Research Continuity

Planning and Execution During COVID-19

MAY 10, 2021

University of Arkansas
Fayetteville, Arkansas
Guiding Principles

Failure to abide by the directives and guidelines posted here may result in restrictions or loss of laboratory privileges.
These guidelines should in no way supersede basic lab safety practices.

- The safety, health, and welfare of our students, faculty, and staff is paramount. Every effort must be made to minimize the risk of exposure to or transmission of COVID-19 and to uphold our commitment to maintaining safe laboratory and research environments, while carrying out key research functions.
- Consistent with the activity and staging levels described in this document, and subject to broader guidance issued to the campus, employees who can conduct their work effectively on a remote basis, as determined by the supervisor, should continue to do so.
- Those with underlying health conditions that enhance risk from COVID should not be required to work in research workspaces. In addition, whenever possible, supervisors should seek to be responsive to employee concerns about potential risk of exposure.
- Researchers must adhere to applicable guidance issued by the State of Arkansas— and to campus/college/school requirements for the research site or facility.
- This guidance document is intended for all persons involved in the planning and execution of research during the COVID-19 pandemic.
- Restricting and reopening research activities must happen in a highly controlled manner, and in stages that gradually allow transitions regarding laboratories and research spaces.
- A methodical review process, managed at the Dean’s level, will prioritize and guide requests relating to research activities and spaces.
- Flexibility in scheduling shall be a major consideration for accomplishing any required spatial separation of researchers.
Activity and Staging Levels

**NOTE:** For Levels 1 - 3, all approved activities must be planned to minimize person-to-person interactions and adhere to distancing and face covering recommendations. Face coverings are required during unavoidable, close (less than 6 feet) person-to-person contact.

**Level 4**
Unrestricted Activity

**Level 3**
Restricted Activity
- Physical presence on-campus is desirable, but socially and temporally distanced as much as possible
- Approved after review

**Level 2**
Critical Activity
- **Essential, Critical** and **Time-Sensitive** research tasks where on-campus physical activity is required

**Level 1**
Essential Activity
- **Essential** activities requiring physical access, limited as much as possible

**Level 0**
Shut-Down
- Short term physical access for **vital** activities
Definitions

Plans for each level of research activity must be proposed by the researcher and properly reviewed and approved, balancing risks and costs, whether an activity appears to be allowed or prohibited at a given level. These definitions and examples are not meant to be overly prescriptive in terms of the specific activities that might be permitted or forbidden at each level. They are general guidance that must be interpreted and implemented with common sense but never in isolation by a single researcher.

Vital Activity

Vital research activities are limited to specific tasks that require a physical presence on-campus, which are absolutely required for the long-term health of the research enterprise or would cause immediate and lasting harm if not accomplished. Examples could include care of very expensive or unique animals and plants, maintenance of irreparable cell lines, safe shutdown of equipment or disposal of volatile or unstable chemicals which would otherwise require ongoing attention to be safely stored, and maintenance of equipment which cannot be shut down, for example, cryogen replacement in superconducting magnets, or building infrastructure, such as belt replacement in air handling units or repairs of water line leaks, that cannot be deferred during a restriction on research. In this situation the goal of allowed activity is not to conduct on-campus research but to avoid long-term and lasting damage that will greatly disrupt future research work. An exception is specifically-targeted research activities such as projects addressing the COVID-19 crisis, human subject research that would endanger research participant lives if stopped, and limited on-campus IT activities that enable remote work.

Essential Activity

Essential research activities could include animal and plant care or maintenance of cell lines where replacement is possible, though every effort will be made to continue care while ensuring the health and safety of the researcher, and maintenance of equipment or building infrastructure that potentially could be shut down but might require an extended time frame or large expense to restart, for example equipment under high vacuum or clean room operation.
Critical Activity

Critical research activities are identified and prioritized at the Unit level, to be those activities with the greatest time and research productivity constraints. These can include time sensitive activities, for example, graduate students and postdoctoral associates close to completing their degree/term of appointment and research for completion of grants with end dates within 6 months, where the funding agency has not granted leniency. Activities could include, but are not limited to, seasonal data collection such as field and agricultural work, experiments close to completion, or projects whose continued restriction or deferral would lead to catastrophic delay or loss of research results and subsequent success. Limited core facility access may also be granted depending on the nature of the activity.

