Overview

Museums and other cultural heritage and collecting institutions are dealing with emerging challenges created by COVID-19. This document offers practical guidance, particularly for small and medium-size museums to develop their reopening plans, including physical distancing, collection care and conservation concerns, ventilation and utilities, employee wellness and training, communication to the public, and other control measures. This industry and its workforce engage in the collection, preservation, study, and exhibition of objects and specimens of historical, cultural, scientific, and educational value. These establishments consist of art museums and (non-retail) galleries; historical, military, natural history, science, and technology museums; archives; halls of fame, botanic gardens, aquariums and zoos; traveling exhibitions; and more. Teaching and study collections within many academic campus departments and collection exhibits associated with specific corporations or governmental agencies are also included. Although important, most, if not all, were deemed “non-essential” in the United States by state and federal governments, resulting in employers halting operations and closing workplaces. Currently, many states are trying to reopen parts of their economies, including some non-essential businesses.

These venues often have a very public face including displays, outdoor sculpture gardens, docent tours and lectures, performances and hands-on learning, student field trips, traveling exhibitions, and private events. The occupations that support the mission of museums include curation, conservation, art handling and preparation, scientific examination, education, exhibit design and fabrication, security, administration, maintenance, and more. Museums also collaborate locally and internationally to ship and receive loans and acquisitions (gifts as well as purchases) for temporary exhibits and ongoing research projects. These institutions will have to implement measures to reduce the risk of transmitting COVID-19 by person-to-person spread through aerosolized respiratory droplets and surface transmissions.

SARS-CoV-2, the virus that causes COVID-19, is thought to be spread primarily through aerosolized respiratory droplets at close range. Airborne transmission from exposure to very small droplets over long distances is unlikely. However, there is evidence that this mode of transmission is possible, particularly in crowded, indoor spaces. People may also become infected by touching contaminated surfaces. The virus has been shown to survive in aerosols for hours and on surfaces for days. Infection can occur through eyes, nose, and mouth exposures. There is also strong evidence that people can spread the virus while pre-symptomatic or asymptomatic.

As museum administrators begin their reopening process, they should address these fundamental questions:

- What measures can be enacted to protect the health of employees, volunteers, and visitors, with consideration for the care and integrity of the diverse collection material types and environments?
- What physical distancing, pathway restrictions, and barrier limitations should be implemented?
- How can crowd management and planned group events be handled throughout the venue, including peak times?
- What precautions should be taken regarding high-touch interactive surfaces?
- What employee training and public communication is needed to keep everyone informed of the preventative steps being taken?

A special thanks to the AIHA Museum and Cultural Heritage Industry Working Group for its contributions.
What should an Employer do to protect themselves, their employees, and visitors?

Employers should continually monitor global (World Health Organization [WHO]), federal (Centers for Disease Control [CDC] and Occupational Safety and Health Administration [OSHA]), and state and local public health guidelines for changes in recommendations, disinfection strategies, worker protections and other best management practices. Employers should consider forming a knowledgeable team to monitor, assess, and implement new strategies as they become available.

Since museums constitute many industries under one roof, AIHA’s Back To Work Safely Guidance Documents for Construction, General Office Settings, Libraries, Warehouses (i.e., for Collection Storage areas), Retail Services, Restaurant Industry, and Childcare Centers may also be helpful. Employers should consult AIHA’s Resources List below to connect with other local museums and their professional organizations, such as the American Alliance of Museums, for reopening plan examples and innovative practices.

A phased-in approach to reopening will allow museums to prioritize health and safety while taking progressive steps to restore regular operations. For a sample checklist, see “Long-Term Closure Re-Entry Checklist for Cultural Institutions and Collection Care Stewards.”

Personnel and Facility Readiness

- Implement and inform employees of supportive workplace policies as applicable:
  - Flexible sick leave policies consistent with public health guidance. Providing paid sick leave is an important way to encourage employees to stay home when sick.
  - Consider not requiring a COVID-19 test result or a healthcare provider’s note for employees who are sick to validate their illness in order to qualify for sick leave. If you do require a doctor’s note from your employees to verify that they are healthy and able to return to work, be aware that healthcare provider offices and medical facilities may be extremely busy and not able to provide such documentation in a timely manner. Get more information related to the Americans with Disabilities Act during the COVID-19 pandemic.
  - Flexibility to stay home to care for a sick family member.
  - Human resources policies consistent with public health guidance, and state and federal workplace laws. For more information on employer responsibilities, visit the Department of Labor’s and the Equal Employment Opportunity Commission’s websites.
  - Employee assistance program and community resources to help employees manage stress and receive support.
  - Encourage employees at increased risk for severe illness to request special accommodations to allow them to perform their job duties safely while also protecting sensitive employee health information.
- Consult OSHA’s Guidance on Preparing Workplaces for COVID-19 to assess which work activities and employees have very high-, high-, medium-, and low-risk exposure levels. This will help determine how to phase-in employee and activity levels to reach the goal of opening to the public. For instance: employees who can work from home, such as those in finance or design, should continue working from home; while employees who deal directly with collections and building operations such as janitorial, collections employees, and research scientists might be the first to return to work.
For immediate openings, particularly while the museum is closed to visitors, allow telework-capable and high-risk employees (per CDC guidance: persons over 65 years of age or with certain underlying medical conditions) to work from home, with only essential employees on-site. Volunteers, docents, the public, research visitors, etc. are restricted.

