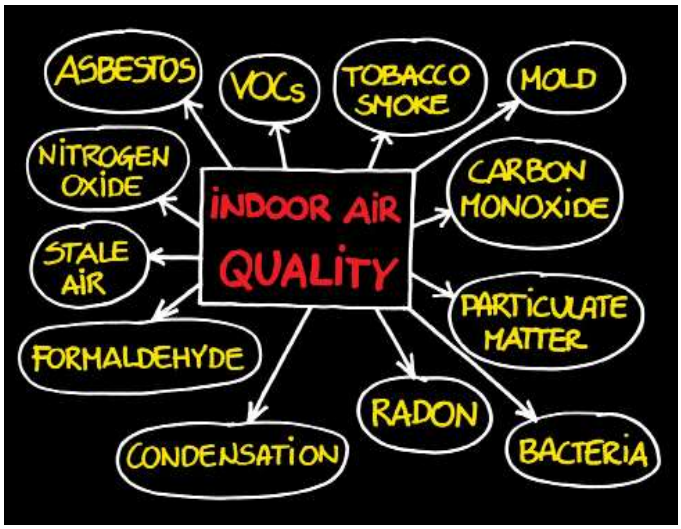
INDOOR AIR QUALITY

INFORMATION AND RESOURCES ON INDOOR AIR QUALITY ISSUES

Air Contaminants

Air quality can be affected by airborne contaminates, the temperature or by how much moisture is in the air. Many contaminants, like asbestos or carbon monoxide, are regulated and have Permissible Exposure Limits (PEL) and are enforced by the Occupational Safety and Health Administration (OSHA) or by the Public Employees Safety and Health Bureau (PESH) for NY public sector workers. Not every contaminate has a PEL. Viruses are a prime example. Testing for contaminates can be difficult as they are not all collected and measured the same; testing for saw dust and other particulates is very different than gasses and vapors.



Indicators of Indoor Air Quality

To evaluate your indoor air quality, look three basic indictors:

- **temperature,**
- **relative humidity, and**
- **carbon dioxide.**

Indoor air that is too hot or too cold is an obvious concern as is relative humidity, (air that is too dry can cause the nasal passages too dry and crack leaving occupants more susceptible to infection). Air that is too wet can allow mold growth to occur. These issues are not regulated by PESH or OSHA.

Common Symptoms of Poor Indoor Air Quality

- Dryness and irritation of the eyes, nose, throat, and skin
- Headache
- Fatigue
- Shortness of breath
- Hypersensitivity and allergies
- Sinus congestion
- Coughing and sneezing
- Dizziness
- Nausea

Ventilation System (HVAC) Issues

Ventilation systems if not well maintained can be breeding grounds for **mold** and other contaminants. The air the system intakes can also be contaminated with nearby sources such as carbon monoxide. Spaces redesigned without proper ventilation in mind or "sealed buildings" with no natural ventilation can be problematic.

Carbon dioxide is the most common indicator used to determine how well the ventilation system is providing outside air into a building. People are the primary source of carbon dioxide indoors because as we breathe, we remove oxygen from the air and replace it with carbon dioxide. If the air in an indoor space is poorly ventilated, carbon dioxide and other contaminates can build up and increase in concentration over time. Well ventilated spaces will remove the old air and replace it with fresh air keeping the concentration of carbon dioxide and other contaminates down. Spaces that are above 1,200 parts per million of carbon dioxide are typically considered poorly ventilated.

Union Action Around Indoor Air Quality

- Keep an occupant diary and record conditions observed.
- Identify potential source of the problem (new chemicals or building materials).
- Report it to your supervisor.
- Report it to your union representative.
- Utilize an inexpensive IAQ meter to measure conditions.
- Consider utilizing a personal air filter HEPA/ UVC.

Permissible Exposure Limits

PELs are typically expressed in three basic ways.

1) The first limits what a worker can be exposed to over their entire shift and that is expressed in an **8-hour time weighted average (TWA).**

2)The second limits how much a worker can be exposed to in a relatively short amount of time that is expressed in a **15-minute short term exposure limit or (STEL).**

3) The final method limits the maximum allowable amount of a contaminate that a worker can be exposed to at any given time that is expressed in a **ceiling limit (C)**.

Employers must ensure that workers do not exceed the PEL.

For more information and resources visit:

www.cseany.org/safety

CSEA has been winning the fight for safe and healthy working conditions for over 100 years, yet there is more to be done. Hazards old and new- from Asbestos to Zika- remain a threat to workers every day. CSEA will not back down from the fight and nothing is more important than saving lives and keeping workers free from injury. Your help is needed now more than ever.

The life you save could be YOUR OWN.

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