

# National Tribal Air Association

## IAQ Considerations to Assist Tribes in Re-Opening Tribal Buildings: An Overview of COVID in the Workplace and Funding for Tribes

July 29, 2020

### Indoor Air Quality Informational Webinar

An Overview of COVID in the Workplace &  
Funding for Tribes: Re-Opening Tribal Buildings  
Wednesday, July 29th, 2pm ET



#### Webinar Agenda:

1. Welcome & Introductions
2. An Overview of COVID in the workplace & Indoor Air Quality Considerations
3. Funding for Tribes to re-open the workplace
4. Questions & Discussion



#### Featured speakers include:

Philmer Bluehouse (Diné), Mansel Nelson (ITEP),  
Holly Thompson Duffy (NPAIHB), Gillian Mittelstadt  
(THHN), Hilary Atkin and Danielle Schopp (HUD  
ONAP), & Pat Childers and Nate McMichael (EPA  
OAR)



Informational webinars  
will last 1.5 hours  
and are free and  
open to the public.

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register!

Hosted by the National Tribal Air Association  
Indoor Air Quality Work Group





# Webinar Agenda:

1. **Welcome and Introductions:** Ernie Grooms, NTAA IAQ Work Group Lead
2. **An Overview of COVID in the workplace & Indoor Air Quality Considerations:**
  - a. An Indigenous Perspectives on COVID: *Philmer Bluehouse, Traditional Diné Peacemaker*
  - b. Latest science review: *Mansel Nelson, Institute for Tribal Environmental Professionals*
  - c. Summary of Recommendations: *Holly Thompson Duffy, Environmental Health Consultant for the Northwest Portland Area Indian Health Board*
3. **Funding for Tribes to re-open the workplace**
  - a. CARES Act Technical Assistance Guidance: *Oxcenia O'Domin of Alaska Native Tribal Health Consortium*
  - b. Indoor Air Funding Directory for Tribes: *Gillian Mittelstaedt of the Tribal Healthy Homes Network*
  - c. Overview of HUD Funds: *Danielle Schopp from the U.S. Department of Housing and Urban Development's Office of Native American Programs (HUD ONAP)*
  - d. Overview of EPA Indoor Air Quality Resources: *Pat Childers and Nate McMichael, EPA's Office of Air and Radiation (EPA OAR)*
4. **Review Attendee Questions and Discussion:** Andy Bessler, NTAA Project Director

*An Overview of COVID in the workplace & Indoor Air Quality Considerations:*

# Reopening Businesses & Offices Amid the COVID-19 Pandemic

*Holly Thompson Duffy, NW Portland Area  
Indian Health Board*





# Reopening Decisions

- Guided by cultural values, non-maleficence, & grounded in public health principles
- Risks vs. benefits
- Identifying & meeting “gating criteria”
  - Downward trajectory of cases (or other comparable metrics/benchmarks suggesting reduced risk)
  - Health care capacity
  - Public health capacity
  - Rapid testing/diagnostic capacity

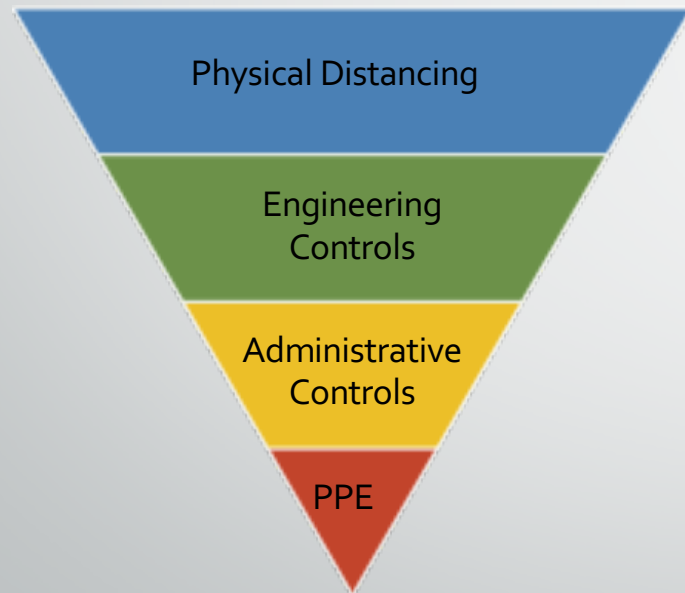




# Environmental Public Health Risk Assessment Tool

## Mitigation Measures:

### Modified Hierarchy of Controls



Formal process for evaluating risks & hazards:

