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Operational Safety Procedure Review and Approval Form # 102494  
(See [ES&H Manual Chapter 3310 Appendix T1 Operational Safety Procedure \(OSP\) and Temporary OSP Procedure](#) for Instructions)

|  |   |  |  |
|--|---|--|--|
| Type:  | <b>OSP</b><br><a href="#">Click for OSP/TOSP Procedure Form</a><br><a href="#">Click for LOSP Procedure Form</a><br><a href="#">Click for LTT-Individual Information</a><br><a href="#">Click for LTT-Group Information</a> |  |  |
| Serial Number:   | <b>ESH-20-102494-OSP</b>  |  |  |
| Issue Date:  | <b>5/28/2020</b>  |  |  |
| Expiration Date:   | <b>3/28/2023</b>  |  |  |
| Title:   | <b>COVID-19 Pandemic Controls</b>   |  |  |
| Location:<br>(where work is being performed)<br><a href="#">Building Floor Plans</a>                         | <b>JLAB - Multiple Buildings/Trailers</b>   | <b>Location Detail:</b><br>(specifics about where in the selected location(s) the work is being performed) | <b><i>This applies to the entire JLab Campus</i></b> |
| Risk Classification:<br>(See <a href="#">ES&amp;H Manual Chapter 3210 Appendix T3 Risk Code Assignment</a> ) | Without mitigation measures (3 or 4):   |  | <b>4</b>   |
|  | With mitigation measures in place (N, 1, or 2):   |  | <b>3</b>   |
| Reason:  | This document is written to mitigate hazard issues that are :<br><b><i>New/previously unrecognized Hazard Issue</i></b>   |  |  |
| Owning Organization:   | <b>ESH</b>  |  |  |
| Document Owner(s):   | <b>May, Bob (<a href="mailto:may@jlab.org">may@jlab.org</a>) Primary</b>  |  |  |

Supplemental Technical Validations

***Air Contaminants - Hazardous (Imani Burton, Jennifer Williams)***  
***Emergency Preparedness (Tina Menefee)***

Other Hazards:  
***viral pathogen (Smitty Chandler)***  
***additional review (Will Oren)***  
***additional review (Harry Fanning)***  
***additional review (Ed Folts)***  
***additional review (Paul Powers)***  
***additional review (Rolf Ent)***  
***additional review (Andrei Seryi)***  
***human performance considerations (Paul Collins)***  
***additional review (Rusty Sprouse)***

Document History

| Revision | Reason for revision or update | Serial number of superseded document |
|----------|-------------------------------|--------------------------------------|
| 0        | Original issue                |                                      |

Lessons Learned

[Lessons Learned](#) relating to the hazard issues noted above have been reviewed.

Comments for reviewers/approvers:

Attachments

Procedure: *3310T1Form COVID-19 final rev1.pdf*  
 THA: *Covid-19 THA final rev1.pdf*  
 Additional Files:

Review Signatures

|   |  |
|---|--|
| Additional Authorization : Associate Director - ESH&Q   | Signed on 5/27/2020 10:02:12 AM by Steven Hoey ( <a href="mailto:hoey@jlab.org">hoey@jlab.org</a> )              |
| Additional Authorization : Emergency Preparedness   | Signed on 5/27/2020 2:51:12 PM by Tina Menefee ( <a href="mailto:menefee@jlab.org">menefee@jlab.org</a> )        |
| Person : May, Bob (may)<br><b>Reasoning:</b> Alternate Subject Matter Expert : Physics additional review for Rolf Ent | Signed on 5/27/2020 2:47:38 PM by Bob May ( <a href="mailto:may@jlab.org">may@jlab.org</a> )                     |
| Person : May, Bob (may)<br><b>Reasoning:</b> Alternate Subject Matter Expert : viral pathogen                         | Signed on 5/27/2020 2:47:38 PM by Bob May ( <a href="mailto:may@jlab.org">may@jlab.org</a> )                     |
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| Person : Subject Matter Expert : additional review  | Signed on 5/27/2020 3:09:43 PM by Rusty Sprouse ( <a href="mailto:sprouse@jlab.org">sprouse@jlab.org</a> )       |
| Person : Subject Matter Expert : human performance considerations   | Signed on 5/26/2020 12:06:14 PM by Paul Collins ( <a href="mailto:paulc@jlab.org">paulc@jlab.org</a> )           |
| Subject Matter Expert : Air Contaminants - Hazardous  | Signed on 5/27/2020 8:27:02 AM by Jennifer Williams ( <a href="mailto:jennifer@jlab.org">jennifer@jlab.org</a> ) |

