AIHA®

HEALTHIER WORKPLACES | A HEALTHIER WORLD

AIHA NATIONAL UPDATE: FOCUS ON CDC GRANT

Yuma Pacific-Southwest Section 47th Annual Meeting
January 21, 2022

Presented by:
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Chief Executive Officer, AIHA

AIHA STRATEGIC PLAN (2022-24)

- **Mission -** Empowering and advancing those who apply scientific knowledge to protect all workers and their communities from occupational and environmental hazards
- **Vision –** A world where all workers and their communities are healthy and safe
- **Value Proposition (NEW)-** AIHA members are scientists and professionals who protect the health and safety of workers and communities by reducing risks and safeguarding operations to help organizations operate efficiently and without interruption.

Domains				
Community AIHA will nurture and empower a diverse and inclusive professional community and engage with allied professional organizations to work towards achieving common goals.	**Awareness** AIHA will promote the practice of occupational and environmental health and safety (OEHS) by increasing awareness of the value of the profession and growing the organization and profession.	**Advancement and Dissemination of Knowledge** AIHA will explore, develop, and disseminate cutting-edge educational, technical, and career enrichment resources to advance the OEHS profession and professionals.	**Integrity of Professional Practice** AIHA will identify, develop, continuously improve, and promote excellence in OEHS practices.	**Advocacy** AIHA will influence the actions of the public, government, and organizations to advance worker and community health and safety.
Strategic Objectives				
1. Enhance AIHA's value proposition to attract, grow, and retain a diverse and inclusive community of OEHS professionals as members. 2. Enhance AIHA's value proposition to appeal to non-core OEHS and allied professionals. 3. Enhance Product Stewardship Society's value proposition to attract, grow, and retain a community of diverse product stewards as members. 4. Identify and nurture relationships with allied professional organizations.	1. As the AIHA association, communicate our mission, vision, values, and value proposition to increase the strength of the organization. 2. As a profession, inform organizational leaders of the value proposition of OEHS professionals: who we are, what we do, and why. 3. As a profession, broadly communicate to the public AIHA's mission, vision, and value proposition to improve society.	1. Identify the needs associated with critical issues in OEHS, create the research agenda, and facilitate information sharing, partnerships, dissemination, and implementation of evidence-based practices. 2. Develop educational, technical, and career resources for targeted audiences. 3. Disseminate educational, technical, and career resources to targeted audiences in developed and emerging economies through multiple delivery options.	1. Implement a continuous improvement strategy to identify and address gaps between current and state of the art (best in class) OEHS practice. 2. Advance competency in specialty areas through laboratory accreditation, proficiency programs., and registry programs. 3. Develop recognized leading metrics and best practices for worker and community health and safety, including organizational social responsibility.	1. As thought leaders, build awareness of the OEHS profession and the value of the professionals' impact on businesses and communities to influence stakeholders, the public, and policymakers at all levels of government. 2. Empower AIHA members and the public to contact their policymakers in support of AIHA public policy positions and issues.

BACK TO WORK SAFELY CAMPAIGN: MEDIA, MARKETING, AND EXPOSURE

- 2nd edition was released in August 2021
- Over 3 million website views since initial debut
- 3.25 million downloads to date
- Featured resource on CDC website
- Featured in and on:
  - New York Times
  - Wall Street Journal
  - MSN
  - Readers' Digest and dozens more…

INDUSTRY SECTORS

ALL AVAILABLE IN SPANISH!

- Amateur Sports
- At-Home Service Providers
- Bars
- Business Services (e.g., banks, dry cleaners)
- Childcare Centers
- Construction Sites
- Dental Offices/Clinics
- General Office Settings
- Gyms and Workout Facilities
- Hair and Nail Salons
- Houses of Worship
- Institutions of Higher Education
- K-12 Schools
- Laboratory Environments
- Libraries
- Museums and Collecting Institutions
- Outdoor Recreation (e.g. campgrounds, pools)
- Physical/Occupational/Massage Therapists
- Retail
- Restaurants
- Rideshare Services (e.g., taxi, Uber)
- Small Manufacturing/Maintenance Facilities
- Small Entertainment Venues (e.g., mini golf)
- Small Lodging Establishments
- Street Vendors/Farmers Markets
- Transit Systems
- Warehousing/Transportation

IMPROVING CLINICAL AND PUBLIC HEALTH OUTCOMES THROUGH NATIONAL PARTNERSHIPS TO PREVENT AND CONTROL EMERGING AND RE-EMERGING INFECTIOUS DISEASE THREATS: CDC-RFA-CK20-2003

- As a result of our Back to Work Safely initiative, CDC/NIOSH awarded us a $500,000 grant in March 2021.