Restricted Activity

Restricted research activities are defined at the Unit level, to be those activities that either require or are significantly enhanced by physical presence in University spaces (such as laboratories), and/or require University resources that are not available in a remote setting. These activities should be socially or temporally distanced as much as practicable and must be planned, reviewed and approved.

Key Personnel (note: all Key Personnel must be approved by the Unit Head/Chair and Dean)

All Levels: building executives; I.T. professionals charged with maintaining remote operation capability; technicians charged with maintaining critical equipment.

L1: Research Assistant/Associate, Post-Doctoral Fellows, and Graduate Assistants, without whom Essential Research Activity cannot be performed.

L2: Research Assistant/Associate; Post-Doctoral Fellows; Graduate Assistants; other technicians and labor without whom Essential, Critical and/or Time Sensitive Research Activity cannot be performed.

L3: Research Assistant/Associate; Post-Doctoral Fellows; Graduate Assistants; Undergraduate Students; other technicians and labor without whom Essential, Time Sensitive, Critical, and other on-site research activity cannot be performed.
## Synopsis

<table>
<thead>
<tr>
<th>Who may carry out Activities¹</th>
<th>Level 0 Shut Down</th>
<th>Level 1 Essential Activity</th>
<th>Level 2 Critical Activity</th>
<th>Level 3 Restricted Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.I.s</td>
<td>P.I.s</td>
<td>P.I.s</td>
<td>P.I.s</td>
<td>P.I.s</td>
</tr>
<tr>
<td>Key Personnel L1 (Research, Safety)</td>
<td></td>
<td>Key Personnel L2 (Research, Support, Safety)</td>
<td></td>
<td>Key Personnel L3 (Research, Support, Safety)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What (Activities)</th>
<th>Level 0 Shut Down</th>
<th>Level 1 Essential Activity</th>
<th>Level 2 Critical Activity</th>
<th>Level 3 Restricted Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifically approved tasks only (disinfection &amp; cleaning)</td>
<td></td>
<td>Essential (disinfection &amp; cleaning)</td>
<td>Essential Critical Time-Sensitive (disinfection &amp; cleaning)</td>
<td>Activities which require approved physical presence (disinfection &amp; cleaning)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where</th>
<th>Laboratory/Studio spaces</th>
<th>Laboratory/Studio spaces</th>
<th>Laboratory/Studio Spaces</th>
<th>Laboratory/Studio spaces Support spaces Shared/Community spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Current social distancing guidelines</td>
<td>• Current social distancing guidelines</td>
<td>• Current social distancing guidelines</td>
<td>• Current social distancing guidelines</td>
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<td>• 1 / 15 ft²</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When</th>
<th>University research is currently being conducted at Level 3. Any changes to that status will be communicated to campus by the chancellor.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours of occupancy for facilities/space should be staggered to the greatest extent possible, to ensure proper distancing of personnel. Each building should be closed for a period each day to allow for cleaning and disinfection of common/public spaces.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum Protection</th>
<th>Face covering or mask appropriate to activity (e.g. cloth, surgical, shield, respirator)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequent handwashing and disinfection of common and high-touch surfaces</td>
</tr>
</tbody>
</table>
Special considerations may apply (i.e. Human-Subject Research)

|  
| --- |
|  
| \(^2\)Research Plans may identify personnel alternates, who are available to serve key functions in the absence of P.I.s and/or Key Personnel |
## Special Considerations

### Human-Subject Research

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Unrestricted</td>
</tr>
<tr>
<td>3</td>
<td>Restricted</td>
</tr>
<tr>
<td>2</td>
<td>Critical</td>
</tr>
<tr>
<td>1</td>
<td>Essential</td>
</tr>
<tr>
<td>0</td>
<td>Shut-Down</td>
</tr>
</tbody>
</table>

In-Person activities which meet the guidelines established for each Research Level – with appropriate protocols in place.

