

Promoting Environmental and Occupational Health and Safety



We will be starting soon!

In the chat, please let us know the following:

- 1. Name**
- 2. State affiliate and/or Local**
- 3. Share a summer highlight**

September 26, 2024

Facilitators



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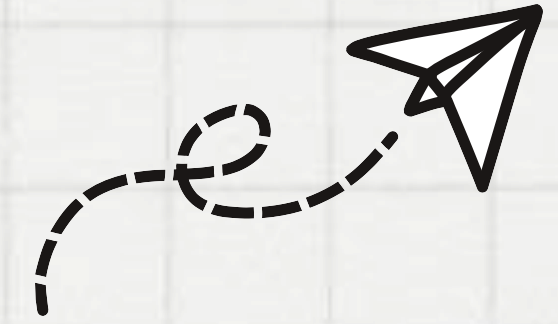
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Community Agreements

- Awareness and Self-Knowledge
- Listen for Understanding
- Be Gracious
- Stay Engaged
- Be Open and Suspend Judgment
- Say “I”- tell your truth
- Lean into Discomfort
- Reach for Empathy
- Expect non-Resolution and non-Closure



Learning Objectives



Upon the completion of the workshop, participants will be able to:

01

Review common health and safety hazards in educational settings.

02

Recognize and prioritize the health and safety issue around which to organize members and build a campaign.

03

Identify and understand what resources are available for health and safety, including tools and funding.

Introduction

This workshop is one of three workshops focusing on health and safety.

1. **Promoting Environmental and Occupational Health and Safety**
2. Advocating for Educators' Mental Health and Psychological Safety
3. Tools and Strategies to Address Gun Violence in Schools.



Health and Safety Issues

- Allergies
- Asbestos
- Bloodborne hazards
- Bullying
- Chemical use/storage/exposure
- Climate justice
- Cold
- Disaster preparation
- Ergonomic hazards
- Food-service concerns (burns, etc.)
- Formaldehyde
- Gun violence
- Health education
- Health Services
- Heat
- Immunization/vaccination
- Infectious diseases
- Indoor air quality
- Infrastructure
- Lead (in paint, water, etc.)
- Mental health and stress
- Mercury
- Mold
- Musculoskeletal problems
- Natural disasters
- Opioids
- Polychlorinated biphenyls (PCBs)
- Pollution (generation of/proximity)
- Safe passage
- Sexual and reproductive health
- Slips, trips, and falls
- Smoking
- Staffing and workload
- Vaping
- Violence (sexual)
- Violence (threats, attacks)
- Water (access to clean water)

