

**ALASKA STATE LEGISLATURE  
HOUSE STATE AFFAIRS STANDING COMMITTEE**

Anchorage, Alaska

December 2, 2020

2:03 p.m.

**MEMBERS PRESENT**

Representative Zack Fields, Co-Chair

Representative Jonathan Kreiss-Tomkins, Co-Chair (via teleconference)

Representative Andi Story (via teleconference)

Representative Steve Thompson (via teleconference)

**MEMBERS ABSENT**

Representative Grier Hopkins

Representative Sarah Vance

Representative Laddie Shaw

**OTHER LEGISLATORS PRESENT**

Representative Kelly Merrick (via teleconference)

**COMMITTEE CALENDAR**

PRESENTATION(S): COVID-19 WORKPLACE SAFETY ROUNDTABLE

- HEARD

**PREVIOUS COMMITTEE ACTION**

No previous action to record

**WITNESS REGISTER**

KELSEY DAVIDSON

American Society of Interior Designers (ASID)

Eagle River, Alaska

**POSITION STATEMENT:** Co-provided a PowerPoint presentation, entitled "Safe Return to the Workplace and Public Buildings," dated 12/2/2020.

DANA NUNN

American Society of Interior Designers (ASID)

Anchorage, Alaska

**POSITION STATEMENT:** Co-provided a PowerPoint presentation, entitled "Safe Return to the Workplace and Public Buildings," dated 12/2/2020.

MARY KNOFF

Fellow American Society of Interior Designers (FASID)  
Anchorage, Alaska

**POSITION STATEMENT:** Co-provided a PowerPoint presentation, entitled "Safe Return to the Workplace and Public Buildings," dated 12/2/2020.

CRAIG ROHWER

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)  
Anchorage, Alaska

**POSITION STATEMENT:** Co-provided a PowerPoint presentation, entitled "Safe Return to the Workplace and Public Buildings," dated 12/2/2020.

KEITH WRITGHTSON, Health & Safety Specialist

American Federation of State, County and Municipal Employees  
Derwood, Maryland

**POSITION STATEMENT:** Provided a PowerPoint presentation, entitled "COVID-19 Workplace Safety."

#### **ACTION NARRATIVE**

[2:03:02 PM](#)

**CO-CHAIR ZACK FIELDS** called the House State Affairs Standing Committee meeting to order at [2:03] p.m. Representatives Story (via teleconference), Representative Kreiss-Tomkins (via teleconference), and Fields were present at the call to order. Representative Thompson (via teleconference) arrived as the meeting was in progress. Also present was Representative Merrick (via teleconference).

#### **PRESENTATION(S): COVID-19 Workplace Safety Roundtable**

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CO-CHAIR FIELDS announced that the only order of business would be a presentation on COVID-19 workplace safety. He explained that the hearing would be an informational presentation for building owners and managers on ways to reconfigure workplaces to help keep people safe.

[2:04:41 PM](#)

KELSEY DAVIDSON, American Society of Interior Designers (ASID), co-provided a PowerPoint presentation, entitled "Safe Return to the Workplace and Public Buildings." She directed attention to slide 1 and read the preface and ASID's presentation statement as follows [original punctuation provided]:

Preface:

Service-providers, businesses and institutions face the necessity of creating Covid-responsive workplaces and public buildings, addressing an array of infection-control safety measures. These impact space utilization and planning, building sustainability and wellness, individual comfort and safety, cleanliness and disinfection, mitigating touchpoint contamination, and promotion of operational-procedural interventions.

ASID Presentation Statement:

Commercial interior design is rooted in the concept of Evidence-Based Design, especially applicable as science evolves on the novel Coronavirus, Covid-19. How we address infection mitigation in the design and outfitting of workplace environments is based on best practices learned through current science as it continues to evolve. Although we can't eliminate risk in the workplace, we can implement flexible approaches and solutions that allow us to feel safe and comfortable in the places we work, learn, live, heal, and recreate.

[2:06:56 PM](#)

MS. DAVIDSON continued to slide 2 and stated that the presentation would address the following frequently asked questions [original punctuation provided]:

1. How do we determine if our workplace is ready for re-occupancy?
2. If our building owners don't replace or update our air system, how might we mitigate airborne infection within our individual suite?
3. Do portable air purifiers disinfect the air? Could we use multiples around the office?
4. How can we mitigate touchpoint contamination?

