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Research Safety

Protecting Your Health: Understanding and Responding to Ventilation Disruptions

Your health and safety depend on the proper functioning of the ventilation systems in our labs. Disruptions to these systems, whether planned or unplanned, can compromise fume hoods and general room ventilation, making it unsafe to work with hazardous materials. In some cases, a ventilation failure could even present a life-threatening situation. This guide provides information on how to prepare for and respond to ventilation disruptions, ensuring your well-being.

Why Ventilation Matters

Proper ventilation is essential for removing hazardous vapors, dusts, and other airborne contaminants from the lab environment. When the ventilation system isn't working as it should, these contaminants can build up, increasing the risk of exposure and potential health effects.

Types of Possible Ventilation Disruptions

There are many kinds of planned and unplanned events that can cause ventilation to be disrupted, such as planned maintenance of the ventilation system, generator testing, fire alarm testing, electrical system testing, power outages (see the Power Outage Guidance for more information), fire alarm activations, and unplanned maintenance on any system that supports the ventilation.

Signs of a Ventilation Problem

Be alert to these indicators that your ventilation system might be compromised:

- **Fume Hood Alarms:** These alarms indicate that the fume hood is not providing the expected level of protection.
- **Biosafety Cabinet Canopy Alarms:** These alarms indicate that the canopy above a ducted biosafety cabinet (BSC) (Class II, Type B2) is not providing the expected level of ventilation.
- **Loss of Power:** A complete loss of power suggests that mechanical systems may be impacted. Fume hood alarms will not work during a power outage.

Responding to Unplanned Ventilation Disruptions

Unplanned disruptions require immediate action. Here's what to do:

- **Stop Working Immediately:** Halt all activities, especially those involving hazardous materials.
- **Secure Your Work Area:** Close the sashes of all fume hoods and biosafety cabinets to contain any potential releases.
- **Leave the Lab:** Evacuate the area calmly and quickly.
- **Warn Others:** Post a sign on the lab door indicating "Do Not Enter - Ventilation System Disrupted."
- **Report the Problem:** Call the Urgent Facilities Issues hotline at 650-723-2281 (or 650-721-2146 if your lab is in the School of Medicine) to report the issue and location. Then, notify your building manager.

- **Potential Exposure:** If you believe you may have been exposed to hazardous materials contact the Occupational Health Center (OHC) at 650-725-5308 during business hours (8 AM - 4 PM, Monday - Friday). If the incident occurs outside of OHC hours and you require immediate medical attention, go to the Stanford Hospital Emergency Department and have someone notify EH&S at 650-725-9999.
- **Reoccupancy:** You will be informed when ventilation has been restored; you may re-enter the lab 30 minutes after that time.

Preparing for Planned Ventilation Disruptions

Advance planning can minimize risks associated with planned maintenance:

- **Receive Notification:** You will be informed of planned maintenance.
- **Secure Hazardous Materials:**
    - Ensure all containers inside fume hoods and biosafety cabinets are tightly closed.
    - Do not leave any hazardous materials exposed to the air.
- **Close Sashes:** Close the sashes of all fume hoods and biosafety cabinets.
- **Post a Reminder:** Place a sign on the lab door stating, "No Hazardous Material Handling - Ventilation System Maintenance."
- **Reoccupancy:** You will be informed when ventilation has been restored; you may re-enter the lab 30 minutes after that time.

By understanding these guidelines and acting quickly in the event of a ventilation disruption, you can help protect your health and the health of your colleagues.