne precautions by using air change rates, calculated assuming perfect mixing of air in the space, to best assess adequate clearance (reduction of a pathogen’s concentration below its infective dose) times. Knowing that perfect mixing is rarely achievable, the CDC includes the caveat that “removal times will be longer in rooms or areas with imperfect mixing or air stagnation.”¹³ **The erection of physical barriers will not only inhibit mixing in the workspace (creating concentrated pockets of infectious aerosols); it will also increase the turnover time needed to remove SARS-CoV-2 and any other respiratory pathogen. Additionally, the above referenced table from the CDC should be incorporated by reference in 29 CFR 1910.509.**

¹² COVID-19: Airflow Patterns Matter.” American Conference of Governmental Industrial Hygienists (ACGIH). <https://www.acgih.org/covid-19-fact-sheet-airflow-patterns-matter/>

¹³ Guidelines for Environmental Infection Control in Health-Care Facilities (2003, updated July 2019): Appendix B. Air.” Centers for Disease Control and Prevention. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html>

The ASHRAE Epidemic Task Force “Core Recommendations for Reducing Airborne Infectious Aerosol Exposure” recommends promoting the mixing of air in spaces without creating strong air currents that could increase the transmission of COVID-19 between persons.

As general heating, ventilation, and air conditioning systems are not designed to remove infectious particles from the air in the building, the American Conference of Governmental Industrial Hygienists (ACGIH) recommends “optimizing the type and location of supply and exhaust to enhance airflow, mixing, dilution and removal of contaminants.” ACGIH also states that for general exhaust ventilation to effectively provide dilution ventilation to a workspace, “the airflow pattern is the most critical issue to determine, modify, and control.”¹⁴ **No mention of performing a risk assessment for air flow is mentioned in 1910.502(k). It is also not recognized that installation of physical barriers in workspaces will increase the amount of time needed to remove airborne COVID-19 virus particles from the air.**

There is also no incorporation by reference of resources for ventilation controls mentioned in 29 CFR 1910.509. ASHE/ASHRAE published “Current/Updated Health Care Facilities Ventilation Controls and Guidelines for Management of Patients with Suspected or Confirmed SARS-CoV-2 (COVID-19)” on February 4, 2021. Within that document are basic recommendations not specifically noted in 29 CFR 1910.502(k), such as disabling demand-controlled ventilation during occupied hours and opening outdoor dampers past minimum settings to reduce air circulation. **Such documents should be incorporated by reference in the ETS. Following current ventilation system optimization guidance and implementing the use of high-efficiency particulate air (HEPA) filtration systems where feasible would be a better investment in our healthcare facilities than the erection barriers to control airborne concentrations of SARS-CoV-2 for healthcare facilities.**

Mini Respiratory Protection Program

There is no need for a “mini respiratory protection program” in this or any OSHA standard. Appendix D of the OSHA Respiratory Protection Standard, 1910.134, addresses voluntary use of respirators. If there is confusion about how Appendix D applies to COVID-19 in healthcare settings, we recommend that OSHA develop a fact sheet and/or set of frequently asked questions.

The term “mini respiratory protection program” implies that respirators can be used for personal protection outside of the full respiratory protection program mandated in 1910.134 and introduces a great deal of confusion for the use of respirators in both healthcare and other types of workplaces.

Voluntary use of a respirator is not “programmatic” in nature; it simply calls for a small set of precautionary activities. **The most important feature of voluntary use should not be ensuring that users know how to perform a user seal check, but rather that they**

¹⁴ ACGIH White Paper on Ventilation for Industrial Settings During COVID-19.” ACGIH. August 2020. https://www.uwsp.edu/rmgt/Documents/ehs/COVID-19/ACGIH_White_Paper_on_Ventilation_for_Industrial_Settings_During_Covid-19_2020_08.pdf

understand that they are not likely to gain any degree of protection from a non-fit tested respirator. NIOSH and other investigators have clearly demonstrated that user seal checks are neither predictive of nor a replacement for fit testing. **We strongly recommend removing 1910.504 from the OSHA ETS and focus, instead, on ensuring that anyone wearing a respirator voluntarily in a healthcare setting understands their considerable limitations in preventing any type of aerosol emission or inhalation.**

Severability

AIHA appreciates the incorporation of the severability clause into the ETS.

Conclusion

AIHA thanks you for the opportunity to provide our thoughts on how OSHA can strengthen the ETS to better protect more workers and their communities. If you have any questions about our comments or would additional information, please contact Mark Ames at mames@aiha.org or (703) 846-0730.

Sincerely,



Lawrence Sloan, MBA, CAE
Chief Executive Officer
AIHA

About AIHA

AIHA is the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety in the workplace and community. Founded in 1939, we support our members with our expertise, networks, comprehensive education programs, and other products and services that help them maintain the highest professional and competency standards. More than half of AIHA's nearly 8,500 members are Certified Industrial Hygienists and many hold other professional designations. AIHA serves as a resource for those employed across the public and private sectors as well as to the communities in which they work. For more information, please visit www.aiha.org.