**Required Protocols – In-Person Activities: Research Levels 1-3**

- Wear a Face Covering\(^b\)
- Wash Hands Frequently\(^c\)
- Clean and Disinfect Surfaces\(^d\)
- Maintain at Least 6-ft Distancing\(^e\)
- Conduct COVID-19 Screening\(^f\)

\(^a\) These protocols must be documented and affirmed in the Research Plan submitted for approval by the Unit and Dean.

\(^b\) All persons – researchers and subjects – should strive to wear face coverings to the greatest extent possible, particularly so if distancing is not possible. Additional personal protective equipment may be worn if warranted/desired. The criteria for when and what type of coverings are used should be clearly laid out in the research plan submitted for approval.

\(^c\) Researchers must wash hands thoroughly (in accordance with CDC guidelines) immediately before and after contact with research participants.

\(^d\) Any reusable personal protection equipment (PPE) must be cleaned/disinfected prior to being reused, otherwise it must be discarded in an appropriate manner, in accordance with EH&S and CDC guidelines.

\(^e\) When close proximity to a participant is not necessary, researcher(s) will maintain six (6) feet of separation from the research participant, and from each other. In addition, researcher(s) will minimize close contact with participants to the extent possible.

Close contact is defined as: (a) being within approximately 6-ft of a person having a confirmed case of COVID-19 for minutes or more over a 24-hour period; OR (b) having direct contact with infectious secretions of a person having a confirmed case of COVID-19.
All research team members and all participants must certify, using the health screening checklist that follows, that they are not currently experiencing symptoms of illness, that they have not recently been ill, and that they have not had direct contact with a person having a known or presumed positive COVID-19 case within the preceding 14 days. An individual must respond “NO” to every question in order to participate in any research activity involving face-to-face interactions with others. Anyone answering “YES” to one or more questions should be tested for COVID and provide documentation of a negative test result prior to participating in any such activities.

Required Protocols – In-Person Activities: Research Level 4

- Small groups of individuals in a laboratory may choose to remove their masks in accordance with campus recommendations on COVID-19

**HEALTH CHECKLIST**

In the past 14 days, have you had:

<table>
<thead>
<tr>
<th>Check response:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever &gt; 100.4 F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td></td>
<td></td>
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<tr>
<td>Shortness of breath or difficulty breathing</td>
<td></td>
<td></td>
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<tr>
<td>Chills</td>
<td></td>
<td></td>
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<tr>
<td>Muscle Aches</td>
<td></td>
<td></td>
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<tr>
<td>Sore Throat</td>
<td></td>
<td></td>
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<tr>
<td>Loss of taste or smell</td>
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<td></td>
</tr>
</tbody>
</table>

**COVID-19 Risk Factors**


COVID-19 is a new disease and there is limited information regarding risk factors for severe disease. Based on currently available information and clinical expertise, older adults and people of any age who have serious underlying medical conditions might be at higher risk for severe illness from COVID-19.

Based on what we know now, those at high-risk for severe illness from COVID-19 are:

- People 65 years and older
- People who live in a nursing home or long-term care facility

People of all ages with underlying medical conditions, particularly if not well controlled, including:

- People with chronic lung disease or moderate to severe asthma
- People who have serious heart conditions
- People who are immunocompromised
  - Many conditions can cause a person to be immunocompromised, including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications
- People with severe obesity (body mass index [BMI] of 40 or higher)
- People with diabetes
- People with chronic kidney disease undergoing dialysis
- People with liver disease
Special Considerations

Off-campus (field) research

Research programs that have an off-campus dimension to the work (i.e. projects that require travel to analyze, interpret, or gather data) require special consideration when the university is operating at Levels 1-3. No off-campus work can begin until a field research operation plan has been prepared by the P.I. and approved by the department chair (or unit manager) and College Dean or Research Dean and travel has been approved through applicable University channels. Current guidelines regarding travel for University employees may be found here https://health.uark.edu/coronavirus/#travel-and-study-abroad

- All participants must review the approved Research Plan
  o Dates/times participants will be off campus
  o List of personnel with contact information and emergency contact(s)
  o Listing of precautions taken to protect personnel
  o Contingency plan to address the return of any person displaying symptoms during the trip
- Research being conducted on non-university property must have written permission of the owner for the field work to proceed.
- Individuals planning to participate in off-campus work should self-quarantine as much as possible before traveling to the remote site.
Special Considerations