5. I think our staff is nervous about returning to the office building. How can we make sure it's safe and help them feel ok about it?
6. What modifications can be implemented with very limited funds?
7. How do these solutions vary for schools, prisons, hotels, restaurants?
8. What is HVAC and how can it help me get back to work?
9. Why is the finish on our waiting area furniture suddenly failing?

[2:08:44 PM](#)

DANA NUNN, American Society of Interior Designers (ASID), introduced herself as a commercial interior designer and project manager based in Anchorage. She said her 17-year focus on safety, accessible universal design, sustainability, and wellness is founded on an integrative, evidence-based design process. She noted that recently, she participated in the International WELL Building Institute's task force studying the role buildings can play in reducing the health burden of COVID-19 and other respiratory infections. She added that she leads a team of six interior designers as the Interior Design Director for Bettisworth North.

[2:09:30 PM](#)

MARY KNOPF, Fellow American Society of Interior Designers (FASID), informed the committee that she is a Washington State University (WSU) graduate with 35 years of commercial design experience in Alaska. She noted that she has served as president of the Alaska chapter of ASID and on the ASID national board of directors. She explained that her focus is on creating safe, healthy, and sustainable interior environments for education, office, hospitality, healthcare, and public/institutional buildings. She added that she is a principal with ECI, an architectural, planning and design firm in Anchorage.

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CRAIG ROHWER, American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), introduced himself and provided a short history of his work experience as a specialist in mechanical air systems and products. He informed the committee that he served six years on the Alaska board of

directors for ASHRAE, educating Alaska's members on topics relevant to the region and climate. With a degree in mechanical engineering, he shared his passion for energy and cost-efficient systems, as well as improving air filtration/purification to mitigate virus transmission. He added that currently, he is an account manager with Trane in Anchorage.

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MS. DAVIDSON resumed the presentation on slide 5 and outlined the agenda, which included workplace screening, circulation, space planning, and partitions; sustainable, healthy buildings, and the human factor; cleaning, sanitizing, disinfecting, and operational interventions; mechanical systems and air filtration.

2:11:36 PM

MS. NUNN explained that she works with a range of Alaskan clients, including agencies, school districts, healthcare organizations, as well as recreation, retail, and hospitality businesses and building owners. In all cases, she said her clients have been looking for a "silver bullet" in the effort to overcome COVID-19 and return to normal. She stated that a multi-pronged approach that addresses human behavior, changes to business environments, and operational adjustments are necessary for greatest impact in this pandemic. She recommended a longer view, investments in improvements for long-term resilience, and solutions that have value for the current situation and beyond. When implementing coronavirus-specific solutions, she encourages clients to adopt flexible strategies to avoid getting stuck with an expensive approach that cannot be easily removed, expanded, or modified as new evidence informs more specific solutions. She pointed out that businesses and organizations have different requirements to meet in order to maintain operations through COVID-19, and those requirements are always changing. She added that state and local mandates add complexity to the collective pandemic response, and designers continue to follow those developments closely to advise clients of their responsibilities and options to meet them within their spaces. Ultimately, she said, national and local public health experts are her first points of reference for information about the disease and how best to mitigate transmission. She noted that OSHA requirements for workplace safety still apply and, in some cases, have new implications since many employees are now handling cleaning and disinfection duties or encountering other new hazards. Additionally, accessibility requirements, in accordance with the

ADA still apply, so businesses must continue to provide reasonable accommodation where new operations and distancing protocols may impede access. She observed that as businesses begin to implement coronavirus-response plans, screening occupants at building entry points has become "the norm." Smaller organizations are handling screening with handheld thermometers and a logbook to support contact tracing, while others have deployed iPads with specific apps to conduct more discreet screening. More recently, she said some clients have implemented automated screening systems at entry points using thermal cameras to confirm or discreetly discourage entry. The available systems range widely from fancy cameras integrated into networks and security systems or simpler, localized application-based systems. She noted that Alaska's cold temperatures have impacted the efficacy of the "fancier" systems; therefore, she encourages her clients to utilize iPads.

MS. NUNN recapped her work on modifying circulation through buildings and suits, establishing separate entrance and exit points, implementing one-way traffic patterns, and widening circulation paths wherever possible; all to minimize overlap of the six-foot bubble. She explained that exiting access to restrooms, elevators, and stairs, as well as security concerns, are all considered when studying and developing strategies. She emphasized that modified circulation should not impede life safety features within buildings. She stated that altered circulation plans are most successful with clear signage that indicates how to proceed and reinforces when people are going the right way. She shared that some businesses have adopted operational solutions to help manage occupant load and circulation; for example, healthcare clients are limiting access to waiting rooms to stagger patients and provide enough time for cleaning between encounters.

