Preservation Essentials—Sara Holmes, Assistant Editor, NARA

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Health and Safety Concerns When Working with Mold

By Sara Holmes, National Archives at St. Louis

Mold is a common concern in archives. Using HEPA vacuums and performing surface cleaning using brushes or "sponge" erasers such as Absorene and Gonzo can help remediate mold on documents, but mold is a health hazard that can cause allergic reactions, infections, and irritations to eyes, skin, throat, and lungs. If working with mold-contaminated collections, you owe it to yourself and other staff members to protect yourselves as much as possible. It's best to find professional assistance from qualified health and safety specialists who can consult with you on your particular needs to ensure that you conform to safety standards. In larger institutions, such as colleges and universities, you can likely reach out to health and safety staff who can assist in setting policies and procedures for staff members working with mold.

Mold-contaminated materials should be separated from other collections. If you are cleaning mold yourself, an isolated room away from other collections is the ideal space to perform the work. Work surfaces need to be cleaned when work is finished. Dormant mold, which is dry, can bloom again if moisture levels are sufficiently elevated. Be sure to keep moldy materials in spaces that are dry and cool.

If you decide to complete surface cleaning of mold in-house, keep in mind these considerations in protecting the health of staff performing the work. Use appropriate PPE (personal protective equipment) when working with mold. This includes using latex or nitrile gloves and disposable aprons or other coverings so clothing is not contaminated. Using respiratory protection will decrease your exposure to fine particulates, but misuse or inappropriate selection of respirators can harm not help. It's important to understand the basics and seek out assistance when needed, especially if required under OSHA guidelines. Fit testing of respirators and medical clearance must be done by qualified specialists, but knowing the basics of respiratory protection can help you determine how to approach dealing with that moldy collection:

- Be sure that you have medical clearance from you doctor or an occupational health specialist to use a respirator.
 People with chronic health issues such as heart or lung conditions may not be good candidates for wearing a respirator.
- When used in the workplace, the Occupational Safety and Health Administration (OSHA) requires that respi-

- rators be fit tested. Be sure to refer to OSHA's standard for respiratory protection (29 CFR 1910.134) at www .osha.gov.
- Use a NIOSH-approved respirator. Surgical masks and dust masks do not qualify. Look for an adjustable-fitting N95 respirator in safety supply or hardware stores. An N95 respirator filters 95% of airborne particulates and is appropriate for use with mold. They can be found as disposable respirators or as plastic or rubber half-face masks.
- Read the manufacturer's instructions for using the respirator and getting a tight seal when worn. If the respirator does not seal, you will not be protected.
- Always check the fit of the respirator by checking for leaks by sharply exhaling. If there are leaks, readjust the respirator.
- If using half-face respirators, follow manufacturer guidelines for cleaning, maintenance, and replacement of filters. (If not regularly using a respirator, you may prefer the ease of disposables.)
- You may need to try different styles or brands of respirators to find a good fit.
- People with beards or other facial hair may not be able to get a sealed fit.
- If you have trouble breathing at any time while wearing a respirator remove it immediately and seek medical help.
- Remember to use respiratory protection when emptying your HEPA vacuum contents!
- Always clean work surfaces when finished to remove mold spores. You may use a diluted bleach solution (1 part bleach to 10 parts water), or a surface disinfectant product such as Envirocide, which is a nonirritating cleaner commonly used in hospitals.

For more information that may help you understand how to develop procedures for working with collections with mold, be sure to check the following sources:

- Occupational Safety and Health Administration on Molds: www.osha.gov/SLTC/molds/
- Centers for Disease Control and Prevention: www.cdc .gov/mold/faqs.htm
- Arts, Crafts and Theater Safety provides free information on health, safety, and industrial hygiene to cultural resources: www.artscraftstheatersafety.org.
- And check with your own state's department of health for information or assistance.