- Over the last several months AIHA and IBEC* have partnered with funding support from the CDC to develop a series of new tools and resources designed to help organizations cope with the pandemic.

**IBEC: The Integrated Bioscience and Built Environment Consortium*

IMPROVING CLINICAL AND PUBLIC HEALTH OUTCOMES THROUGH NATIONAL PARTNERSHIPS TO PREVENT AND CONTROL EMERGING AND RE-EMERGING INFECTIOUS DISEASE THREATS: CDC-RFA-CK20-2003

1. Project A
- Revision of AIHA's "*Role of the Industrial Hygienist in a Pandemic*"
- Supplemental videos addressing need for OEHS professionals (focus on general small businesses, healthcare, long-term care facilities)
- Knowledge products addressing risk assessment and ventilation

2. Project F
- Animated video snippets on respiratory protection
  - Risk assessment
  - Face coverings for low risk
  - Respirators for high risk
- Available in multiple languages

3. Project C
- Derivative products based on AIHA's Back to Work Safely™ guides: Animated video snippets and tools
- Available in multiple languages

4. Project B (Airing 1/25/22)
- Virtual Summit to address needs of vulnerable occupations:
  - First responders
  - Daycare centers
  - K-12, Colleges
  - Gig economy
  - Construction
  - Agriculture

* Each project includes a comprehensive communications plan with engagement metrics

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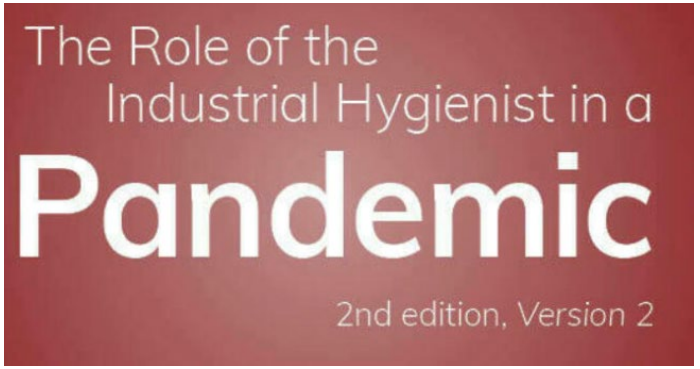


CEAT COVID-19 Exposure Assessment Tool

signature science LLC

US Customary (US)

29 August 2021 V B.32_US BETA

Important: CEAT must be opened with Adobe Acrobat® or Adobe Reader® to function.

Notes

Enter any notes or other info on the scenario

Save As

Start Step 1 Enter information that describes the Group.

a. Group's Infection Likelihood compared to the Community

The Group is composed of people who, prior to this activity, you estimate have a likelihood COVID-19 infection that is...	A	B
100x lower than the community's average due to their adhering to public health guidance on distancing, masking, and exposure to crowds/people.	☐	☐
10x lower than the community's average due to their adhering to public health guidance on distancing, masking, and exposure to crowds/people.	☐	☐
Equal to the community average.	■	■
10x higher than the community's average due to their not adhering to public health guidance on distancing, masking, and exposures to crowds.	☐	☐
100 percent, since they are known to be diagnosed with active COVID-19.	☐	☐

b. Group's Vaccination Rate: 100.00 % ☐ Click to apply Group's Vaccination Rate to the Exposure Calculations

c. Group members use of viral genome or protein surveillance testing

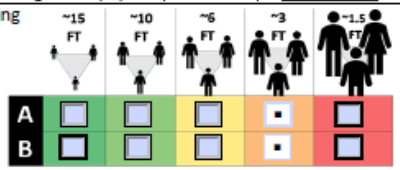
☐ All members are tested within 3-days prior to event ☐ All unvaccinated members are tested within 3-days prior to event ■ Testing not required (or testing status unknown)

Step 2 Enter the number of people sharing the space for the activity.