Encourage teleworking whenever possible; shorten on-site shift time and stagger work schedules so on-site employees do not overlap. A good way of achieving this is by creating separate “teams” to rotate schedules.

Minimize the frequency of jobs that require multiple people to perform work close to each other and limit collection handling and movement to prevent the spread of infection. For example, reduce the frequency of gallery rotation.

Offer alternative work hours for employees challenged by infrastructure not in place yet (i.e. daycare and school closures, eldercare needs, limited public transit).

Ask employees to consider the following if they commute to work using public transportation:
- Use other forms of transportation if possible.
- If taking public transportation, maintain physical distancing and wear a cloth or disposable face covering.
- Change commute time to less busy times if possible.
- Wash hands before and as soon as possible after their trip.

Before returning to work, communicate with employees via the facility’s webpage, web meetings with chat or Q&A sessions, or internal email system about plans that are in place, what employees should expect upon return, and online training materials (should they develop them).

Establish a clear chain of command for return to work, especially on how/to whom to report unsafe conditions if supervisors are not on-site, who is the designated on-site safety officer, and if that person is expected to be on-site daily.

Conduct only essential travel, with medical guidance, as allowed by local, state, federal, and international restrictions.

Stock cleaners, disinfectants, and other supplies needed, including necessary personal protective equipment (PPE) such as disposable non-latex gloves, N95 respirators or face masks, and hand sanitizers.

Post signs and reminders at entrances and in strategic places providing instruction on hand hygiene, respiratory hygiene, and cough etiquette. This should include signs with images for non-English readers, as needed.

Install building signage, including physical distancing requirements, bathroom use requirements, traffic flow, pause points, face-covering expectations, food/beverage processes, easy access to hand cleaning, etc.

Communicate expectations for non-employees. Consider adding contract addenda regarding vendor-required COVID-19 protocols.

Perform walk-through and initial readiness assessment of all exhibitions, storage, and office spaces for any damage, lost or missing items, mold or pests, or emergency events that require immediate attention.

Check the status of the facility’s environment and consult with a conservator and facilities, especially if the Heating, Ventilating, and Air Conditioning (HVAC) has been turned off for the duration of the closure.

Emergency and disaster plans should be reviewed to comply with COVID-19 protocols.

Based on collecting unit and departmental reopening needs, limit and then increase the on...
site return of employees; access to research collections should be limited until later stages, as should special events and the return of retail and food services.

**Collection Handling Readiness Strategies**
- Contact lenders, borrowers, and insurers to inform them the institution is resuming normal operations and resolve any outstanding paperwork. Registrars should contact the U.S. Department of Transportation (DOT) and International Air Transport Association (IATA) to determine if shipping documentation and methods have changed due to COVID-19.
- Restrict or limit new loans and returns to items that do not require couriers. Consider “curbside” or loading dock pickups and deliveries.
- Make sure that lending and borrowing institutions can maintain the level of health and safety protocols required by your institution.
- Consider timed isolation for new acquisitions, loans, and associated packing materials; circulating collections; exhibition rotations; and collections coming-off of public view, depending on the latest public health information on surface viability limits. See Enhanced Cleaning and Disinfecting Sections of this document for more information.
- Reinstall any objects that were removed from display locations before closures.
- Prioritize objects for exhibition that can be easily cleaned, disinfected, and maintained. Schedule longer-term exhibitions with objects that can remain on view for extended periods (i.e., not light sensitive) to reduce employee interactions and work in galleries.

**Employee Wellness**
- Encourage those who are sick or at greater risk to stay home. This includes:
  - People with underlying medical conditions.
  - People who live with elderly people or those who are at risk.
  - People with upper respiratory or flu-like symptoms or who live with someone with these clinical symptoms.
  - People with COVID-19, people who live with someone with COVID-19, or who have been exposed to someone with COVID-19.
- Employers should educate employees to recognize the symptoms of COVID-19 and provide instructions on what to do if they develop symptoms. At a minimum, any worker should immediately notify their supervisor, their health care provider, and the local health department, who will provide guidance on what actions need to be taken.
- Health checks and reporting requirements of individuals infected with COVID-19 should be explained to employees prior to reopening and again once operations have resumed.
- Communicate to employees the importance of being vigilant when monitoring symptoms and staying in touch with their employer or manager if or when they start to feel sick.
- Revisit your leave or sick program to allow for time off and follow all HR Policies and HIPAA/other regulatory requirements.
- Conduct employee temperature screening and wellness checks before each shift. (NOTE: be sure to comply with OSHA’s Access to Employee Exposure Medical Records standard for confidentiality.)
  - Temperature screening methods can include manual (use non-contact infrared thermometers) or thermal camera meeting FDA recommendations. Additional screening information/guidance can be found on the CDC website.
  - Assign an employee to manage and conduct the temperature screenings while following CDC
guidelines in the above link. If this is not possible, employees can self-check their own temperature.

- Screening should be done in a manner such that the privacy of employees is respected.
- Perform a visual inspection for other signs of illness (e.g., flushed cheeks, rapid or difficulty breathing without recent physical activity, fatigue, extreme fussiness, cough).
- Employees who have a fever of 100.4°F (38°C) or above, or other signs of illness should not be admitted to the facility.

