

Research Continuity

Planning and Execution During COVID-19

May 11, 2020

University of Arkansas
Fayetteville, Arkansas



UNIVERSITY OF
ARKANSAS

Guiding Principles

- 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. As of April 30, 2020, face coverings are required to be worn during unavoidable, close (less than 6 feet) person-to-person contact.

Level 4 Normal Operations

Level 3 Limited Activity

- Tasks requiring physical presence only
- Approved faculty and key personnel only

Level 2 Restricted Activity

- **Essential, Critical and Time-Sensitive** research tasks only
- Approved faculty and key personnel only

Level 1 Essential Activity

- **Essential** research tasks only
- Approved faculty and key personnel only

Level 0 Shut-Down

- Temporary access for mission-critical, specific tasks only
e.g. animal care, cultures/tissue maintenance, etc.
- Approved faculty, building executives, Environmental Health and Safety, and core facility managers only

Definitions

Essential Research Activity

Essential research activities could include basic animal and plant care, maintenance of cell lines, and maintenance of equipment or building infrastructure that could not be shut down during a restriction on research. Also included are mission-critical research activities deemed essential, such as projects addressing the COVID-19 crisis and human subject research that would endanger research participant lives if stopped.

Critical Research 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, 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.

Time Sensitive Research Activity

Time sensitive research activities are defined at the Unit level, to be those activities with elevated, but not critical, time and research productivity constraints. These can include activities for graduate students and postdoctoral associates close to completing their degree/term of appointment and research for completion of grants with end dates within 3 months, where the funding agency has not granted leniency. These activities also include field research and extension activities that are highly dependent on weather and other seasonal constraints.

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

	Level 0 Shut Down	Level 1 Essential Activity	Level 2 Limited Activity	Level 3 Restricted Activity
Who may carry out Activities ¹	P.I.s	P.I.s Key Personnel L1 <i>(Research, Safety)</i>	P.I.s Key Personnel L2 <i>(Research, Support, Safety)</i>	P.I.s Key Personnel L3 <i>(Research, Support, Safety)</i>
What (Activities)	Specifically approved tasks only <i>(disinfection & cleaning)</i>	Essential <i>(disinfection & cleaning)</i>	Essential Critical Time-Sensitive <i>(disinfection & cleaning)</i>	Activities which require approved physical presence <i>(disinfection & cleaning)</i>
Where	Laboratory/Studio spaces <ul style="list-style-type: none"> • 6-ft distancing • 1 / 100 ft² 	Laboratory/Studio spaces <ul style="list-style-type: none"> • 6-ft distancing • 1 / 100 ft² 	Laboratory/Studio Spaces <ul style="list-style-type: none"> • 6-ft distancing • 1 / 100 ft² 	Laboratory/Studio spaces Support spaces Shared/Community spaces <ul style="list-style-type: none"> • 6-ft distancing • 1 /100 ft²
When	<p>The Chancellor will inform campus what activity level is in effect.</p> <p>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.</p>			
Minimum Protection	<p>Face covering or mask appropriate to activity (e.g. cloth, surgical, shield, respirator)</p> <p>Frequent handwashing and disinfection of common and high-touch surfaces</p> <p>Special considerations may apply (i.e. Human-Subject Research)</p>			
<p>¹Research Plans may identify personnel alternates, who are available to serve key functions in the absence of P.I.s and/or Key Personnel</p>				

Special Considerations

Human-Subject Research

Research with human participants can be conducted at Levels 1, 2, or 3. At this time, specific modifications of existing protocols with current IRB approval may be deployed without filing a protocol modification, provided the modifications are designed to protect participant safety. Please inform the IRB Administrator of change(s) made to accommodate safety.

1. If required social distancing measures (minimum 6-ft separation, and average of 1 person per 100 ft² of research space) cannot be effectively maintained during the research, researchers must include the following in their research plan:
 - a. Affirmation that researchers will wash their hands thoroughly immediately before and after contact with research participants.
 - b. A description regarding the length of time and the degree of proximity of contact between researcher(s) and participants during an experimental session.
 - c. Affirmation that face covering will be worn during the research session by the participant (if possible) and the researcher. Additional personal protection equipment may be worn by the researcher.
 - d. Affirmation that, when close proximity to a participant is not necessary, researcher(s) will maintain 6 feet of separation from the participant and from each other (if there is more than one researcher).
 - e. Affirmation that any reusable personal protection equipment must be cleaned/disinfected prior to being reused, else it must be discarded.
 - f. Affirmation that researchers will allow a 1-hour gap between research participants to allow for cleaning and disinfecting (as described by EH&S guidelines) of the research space.

2. Research team members and the participant will have to certify (via the Health Checklist which follows) that they are not currently experiencing any symptoms of illness, that they have not recently been ill, and that they have not had contact with a known or presumed COVID-19 patient within the last 14 days.
 - a. Participants should be screened for risk factors for COVID-19 disease per CDC and DOH guidelines. If any are present, they should be made aware before consenting to participate. See the information which follows for risk factors.
 - b. Research team members should also be made aware of risk factors for serious COVID-19 disease and given the option of not participating. Researchers should also follow appropriate social distancing and other recommended mitigation measures outside of the workplace (i.e., avoiding gatherings, wearing masks in public, frequently washing hands, etc.).