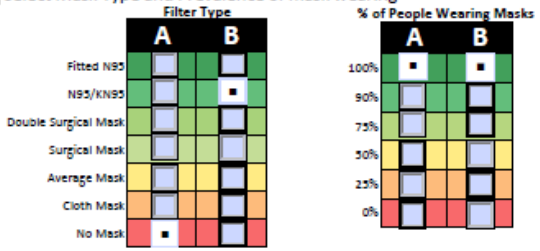
Must be between 2 and 250 people.

	A	B
Number of People Sharing Activity Space:	10	10

Step 3 Select Distancing for the Activity



Step 4 Select Mask Type and Prevalence of mask wearing



Step 5 Select Vocalization Intensity

Activity	Exhalation Type	A	B
Resting	Silent	☐	☐
	Speaking	☐	☐
	Loudly speaking	☐	☐
Standing	Silent	☐	☐
	Speaking	■	■
	Loudly speaking	☐	☐
	Singing	☐	☐
Light exercise	Silent	☐	☐
	Speaking	☐	☐
	Loudly speaking	☐	☐
Heavy exercise	Silent	☐	☐
	Speaking	☐	☐
	Loudly speaking	☐	☐

Step 6 Select Breathing Rate

Activity	A	B
Sleep	☐	☐
Resting	☐	☐
Passive	■	■
Light Exertion	☐	☐
Heavy Exertion	☐	☐

Step 7 Enter the duration that most closely matches activity.

Duration of Activity in Hours:	A	B
	1.00	1.00

Step 8 Select whether outdoor or indoor

Outdoor: A: ◉ B: ◉

Outdoor activities: Select wind conditions that best match.

		Beaufort Scale	A	B
Moderate	13 - 18 mph	Raises dust and loose paper; small branches are moved	☐	☐
Gentle	8 - 12 mph	Leaves/small twigs in constant motion. wind extends light flag	☐	☐
Light	4 - 7 mph	Wind felt on face, leaves rustle	☐	☐
Calm	1 - 3 mph	Direction of wind shown by smoke drift	☐	☐
Very Calm	0.1 - 1 mph	No direction or flow observed	■	■

Indoor: A: ○ B: ○

Enter ACH (or AER[1]) Values

	A	B
Indoor ACH	3.00	3.00

Table 1: Typical ACH Values (Option 3)

Medical	ACH
General	6
Laboratory	6
Treatment room	6
Examination room	6
Retail	
Sales (except as below)	1.5
Barbershop	1.5
Hair and nail salons	3.75
Supermarket	1
Fast Food	6
Bars	2- 6
Restaurants	2- 4
Education	
Classrooms (ages 5 to 8)	2
Classrooms (age 9 plus)	2
Daycare (through age 4)	2.5
Multiuse assembly	5
Lecture hall (fixed seats)	7
Lecture classroom	3
Libraries	1.5
Music/theater/dance	2.5
Office	
Office space	0.5
Reception Area	1.25
Meeting/ Conference Rooms	2
Manufacturing	
Manufacturing Floor	1.5
Residential	
Homes with closed windows	0.5
Rooms with one open window	1.75
Homes with all open windows	3
Travel	
Aircraft	20
Trains/Buses	6
Cars (Windows Closed)	6
Cars (Windows Open)	10

Obtain the ACH using Option 1, 2, or 3:

Option 1 – Use ACH provided by building engineers or H&S.

Option 2 – Estimate ACH using CO_2 measurements. This approach uses **Scenario A's** room dimensions, number of people, breathing rate, distancing, measurements of CO_2, and measurement times. CO_2 values must be 350 ppm or greater

	CO_2 (ppm)	Time (HH:MM)
Measurement 1	420	12 : 45
Measurement 2	1200	15 : 45
Option 2 Estimated ACH	N/A	

Option 3 – from Table 1 on left, select the facility type and ACH that best matches the activity location.

[1] ACH (Air Changes per Hour) is synonymous with AER (Air Exchange Rate [Exchanges/Hour])

Select Room Filtration

	A	B
HEPA Filters	○	○
MERV 13	○	○
MERV 8	○	○
No Filters	◉	◉

Select Flowrate Option:

◉ **Flow Option 1** – Use a default assumption of flow of filtered air of 1 cfm/ft².