- Employers can consider incorporating a wellness questionnaire with questions such as:
  - Have you, or a person you have been in close contact with, been diagnosed with COVID-19 within the last 14 days? (Close contact is 6 feet or less for more than 10 minutes.)
  - Have you experienced any cold or flu-like symptoms in the last 72 hours (to include fever, shortness of breath, cough, sore throat, difficulty breathing, nausea, vomiting, and diarrhea)?
  - Have you traveled to an international or domestic “hot spot” in the last 14 days?
  - There are a number of examples available for wellness questionnaires (see Resources below).

- Require employees who have symptoms or signs (i.e., fever, cough, or shortness of breath) or who have a sick family member at home with COVID-19 to notify their supervisor and stay home.

- Sick employees should follow the CDC-recommended steps. Employees should not return to work until the criteria to discontinue home isolation are met in consultation with healthcare providers and state and local health departments. Consider waiving requirements for medical documentation during the pandemic, as CDC has advised people with mild illness NOT to go to the doctor’s office or emergency room.

- If employee is sick or receives positive COVID-19 test results, results should be reported to employer. In the case of a positive COVID-19 test result, the employee must stay home until cleared for physical return to the workplace by their medical provider, following the CDC’s Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings.

- If an employee tests positive:
  - Follow federal, state, and local recommendations for reporting and communicating cases, while remaining compliant with regulations and guidelines pertaining to protecting private health information such as confidentiality required by the Americans with Disabilities Act (ADA). See OSHA for guidance on reporting workplace exposures to COVID-19.
  - Engage HR immediately and enforce all applicable HR rules and regulations.
  - The employee shall be isolated to the area they are in currently and removed from the work site for a minimum of 14 days. Stay home and isolate until cleared for physical return to the workplace by your medical provider, following the CDC’s Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings.
  - Contact your supervisor and report your results as soon as possible.
  - Notify your supervisor about others in the workplace with whom you came into contact.
  - Any individuals having “close contact” (within approximately 6 feet) with the sick employee should also be isolated from the work site for 14 days; and all other employees should continue to follow physical distancing rules. Communicate and reinforce with employees, while maintaining PII and HIPAA requirements, that they may have been exposed and to closely monitor their health, temperature, and current symptoms as identi-
Reopening: Guidance for Museums and Collecting Institutions

DISCLAIMER: These are meant to be general guidelines to help you re-open your establishment. Always follow local, state and federal laws and guidelines.

Personal Protective Equipment (PPE) and Face Coverings

- Non-medical cloth face coverings are NOT PPE, but they do offer some protection to others and should be worn while near other people in common spaces or shared workspaces. They are not a substitute for physical distancing, engineering controls, cleaning and disinfecting, proper hygiene, or staying home while sick.

- N95 filtering facepiece or a higher level of respiratory protection (half-mask air-purifying respirators for example) may be assigned to those employees performing high or medium risk tasks, especially in close proximity to other employees, such as housekeeping, facilities maintenance, cleaning, disinfecting, and maintaining exhibitions spaces and artifact display plinths, conservation and collection care assessments. See the Training Section for OSHA requirements.

- Gloves are not a substitute for rigorous handwashing protocols. Gloves that are provided must be changed regularly, and employee should be trained in proper use and removal of gloves. See the CDC’s Sequence For Donning Personal Protective Equipment (PPE).

- Any reusable cloth materials (e.g., face coverings, aprons, uniforms, cotton gloves, etc.) should be washed and dried on-site or bagged to be laundered at home prior to subsequent use. Laundering and drying should be performed at the highest temperature setting allowable for the fabric.

- Employees and volunteers need to be assured that they can let their supervisors know if they have concerns about the PPE that is being provided.

Physical Distancing: General Venue

- Reduce the number of people allowed into venues to adhere to local public health limits for the maximum number permitted to gather.
• Limit person-to-person contact, monitor the number of visitors, and restrict access to certain areas such as elevators (signs should state a maximum number of people per elevator per physical distancing guidelines) and galleries (especially small enclosed spaces with less ventilation).

• Consider different hours of operation for vulnerable populations like the elderly or others who may be medically compromised by other illnesses or diseases.

• Creating one-way traffic flows, especially on stairs, and through special exhibitions or galleries, may be appropriate to mitigate crowding and prevent clustering of people.

• Add people-to-people distancing to gallery guard or attendant responsibilities.

• Consider cordonning off six-foot sections on benches or remove benches and replace them with distanced chairs if feasible.

• Control physical distancing for standing by identified areas demarcated on the floor or by temporary removable crowd control barriers both inside and outside the venue.

• Consider installing barriers like protective plexiglass panels that can help maintain distance between employees and visitors. Ropes with stanchions can help maintain distance between exhibits and visitors.

• Place signage and barriers to keep visitors from touching exhibit barriers, signs, information booths, vitrines, and other frequently touched surfaces.

• Suspend coat/bag check-in, with any bags carried in restricted to a maximum size.

• Security employees should not touch visitor belongings during bag inspection.

• Thoroughly clean and disinfect wheelchairs between uses.