Health and Safety Issues

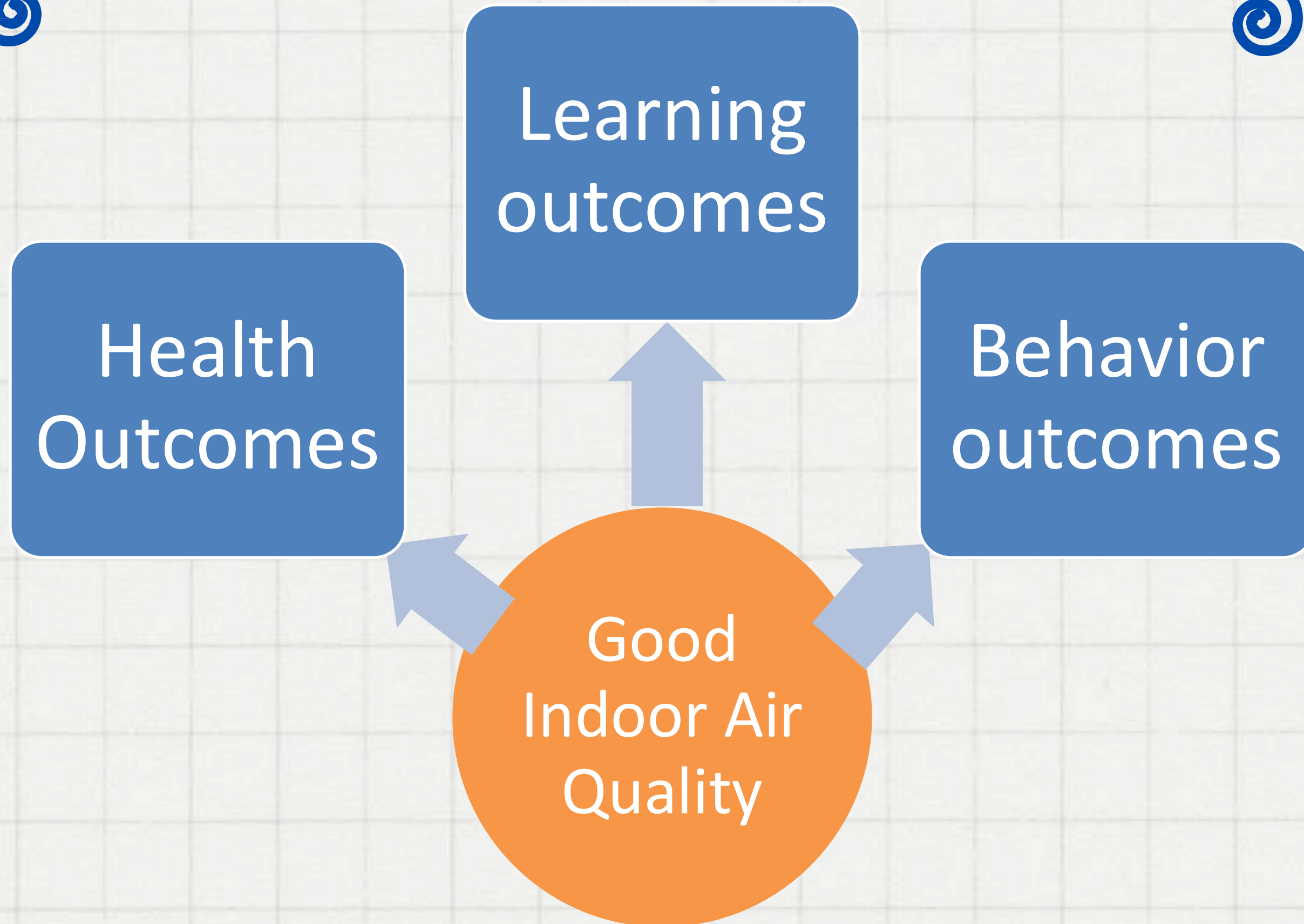
(Selected List)

- Allergies
- Asbestos
- Bloodborne hazards
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Unique Characteristics of a School

1. Occupants are close together, with the typical school having approximately four times as many occupants as office buildings for the same amount of floor space.
2. A variety of pollutant sources are introduced during learning activities, such as supplies and materials for art, science, home economics, and industrial or vocational arts classes.
3. Multiple HVAC units and other mechanical equipment can place an added strain on custodial and maintenance staff.
4. Maintenance often receives the largest cut during budget reductions resulting in staff reductions and deferred maintenance practice.

Indoor Air Quality



Common Pollutants



Negative Impacts of Poor IAQ

1. A study of 100 U.S. schools found a direct association between student academic achievement and classroom ventilation rates, and that measurable progress in math and reading scores were observed when school indoor air quality was improved.
2. Poor IAQ in schools has been linked to cognitive deficits and negative and tangible economic impacts in the workplace, including impacts on the number of employee sick days and job retention.
3. Improving IAQ will diminish routine exposure to airborne diseases, limit outbreaks or epidemics, and lower risks of noninfectious respiratory conditions like asthma that affect the health of millions each year.
4. Studies have identified that increasing ventilation rates, decreasing CO2 levels, and providing cooling can improve student academic performance. As such, many studies have focused on specific indicators including concentration, distraction, memory, fatigue, task completion speed, test scores, and overall grade point average.

Environmental Racism Explained



MY



NEIGHBORHOOD



IS



KILLING



ME

New York City Public Schools



PRESS RELEASE

United States Announces Settlement of Civil Action Addressing Clean Air Act Violations at New York City Public Schools

Monday, September 27, 2021

Share >

For Immediate Release

Office of Public Affairs

The New York City Department of Education Will Monitor Potentially Harmful Emissions from Oil-Fired Boilers, Convert or Replace Seven Large Boilers and Pay a \$1 Million Civil Penalty to the United States

The United States filed suit today under the Clean Air Act (CAA) against the City of New York and the New York City Department of Education (NYCDOE) and lodged a proposed consent judgment to address the defendants' longstanding failure to properly monitor and control harmful emissions from NYCDOE oil-fired boilers in New York City public schools.