○ **Flow Option 2** – Enter a specific filtration flow rate if known

Flowrate (cfm): 330

Step 9 If indoors, enter the room dimensions and the height of the ceiling.

	A	B
Room Length (ft):	32.8	32.8
Room Width (ft):	19.0	19.0
Ceiling Height (ft):	9.00	9.00
Room Area (ft²)	N/A	N/A

Alpha CO_2 (Default setting is 0.1): 0.10

Alpha Exposure (Default setting is 1.0): 1.00

Step 10 Calculate Adjustment to Local Community's Current Conditions

Average Daily Cases per 100,000 in the Last Week		Average Days Infectious (Set to 5 if not known)		Undiagnosed Factor for Area (Set to 3 if not known)		Estimate of Active Infections per 100,000 [2]
20.00	x	5.00	x	3.0	=	300.0

Variant Prevalence

WHO Variant Label	Estimate of Portion of Active Infections (%)	Comparative Increased Transmission (%)
Alpha	1.00	40.00
Beta	0.00	0.00
Gamma	99.00	100.00
Delta	0.00	0.00

Immunity Prevalence

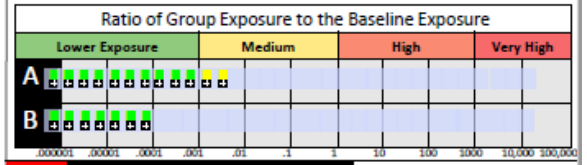
Population Vaccination Rate (%)	60.00
Population Recovered (%)	40.00
Protection Effectiveness of Immunity (%)	70.00

Results Relative Exposure Ratio and near- and far-field contributions.

Ratios of Exposure to the Baseline Exposure Scenario

	A	B
Worst-case Individual Exposure	0.0039	0.0000
Group Exposure	0.0039	0.0000
Number of People Initially Infected (may be <1)	0.0269	0.0269
Near Field:	0.0039	0.0000
Far Field:	0.0039	0.0000
CO_2 Action Level (ppm)	N/A	N/A

Ratio of Group Exposure to the Baseline Exposure



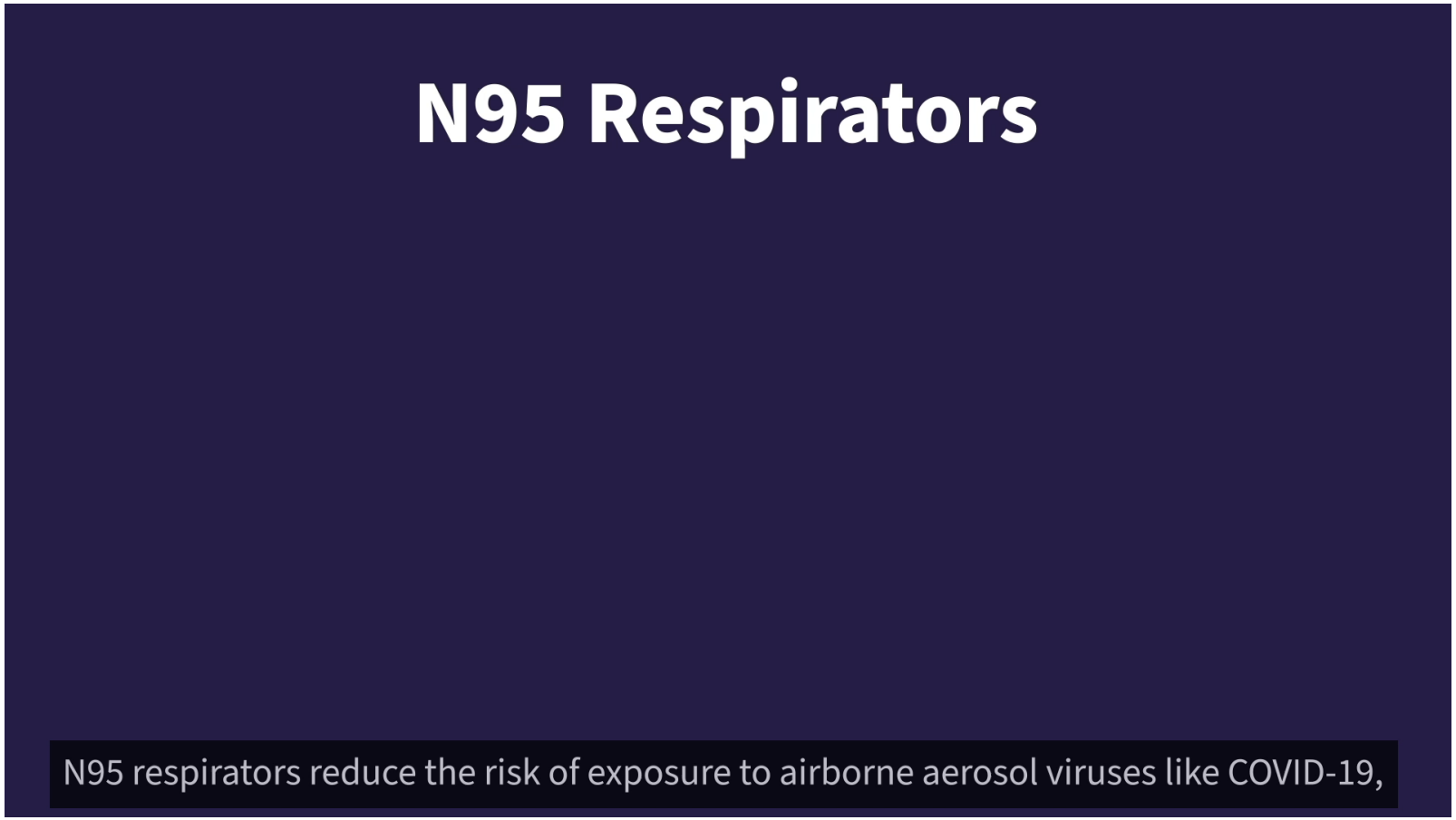
END Take actions to reduce exposure!