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MS. NUNN directed attention to slide 6, which highlighted workplace practices. She explained that at her own businesses, they immediately conducted an office analysis and developed plans to reduce occupant density, implemented protocols for sharing spaces and amenities, and identified locations for hygiene and cleaning stations. She said she has since completed similar studies for many clients throughout the state to help them understand and plan how to bring their workforce back to the office, either in full or in a "modified shift situation." In some cases, plans were created for temporary expanded offices to support larger teams of businesses with more traffic; other

times, offices were rearranged to provide a greater variety of workstation types to accommodate drop-ins for people that are primarily working remotely but may need to come into the office occasionally. In all cases, she conveyed that universal masking combined with distancing inside businesses and public facilities is imperative regardless how spacious the building or suite may be. She added that it's important to develop and enforce guidelines for the use of shared spaces, like print areas, breakrooms, and meeting spaces; also, to communicate expectations for masking or other practices in private offices versus open work areas. She noted that if leadership doesn't consistently demonstrate compliance with the new plans, it's quite unlikely that employees or customers would either.

MS. NUNN relayed that a well-designed hybrid plan that provides choice in the settings individuals and groups need to work and collaborate has been discussed in the design community for years, but businesses and agencies have been slow to adopt a more flexible plan. She offered her belief that the pandemic would change that. Furthermore, she pointed out that remote work eliminates the potential for transmission between employees. She opined that going forward, the virtual workplace would remain a prominent aspect of workplace design; however, she recognized that it's critical in some situations that people come together for collaboration and improved productivity. To that end, she indicated that the flexible hybrid plan would support that dual modality.

MS. NUNN continued to explain that workstation panels and partitions are part of the discussion, but there are mixed reviews on how much separation is helpful versus a hindrance to safety or a contribution to employee complacency in the infection control protocols. She emphasized her interest in working together with allied disciplines to create healthier interior environments without degrading the desired effects of building improvements.

[2:19:53 PM](#)

CO-CHAIR FIELDS asked how design recommendations have evolved in response to the emerging science about aerosolized virus transmission.

MS. NUNN noted that there is emerging research from MIT on interior design implications. She said ultimately, everyone should have a mask to capture larger droplets and some of aerosolized particles from speaking. Beyond that, she

encouraged a slightly lower level of partition because a higher level could potentially create eddies in the air system, which are pockets of stagnating air where viral loads could build. She noted that the results of that research are not yet definitive, but it indicates that lower partitions help block the larger particles.

[2:22:05 PM](#)

MS. KNOPF resumed the presentation on slide 7, which addressed sustainable, healthy buildings and the human factor. She stated that the Center for Disease Control (CDC) defines indoor environmental quality (IEQ) as "the building's environment in relation to the health and wellbeing of those who occupy space within it." She stated that in considering returning to work, the human factor must be considered. She reported that there has been a major shift in work life balance, as well as opportunities to rethink the office environment. Employers must have protocols and policies in place to mitigate the stress, physical, and mental safety concerns of returning to the workplace. She said employees who see their employers care and provide a safe environment experience much less anxiety. Furthermore, she pointed out that healthy buildings contribute to the health of occupants, including simplified finishes and clean spaces clear. Additionally, life stages are a factor to consider in determining how to return to work with reduced occupancy. Younger employees require more structure and mentorship while seasoned staff might prefer to work individually.

MS. KNOPF relayed the importance of recognizing how interiors impact indoor air quality. She explained that selecting materials and furnishings that support a healthy environment could impact both mental and physical health. She stated that people spend 90 percent of their time inside; accordingly, limiting VOCs, caustic chemicals, and plastics improves air that is breathed. She added that select materials assist in mitigating dust, mold, and mildew habitats. Ms. Knopf continued to explain that thermal and acoustical comfort is impacted by furniture configuration, which affects air circulation. She recommended creating "private quiet respite zones" in open offices to allow employees to take a break or complete focused work. She said there are options to introduce acoustic materials, such as lighting; ceiling and wall finishes; and furniture finishes. She indicated that since 1991, studies have affirmed the power of nature to reduce anxiety. She reported that natural light, views, and the use of organic forms

contribute to comfortable, healthy interiors. In addition to air flow, modifications to space configuration provides better views to extend daylight; additionally, certain window treatments let light and views through while reducing glare. Lastly, she introduced several green building programs, including the Leadership in Energy and Environmental Design (LEAD), International Living Future Institute (ILFI), and International WELL Building Institute (IWBI). She stated that moving forward, interior designers would continue improving and adjusting interior solutions to provide the best possible safe and healthy interior environments using current best practices.