Many of NYCDOE's boilers are located in disadvantaged communities whose residents are exposed to disproportionately high pollution levels that result in adverse health and environmental impacts. The consent judgment, agreed upon by the parties and also filed today with the court, requires NYCDOE to: (1) conduct regular tune-ups to monitor and repair its boilers as required by the CAA to control excess emissions; (2) reduce its boiler emissions by transitioning seven of its largest oil-fired boilers to cleaner, natural gas boilers by 2023, at an

TOP

Pathways to Action Tool



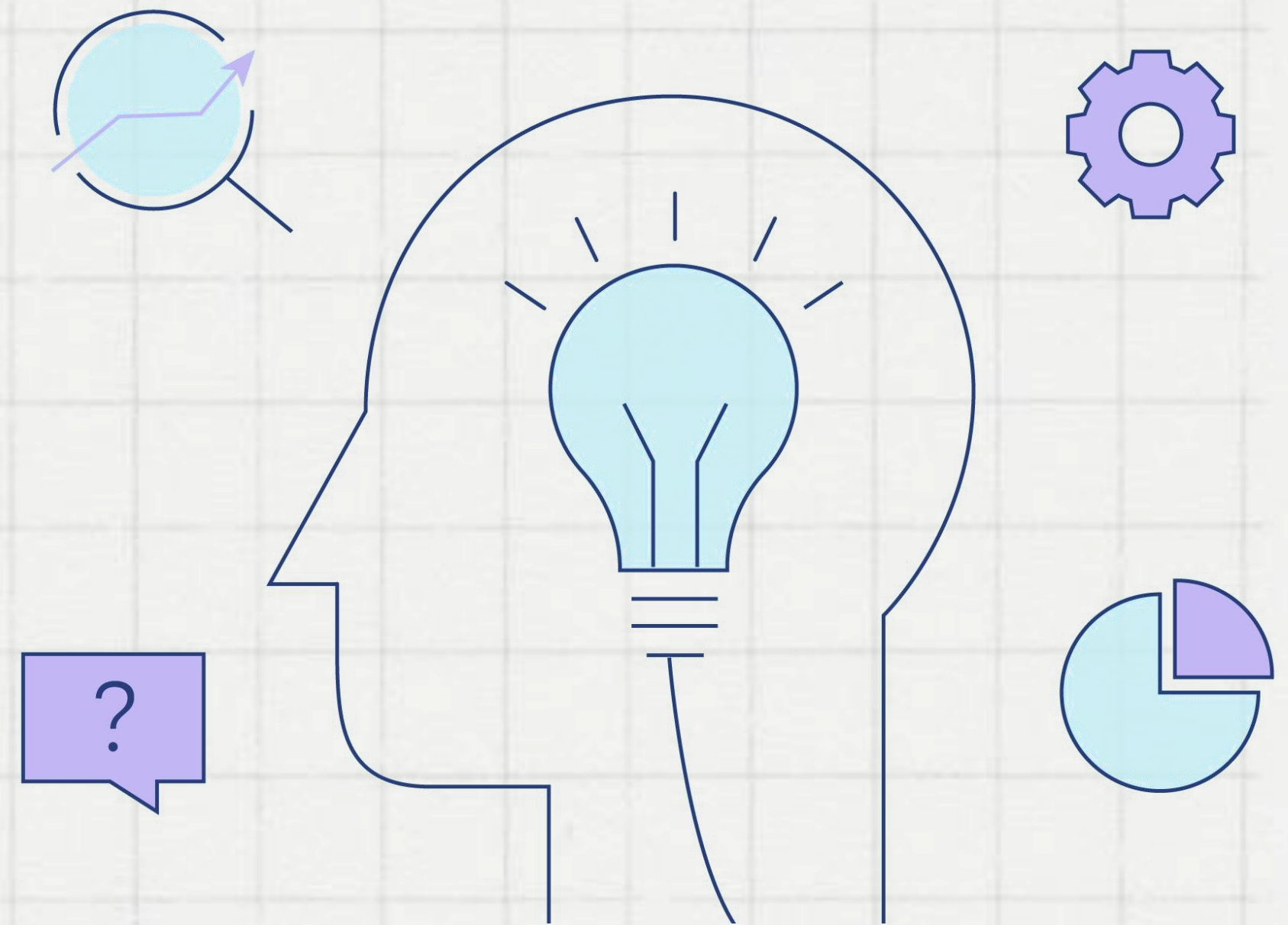
Pathways to Action

When seeking to address school safety concerns, there are two areas of consideration you should explore as you develop your campaign strategies and tactics: structural challenges and opportunities, and people power. Use this checklist as a tool to develop a better understanding of where your challenges and opportunities may be, and to determine your priorities and order of action.