HIGH OR VERY HIGH: Make changes to reduce exposure. Rethink the event or activity. Combine multiple mitigations such as using N95 masks, increasing ventilation, holding event outside, greatly increasing distancing, reducing people, or shortening the duration

CO_2 Action Level Exceeded: The CO_2 Action Level provides a level to compare actual measurements to. If the measured CO_2 exceeds the action level, this indicates that the values for the ACH, room dimensions, number of people, activity/breathing rate, or distancing may no longer be correct. Consider reducing people or increasing ventilation in these cases. The model will not suggest action levels >2000 ppm, since this would indicate a poor ventilation situation.

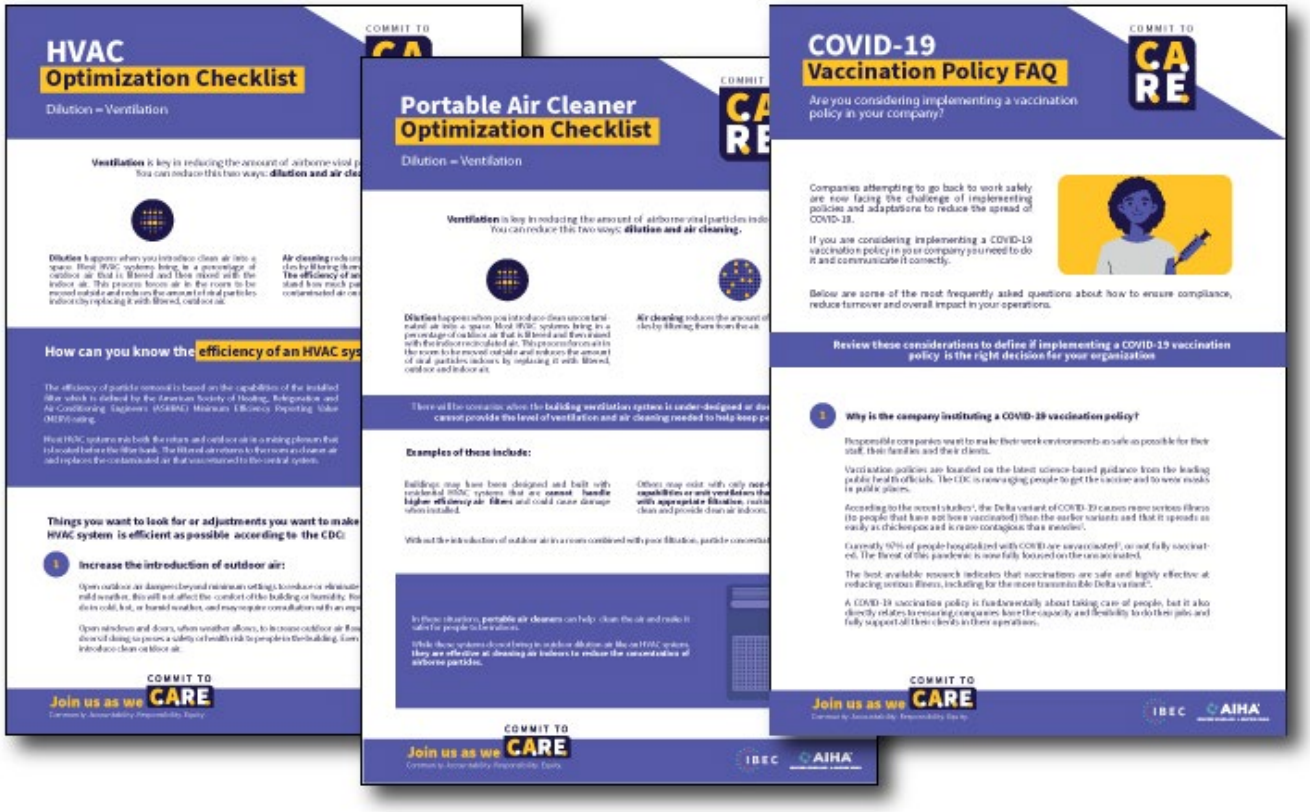
Disclaimer Statement See bottom right on next page

How and When to Use N-95 Respirators



How and When To Use N-95 Respirators (YouTube Video)