[2:26:53 PM](#)

MS. NUNN turned attention to slide 8 and reviewed cleaning, sanitizing, disinfecting, and operational interventions. She explained that although COVID-19 is primarily transferred via droplets and aerosols, touchpoint contamination is a factor that can be managed with behavioral changes, effective cleaning protocols, and hands-free solutions. She said frequent and proper hand hygiene with basic soap and water is highly effective in reducing the spread of COVID-19 by degrading the virus's lipid encapsulation, essentially destroying the virus altogether. Hand sanitizer with a high alcohol content disables the virus, but does not destroy it; therefore, hand sanitizer is effective, but not the "go-to" for ideal hand hygiene. She stated that thoughtful planning of workspaces and businesses makes it easier for people to practice the habit. She suggested evaluating need, proximity, ease of access, and alternatives when soap and water washing is not feasible; additionally, accounting for supply and upkeep. She recommended minimizing touchpoint contamination by reducing the frequency of person to person contact and contact with high touch surfaces. Proper cleaning/disinfection is another way to mitigate touchpoint contamination. She emphasized the importance of understanding the difference between cleaning and disinfecting, so that effective procedures are developed and deployed. She explained that cleaning reduces the number of germs, dirt, and impurities on a surface, while disinfectant kills the germs a surface. She noted that the CDC maintains that cleaning is necessary before disinfection is even possible. The dual action of cleaning and disinfecting further lowers the risk of spreading infection, she said. She pointed out that without observing the dwell time - the time it takes a product to work on a surface, as recommended by the manufacturer - effective disinfection isn't possible. Furthermore, not all disinfectants are effective against all viruses, so it's important to verify the effectiveness of

preferred products. She recommended referencing the EPA's list to confirm products' effectiveness and dwell time; further, to implement the "uncluttered surface policy" to allow custodial staff to clean and disinfect workspaces thoroughly.

MS. NUNN continued to explain that cleaning and disinfection protocols and products have a significant impact on the durability and life of interior finish materials and furnishings, especially porous products, like wood finishes, plastics, leather, and upholsteries. She noted that fogging devices often use bleach or hydrogen peroxide, which could leave bleach spots or come to rest on coffee cups and glassware, posing a risk of injection. Additionally, UV light, which is effective in the right dosage, can also rapidly degrade and fade interior surfaces, like plastic laminate cabinetry, flooring, paint, upholstery, artwork, or students' outerwear stored in classroom cubbies. Ultimately, she said, the best strategy in combatting COVID-19 and building community resilience is to adopt an integrated approach to planning and design. She recommended engaging stakeholders, as well as those that might not normally be part of higher-level conversations, such as custodial and environmental services staff, facility maintenance, and various team leaders that would implement the plans. Lastly, she encouraged regular communication demonstrating commitment to plans, providing employees with proper training, and enforcing new protocols.

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MR. ROHWER directed attention to slide 9, which provided the following outline for the remainder of the presentation [original punctuation provided]:

1. COVID: WHO/CDC and ASHRAE Recommendations
  - a. Modes of Transmission
    - i. Close Contact/large droplet transmission  
"Most Common"
    - ii. Airborne/small droplet transmission  
"Sometimes"
    - iii. Surface/contact points - "less common"
2. The Four Key Areas of Indoor Air Quality
  - a. Dilute - Increase Ventilation with outdoor air
  - b. Exhaust - Keep exhausts running
  - c. Contain - Control indoor humidity
  - d. Clean - Safely use air cleaning technology

### 3. Mitigation Technologies

- a. GOOD - MERV 1-8, Electrostatic filters, Surface Coatings
- b. BETTER - MERV 9-16, UV, H2O2, Air Ionization & Ozone Generators
- c. BEST - HEPA, Photo Catalytic Oxidation

MR. ROHWER turned attention to slide 10 and said he would be focusing on indoor air quality and how to clean and sterilize that space. He continued to slide 11, which highlighted four methods for controlling indoor air quality and read in its entirety as follows:

#### Dilute

- Disable CO2 control
- Increase minimum outdoor-air airflow
- Operate air-handling equipment with 100% outdoor air (no recirculation), when outdoor conditions allow
- Provide Temporary and Permanent Solutions for additional capacity
- Keep ventilation systems operating 24/7, even if at lower airflows
- Implement pre- and post-occupancy purge sequences to flush building with outdoor air

#### Exhaust

- Keep restroom exhaust operating 24/7

#### Contain

- Modify system to maintain indoor humidity between 40% and 60% relative
- Add humidifiers where appropriate and possible to increase humidity in winter

#### Clean

- Upgrade filters to MERV-13 (or higher, if possible) and ensure effective air seals
- Add portable room air cleaners with HEPA or high-MERV filters
- Add ultraviolet (UV) lamps in ductwork, air-handling units, or upper region of the room

CO-CHAIR FIELDS inquired as to the appropriate number of times to replace the air in a room or structure per hour.