• Establish ordering and payment systems that discourage the use and handling of cash or checks (e.g., use an electronic pre-payment or app-based system where possible or have a service provider take payment information over the phone).

  – Encourage visitors to purchase all tickets and make reservations online.

  – Consider using smartphone apps for food and drink orders. This can limit congestion around order areas.

  – If the above is not possible, clearly indicate ticket purchase areas to ensure physical distancing. Consider physical barriers between employees and visitors for in-person transactions.

  – To minimize contact between customers, consider using reservation-only methods for areas of the facility used by small groups.

• Limit access to theaters, cafés, high-traffic areas, and particularly tight spaces in the museum. Establish flow paths through your museum and identify points where traffic congestion may be problematic, especially by bathrooms and hand sanitization stations. Sign these with the directional flow and stop signs to encourage waiting to pass or yield signs to indicate that they are entering high flow areas. Provide apps with alternative routes or other alternative venues.

**Physical Distancing: Exhibition Spaces and Galleries**

• Consider capacity restrictions to exhibits and viewing areas in addition to the entire venue. Physical distancing should be maintained even for smaller groups congregating at an exhibition, or smaller event within the space.

• If necessary, reduce the number of galleries open, particularly for dead-end areas, where airflow is limited or, more importantly, if the airflow in an area is poor and is supplied with unfiltered recirculated air.

• For exhibits that do not allow adequate distance of six feet between visitors, assess to determine if
installations can be relocated elsewhere in the gallery or if acrylic sheet barriers can be installed.

- Cancel or limit the number of participants in group visits, guided tours, public programs, and special or private events until safe to offer them, as based on state and local health department guidelines. Consider holding events in outdoor areas as an alternative.

- Develop strategies to minimize contact with high-touch surfaces (interactive screens) and consider the removal of touchpoints that bring a person’s face close to the item (e.g., audio guides and headphones) or “Please Touch” exhibits. Concentrate efforts on frequent and rigorous surface cleaning and disinfection protocols throughout the day and install signage informing the public to wash hands or use hand sanitizer before and after touching.

- For exhibits with no barriers, such as oversized sculptures (indoors and outdoors), historic gardens, and outdoor architectural monuments, develop strategies to minimize contact, including the use of barriers such as ropes and stanchions, strategically placed tapes or paint lines, and appropriate signage. If feasible, provide hand sanitizer stations and signs to encourage handwashing.

Physical Distancing: Collections Storage and Work Areas

- Limit access to storage and workrooms to essential personnel. Consider strategies for alerting others that rooms are occupied, such as signs or email alerts.

- Limit the number of visitors and seating in libraries and reading rooms to provide physical distance between visitors using collection materials.

- Restrict or limit access to books and archival collections, which generally require handling by the visitor as well as the use of artifacts requiring handling by employees. If digital substitutes are available, these should be offered. Collection materials may be sequestered after use by visitors for the length of time appropriate for material and environment. See Enhanced Cleaning and Disinfecting Section for more details.

- Consult Reopening Archives, Libraries, and Museums (REALM) for information on current research and toolkits to assist in workflows that provide protection for collections use.

Physical Distancing: Meeting and Group Areas

- Reduce capacity for areas that require seating or extended occupancies such as theaters, education spaces, meeting rooms, and employee and visitor transportation. Remove or block off seating, if possible.

- Keep live performances brief (e.g., to less than 15 minutes) or discontinue unless performing for a very small audience such as a private event.

- Hands-on demonstrations should be limited to docent handling only and should be discouraged unless safe cleaning, disinfection, and physical distancing protocols can be maintained to keep employees and visitors safe.

- Online education, lectures, taped performances, and gallery tours should be encouraged. In-person outdoor education and events can provide easier physical distancing, crowd control, and cleaning and disinfecting protocols.

- Ensure that the seating meets the occupancy limits and social gathering number limits required by local and state governments.

- Assigned seating should be used where appropriate (e.g., theatres, shows) such that guests are not seated next to one another, except for household groups.

- Stagger screen, show, and event times so that visitors for one event do not arrive at the same time as those for another and to allow for disinfecting and air circulation in theater space.
Post clear direction signs to ensure that the entrance and exit (which preferably are separate from each other to accommodate one-way traffic flow) to/from the auditorium or meetings space are not areas of congregation or congestion. If there are exhibits in the exit area, turn off lights to these exhibits or provide barriers to prevent visitors from pausing to explore after the show.

Ensure that public seating will be thoroughly cleaned and disinfected before and after the conclusion of the performance or demonstration.

Enhanced Cleaning and Disinfecting Practices: General Venue

- Select appropriate disinfectants – consider effectiveness and safety.
  - The U.S. Environmental Protection Agency (EPA) has developed a list of products that meet EPA’s criteria for use against SARS-CoV-2.
  - Do not mix different EPA registered chemicals together. The combination could be toxic by inhalation. Be particularly careful when using any products containing ammonia, sodium hypochlorite (bleach), or hydrogen peroxide.
  - Review product labels and Safety Data Sheets (SDS) and follow manufacturer specifications for cleaning/disinfecting.
  - Consider consulting an Occupational and Environmental Health and Safety (OEHS) Science Professional or Industrial Hygiene expert if additional advice is needed. AIHA has a consultants list of such qualified professionals.