	Pathways of Action	WHERE TO LOOK/ WHAT TO LOOK FOR	YES	NO	DON'T KNOW	N/A	COMMENTS (buy-in, effectiveness, level of engagement, etc.)
1	Are there any state regulations/legislation?	• OSHA state plan • EPA • School district-related legislation • State Dept of Ed. • Regulations on school mental health services/providers, IAQ, school safety,	☐	☐	☒	☐	We have a lobbyist we need to inquire about this with.
2	Are there any local regulations?	• Health department • County government education departments	☒	☐	☐	☐	A member knows a person at the county health department.
3	Do you have any collective bargaining language?	Local Association records	☒	☐	☐	☐	Language exists, but the enforcement/remedy is not clear and only anecdotal evidence exists.
4	Are there memos of understanding / letters of agreement?	Local Association records	☐	☒	☐	☐	Contract expires July 31, 2024
5	Are there school board policies?	School district website	☒	☐	☐	☐	Similar to contractual language. Remedy is not clear; however, Tom and Lera are new board members and

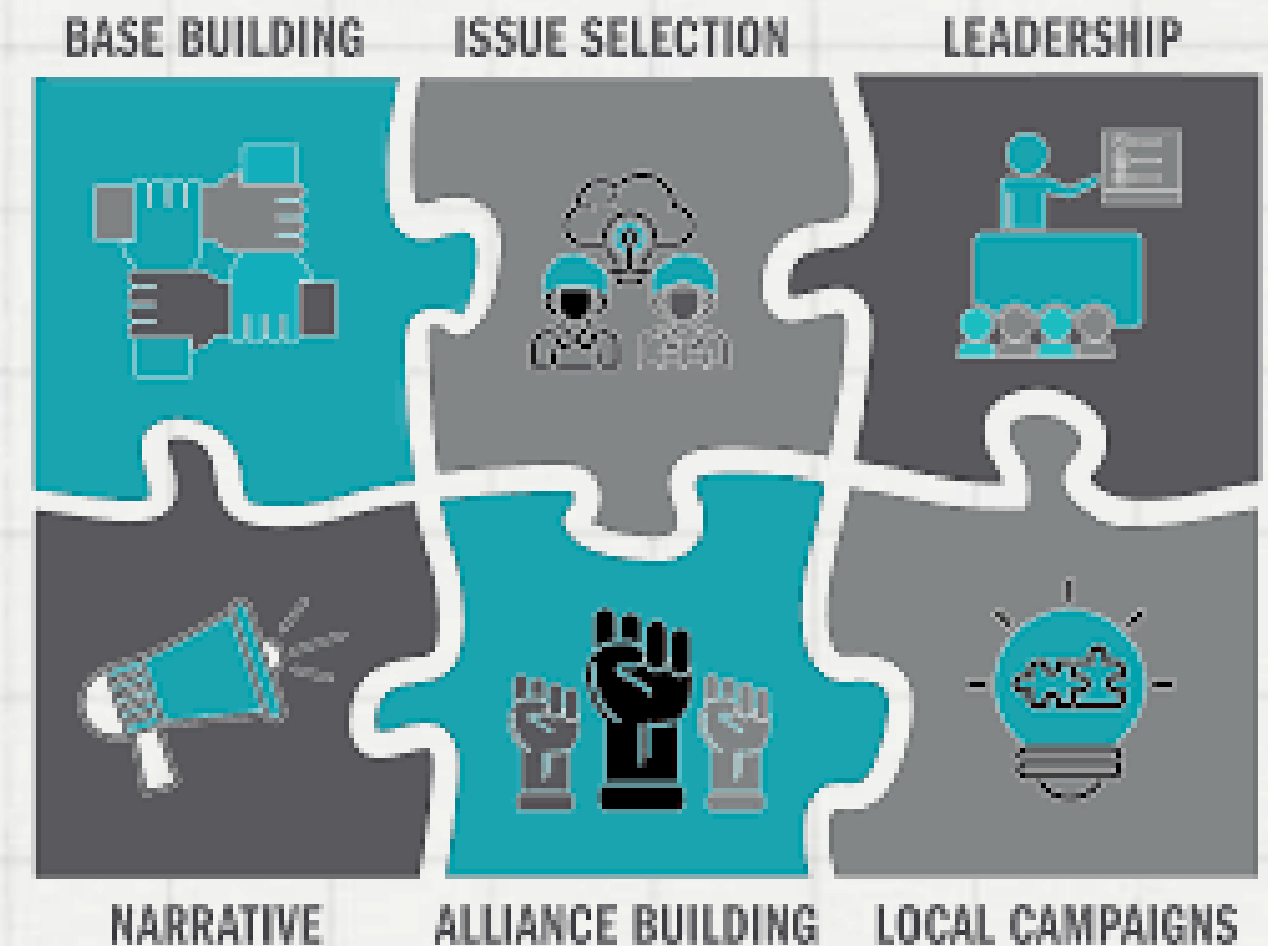
Organizing around Health and Safety

- Understand the organizing landscape
- Identify winnable objectives
- Determine if the objectives can be part of a larger campaign
- Engage more stakeholders
- Communicate clearly, simply, viscerally, and consistently



Organizing around Health and Safety

Look over the Pathways to Action Tool. How might you use this tool for assessment, prioritizing, and organizing around health and safety?



NEA Health and Safety Webpage

nea

MENU

SCHOOL HEALTH & SAFETY

STUDENT & EDUCATOR MENTAL HEALTH

RESPONDING TO GUN VIOLENCE

INFECTION CONTROL & COVID-19

HEALTHY BUILDINGS & SYSTEMS



It's time to invest in
**STUDENT & EDUCATOR WELL-
BEING**



NEA RESOURCES

Evaluating ventilation using CO₂ monitors



How to Evaluate Building Ventilation Using Carbon Dioxide Monitors

May 2022

Carbon dioxide (CO₂) is a colorless, odorless gas that we exhale during the respiration process. Measuring CO₂ in indoor spaces, like classrooms, can—when done properly—serve as a screening tool to determine when ventilation in that space needs further investigation and potential improvement. Measuring CO₂ does not function as an absolute measure of safe or unsafe air quality or determine whether COVID-19 or other hazards, such as asbestos or carbon monoxide, are present.¹ However, too much CO₂ in the air can indicate ongoing problems with indoor air quality (IAQ) and ventilation.