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MR. ROHWER said most engineers are designing around three air changes per hour. He recommended pushing it to six air changes per hour for pre- and post-flushing, which may push the boundaries of what the system can do. He added that if a system can't do six, the recommendation is to do as much as possible to stir up any dust or viral particles that could be suspended in the air and help flush them out of the facility.

[2:40:32 PM](#)

MR. ROHWER returned to slide 11. He noted that multiple studies found that viruses and bacteria propagate and spread faster below 40 percent humidity and above 60 percent humidity; consequently, the goal is to keep indoor humidity between that narrow range, which can be done by adding humidifiers.

CO-CHAIR FIELDS surmised that the average Anchorage office building cannot get above 60 percent relative humidity in the winter even with a portable indoor humidifier. He asked if that is a reasonable assumption.

MR. ROHWER answered yes. He anecdotally reported that most [Anchorage] office buildings are leaky, which makes it difficult to increase humidity above 50 percent in the summer. He suggested studying the space to ensure that the amount of moisture wouldn't cause condensation or other high-humidity issues. Nonetheless, in general, he maintained that adding humidification is not harmful to building [spaces].

[2:43:19 PM](#)

MR. ROHWER returned to slide 11 and said cleaning is the last area of indoor air quality, which involves upgrading filtration, adding mechanical cleaning systems, injecting air sterilization into air streams, and UV lights. He continued to slide 12, which outlined "good" mitigation technologies and read as follows [original punctuation provided]:

1. GOOD:
  - a. MERV 1-8 Filters
    - a. Install filters if none are present
  - b. Electrostatic Filters
    - a. Charged filters to "attract" particulates in the air stream
    - b. More costly than standard filters but can replace existing filters or augment HEPA filtration

c. Surface Coatings

a. Potential for microbiological destruction on surfaces such as coils, countertops, door handles, etc.

b. Does not effectively counter airborne micro-biologicals

MR. ROHWER explained that filters are rated in "MERV" (minimum efficiency reporting values), which ranges from 1-16. He noted that MERV 8 is considered the standard in office and retail spaces. He recommended upgrading to a minimum of MERV 8 and increasing the frequency at which filters are changed. He continued to electrostatic filters, explaining that electricity charges the filter and attracts particles to stick to it, which requires a lower rated MERV filter. Lastly, Surface coatings require an extensive input, such as titanium dioxide or silver compounds, which are applied to a surface that has natural microbial properties to reject or kill virus or bacterial compounds.

[2:46:22 PM](#)

MR. ROHWER directed attention to slide 13, which depicted the effect of MERV filters on influenza A virus. He indicated that MERV 8 - the code standard - captured 11 percent of flu virions; MERV 13 - ASHRAE's current recommendation - captured 46 percent of flu virions; MERV 15 captured 71 percent of flu virions. He pointed out that HEPA filters capture 99.97 percent of all particles that filter through it, making it the "gold standard" of filtration systems. Slide 14 highlighted "better" mitigation technologies: MERV 9-16 filters and ultraviolet germicidal irradiation (UVGI).

CO-CHAIR FIELDS asked whether it's possible to replace MERV 8 filters with HEPA filters in Anchorage office buildings.

[2:50:07 PM](#)

MR. ROHWER said HEPA filters can be used portably or building wide. He explained that a portable air cleaner with a HEPA filter is plugged into the wall and recirculates the air within that space. Contrarily, replacing a MERV 8 filter with a higher rated filter would require a quick analysis by an engineer and the building manager to determine whether the increase in energy is feasible.

CO-CHAIR FIELDS asked how often portable HEPA filters need to be replaced.

MR. ROHWER said it depends. He explained that most HEPA filters are designed to last six months; however, he suggested checking with the manufacturer to determine the lifespan of the specific piece of equipment. He noted that hospital facilities replace HEPA filters on a 3-6-month cycle.