- To identify high risk operations
- Develop & implement mitigation measures
- Monitor & evaluate risk over time

How it works:

- Measure the likelihood of COVID-19 disease transmission
- Measure the consequences of health, social, political and economic impacts

$$\text{Risk} = \text{Likelihood} \times \text{Consequence}$$



# Prioritize Based Off Risk Level

BUSINESS	RISK FACTORS							RISK RATING Relative Threat 0 - 100%	RISK CATEGORY I - III
	LIKELIHOOD				CONSEQUENCE				
Type	Time	Distance	Size of Population	Public Health Factor*	Health Impact	Service Impact	Susceptibility of Population at Risk		
Restaurant, embedded within a Casino, with exterior and interior entry/egress	2	2	3	1	3	3	3	66.67%	II
Casinos	2	3	3	1	3	3	3	75.00%	III
Restaurants (stand alone)	1	2	2	1	2	2	3	38.89%	II
Salon, spas, saunas and other personal care	2	3	1	1	3	2	2	45.37%	II
Gym/Fitness centers	1	1	2	1	2	1	1	18.52%	I
Museums	2	1	1	1	2	1	2	23.15%	I
Hotels	3	1	2	1	2	3	3	51.85%	II
Camp grounds	3	1	2	1	2	2	1	32.41%	I
Outdoor venues (concerts, sports, Pow Wow)	2	2	3	1	3	1	3	51.85%	II
Indoor large venues (concerts, sports)	2	2	3	2	3	3	3	64.00%	II

MONITORING & EVALUATION FREQUENCY		
LOW	III: 0 - 33%	Once a month
MODERATE	II: 34 - 66%	Bi-weekly
HIGH	I: 67 - 100%	Once a week



# Exposure Risk Varies by Job

Define level of risk for each job:

- Very High- jobs with high potential exposure to known or suspected sources of COVID-19 during medical procedures
  - Ex: doctors, nurses, EMTs, laboratory staff, dentists
- High- jobs with high potential exposure to known or suspected COVID-19 sources
  - Ex: others who work at healthcare facilities like pharmacist or support staff



# Exposure Risk Varies by Job

Most workers fall into one of these levels:

- Medium- jobs that have frequent and/or close contact with the public, clients or coworkers who may be infected but are not known to be
  - Ex: grocery store clerks, food service workers, counselors, hair salons, teachers
- Low (caution)- jobs that can maintain 6' from others for most of the day
  - Ex: offices where desks are 6' apart





# Before Opening: Comprehensive Prevention & Control Plan

- Employee Health & Safety & Leave
- Cleaning & Disinfecting
- Hygiene & PPE
- Physical Distancing
- Training & Communication
- Daily Health Screening
- Travel
- Monitoring & Evaluation





# Before Opening: Building Safety

- Conduct comprehensive Environmental Health & Safety Inspection
- IAQ specific considerations:
  - HVAC system efficiency and function
  - HVAC filter (replace and/or upgrade)
  - Ventilation
  - Others: rodents, sewer gases, identifying leaks & mold, flush pipes



# ACH & Time Required for Airborne-Contaminant Removal by efficiency

ACH § 91	Time (mins.) required for removal 99% efficiency	Time (mins.) required for removal 99.9% efficiency
2	138	207
4	69	104
6+	46	69
8	35	52
10+	28	41
12+	23	35
15+	18	28
20	14	21
50	6	8





# Cleaning & Disinfecting

- **FIRST** clean **THEN** disinfect
- Use EPA List to select products for use
- Read & follow all label directions for mixing, applying, storage & disposal
- Safety during application
- IAQ concerns with bleach and other harsh chemicals

A screenshot of the EPA List of Approved Products search interface. It features a dark background with several white and blue buttons. The buttons are: a blue button with a hash symbol and "EPA Registration Number", a white button with a pink molecular icon and "Active Ingredient", a white button with a building icon and "Use Site", a white button with a purple clock icon and "Contact Time", a white button with a yellow grid icon and "Browse All", and a white button with a red "A" icon and "Keyword Search".