The National Education Association (NEA) created this document to provide guidance on what to look for in CO₂ monitors; explain how to effectively use them and interpret the results; and outline cautions when using results to make decisions about IAQ. It includes a checklist for selecting CO₂ monitors and a table to track CO₂ measurements. This guidance is part of a walkthrough toolkit that features hazard mapping, health surveys, and comprehensive checklists for building walkthroughs in educational settings related to mold, IAQ, building ventilation, and construction and renovation.

CO₂ OUTDOOR AND INDOOR LEVELS



People are the primary source of carbon dioxide in indoor spaces, and certain activities increase the concentration of CO₂ gas, such as choir practice in music class or people gathering to eat in a cafeteria. CO₂ is found naturally in outdoor air at low levels and does not generally pose a health risk at normal concentrations. As of 2022, the outdoor level of carbon dioxide is usually 420–450 parts per million parts of air (ppm), but it can be higher in areas with high traffic and industrial activity.² Carbon dioxide levels are usually greater inside a building than outside, especially when sources of natural ventilation in a building, such as windows and doors, are closed.



Elevated CO₂ concentrations serve as indicators of inadequate ventilation; they suggest that natural ventilation—such as open windows—and mechanical ventilation—like that provided through a heating, ventilation, and air conditioning (HVAC) system—are insufficiently moving stale air out of a space. Inadequate ventilation can increase the concentrations of all contaminants within indoor spaces.

Generally, if indoor carbon dioxide levels are 800–1,000 ppm or greater, building occupants may experience headaches, dizziness, fatigue, sleepiness, and eye and throat irritation.³ At extremely high levels, CO₂ can cause shortness of breath, confusion, neurological and cardiac disturbances, and worse;

¹U.S. Environmental Protection Agency. "Clean Air in the Building Challenge." Accessed April 8, 2022. Retrieved from epa.gov/system/files/documents/2022/03/508-clear-buildings-factsheet_v5_508.pdf.

²NOAA Climate.gov. "Climate Change: Atmospheric Carbon Dioxide." Accessed April 29, 2022. Retrieved from climate.gov/news-features/understanding-climate-change-atmospheric-carbon-dioxide.