Human-Subject Research (continued)

HEALTH CHECKLIST

In the past 14 days, have you had:

	<i>Check response:</i>	YES	NO
Fever > 100.4 F			
Cough			
Shortness of breath or difficulty breathing			
Repeated shaking with chills			
Muscle aches unrelated to exercise or activity			
Sore Throat			
Loss of taste or smell			
Contact with someone infected with COVID-19			
Travel to a hot spot, as identified by Arkansas Department of Health			

COVID-19 Risk Factors

From: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>

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

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- 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. 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>

1. The approved field research plan must be reviewed and understood by all participants.
2. Individuals planning to participate in off campus work should self-quarantine as much as possible before traveling to the remote site.
3. The field research plan must include
 - a. dates/times you will be off campus
 - b. list of personnel, their contact information, and an emergency contact
 - c. description of what precautions will be undertaken to protect personnel (i.e. personal protective equipment, social distancing)
 - d. contingency plan to address the return of a person who displays symptoms during field work
4. Research being conducted on non-university property must have written permission of the owner for the field work to proceed.
5. If non-university research partners are actively engaged in the research, the more stringent guidelines for personal safety shall apply.
6. During the trip, do not transport others (e.g., station staff, farmers, industry reps, etc.) in your vehicle.
7. Keep track of whom you interact with and what facilities you use during visits. Should you test positive for COVID-19 this information will be required for contact tracing. If you are in contact with someone that tests positive, you will have to self-quarantine for 14 days.
8. When using vehicles or farm equipment assume the last person that used the equipment did not clean it – take appropriate measures to disinfect surfaces.
9. When necessary you may need to make your own solution to sterilize surfaces ($\frac{1}{2}$ 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.
10. Disinfect vehicles and farm equipment surfaces daily or when you finish using the equipment, whichever comes first.
11. Continue to practice the standard CDC recommendations that include:
 - a. Washing hands for at least 20 sec. with soap or use of hand sanitizer

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- b. Minimizing hand contact with your face
 - c. Covering your mouth when sneezing or coughing
 - d. Avoiding the customary handshake
 - e. Frequently disinfecting surfaces in common use areas
 - f. Practicing social distancing
12. Currently the State of Arkansas permits in-state, overnight travel.
- a. When traveling, please limit vehicle occupancy and/or hotel room occupancy to two people.
 - b. 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.
 - c. Plan gas and food stops. Avoid fuel stops or eating in areas with a high incidence of positive COVID-19 cases. As of March 31, the highest number of confirmed cases are in Benton, Clark, Cleburne, Crittenden, Faulkner, Garland, Jefferson, and Pulaski counties.
 - d. Purchasing of food and supplies and contact with society outside the field team should be limited to as few individual interactions as possible.
 - e. If a member of the field team presents symptoms consistent with COVID-19 the following steps are required:
 - i. 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.
 - ii. Apply for COVID testing as soon as possible.
 - iii. The remainder of the team may continue their work but must make extra efforts to isolate.
 - iv. The individual can return to work if they test negative or are fever free for at least 14 days.
13. 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.
14. 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.
15. During field tasks, it is required that masks be worn and are required when conducting tasks that require interacting at less than 6 feet.

Operational Recommendations

1. The Provost's Office shall issue a policy requiring stringent compliance with this document, e.g. individuals who fail to adhere to the rules/regulations may have 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 Office of the Vice Chancellor for Research and Innovation [or Environmental Health and Safety]. No individual may be retaliated against for raising concerns on a good-faith basis.

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

Project title					
Personnel					
Person	Title/Role	Contact Information	Direct Supervisor	Workspace(s)	
				Bldg/Room	BioRaft Owner
Hall, Kevin	Professor / P.I.	kdhall@uark.edu 479.640.2525	John English jre@uark.edu	ENRC 3554	Braham, Andrew afb@uark.edu

Tasks						
Person	Title/Role	Task Justification: <i>why this person is required for this task</i>	Task Designation			
			Essential	Critical	Time Sensitive	Other
Doe, Jane	Key Personnel	Cycle hydraulics on MTS test press to prevent leak (daily) <i>J.Doe is the only team member with the knowledge for the task</i>	X			
		Conduct IDEAL-CT cracking tests on asphalt samples <i>Tests are needed to complete project with due date May 1</i>			X	

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 2 and 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 (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:
 - the **COVID-19 Laboratory Startup Checklist**
 - 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
 - personal protection through minimization of contact
 - graduating students and/or projects that are time sensitive
 - appropriate disinfection processes that does 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 – 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.:

ITEM	Complete	N/A	Notes
Design a rotation schedule that adheres to EH&S guidelines of 100 sq foot per person			
Update the lab contact information in BioRAFT and ensure lab safety training is up to date for all members			
Perform check of unstable/reactive hazardous materials to ensure it is safe to resume operations			
Contact EHS if materials had been ordered prior to the suspension and have not been received			

Hygiene:

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

Administrative Controls:

ITEM	Complete	N/A	Notes
Communicate the key signs and symptoms of COVID-19 and advise personnel not to come in anytime they are not feeling well https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html			
Communicate the name of person(s) to inform when Lab members will be absent			
Inform team that when a lab member is suspected of, or have confirmed exposure to COVID-19, the individual will			

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			

Lab Cleaning and Disinfecting:

ITEM	Complete	N/A	Notes
Communicate the difference between cleaning and disinfecting https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html			
Confirm all lab members are aware of the specific cleaning and disinfecting plan for the lab spaces			
Confirm that approved disinfectants are compatible with surfaces and within the laboratory https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2			
Confirm specific manufacturer instructions for the disinfectant product used have been reviewed to ensure proper application techniques and dwell times			
Identify high-contact surfaces in the lab and include in the disinfection plan			
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			
Communicate to team that self-made bleach disinfectants are used up within 24-hrs			

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:

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>

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

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- 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

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
- 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.edu





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