[2:52:06 PM](#)

MR. ROHWER resumed slide 14 and explained that UVGI uses UV bulbs, or "C-band," to irradiate. He stated that the UV lights are less effective in an air stream and more effective in a portable system. Slide 15 continued to highlight "better" mitigation technologies [original punctuation provided]:

2. BETTER:

a. Hydrogen Peroxide Generators

a. Introduces gas phase hydrogen peroxide directly to the space to provide active reaction in the zone (air does NOT need to return to air unit to be treated)

b. Actively treats both air and surfaces

b. Bipolar Ionization & Ozone Generation

a. Ion Production - Produces both Positive and Negative Ion  
b. Pathogen Control - Ions kill Virus, Mold/Fungus and Bacteria in the plenum, ductwork & the work/living space.  
c. Allergen Control - Ions allows particles to agglomerate making particles larger for more effective filtration.  
d. Odor & Smoke Control - Odors & smoke are converted into atmospheric gases.  
e. VOC's - are broken down in the Cold Plasma Field.  
f. UL 867 certification for ozone production (<50ppb)

MR. ROHWER conveyed that hydrogen peroxide generators distribute a low concentration of hydrogen peroxide into the air stream in public places. He stated that they are highly effective and can be implemented in any air distribution system. He explained that bipolar ionization and ozone generators are not recommended for highly populated areas and should be used in pre/post-occupancy situations, such as locker rooms, where they can be turned on after people leave to inactivate virus, bacteria, and other odors that are in the space. He noted that there is not a significant amount of science-based data that supports the effectiveness of ozone or bipolar ionization; therefore, ASHRAE

does not endorse the use of the technology. He suggested working with an engineer to determine whether it's a good fit for a specific facility. Slide 16 outlined the "best" mitigation technologies [original punctuation provided]:

3. BEST:

a. Technologies for Microbiological Air Cleaning

i. HEPA - High Efficiency Particulate Filter 99.97%  
HEPA filters, as defined by the United States Department of Energy (DOE), remove at least 99.97% of airborne particles 0.3 micrometers ( $\mu\text{m}$ ) in diameter. <https://www.standards.doe.gov/standards-documents/3000/3020-astd-2015>

ii. Photo Catalytic Oxidation UV light creates photons, photons "catalyze" by the  $\text{TiO}_2$ , radicals last 1/10 second and react with carbonbased compounds (viruses, bacteria, etc.) Organic compounds reduced to  $\text{CO}_2$  or  $\text{H}_2\text{O}$

MR. ROHWER reiterated that HEPA filters are the "gold standard" in air filtration; nonetheless, they are not always practical or feasible because they are costly and require higher energy output. He stated that photo catalytic oxidation is the next best option; however, it is costly and can be impractical.

3:00:11 PM

KEITH WRITGHTSON, Health & Safety Specialist, American Federation of State, County and Municipal Employees, urged the legislature and Alaskan businesses to incorporate a series of hazard prevention controls in indoor workplaces to reduce the risk of exposure to coronavirus. In doing so, he said an emphasis should be placed on workplace configuration, ventilation, enhanced cleaning practices, and personal protective equipment (PPE) to protect the health and safety of workers indoors. He informed the committee that the CDC recognizes three vehicles of coronavirus transmission: small droplets from speaking or coughing, contact with contaminated surfaced, and transmission from aerosols. Without ventilation aerosols remain suspended in the air and become increasingly dense the longer an infected person remains in an enclosed space. He added that the risk of contagion is highest indoors but can be reduced by applying all available measures to combat infection from aerosolized respiratory droplets. He said initially, it was believed that the main vehicle of transmission

was large droplets expelled from coughing and sneezing; however, now, it is widely understood that shouting and singing indoors in poorly ventilated spaces over a prolonged period also increases the risk of exposure, as speaking in a loud voice releases 50 times more virus particles than not speaking. He indicated that scientists have found that those particles, which are released into the atmosphere from breathing and can escape from improperly worn facemasks, can infect people who spend more than a few minutes within a 16-foot radius of an infected person depending on the length of time and the nature of the interaction.

MR. WRIGHTSON directed attention to a PowerPoint presentation, entitled "COVID-19 Workplace Safety." Slide 2 examined workplace configuration and read as follows [original punctuation provided]:

Prior to opening the workplace, perform a detailed review of the configuration of your workspaces.

Eliminating reception seating areas and require clients, visitors and guests to phone ahead for a specific time to enter the workplace.

Installing a plastic partition at the reception area and in spaces where one-on-one meetings are conducted to provide a barrier between the public and office staff.

Reviewing floorplans and removing or reconfiguring seats, furniture and workstations to achieve physical distancing in accordance with guidelines (generally six feet).