³Istai, D.H., Lin, J.S., Chan, C.C. "Office workers' sick building syndrome and indoor carbon dioxide concentrations." *Journal of Occupational and Environmental Hygiene*. 2012. 9(5):345-51. doi: 10.1080/15459624.2012.675291. PMID: 22530709.

NEA building walkthrough toolkit



Hazard Mapping

Identifying Hazards and Health Symptoms in the Workplace

If you cannot conduct a walkthrough in-person or would prefer first to collect data, then facilitate the following hazard mapping exercise.

A hazard map is a visual representation of the general health and safety hazards and health symptoms in the workplace. The goal of the exercise is to collect information about the hazards from staff and work toward mitigating exposures. Mapping hazards and health symptoms will help identify patterns associated with the location, timing, and type of health symptoms or hazards occurring. A group of staff from a cross-section of different job classifications should participate in this exercise to add insight. If appropriate, parents/caregivers and age-appropriate students can participate. The duration of the activity ranges from one to two hours.

A facilitator can facilitate the hazard mapping exercise during a membership meeting, local association workshop, or other event/meetings. This is a health survey that will help users identify what areas/items require further investigation. It is part of a series of documents in an NEA Building Walkthrough toolkit. The instructions below describe how to facilitate the hazard mapping exercise.

Hazard Mapping Instructions

- 1) Assign participants to work in small groups (3–5 people per group). Have each group identify a scribe, reporter, and timekeeper. Inform each group about how much time they have for each step based on the amount of time for the entire activity.

Ask each group to think of their worksite and the grounds on which it resides. Ask participants to conduct a virtual walkthrough of the building and grounds to identify actual or potential hazards or hazardous conditions and health symptoms that staff and students are experiencing in the eight tables beginning on page 8.

Each of the eight tables represents different rooms/areas of a building and includes two columns labeled "health and safety hazards" and "health symptoms," which the scribe will document with the group's responses.

Materials Needed

- Markers (7 different colors: red, orange, pink, green, blue, purple, and black)
- Pen/pencils
- Dot stickers: (7 different colors: red, orange, yellow, green, blue, neon pink, and neon green)
- Large notepad paper with adhesive on the back
- Easel (for large notepad paper)
- Floor plan
- Health survey
- Building walkthrough checklist or other checklists from the toolkit

2



Health Survey

A health survey will help identify and compile the health symptoms that building occupants may experience as a result of occupational hazards. A health survey will identify where symptoms are occurring, when they are occurring, what type of symptoms, how many people are experiencing the same symptoms, and if the symptoms disappear when people are away from their worksite. This is a health survey that will help users identify what areas/items require further investigation. It is part of a series of documents in an NEA Building Walkthrough Toolkit.

How to Conduct a Health Survey

There are two approaches to conducting this survey:

- 1) Users can **distribute the health survey** to staff and have them fill it out and return it to the health and safety committee or team to add insight during the committee or team's walkthrough. Users should inform staff of the deadline for returning the surveys.
- 2) Users can use the health survey in a **hazard mapping exercise**, also found in this toolkit, to identify potential issues and hazards and/or to further add insight during the committee or team's walkthrough. Anytime the health survey is used for the hazard mapping exercise during a training or membership meeting, users should share overall findings with the health and safety committee or team. See the hazard mapping exercise for further instructions on how to incorporate this health survey.

Notifying Participants of Purpose and Confidentiality

It is important to ensure that staff who fill out and submit the survey understand its purpose and are given assurances that confidentiality will be maintained. Staff may be hesitant to participate if they think the data collected will get them in trouble. Users should inform participants how the local association will maintain confidentiality by not revealing identities. Confidentiality will be maintained by **summarizing results**; for example, 10 out of 40 staff experienced headaches.