Approval Signatures

|  |  |
|--|--|
| Division Safety Officer : ESH  | Signed on 5/27/2020 11:22:43 PM by Bob May ( <a href="mailto:may@jlab.org">may@jlab.org</a> )                |
| Org Manager : ESH  | Signed on 5/27/2020 11:22:43 PM by Bob May ( <a href="mailto:may@jlab.org">may@jlab.org</a> )                |
| Person : Henderson, Stuart (stuart)<br><b>Reasoning:</b> Laboratory Director | Signed on 5/28/2020 11:02:23 AM by Stuart Henderson ( <a href="mailto:stuart@jlab.org">stuart@jlab.org</a> ) |

Safety Warden : Multiple  
Buildings/Trailers

**Signed** on 5/28/2020 8:46:19 AM by Tina Menefee  
([menefee@jlab.org](mailto:menefee@jlab.org))

**Operational Safety Procedure Form**  
(See [ES&H Manual Chapter 3310 Appendix T1 Operational Safety Procedure \(OSP\) and Temporary OSP Procedure](#) for instructions.)

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|   |   |              |  |
|---|---|--------------|--|
| <b>Title:</b>   | COVID-19 Pandemic Controls                              |              |  |
| <b>Location:</b>  | Jefferson Lab Campus                                    | <b>Type:</b> | <input checked="" type="checkbox"/> OSP<br><input type="checkbox"/> TOSP |
| <b>Risk Classification</b><br>(per <a href="#">Task Hazard Analysis</a> attached)<br>(See <a href="#">ESH&amp;O Manual Chapter 3210 Appendix T3 Risk Code Assignment.</a> ) | <b>Highest Risk Code Before Mitigation</b>              |              | 4  |
|   | <b>Highest Risk Code after Mitigation (N, 1, or 2):</b> |              | 3  |
| <b>Owning Organization:</b>   | ES&H Division   | <b>Date:</b> | 5/20/20  |
| <b>Document Owner(s):</b>   | R. May  |              |  |

**DEFINE THE SCOPE OF WORK**

- Purpose of the Procedure** – Describe in detail the reason for the procedure (what is being done and why).  
Specify controls for activities at Jefferson Lab under SARS-CoV-2 (COVID-19) Pandemic conditions, specifically MEDCON 5 and MEDCON 4 conditions. This OSP will:
  - Reduce the likelihood that the virus enters the campus
  - Reduce the exposure of workers to an unrecognized virus on campus, and
  - Contain the spread of the virus once we recognize it has entered the campus.
- Scope** – include all operations, people, and/or areas that the procedure will affect.  
COVID-19 controls for all activities at Jefferson lab under MEDCON 5 and MEDCON 4.
- Description of the Facility** – include building, floor plans and layout of the experiment or operation.  
Jefferson Lab campus, all interior and exterior spaces, all government or Jefferson Lab owned vehicles and conveyances

**ANALYZE THE HAZARDS and IMPLEMENT CONTROLS**

- Hazards identified on written Task Hazard Analysis**  
Since the THA covers activities broadly, it is organized around 7 cases:
  - Case #0      Return to work on campus
  - Case #1      Office Work
  - Case #2      Casual Contact
  - Case #3      Work with separation  $\geq$  6ft
  - Case #4      Work at <6ft separation
  - Case #5      Developing symptoms while at JLab
  - Case #6      In person meetings
- Authority and Responsibility:**
  - Who has authority to implement/terminate**  
COO, Mike Maier

## 5.2 Who is responsible for key tasks

Division Safety Officers for review and comment  
 Associate Directors and Division Managers for establishing requirements  
 Supervisors and line managers for implementation  
 Workers for implementation

## 5.3 Who analyzes the special or unusual hazards including elevated work, chemicals, gases, fire or sparks (See [ES&H Manual Chapter 3210 Appendix T1 Work Planning, Control, and Authorization Procedure](#))

The special or unusual hazards related to COVID-19 pandemic. The Site Occupational Medicine Director (SOMD) supported by the Pandemic Assistance Team and the COO develops recommendations for senior managers regarding special controls. ES&H specifies personal protective equipment that can meet the recommendations of the SOMD, provides training and guidance on use in any particular work situation, and provides PPE equipment.