Reconfiguring workstations so that employees do not face each other or installing partitions (plastic or other material) if facing each other cannot be avoided.

Streamlining building and office space entry and exit points, in accordance with local building codes, to limit and monitor clients, visitors and guests in the building and to ensure that building capacity levels are not exceeded.

[3:08:19 PM](#)

MR. WRIGHTSON continued to slide 3, "Meeting Rooms," which read as follows [original punctuation provided]:

- If in-person meetings are essential, consider limiting the size of the meetings in accordance with local, state and federal guidelines.
- In-person meetings should only take place if physical distancing can be achieved.
- Meeting rooms that are used should be disinfected regularly and after each use. Disinfectant wipes or spray should be left in each conference room, and employees should be encouraged to wipe down all surfaces and equipment (e.g., mouse, keyboard, phone) touched during conference room meetings.
- Lingering and socializing before and after meetings should be discouraged, and employees should be encouraged to use virtual meeting tools, including phone and virtual teleconference, in lieu of in-person meetings, whenever possible.

MR. WRIGHTSON turned attention to slide 4, "lobby and Common Areas," which read as follows [original punctuation provided]:

Common areas (e.g., lobby, security checkin, delivery receiving areas) should be cleaned and disinfected at least daily.

Occupancy limits should be established for passenger and freight elevators (generally no more than two individuals in the elevator cab at once) to achieve physical distancing.

Signage should be prominently displayed encouraging staff and visitors to:

- Follow physical distancing measures (at least six feet).
- Practice good personal and environmental hygiene (e.g., handwashing, respiratory etiquette, cleaning frequently touched objects).
- Respect occupancy limits.

- Not linger or socialize in common areas and around building entrances and exits or loading docks.

[3:12:39 PM](#)

MR. WRIGHTSON directed attention to slide 5, "Breakrooms," which read as follows [original punctuation provided]:

- Breakroom areas should be cleaned and disinfected at least twice daily. A special emphasis on cleaning should take place after typical break times (coffee and lunch hours).
- Congregating in kitchen areas should be discouraged.
- Kitchen equipment and utensils should also be cleaned on a routine basis, including coffee machines, refrigerator handles, dishwashers, microwaves, toasters, water and beverage faucets and ice machine handles.
- All silverware, dinnerware, utensils and coffee pots should be cleaned in the dishwasher.
- Ice machines that require a handheld scoop should be disconnected and taken out of service.
- If vending machines are available for employee use, disinfecting should be required after each use. Eliminate public access to vending machines.

MR. WRIGHTSON continued to slide 6, "Restrooms," which read as follows [original punctuation provided]:

- Place a trash can and disposable towels by the door if the door cannot be opened without touching the handle.
- Place signs indicating that toilet lids (if present) should be closed before flushing. SARS-COV-2 may be aerosolized when flushing the toilet.
- Place signs asking employees and the public to wash hands before and after using the restroom.
- Clean and disinfect restrooms available for public use on an hourly basis.

- Vent separately where possible (e.g., turn exhaust fan on if vented directly outdoors and run fan continuously).
- Keep bathroom windows closed if open windows could lead to reentrainment of air into other parts of the building (i.e., if the exhausted air could re-enter the building through air intakes or other openings).
- Have an ample supply of hand soap and sanitizer available for use.

[3:17:44 PM](#)

MR. WRIGHTSON, skipping slide 7, turned attention to slide 8, "Cleaning Chemicals," and expressed concern about exposure to disinfectants, such as hydrogen peroxide, sodium hypochlorite, peroxyacetic acid, isopropanol, and sodium chlorite, which are commonly issued in workplaces across Alaska and the world. He noted that the aforementioned chemicals are all listed on the Environmental Protection Agency's (EPA's) List N: Disinfectants for use against SARS-CoV-2. Additionally, the U.S. Department of Transportation (USDOT) and the Occupational Safety and Health Administration (OSHA) consider materials that contain those ingredients hazardous materials and therefore, individuals must be trained in chemical safety. He encouraged employers to comply with OSHA and USDOT's regulations.

[3:22:08 PM](#)

MR. WRIGHTSON directed attention to slide 9, "personal Protective Equipment," which read as follows [original punctuation provided]:

Workers must wear (PPE) that will protect workers against SARS-CoV-2 and other hazards associated with chemicals which they may be exposed during cleaning and decontamination of surfaces and objects.

Examples of PPE that may be needed while caring for a COVID-19 patient or during cleaning and decontamination include:

- Nitrile gloves
- Goggles or face shields.