IMPORTANT: The purpose of the health survey is to identify and collect data on the general health and safety of the workplace. If an educator has a specific health concern and, particularly, if they are missing work or seeking treatment because of these work-related health symptoms, the educator should be referred to their local association, a UniServ field representative, legal counsel, employer human resources department, and/or healthcare provider, as appropriate, to discuss potential individualized remedies. Because this is outside of the expertise of the health and safety committee and beyond the purpose of the health survey, it is important to be clear

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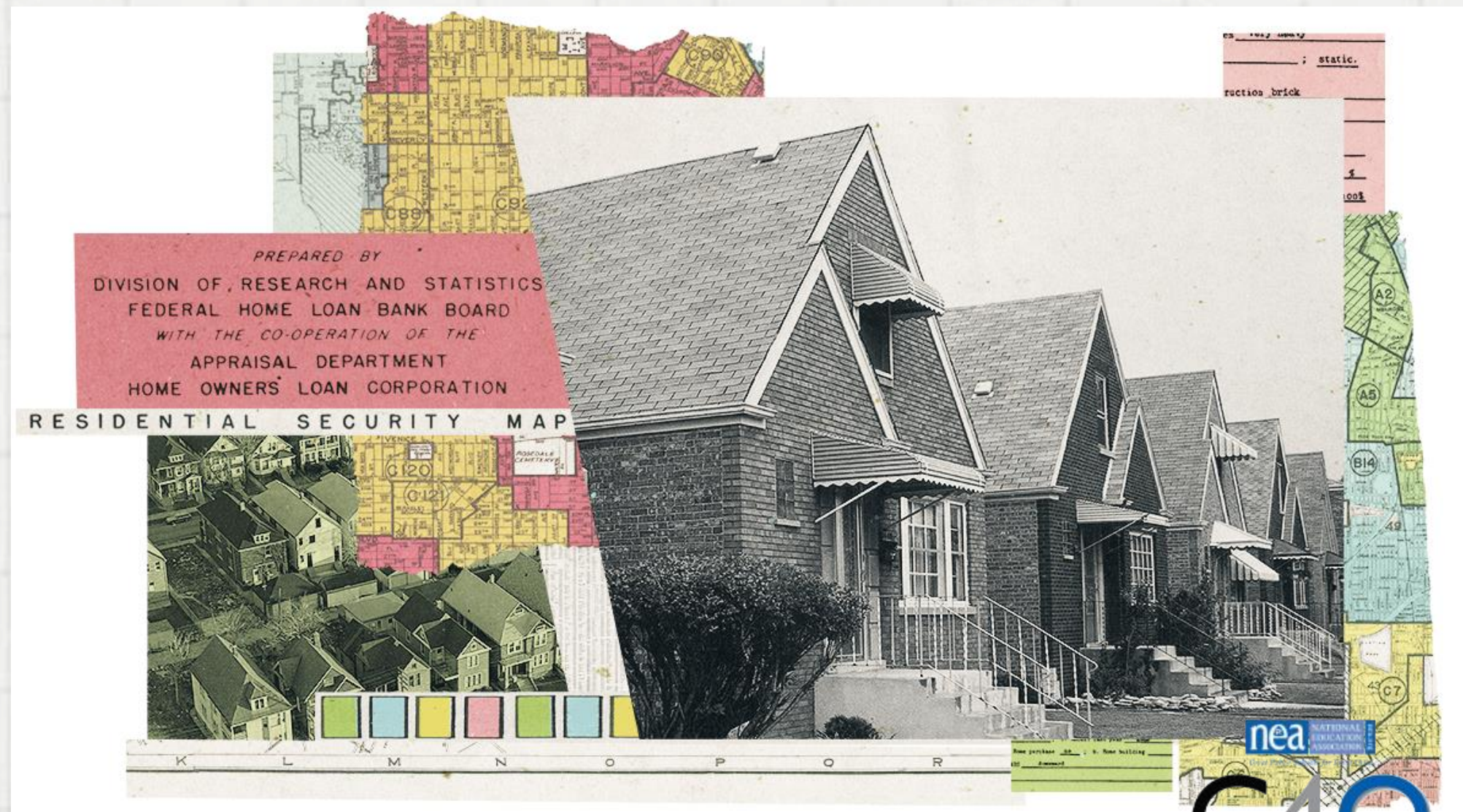
Agencies or Organizations

- **OSHA** – OSHA State plans cover public sector workers
- **EPA** – resources on IAQ, and other health and safety issues
- **National COSH**—strategies, resources, training on occupational safety and health www.coshnetwork.org
- **ACGIH**—mold remediation guidelines www.acgih.org
- **ASHRAE**—ventilation/thermal comfort standards
- **AIHA**—find recommended consultants for mold and other safety issues www.aiha.org



Scenario

Crossing A Red Line





Breakout Groups

- 1) We will divide up into small breakout groups
- 2) Discuss the scenario in your small group
 - A. Assume/imagine some aspects of the scenario using the Pathways to Action Tool
 - B. Identify some of the issues and determine the most widely felt and winnable issue. How might you organize around the issue?
 - C. Think of a slogan for your campaign
- 3) We will bring the group back together and share.