CHECKLISTS



https://www.backtoworksafely.org/cdc/care-checklists

CLEAN SUMMIT

CONFIDENCE. **L**EADERSHIP. **E**XPOSURE REDUCTION. **A**WARENESS. **N**EXT STEPS.

STAGE 6: NEEDS ASSESSMENT OF VULNERABLE OCCUPATIONS AND POPULATIONS AND STRATEGIES FOR RESOLUTION

MARK YOUR CALENDAR: *JANUARY 25, 2022 (12 NOON TO 5 PM ET)*

- A series of panel discussions by industry: (1) first responders, (2) education (daycare centers, K-12, higher ed), (3) gig economy, and (4) vulnerable workers in agriculture and construction
- Within each panel, we will:
  - ❑ Understand paint points, challenges
  - ❑ Recognize organizational and psychological barriers to overcome as scientific knowledge develops
  - ❑ Explore new technology innovations and case studies highlighting exposure reduction strategies

IBEC

AIHA®

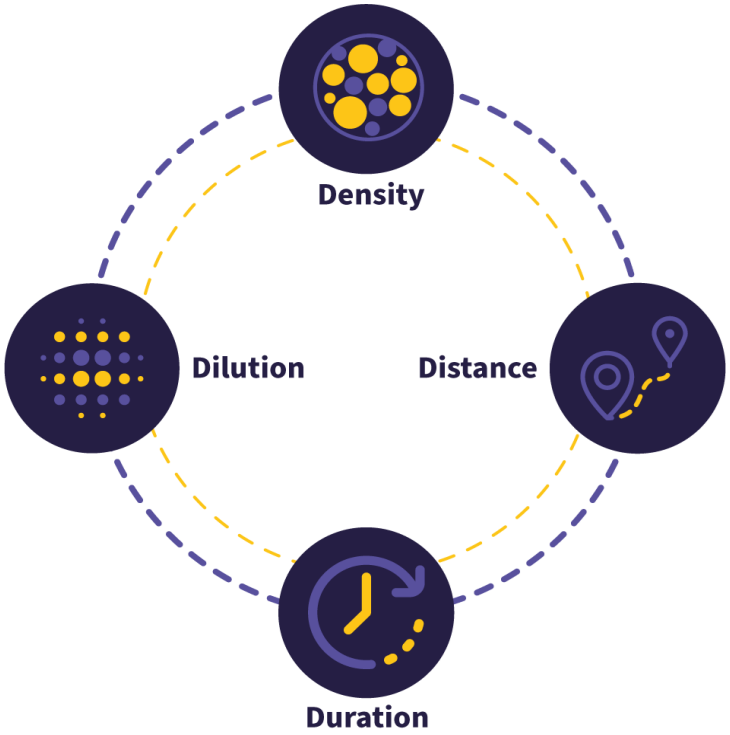
BACKGROUND

Community. Awareness. Responsibility. Equity.