- Establish a disinfection routine.
  - Ensure disinfection protocols follow product instructions for application and contact time. All items should be allowed to dry thoroughly after cleaning.
  - Use disposable wipes or rags when available. If not available, ensure rags are maintained, handled, and cleaned per product instructions.

- Consider developing a standard operating procedure, a checklist, or audit system to consistently train employees on enhanced cleaning/disinfecting practices or to track when and how cleaning and disinfecting is conducted. Note that this may be a requirement in some states or local jurisdictions.

- Provide Safety Data Sheets (SDS) for cleaning and disinfection products and ensure employees are aware of the hazards of use. Incorporate new hazards into existing OSHA Hazard Communications Program.

- Employees should receive, at minimum, awareness training on cleaning and disinfection products used in the workplace following OSHA Hazard Communication Standards. For employees who will use cleaning and disinfecting products, training should also include proper use, PPE, disposal, and all precautionary measures.

- If adequate cleaning and disinfection of frequently touched surfaces between each use cannot be accomplished, then the facility manager should consider leaving these areas closed, or additional resources for cleaning supplies and cleaning professionals should be allocated.

- The sharing of equipment and workspaces should be discouraged wherever possible. Equipment that must be shared should be cleaned and disinfected before and after use.

- Single-use items and used disinfection materials can be treated as regular waste, following regular safety guidelines.

- Any reused cloth materials should be washed and dried on the highest temperature setting allowable for the fabric.

- Deeper cleaning and disinfecting protocols should be developed and implemented in cases where confirmed cases of COVID-19 are discovered. Refer to AIHA’s Workplace Cleaning for COVID-19.
Consider retrofitting or disabling (if the local board of health will allow) water fountains. Alternatively, replace with water bottle refill stations.

Conduct inspection for presence of rodents, birds, or insect pests that may have infiltrated and nested during building closure. Coordinate any pesticide treatment first with collections employees or consult with a conservator to prevent adverse damage to collections.

Enhanced Cleaning and Disinfecting Practices: Collections Areas

Before planning a room-by-room cleaning or disinfection protocol, FIRST check with your preservation/conservation employee or consultants about whether these treatments are needed for collection or exhibit containing areas. If a needs determination is made, ensure that these products have been vetted and are safe to use for all collection components. Many disinfectants and treatment technologies (e.g., Ultraviolet Germicidal Irradiation – UVGI) may be unsafe for use on collection items or historic surfaces.

Conduct a risk assessment for exhibits made of materials that cannot be safely cleaned, such as historic surfaces, outdoor metal sculpture, or fragile stone, to determine if cleaning is necessary before making plans to enhance cleaning and disinfecting practices.

Decontaminate collections and exhibition materials using timed isolation. This is the best option, particularly for extensive collections or materials that cannot be cleaned or will be harmed by using common disinfectants. Consider if they can be isolated after phased return to work begins. Facility management, safety personnel, or local public health authorities should be consulted. For current recommendations related to disinfection timing and methods based on materials and environment see the Canadian Conservation Institute’s (CCI) Caring for Heritage Collections during the COVID-19 Pandemic, Northeast Document Conservation Center’s (NEDCC) Disinfecting Books and Other Collections and Reopening Archives, Libraries, and Museums (REALM) Project’s Literature Review.

Cleaning or disinfecting beyond regular housekeeping is not required for collections and collections storage areas that have remained undisturbed during closure. These include: storage cabinets that remained closed over lengthy time; collections that have not been used or handled during the shutdown; storage spaces that were not occupied (or occupied by only one person for a brief time) during the closure; and items enclosed in vitrines, boxes, or other containers.

Before making plans to enhance cleaning and disinfecting practices, conduct a risk assessment for collections workspaces, office, and work equipment (collections storage areas, collections work areas, libraries, conservation laboratories, etc.), based on the frequency of space occupancy and air exchange rates to determine what cleaning is necessary.

Clean and disinfect all equipment and surfaces that are shared such as microscope oculars, table surfaces, camera equipment, etc. before and after use. Provide enough writing implements and tools so that these items are not shared.

Disinfect high touch surfaces such as scanners, copiers, online catalog lookup stations, etc. frequently with appropriate disinfectants for electronics.

Clean and disinfect work surfaces used by visitors and chair arms and backs before allowing the next visitor to be seated. A disposable barrier, such as newsprint or blotter, can be used to protect a tabletop work surface if disinfecting the surfaces is not an option.

Training

Schedule live training for supervisors and team leaders before returning to the venue, possibly off-
site or virtual, as a “train-the-trainer” opportunity and deploy those leaders once employees return to the venue. Explore the National Institute of Environmental Health Sciences’ (NIEHS) Worker Training Program for COVID-19 Virtual Safety Training Initiative. Detailed instructor notes are included.

- Provide pre-opening and/or orientation upon return training to employees and volunteers to ensure they understand and feel confident in managing the physical distancing and hygiene aspects of their roles, including reminding visitors of museum safety requirements. Provide clear direction on new, COVID-19-related protocols. They should understand when to stay away from the workplace, what action to take if they become unwell, and what symptoms to be concerned about.

- Educate employees on the cleaning and disinfecting of common high-touch surfaces (e.g., door-knobs, faucet handles, light switches, etc.) and unique venue specific high-touch surfaces (e.g., interactive touch screens, vending machines, shared equipment, etc.). Train employees to wipe down and disinfect surfaces after every work interaction and between timed-entry public visitations.