Off-campus (field) research, including human subjects research

- During the trip, do not transport others (e.g., station staff, farmers, industry reps, etc.) in your vehicle.
- When traveling, please limit vehicle occupancy and/or hotel room occupancy to two people.
- When traveling and staying in hotels, maintain the same two people in vehicles and rooms for the duration of the trip. This will help minimize the potential exposure of others that may be traveling or working at the same facility.
- Plan gas and food stops. Avoid fuel stops or eating in areas with a high incidence of positive COVID-19 cases. As the spread of COVID-19 can be rapid and unpredictable, it is important to plan and evaluate travel routes as close to departure as possible. Please check at least one of the following websites for the most current information on COVID-19 cases for your specific travel routes and destinations:
  https://covid.cdc.gov/covid-data-tracker/#county-view
- Purchasing of food and supplies and contact with society outside the field team should be limited to as few individual interactions as possible.
Special Considerations

Off-campus (field) research, including human subjects research

- Keep track of whom you interact with and what facilities you use during visits. Anyone identified as a close contact of an individual who has a positive test result is required to quarantine, even if their own test is negative. Through Dec. 31, 2020, the University of Arkansas will continue to require a 14-day quarantine for those individuals.

- The following guidance will be implemented beginning Jan. 1, 2021: Close contacts of someone with COVID-19 are required to quarantine and it’s strongly encouraged that the quarantine last for 14 days – this is the safest and most effective practice recommended by the CDC, ADH and the Pat Walker Health Center, however: Quarantine can end after 10 days from exposure to a close contact (with or without testing) IF no symptoms have occurred.

- For those who have tested negative for COVID-19 but are NOT considered a close contact of someone with COVID-19 and are NOT experiencing symptoms, quarantine is not required, but is strongly recommended.

- Additional Testing, Reporting, Quarantine and Health Information is available on the university’s COVID-19 Response website.

- When using vehicles or farm equipment assume the last person that used the equipment did not clean it – take appropriate measures to disinfect surfaces.
  - When necessary you may need to make your own solution to sterilize surfaces (⅓ cup chlorine bleach per gallon water, approximately a 6% solution). Recognize that cleaning solutions have an effective shelf life and the general recommendation for bleach solution is to make a fresh solution daily.
  - Disinfect vehicles and farm equipment surfaces daily or when you finish using the equipment, whichever comes first.
  - Continue to practice the standard CDC recommendations that include:
    - Washing hands for at least 20 sec. with soap or use of hand sanitizer
    - Minimizing hand contact with your face
    - Covering your mouth when sneezing or coughing
    - Avoiding the customary handshake
    - Frequently disinfecting surfaces in common use areas
    - Practicing social distancing
  - No more than two people may occupy a vehicle to, from, and at the work site. Masks (i.e., cloth face coverings) are to be worn in vehicles when there are two people. If possible, travel with windows open.
High touch areas (i.e., truck keys, door handles and steering wheel) must be disinfected before and after the field day.

- If boats are to be used, each boat will have a maximum number of total personnel allowed on the vessel at any time. Outboard vessels that are 21 feet or less will be limited to crews of two. Vessels over 21 feet but less than 27 feet will be limited to a crew of three. Vessels larger than 27 feet will be limited to crews of four.

- During field tasks, it is recommended that masks be worn and are required when conducting tasks that require interacting at less than six (6) feet.

### Special Considerations

**Off-campus (field) research, including human subjects research**

- If a member of the field team presents symptoms consistent with COVID-19 the following steps are required:
  - The individual must cease field work and self-quarantine.
  - Contingency funds for a separate hotel room or other measures must be considered by the P.I. before research begins.
  - Apply for COVID testing as soon as possible.
  - The remaining team members may continue their work but must make extra efforts to maintain physical distancing.
  - Please refer to page 12 for complete guidance on quarantining.

Individuals who fail to adhere to the rules/regulations may have access to the laboratory restricted until normal/unrestricted operations resume.

Any concerns that the guidelines that in this guide are not being followed may be reported to the Division of Research and Innovation or the Office of Environmental Health and Safety. No individual may be retaliated against for raising concerns on a good-faith basis.
Operational Recommendations

1. The Office of the Chancellor shall publish and display a policy making it clear that compliance with this document will be strictly enforced, e.g. individuals who fail to adhere to the rules/regulations may be barred from returning to the laboratory until normal/unrestricted operations resume.