- Fluid-resistant or fluid-impermeable gowns, coveralls and aprons.
- Dedicated work clothing and washable shoes with shoe or boot covers.

[3:23:53 PM](#)

CO-CHAIR FIELDS asked to what extent KN95 masks reduce risk and provide protection for employees; further, he asked if there are other commercially available products similar to KN95 masks.

[3:24:26 PM](#)

MR. WRIGHTSON pointed out that OSHA uses the term "filtering facepiece." He explained that respirators have different ratings that speak to their efficiency and design; N, for example, indicates that N95 respirators are not oilproof and filter 95 percent of contaminants in the air; P100 respirators, are designed to seal to the face and prevent contaminants from entering; and KN95 respirators have straps that loop behind the ears. He opined that KN95 masks are acceptable in nonhealthcare environments.

CO-CHAIR FIELDS sought to clarify whether there are commercially available alternatives to KN95 masks that provide a higher degree of protection compared to a cloth or surgical mask. He surmised that KN95 masks are the only available option because N95 masks continue to be hard to obtain in Alaska.

MR. WRIGHTSON affirmed that.

[3:27:47 PM](#)

MR. WRIGHTSON returned to slide 9 and reviewed the proper PPE for caring for a COVID-19 patient or during cleaning and contamination. He continued to slide 10, "Communication," which read as follows [original punctuation provided]:

- Workers and employers should collaborate and designate an effective means of communicating information on new workplace policies and changes prior to reopening and upon resuming operations.
- A communication policy that establishes formal and informal routes of communication for staff to express

concerns, questions, comments and feedback is a necessity.

MR. WRIGHTSON said he has observed retaliation [against workers] and strongly encouraged employers to develop communication policies that provide an "open door" for workers to express their concerns without retaliation. He turned attention to slide 11, "Training," which read as follows [original punctuation provided]:

Education and training opportunities provide employers, managers, supervisors and workers with:

- Knowledge and skills needed to do their work safely and avoid exposure to SARS-Cov-2 that could place themselves or others at risk.
- Awareness and understanding of policies and procedures and how to identify, report and control exposure to SARS-Cov-2.
- Specialized training when their work involves unique hazards.

MR. WRIGHTSON informed the committee that once an employee is issued a disinfectant, he or she must be trained pursuant to OSHA's Hazard Communication rule; furthermore, upon being issued an N95 respirator, employees must be trained on respiratory protection standards, which applies to all PPE that an employer requires. He emphasized that PPE is the last line of defense and can be accompanied by many complications.

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MR. WRIGHTSON continued to slide 12, "Flexible Work Policies," which read as follows [original punctuation provided]:

Employers should adopt flexible work policies that minimize exposure to and transmission of the SARS-Cov-2 virus by reducing the number of workers in a workspace at the same time.

Flexible work policies also consist of staggered work schedules that have workers in an office at different times during a day.

This includes continuing the use of telework, either full time or at regular intervals (e.g., every other day).

Consideration also should be given to changes in transportation options available to workers and CDC guidance encouraging the use of forms of transportation that minimize close contact with others.

[3:34:12 PM](#)

CO-CHAIR FIELDS read the following questions submitted by Representative Story:

Have you been asked by the state to assess state buildings, schools, [and] public safety places, including prisons?

What sort of private businesses have asked for this kind of analysis regarding COVID-19 safety?

Are you aware of best practices from peers and other states?

MS. NUNN said she has been working with state agencies, including DOT and the Alaska Court System. She recounted working with the court system at the outset of COVID-19 to understand occupancy loads for courtrooms, lobbies, and jury call spaces to establish a baseline and apply local mandates for occupancy limitations. Additionally, she recalled her work with DOT pertaining to pioneer homes and correctional facilities. She noted that her firm is advises school districts, particularly in Western Alaska, on best practices for implementing sanitization and disinfection protocols.

CO-CHAIR FIELDS asked how to make this information available to the public.

MS. NUNN recommended looking into the health and safety guidelines created by the IWBI task force. She added that ASID had a parallel task force that recently completed a literature review and created 68 approved resources, which is currently being collated into a usable resource for the general public.

[3:42:39 PM](#)

CO-CHAIR FIELDS pointed out that OSHA did not issue guidelines for COVID-19 safety. He thanked the testifiers for making this information available so that Alaskan entrepreneurs and public building managers can make informed decisions.

[3:43:35 PM](#)

**ADJOURNMENT**

There being no further business before the committee, the House State Affairs Standing Committee meeting was adjourned at 3:43 p.m.