- Plan for respiratory protection training, medical surveillance, and fit-testing for respiratory protection per OSHA Standard 29CFR 1910.134 to be initiated before high-risk employees return in full force to the venue. Explore the distribution of medical surveillance forms electronically and e-learning access.

- Provide employees with information about chemical hazards, safety procedures, proper use and limitation of required PPE, face covering usage, and personal hygiene – following OSHA requirements. Employees must have access to Safety Data Sheets (SDS) for all cleaning products and chemicals in use.

**Communication with the Public**

- Clearly explain, using museum websites, social media, and email communications, the safety and health precautions taken to protect visitors; amenities that are currently unavailable; and any restrictions or requirements for visitors. For example, see the Museum of Fine Arts, Houston’s (MFAH) Welcome Back webpage. Notifications can include:
  - Requirements for visitors to bring and/or wear cloth or disposable face coverings.
  - Temperature checks before entry.
  - Availability of restrooms.
  - Physical distancing requirements.
  - Locations of handwashing facilities.
  - Occupancy limits per exhibit spaces, cafes, elevators, etc.
  - The theater will be cleaned and disinfected after each session.

- Advise that your facility will expect visitors to comply with all safety protocols and has the right to refuse entry or service if protocols are not followed to prevent risk to themselves or others.

**Ventilation and Other Building System Utilities**

Heating, Ventilating, and Air Conditioning (HVAC) and other building systems, such as cooling towers, chiller loops, and deionized water systems, are important aspects to consider when reopening a museum or similar facility because their function and use can impact worker health and effect environmental change for collections. Ideally, the HVAC system should have been adjusted to account for inactivity prior to closing the facility. If a museum or similar venue has remained dormant or inactive during the pandemic, this dormancy may lead to harmful and uncomfortable indoor air quality issues directly related to the HVAC system. Mold can grow on moist building surfaces due to leaks or condensation on windows, roofs, or pipes. In addition, if Legionella...
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Guidance Document

Prior to employees reoccupying the workplace, employers and managers should consult facility management or HVAC/Building Systems professionals to ensure these systems are operating correctly and optimized to address indoor air quality and COVID-19 concerns. Facilities should verify the operation of mechanical systems and restore all sequences, set points, and schedules that were modified during the rollback of operations. Facilities personnel, conservators, and collection care professionals specializing in HVAC systems play an important role in protecting building occupants by optimizing ventilation systems to help reduce the indoor spread of infectious aerosols through HVAC and local exhaust ventilation systems while maintaining environmental conditions suitable for preservation. Refer to AIHA Recovering from COVID-19 Building Closures for information.

- Ensure there is an adequate flow of fresh air to workspaces and optimize the ventilation system settings. Some ways to do this are:
  - Maximize fresh air through your ventilation system, as appropriate. Confer with collections care employees and/or conservators on environmental needs in exhibit and collection storage areas.
  - Continued operation of all HVAC system.
  - Encourage outdoor seating and open doors and windows if possible.
  - Consider installing Minimum Efficiency Reporting Values - MERV 13 or MERV 14 air filters in ventilation systems where appropriate.
  - Maintain relative humidity at 40-60%.
  - Limit the use of portable pedestal or overhead ceiling fans.
  - Ensure restroom(s) is/are under negative pressure.
  - Ensure preventative maintenance on ventilation and other building systems is completed periodically and in accordance with the manufacturer’s recommendations.

- If you need assistance on HVAC issues, ask an HVAC professional and see the American Society of Heating, Refrigerating, and Air-Conditioning Engineers’ (ASHRAE) COVID-19 (Coronavirus) Preparedness Resources updates for more information.

- AIHA Occupational and Environmental Health and Safety (OEHS) Science Professionals and industrial hygienists are also well versed in general dilution ventilation. AIHA has a consultants list of such qualified professionals.

- Ensure water systems, such as portable systems, cooling tower and chiller loops, and laboratory deionized or reverse osmosis water systems, are in readiness condition for occupancy. Some measures include:
  - Flushing water systems to remove stagnant water that could support microbial growth such as Legionella bacteria.
  - Confirming water quality parameters such as water temperature, pH, and pressure are correct.
  - Working with water treatment service provider to ensure system components are in good working order and chemical levels are within defined ranges for cooling towers, closed water systems, etc.

- If you don’t know how, ask a water system professional, and see the American Water Works Association’s (AWWA) COVID-19 Resource Topic, the EPA’s Information on Maintaining or Restoring Water Quality in Buildings with Low or No Use, and the Louisville Water Company Flushing Lines Video/Fact Sheet for more information.
Restrooms (NOTE: See Supplement guidance on use of air dryers)