2. The Vice Chancellor for Research and Innovation will provide a mechanism that protects anonymity if necessary, for persons to report discomfort or concern with instructions compelling them to report for research activity in campus work spaces, and/or to report potentially high-exposure-risk work practices.
Research Plans

Framework

For Activity Levels 1, 2, and 3, Principal Investigators must prepare a Research Plan for approval. Initial approval will be made by the Unit Head/Chair. The Unit Head/Chair will subsequently forward approved Plans to the Dean for review. This framework for research plans provides suggested data elements for inclusion. Specific requirements for Research Plans will be developed by each College/School.

Example

<p>| Project title |</p>
<table>
<thead>
<tr>
<th>Person</th>
<th>Title/Role</th>
<th>Contact Information</th>
<th>Direct Supervisor</th>
<th>Workspace(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hall, Kevin</td>
<td>Professor / P.I.</td>
<td><a href="mailto:kdhall@uark.edu">kdhall@uark.edu</a> 479.640.2525</td>
<td>John English <a href="mailto:jre@uark.edu">jre@uark.edu</a></td>
<td>ENRC 3554</td>
</tr>
</tbody>
</table>

| Tasks |
| Person | Title/Role |
| Doe, Jane | Key Personnel |

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Justification: why this person is required for this task</th>
<th>Task Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle hydraulics on MTS test press to prevent leak (daily)</td>
<td>Doe is the only team member with the knowledge for the task</td>
<td>X</td>
</tr>
<tr>
<td>Conduct IDEAL-CT cracking tests on asphalt samples</td>
<td>Tests are needed to complete project with due date May 1</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essential</th>
<th>Critical</th>
<th>Time Sensitive</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Additional Elements**

- **Schedule**
  - Include all persons working in each space
  - Indicate day/time each person will be present in the workspace

- **Communication Plan**
  - Include contact information for all persons working in each space
  - Include contact information for supervisory personnel, building executives, and emergency contacts
Deployment

In anticipation of Level 3 activities the remainder of this packet includes information for unit administrators and P.I.’s.

Department Heads and Chairs, and Principal Investigators shall use the Worksheets to guide compliance with the policies in this document.

Copies of the COVID-19 Laboratory Startup Checklist and COVID-19 Laboratory Practice are provided.
Worksheet - Responsibility of DEPARTMENT HEAD or CHAIR

- Distribute the **COVID-19 Laboratory Startup Checklist** to faculty, staff and key laboratory personnel.
- Provide to each P.I. an inventory of spaces under the direction of the P.I. that includes:
  - the square footage of the laboratory,
  - any special activities that occur in a space (e.g. common equipment), and
  - the designation of individual or shared.
- Calculate the total number of personnel that may be present at a site at a given time using the formula: one person per 100 square feet. This is the maximum number of research personnel on campus for a given day.
- Share the maximum number of research personnel on campus for a given day with all personnel in a unit.
- Meet with each P.I. to determine the number of personnel that may be present at a given time in space(s) under the direction of the P.I.
- Confirm with the P.I. that sufficient materials for decontamination and personal protection are available.
- Place signs in the office suites/common faculty office hallways indicating:
  - that interactions are to be completed through teleconferencing as the primary method of communication, and
  - the maximum number of faculty permitted in an office suite / common hallway.
  Consider operating at no more than 20% capacity or one person per 100 square foot.
- Direct questions to VCRI and EH&S.

Additional safety measures may be required of the P.I., and they will be articulated at the research site (e.g. departmental sign in/sign out). Other restrictions may be imposed upon a P.I. depending on the nature of the research or physical layout of the laboratory. One additional measure may be to decrease the number of persons per square footage if the space is dense with equipment.