The SOMD has recommended that the lab take the stance that all are contagious. This concept is called “universal precaution” and is a critical assumption since it has been shown in certain circumstances that a significant number of contagious people in a population can have no symptoms.

## 6. Personal and Environmental Hazard Controls Including:

**NOTE: Exposure to COVID-19 hazards can be mitigated to varying degrees through the implementation of controls. The most effective protection measures (listed from most effective to least effective) are: Engineering Controls (including elimination or substitution), Administrative Controls, and Personal Protective Equipment. During the COVID-19 Pandemic, when it may not be possible to eliminate or substitute a hazard condition or hazardous substance, multiple controls may be used to provide the most protection.**

### 6.1 Shielding

The SOMD has likened the concepts of time, distance, and shielding to that of radiological controls at Jefferson Lab. Applying the hierarchy-of-controls discipline, the principle control to limit the spread of COVID-19 is physical (or what’s conventionally termed social) distancing. The SOMD recommends:

- 1) Maximizing distance from others  
 The concept of maximizing distance incorporates the fact that expiratory plumes from the mouths of others expand with distance. Therefore, the viral concentration in air falls with distance.
- 2) Minimize time of exposure  
 For instance, even if 6-foot distancing is followed, in-person meetings and casual interactions should be avoided and shall be limited in duration to the minimum time necessary.
- 3) Use shielding  
 For protection against viruses, “shielding” refers to use of PPE to prevent inhalation of, or contact with, droplets and aerosols, or fomites: N95<sup>®</sup> respirator, nitrile gloves, Tyvek<sup>®</sup> with hood and a face shield.

### 6.2 Barriers (magnetic, hearing, elevated or crane work, etc.)

See 3) above. Other physical barriers, such as Plexiglas<sup>®</sup> shields to minimize the spread of droplets are ineffective against aerosols and are not recommended by the SOMD as a substitute for physical distancing or PPE.

### 6.3 Interlocks

N/A

## 6.4 Monitoring systems

N/A

## 6.5 Ventilation

FM&L has evaluated HVAC systems in buildings around the Jefferson Lab campus and reconfigured these systems to increase fresh air intake, maximize air exchange, and improved filtration where possible.

## 6.6 Other (Electrical, ODH, Trip, Ladder) (Attach related Temporary Work Permits or Safety Reviews as appropriate.)

FM&L has also evaluated each space at the lab that is designed for more than one person. These spaces are labeled at their entrance with a sign indicating the maximum occupancy.

## 7. List of Safety Equipment:

### 7.1 List of Safety Equipment:

Where physical distancing can't be maintained during work, the standard PPE requirements for working closer than 6 ft. are: N95<sup>®</sup> respirator, disposable gloves, face shield or goggles, Tyvek<sup>®</sup> coveralls/overalls with hood. Note: additional PPE will be evaluated by ES&H and may be specified for specific tasking.

### 7.2 Special Tools:

N/A

## 8. Associated Administrative Controls

- 1) Daily Worker Self Certification  
 Follow the process outlined in Section 2.2.1 Daily Worker Health Self-Certification using Figure 3 in the TJNAF Resumption of On-Site Operations Plan.
- 2) Teleconferencing:  
 Teleconferencing helps “maximize distance from others”. Jefferson Lab has a site license for *Bluejeans* teleconferencing and *MSTeams* software. These methods are the default mode of holding meetings with multiple staff under MEDCON5.
- 3) Cloth face coverings (selected, obtained, or fabricated by the user and meet CDC guidelines):  
 Cloth face coverings are required in hallways, stairwells and elevators, in common areas such as restrooms and kitchens, when in transition to and from an office space (and inside the office space if it contains more than one person), in office space defined by cubicles (not fully enclosed spaces) located in a common area, if travelling in a GSA or lab-owned vehicle, and during casual interactions when moving about the campus on foot.  
 NOTES:
  1. cloth face coverings are not required when you are alone in your individual walled office, when engaging in outdoor activities such as walking, biking, running or eating lunch
  2. only one person may travel GSA or lab-owned vehicle at a time. This may change – always follow vehicle occupancy restrictions established and communicated by FM&L.
- 4) Minimize contact:  
 Minimize the time spent in the presence of others: limit in-person meetings, and avoid causal encounters when moving around campus. Under MEDCON 5 and 4, in-person meetings shall

follow 6 ft. distancing requirements and shall be planned in advance to limit contact time. The capacity of all rooms and work spaces will not exceed one person every 170 ft<sup>2</sup>