- Post signage limiting restroom occupancy to allow for proper physical distancing and to remind employees and visitors to wash hands before and after using the restroom.
- Minimize touchpoints entering and existing restrooms, if possible.
- If the door cannot be opened without touching the handle, provide paper towels and a trash can by the door so a paper towel can be used when touching the handle and then discarded.
  - Consider controlling access to bathrooms with a key so disinfection measures can be better managed. If a key is used, consider disinfecting it after each use.
- Doors to multi-stall restrooms should be able to be opened and closed without touching handles if possible.
- Place signs indicating that toilet lids (if present) should be closed before and after flushing.
- Use no-touch faucets, towel dispensers, soap dispensers, and waste receptacles when possible.
- Hand soap should be readily available for use by occupants.
- Provide paper towels and air dryers in restrooms.¹
  - The WHO and CDC currently state that hands can be dried using a paper towel or hand dryer.
  - Due to current uncertainties surrounding the transmission of SARS-CoV-2, care should be taken when using a hand dryer or paper towel.
  - The use of touch or push hand dryers is discouraged due to possible surface contamination. If hand dryers are used, consider touchless devices.
- Businesses and employers should work with HVAC professionals to ensure that bathrooms are well ventilated, and if filtration is used, that proper filtration practices are being followed.
- Increase frequency and efforts to keep bathrooms clean and properly disinfected and maintain a record of sanitary work practices.
- Make hand sanitizer stations available throughout work and public places. Stations should also be placed in convenient locations, such as at entrances, exits, near elevators, and restrooms. Touch-free hand sanitizer dispensers should be installed where possible.

What should an Employee do to protect themselves, volunteers, and visitors?

- Evaluate your health continually. If you are sick, stay home. If you have a temperature, stay home. If someone at home is sick or you came into contact with someone who became sick, stay home. If you have allergies or other medical illness, stay home. NOTE: Employer HR Policies, HIPAA guidelines and other laws should be followed at all times.
- Cover your mouth and nose with a tissue when you cough or sneeze and throw used tissues in the trash. If you don’t have a tissue, cough or sneeze into your elbow, not your hands. Immediately wash your hands after blowing your nose, coughing or sneezing. Learn more about coughing and sneezing etiquette.
- Maintain cloth or disposable (or better if you have it) face covering, clean or replace frequently, and use at minimum when unable to maintain physical distancing of 6-feet.

¹NOTE VERSION CHANGE: In version 1 of this guidance document, in the section titled “Restrooms” it stated to disconnect or tape off the hand dryer. NOTE: See Supplement guidance on use of air dryers.
• Depending on local requirements, in alignment with CDC recommendations, wear a cloth or disposable face covering whenever physical distancing cannot be maintained (indoors or outdoors). Ensure the face covering is properly maintained and cleaned. Additional information on cloth face coverings can be found on CDC’s website. (NOTE: Cloth or disposable face coverings primarily protect other people. A cloth or disposable face covering is not a substitute for physical distancing.)

• With the exception of children less than two, and individuals who have difficulty breathing, are unconscious, or otherwise unable to remove a face covering without assistance, CDC recommends that all people wear a cloth or disposable face covering in public settings and when around people who don’t live in their household, especially when other physical distancing measures are difficult to maintain.

• Non-medical cloth or disposable face coverings or cloth or disposable face coverings are NOT Personal Protective Equipment (PPE), but they do offer some protection to others and should be worn while near other people in common spaces or shared workspaces. They are not a substitute for physical distancing, engineering controls, cleaning and disinfecting, proper hygiene, or staying home while sick.

• Remove cloth or disposable face coverings correctly and wash hands after handling or touching a used face covering.

• Wash cloth face coverings after each use. Cloth face coverings can be included with regular laundry. Use regular laundry detergent and the warmest appropriate water setting for the cloth used to make the face covering. Use the highest heat setting and leave in the dryer until completely dry. If air drying, lay flat and allow to completely dry. If possible, place in direct sunlight.

• If your employer provides a respirator such as an N95, let your employer know if you have concerns about the PPE that may be provided to you and ensure that you are properly instructed on how to use it. The CDC has recommended sequences for donning and doffing PPE.

NOTE: If an employer chooses to provide or the employee supplies their own N95 respirator, please fully consider all the potential OSHA requirements.

• At minimum, employees should wash their hands after they have been in a public place, after touching their face covering, after blowing their nose, coughing, or sneezing, after using the restroom, after touching any common contact surfaces, and before eating. Avoid touching eyes, nose, or mouth with unwashed hands.

• Employees should wash hands with clean, running water, apply soap, lather and scrub for at least 20 seconds, then rinse. Dry hands using a clean paper towel or air dry. When soap and water can’t be used, use an alcohol-based hand sanitizer that contains at least 60% ethanol or 70% isopropyl alcohol. Any use of alcohol-based hand sanitizers should follow local and State guidelines.

• Sanitize shared equipment and shared surfaces after use.

Worker Rights
AIHA believes that basic protections are worker rights, as well as an essential ingredient of occupational health and safety systems, and that employers must provide a safe and healthful work environment.

What can Visitors do to minimize the transmission of COVID-19?

• Adhere to instructions regarding restricted access and movement throughout the institution.

• Do not touch collection objects or exhibition furniture such as vitrines, platforms, or stanchions.

• Evaluate your own and your family’s health continuously. If you or anyone in your family is sick, stay
home. If you or a family member have an elevated temperature, stay home. If someone at home is sick or you came into contact with someone who became sick, stay home. If you have allergies or other medical illnesses, stay home.

- Before you go, check to see if visitors will be required to wear cloth or disposable face coverings or if there are other special requirements for entry, such as temperature checks.