*Retain for your records a copy of this worksheet.*
*Record the date completed with the P.I.*
Worksheet - Responsibility of PRINCIPAL INVESTIGATORS

☐ Complete the first four items of the COVID-19 Laboratory Startup Checklist prior to meeting with your research team.
☐ Conduct a virtual meeting with personnel that encompasses:
  o the COVID-19 Laboratory Startup Checklist
  o provisions for any additional training that may be required (e.g. glove removal)
☐ Present the rotation schedule to personnel to permit physical access to the laboratory that prioritizes
  o personal protection through minimization of contact
  o graduating students and/or projects that are time sensitive
  o appropriate disinfection processes that do not unduly waste material. In order to minimize the wasting of disinfection material, the rotation schedule should allow blocks of time for individual research to occur. For example, rotation every three days to a week would allow less chance of incidental exposure.
☐ Post guidelines from EH&S regarding COVID-19 Laboratory Practice on the doors of all laboratories.
☐ Direct questions to VCRI and EH&S.

Retain for your records a copy with the date completed.
To indicate you have complied with this Worksheet, return a signed copy to your Department Head/Chair when you forward your Research Plans.
# COVID-19 Laboratory Startup Checklist

## For the P.I.:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Complete</th>
<th>N/A</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design a rotation schedule that adheres to EH&amp;S guidelines of 100 ft, per 1 occupant per laboratory</td>
<td></td>
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<tr>
<td>Update the lab contact information in BioRAFT and ensure lab safety training is up to date for all members</td>
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<tr>
<td>Perform check of unstable/reactive hazardous materials to ensure it is safe to resume operations</td>
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<tr>
<td>Contact EHS if materials had been ordered prior to the suspension and have not been received</td>
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</table>

## Hygiene:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Complete</th>
<th>N/A</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Inform all lab members of the necessity to apply the Centers for Disease Control (CDC) protective measures at all times <a href="https://www.cdc.gov/coronavirus/2019-ncov/index.html">https://www.cdc.gov/coronavirus/2019-ncov/index.html</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirm that everyone understands to maintain at least 6 feet separation</td>
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<tr>
<td>Confirm that everyone knows how to conduct, and the importance of effective handwashing</td>
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<tr>
<td>Instruct everyone to cover sneezes and coughs</td>
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<tr>
<td>Instruct everyone to avoid touching eyes, nose, and mouth</td>
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<tr>
<td>Confirm that everyone knows the proper way to remove gloves to avoid spreading contamination <a href="https://www.youtube.com/watch?v=cxfbYvbtH4k">https://www.youtube.com/watch?v=cxfbYvbtH4k</a></td>
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## Administrative Controls:

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<tr>
<th>ITEM</th>
<th>Complete</th>
<th>N/A</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate the name of person(s) to inform when Lab members will be absent</td>
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</tr>
<tr>
<td>Inform team that when a lab member is suspected of, or have confirmed exposure to COVID-19, the individual will</td>
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</tbody>
</table>
alert P.I. and Department Head/Chair who will then identify lab members have been in contact within 48 hours to the start of symptoms

Inform team members that lab spaces of a member that is suspect/confirmed with COVID-19 will be shut down for a minimum of 24 hours and properly disinfected before operations are resumed

Inform team that appropriate barriers (e.g., face coverings, plastic shields) will be used in lab locations where personnel may have nonincidental contact within 6 feet

Inform lab members to contact EH&S or PWHC if they have specific concerns

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Complete</th>
<th>N/A</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate the difference between cleaning and disinfecting</td>
<td></td>
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<tr>
<td>Confirm all lab members are aware of the specific cleaning and disinfecting plan for the lab spaces</td>
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<tr>
<td>Confirm that approved disinfectants are compatible with surfaces and within the laboratory</td>
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<tr>
<td>Confirm specific manufacturer instructions for the disinfectant product used have been reviewed to ensure proper application techniques and dwell times</td>
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<tr>
<td>Identify high-contact surfaces in the lab and include in the disinfection plan</td>
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<tr>
<td>Confirm that areas where respiratory particles may accumulate due to personnel staying in one location for an extended period (e.g., fume hood sash) have been included in disinfection plan</td>
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<tr>
<td>Communicate to team that self-made bleach disinfectants are used up within 24-hrs</td>
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</table>

Please contact your Lab Safety Advisor with any additional questions concerning COVID-19 considerations for continuation of research operations in your laboratory. You may also refer to the Chemical Hygiene, Radiation Safety Manual and Biological Safety Manual as needed
COVID-19 Laboratory Practice

Critical COVID-19 Preventative Measures

It is critical to follow social distancing, proper hygiene, reporting, and cleaning/disinfection measures to minimize COVID-19 transmissions.