Scenario





Report Back

Action Opportunity

Federal OSHA's Proposed Heat Rule

»»» Due December 30, 2024

PR

PROPOSED RULE

Share

Comment Period Ends: 105 Days

Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings

Posted by the Occupational Safety and Health Administration on Aug 30, 2024

Comment

Document Details

Document Comments 1.94K

Docket (OSHA-2021-0009) / Document

✓ Document ID

OSHA-2021-0009-4761

Comments Received

7,145

More Details

Document Details

Comment Due Date ?

Dec 30, 2024

Federal Register Number ?

2024-14824

CFR ?

29 CFR Part 1910, 1915, 1917, 1918,

Content

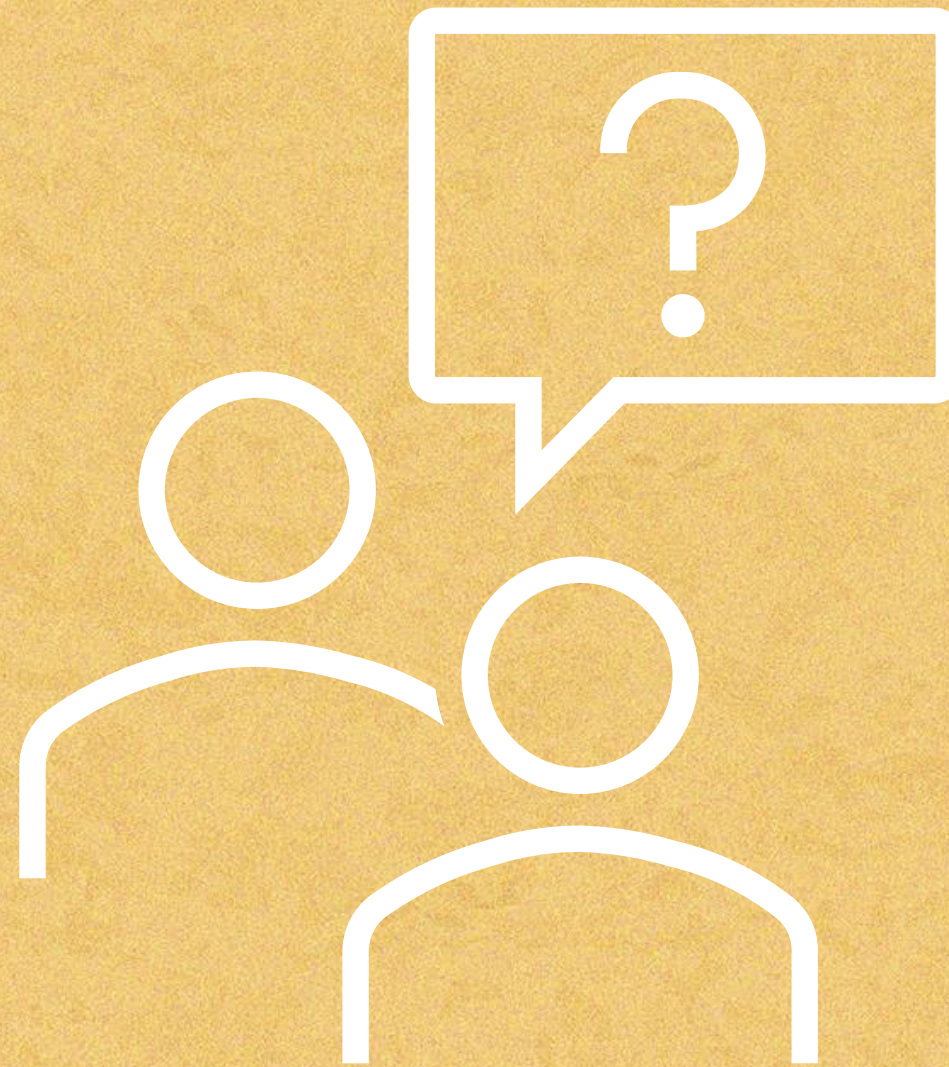
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Action Steps and Take Aways



1. How will you use something you've learned today to facilitate positive change in worksite health and safety?
2. How would you be able to measure a win in worksite health and safety?
3. What have you learned today that would make your work with locals different than you always have?



Questions

Contact Us



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