- Ensure you can comply with their physical distancing requirements and any limitations that may result from restrictions to exhibit spaces, cafes, elevators, or other amenities that may not be available to guests.

- Wear a cloth or disposable face covering when out in public and maintain physical distancing (keep at least six feet of separation from others).

- Wash your hands throughout the day, and after touching your face or face covering.

- Cover your mouth and nose with a tissue when you cough or sneeze and throw used tissues in the trash. If you don’t have a tissue, cough or sneeze into your elbow, not your hands. Immediately wash your hands after blowing your nose, coughing or sneezing. Learn more about coughing and sneezing etiquette.

- Inform the institution if you or a family member has been diagnosed with or has come in contact with someone diagnosed with COVID-19 after visiting.

Resources

- AIHA Recovering from COVID-19 Building Closures (Guidance Document)

- AIHA Workplace Cleaning for Covid-19 (Guidance Document)

- ASHRAE COVID-19 (Coronavirus) Preparedness Resources

- ASHRAE Position Document on Infectious Aerosols

- CDC About Cloth Face Coverings

- CDC Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings

- CDC Guidance for Reopening Buildings After Prolonged Shutdown or Reduced Operation

- CDC Resuming Business Toolkit

- CDC Sequence For Donning Personal Protective Equipment (PPE)

- CDC Health Screening “Should we be screening employees for COVID-19 symptoms?” section of General Business Frequently Asked Questions

- EPA Information on Maintaining or Restoring Water Quality in Buildings with Low or No Use

- EPA List N: Disinfectants for Use Against SARS-CoV-2 (COVID-19)


- NIEHS Worker Training Program for Covid-19 Virtual Safety Training Initiative

- National Pesticide Information Center (NPIC) Reducing Disinfectant Exposures in the Workplace (video)

- OSHA Guidance on Preparing Workplaces for COVID-19

- AIHA’s Indoor Environmental Quality Committee developed these guidance documents about reopening and cleaning buildings after closures due to COVID-19: Recovering from COVID-19 Building Closures and Workplace Cleaning for COVID-19.

- AIHA’s Considerations on the Safe Use of UVC Radiation

- AIHA’s Focus on Construction Health: COVID-19

- AIHA’s Effective and Safe Practices: Guidance for Custodians, Cleaning and Maintenance Staff
Reopening: Guidance for Museums and Collecting Institutions

AIHA®

AIHA is the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety (OEHS) in the workplace and community. Founded in 1939 as the American Industrial Hygiene Association® (AIHA®), we support our members with our expertise, networks, comprehensive education programs and other products and services that help them maintain the highest professional and competency standards. More than half of AIHA’s nearly 8,500 members are Certified Industrial Hygienists (CIH), and many hold other professional designations. AIHA serves as a resource for those employed across the public and private sectors, as well as to the communities in which they work. For more information, visit AIHA.org.

About Occupational and Environmental Health and Safety Professionals

Occupational and Environmental health and safety (OEHS) professionals (also known as industrial hygienists) practice the science of anticipating, recognizing, evaluating, and controlling workplace conditions that may cause workers’ injury or illness. Through a continuous improvement cycle of planning, doing, checking and acting, OEHS professionals make sure workplaces are healthy and safe.

- Get additional resources at AIHA’s Coronavirus Outbreak Resource Center.
- Find a qualified industrial hygienist and OEHS professionals near you in our Consultants Listing.

AIHA’s Employers Guide to COVID-19 Cleaning & Disinfection in Non-Healthcare Workplaces

AIHA’s Reducing Risk of COVID-19 Using Engineering Controls

AIHA’s PPE for SARS-CoV-2

AIHA’s Use of Real Time Detection Systems

AIHA’s Proper Use of Respirators for Healthcare Workers & First Responders

AIHA’s Workers Rights White Paper

Museum, Conservation, Cultural Heritage Organization Guidance

- American Alliance of Museums (AAM) Preparing to Reopen: COVID-19 Resources & Information for the Museum Field
- American Institute for Conservation (AIC) Covid-19 Resources
- CCI Caring for Heritage Collections during the COVID-19 Pandemic
- Curae Collections Care and Newfields Long-Term Closure Re-Entry Checklist for Cultural Institutions and Collections Care Stewards
- Minnesota Historical Society (MNHS) Historic/Adjunct Properties Workplace Enhanced Cleaning Guidance for COVID-19
- MFAH Welcome Back
- National Park Service (NPS) Exhibitory to Combat Novel Coronavirus
- Northeast Document Conservation Center (NED-CC) Disinfecting Books and Other Collections
- OCLC, IMLS, and Battelle Reopening Archives, Libraries, and Museums (REALM) Information Hub: A COVID-19 Research Project
Disclaimer

AIHA is not legally responsible and shall be held harmless from all claims, causes of action, and demands, whatsoever, any third party may incur on account of damage, loss or injury resulting from adhering to these guidelines.

These guidance documents were primarily developed for those smaller businesses that don’t have readily available occupational health and safety resources, and designed to help business owners, employers, employees and consumers implement science-backed procedures for limiting the spread of the coronavirus. They are subject to any local, state, or federal directives, laws, or orders about operating a business and should only be used if they do not conflict with any such orders.

These documents are subject to revision and shall be updated accordingly.

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