5) Enhanced sanitation:

FM&L has increased the frequency of cleaning for common space (restrooms, conference rooms, and breakrooms) by the janitorial subcontractor. Workers shall ensure that disinfecting wipes and hand sanitizer are available in the area before starting work. Upon completion of job or at end of shift, workers shall clean common or shared surfaces such as bench tops, desk space, and commonly used tools in so far as practicable. The Stockroom carries cleaning supplies for cleaning individual work space and tools. Visit the Stockroom or contact your Safety Wardens for locations of cleaning supplies. Wipes used for disinfecting may be disposed of in the regular trash. Enhanced sanitation is not required if a space has been unoccupied for greater than 10 days. (If questions develop regarding the need for Enhanced Sanitation, contact FM&L for guidance.)

**9.1 What are the Training Requirements (See [List of Training Skills](#))**

SAF003, COVID-19 Hazard Awareness and Controls - on-line training  
[Respirator Use/Medical Approval Form](#)

COVID-19 PPE donning/doffing and storage for reuse procedure – as needed, provided by IH

## DEVELOP THE PROCEDURE

### 9. Operating Guidelines

The TJNAF Resumption of On-Site Operations Plan describes additional hazard controls necessary to resume on-site operations at the Thomas Jefferson National Accelerator Facility (TJNAF) following the suspension of most on-site operations starting on March 23, 2020, due to the continued risk of COVID-19 infection to the workforce. In some cases these additional controls require significant adjustments to how we plan and conduct work at TJNAF. This procedure provides the additional controls and a process to review these controls and assess how these controls can be implemented amidst the controls identified in existing (T)OSPs for Medium and High Risk work and LOSPs.

### 10. Notification of Affected Personnel (who, how, and when include building manager, safety warden, and area coordinator)

All staff shall read and complete this OSP by signing the Pre-job Checklist for the COVID-19 OSP before conducting work.

Line managers will determine whether existing formal work control documents have bearing on upcoming activities. If so, line managers will use the second checklist, **Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP**, to evaluate the impact of COVID-19 controls on those controls identified in the formal work control document and have participating staff sign the associated Pre-job Checklist.

### 11. List the Steps Required to Execute the Procedure: from start to finish.

- A. Before an employee returns to the Jefferson Lab campus, each employee
  - 1. Shall complete SAF003, COVID-19 Hazard Awareness and Controls
  - 2. Shall complete all *web-based training* identified in their ITP (that is, all the required training that *can* be completed before returning to JLab campus)
  
- B. Before an employee returns to the Jefferson Lab campus, each supervisor
  - 1. Shall verify that their workers have completed all *web-based training* identified in the ITP
  - 2. Should consider a staged return (for example, bringing in Safety Wardens first to help with plans to

- optimize work areas or stage supplies)
3. Shall identify the activities necessary to support Performance-Critical Operations that are governed by (T)OSPs and or LOSPs and prioritize those activities
  4. Shall determine a means for communicating COVID-19 restrictions and any related new requirements to staff while maintaining the 6-foot social distancing requirements.
- C. Upon return to work, each supervisor shall
1. Observe employee and confirm the results of the employee's Health Self-Certification (while respecting social distancing requirements)
    - a. if staff member believes they are at higher risk for severe illness some adjustments may be necessary to work plans
    - b. if necessary, direct employee to Occupational Medicine to establish work restrictions or to establish fitness for duty
    - c. consult with Occupational Medicine for work restriction implementation and to resolve fitness for duty questions
  2. Conduct the Pre-job Checklist for the COVID-19 OSP with each employee and assure that the signature page is completed
  3. Conduct or assure that the **Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP's** that support Performance Critical Operations for each employee in their organization who is effected by the associated work control document is completed
  4. Make any necessary work process / workplace modifications and obtain necessary PPE resources to meet requirements in the (T)OSP and/or LOSP and pre-job briefing notes
  5. Authorize work to begin
    - a. Authorization is in the form of a supervisor signature on the pre-job briefing and a copy posted at the job-site for any task conducted under a work control document identified in the pre job briefing
  6. Continue to do routine pre-job briefings on timely and relevant aspects of the work
- D. Upon return to work, each employee is expected to
1. Pause work and reevaluate the task if inconsistent with the plan
  2. Perform the Health Self-Certification process described in SAF003 mentioned above
  3. Read this COVID-19 Pandemic Controls OSP (COVID-19 OSP)
  4. Complete the associated **Pre-job Checklist for the COVID-19 OSP**
  5. Sign the signature page on the **Pre-job Checklist for the COVID-19 OSP**
    - a. signature certifies that the employee has read, understands, and agrees to abide by the requirements in the COVID-19 OSP
  6. Review, with the work control document author, existing area or task-specific (T)OSPs and/or LOSPs
    - a. use the **Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP** to evaluate the implications for COVID-19 controls related to the task or area-specific (T)OSP and/or LOSP controls
    - b. review with supervisor and clearly identify associated modification of requirements in the area or task-specific (T)OSP and/or LOSP to accommodate COVID-19 controls
    - c. list the modifications in the notes section of the **Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP**
      - i. employ hierarchy-of-controls discipline to modifications to task or area-specific