A. Social Distancing

- Minimum of 6 feet separation
  - Always maintain a 6 ft distance from other personnel
  - Consider working in shifts to minimize personnel contact while also ensuring lab/personal safety
  - No more than 1 person per 100 sq ft

B. Hygiene

- Handwashing
  - Wash hands often for 20 seconds with soap and warm water
  - Thoroughly wash palms, back of hands, fingers, thumbs, nails, and wrists
  - Wash every time you remove protective gloves

- Touching Face
  - Always avoid touching your face, (nose, mouth, eyes)

- Cover Coughs and Sneezes
  - Cover coughs or sneezes with a tissue or use the inside of your elbow
  - Throw tissues directly into the trash

C. Reporting

- Feeling Ill
  - It is critical anyone on the research team stay home anytime they are feeling ill and let their P.I./supervisor know to include any other lab members they had been in close contact with 48 hours prior to first symptoms
  - Guidelines on what to do if you are sick can be found at the following link: https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html

- COVID-19 Quarantine
  - Anyone that is going into quarantine with COVID-19 symptoms needs to follow the same procedures noted above and comply with the Arkansas Department of Health requirements

Laboratory Cleaning & Disinfection

Personnel working in laboratories must perform routine cleaning and disinfection of high touch surfaces on a routine basis, but minimally once a day. Details may be found at the following link:

A. Cleaning

- Dirty contact surfaces
  - Any area that is soiled/dirty should be cleaned with detergent and water before disinfection as the virus can “hide” in dirt and debris rendering the disinfectant ineffective
  - Cleaning alone will remove dirt and germs, but may not kill anything left behind

B. Disinfection

- Application
  - Determine the best disinfectant based on ease of use and one appropriate for the surface to be cleaned
  - EPA approved products can be found at the following link: https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2
  - If making the disinfectant, keep fresh solutions – old solutions may have reduced efficacy
  - Wipes or sprays may be appropriate depending on the surfaces and compatibility

- Focus on High-Contact Surfaces
Doorknobs  Light switches  
Tables/Chairs  Pens/pencils  
Computer keyboards  A/V controls  
Equipment lids/doors  Remotes  
Equipment on/off switches  Knobs  
Cell phones/touchscreens  Handles  
Benchtops/counters  Sinks  
Desks  Cabinets  
• Consideration may be given to using plastic wrap on sensitive, high touch surfaces that are hard to disinfect discarding the plastic after each use  
• Don’t overlook those areas where respiratory particles may accumulate due to personnel staying in one location for an extended period  
• For example, a researcher watching an experiment outside a fume hood with the sash lowered, the exterior of the sash should be disinfected  

➢ Contact Time  
• Ensure all areas are covered thoroughly with the solution and remain “wet” throughout the necessary contact time; reapply if necessary  
• Follow the manufacturers recommendation for amount of time the disinfectant must dwell on the surface to be effective  
• Allow items to air dry completely before use  

➢ Dispose Used Materials  
• Place used wipes or rags in the trash  
• Wash hands after completing disinfection  

➢ Lab members in close contact with COVID-19 suspected/confirmed individual should be informed to stay at home and contact Arkansas Department of Health if not contacted already  

➢ Actions for Lab  
• If it has been under 24 hours since COVID-19 suspected/confirmed individual was in the lab, immediately shut down the lab and wait 24 hours before following the CDC disinfection procedures  
• If it has been longer than 24 hours since the COVID-19 suspected/confirmed individual was in the lab, follow the CDC disinfection procedures  
• If access is needed before the 24 hours has passed, contact EHS for guidance  

Contact EHS with Any Questions  

EHS is available to answer any questions and assist with your efforts. Personnel are in the EHS Office daily and can be reached at 479-575-5448 and ENHS@uark.  

C. Actions Following COVID-19  
Suspected/Confirmed Individual in Lab  
➢ Notification  
• Lab member should notify their P.I./supervisor and anyone in the lab they had contact with 48 hours prior to symptoms