Commit to C.A.R.E. is a public awareness campaign with a mission to:

- Debunk myths about the spread of the COVID-19 virus
- Make the complexities of the science easier to understand through various engaging multi-media tools
- Encourage businesses to pledge their commitment to C.A.R.E. for the health and well-being of their employees, clients, and customers.

CARE



Vaccination and human diagnostic are critically important.

Given that a primary **transmission route for COVID-19 is airborne,** medical mitigation strategies MUST be complemented with environmental control solutions to reduce the risk of transmission.

This is a **holistic approach that is more comprehensive.**

*__Duration/Density__ = Risk Factors | __Dilution/Distance__ = Risk Mitigation Factors

How to determine and assess your risk.

COMMIT TO CARE

Reducing exposure to an airborne virus is the most important thing you can do in reducing its spread.

Viruses that transmit as airborne particles - such as the viruses that cause COVID-19 and measles - pose a significant risk as they can travel long distances – up to 20 to 30 feet – and stay active in the air for at least 4 hours.

Consider the 4Ds to determine the risk category:

Risk Factors

Duration
How long will the employee or others be indoors? The longer time spent indoors, the more the air becomes filled with invisible airborne particles.

Density
How many people are in the space, how many are not vaccinated, how many people are sick and not showing signs, and how many are not wearing masks? As these numbers increase, so does the risk.

Risk Mitigation Factors

Dilution
Being outdoors is relatively safe compared to being indoors thanks to how easy it is to dilute the virus due to more open space, moving air, and the aid of sunlight to stop the virus.

Distance
How far or near are people around one another? People with COVID-19 exhale a high amount of viral particles, which is why being close to an infected person increases the risk of infection for you.

CARE

Sequential lessons to help an organization:

- Determine its relative **risk** (interactive risk assessment tool)
- Implement **workforce training** (face coverings vs PPE)
- Assess/improve **building ventilation**
- Determine if/when/why it needs an **OEHS professional**
- Understand how to find an **OEHS professional**
- Develop a **vaccination policy**
- Develop a **testing policy**

INVITATION TO PARTNER!

1. Go to https://commit2care.org/become-partner/

2. Consider lending your support in one of several ways:
    a. ENDORSE: Provide us with your organization's logo to add to the CommitToCARE.org website and your communications materials.
    b. ENDORSE and SHARE: Combination of #1 above and your organization's commitment to share information about this program with your members, etc. We will send you a media toolkit with sample newsletter articles, social media posts and artwork for you to add on your website and correspondence.
    c. ENDORSE, SHARE, and LEAD: Combination of #2 above, plus your organization's commitment to appoint a liaison to help reach out to other audiences. We would ask you to help arrange brief webinars with your members as well as with groups of your members' customers -- to educate and mobilize even more people. The appointee would be invited to occasional meetings and be provided with a Leadership Toolkit to guide them.

COMMIT2CARE.ORG

Pledge to do your part in making your building, organization, and community healthier and safer from COVID-19.

EMPLOYERS

For those who run any business and are responsible to keep their employees safe and healthy.

Get Started

EMPLOYEES

Looking to join thousands of companies from around the world who have committed to staying healthy and safe at work?

Get Started

GENERAL PUBLIC/MEDIA

For the concerned citizen, a solopreneur, or part of the media and want to pledge to Commit to C.A.R.E.

Get Started

AIHA®

These same resources are also posted at www.backtoworksafely.org/cdc

DIGITAL BADGES

Allied/Partner Organizations

Employers

Employees and General Public

THANK YOU

HEALTHIER WORKPLACES

A HEALTHIER WORLD

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