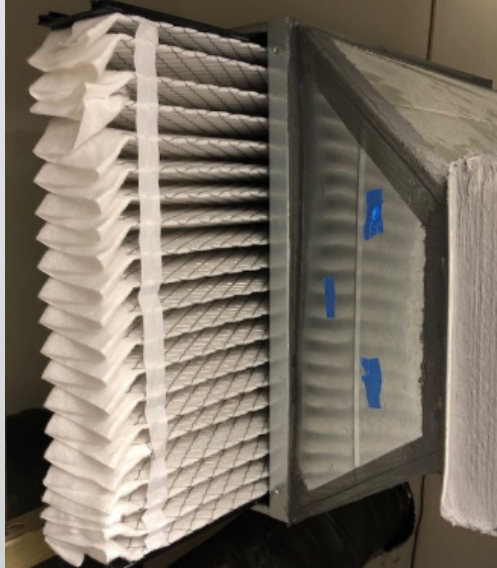
#	EPA Registration Number
Active Ingredient	
Use Site	
Contact Time	
Browse All	
Keyword Search	

EPA. (2020). List of Approved Products.  
<https://www.epa.gov/coronavirus/disinfectant-use-and-coronavirus-covid-19>





# Tools to Improve IAQ



- Upgrade Filter (MERV<sub>13-16</sub>; HEPA)
- Air purifiers (True HEPA)
- UV Air Sanitizer
- Electrostatic Disinfectant Sprayer







# Facility Specific IAQ Considerations

- Gaming Operations
  - Smoking
- Health Care Facilities
  - Ventilation
  - Air exchanges (ACH)
  - Cleaning products
  - PPE
- Childcares & Schools
  - Cleaning products





# NPAIHB Tools for Reopening

- Risk Analysis Tool & Guidance
- Guidelines & Checklists by facility type:
  - Food service operations
  - Gaming operations
  - Tribal Office & Admin operations
- "Return to Work" PPT presentation (customizable) & handout
- Air Purifier Consumer Guide
- Cleaning & Disinfecting Factsheet



- ✓ [Returning to Work Amidst the COVID-19 Pandemic \(PowerPoint with Audio\)](#)
- ✓ [Returning to Work Amidst the COVID-19 Pandemic \(Text Summary\)](#)
- ✓ [Facility Risk Analysis Reopening Tool](#)
- ✓ [Guidance on Using the Facility Reopening Risk Analysis Tool](#)
- ✓ [Reopening Gaming Operations Specific Considerations](#)
- ✓ [COVID-19 Checklist – Gaming Fillable](#)
- ✓ [Reopening Food Service Specific Considerations](#)
- ✓ [COVID-19 Checklist – Food Service Fillable](#)
- ✓ [Guidelines for Reopening Tribal Offices and Administrative Operations](#)
- ✓ [COVID-19 Checklist – Tribal Offices and Administrative Operations](#)
- ✓ [Clinical and Epi Risk Assessments for Reopening](#)





# Resources for More Information:

- NPAIHB:

<http://www.npaihb.org/covid-19/>

- CDC:

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

- EPA:

<https://www.epa.gov/coronavirus/disinfectant-use-and-coronavirus-covid-19>

- ASHRAE: [www.ashrae.org](http://www.ashrae.org)

- OSHA- Guidance on Preparing Workplaces for COVID-19.

<https://www.osha.gov/Publications/OSHA3990.pdf>



# NPAIHB Environmental Public Health Team

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