(T)OSP and/or LOSP

- ii. review the modifications in the notes section of the Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP with supervisor
7. Complete and sign the pre-job briefing for each task or area-specific (T)OSP and/or LOSP
- a. signature certifies that the employee has read, understands, and agrees to abide by the requirements in the Task or Area-Specific (T)OSP and/or LOSP
  - b. the Pre-job briefing communicates modification of requirements in the Task or Area-Specific (T)OSP and/or LOSP to accommodate COVID-19 controls.

E. Note: While this OSP focuses on the impact of COVID-19 controls on medium and high-hazard work governed by (T)OSPs and LOSPs, the same approach should be applied to procedures that are not formal work control documents, such as SOPs, and bench-top procedures used routinely at JLab.

**F. All are expected to pause work and reevaluate the task if inconsistent with the plan**

**12. Back Out Procedure(s)** i.e. steps necessary to restore the equipment/area to a safe level.

With the exception of the Daily Worker Health Self-Certification, the requirements in this OSP are terminated when Jefferson Lab transitions from MEDCON 4 to MEDCON 3.

**13. Special environmental control requirements:**

**13.1 List materials, chemicals, gasses that could impact the environment** (ensure these are considered when choosing Subject Mater Experts) and explore [EMP-04 Project/Activity/Experiment Environmental Review](#) below

**13.2 Environmental impacts** (See [EMP-04 Project/Activity/Experiment Environmental Review](#))

As part of the Jefferson Lab EMS, and as a Best Management Practice, Tyvek® coveralls shall be retained for recycling. The procedure for disinfecting coveralls for reuse shall be used to render the coveralls safe for recycling.

**13.3 Abatement steps** (secondary containment or special packaging requirements)

**14. Unusual/Emergency Procedures** (e.g., loss of power, spills, fire, etc.)

Pause and reevaluate whenever the activity is inconsistent with the plan. Use [3330 Stop Work and Re-Start for Safety Program](#)

**15. Instrument Calibration Requirements** (e.g., safety system/device recertification, RF probe calibration)

N/A

**16. Inspection Schedules**

N/A

**17. References/Associated/Relevant Documentation**

TJNAF Resumption of On-Site Operations Plan

**18. List of Records Generated** (Include Location / Review and Approved procedure)

- Pre-job Checklist for the COVID-19 OSP** (attached)
- Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP** (attached)

**Submit Procedure for Review and Approval** (See [ES&H Manual Chapter 3310 Appendix T1 OSP & TOSP Instructions – Section 4.2 Submit Draft Procedure for Initial Review](#)):

- Convert this document to .pdf
- Open electronic cover sheet:  
[https://mis.jlab.org/mis/apps/mis\\_forms/operational\\_safety\\_procedure\\_form.cfm](https://mis.jlab.org/mis/apps/mis_forms/operational_safety_procedure_form.cfm)
- Complete the form
- Upload the pdf document and associated Task Hazard Analysis (also in .pdf format)

**Distribution:** Copies to Affected Area, Authors, Division Safety Officer

**Expiration:** Forward to ESH&Q Document Control

### Form Revision Summary

**Revision 1.5 – 04/11/18** – Training section moved from section 5 Authority and Responsibility to section 9 Training

**Revision 1.4 – 06/20/16** – Repositioned “Scope of Work” to clarify processes

**Qualifying Periodic Review – 02/19/14** – No substantive changes required

**Revision 1.3 – 11/27/13** – Added “Owning Organization” to more accurately reflect laboratory operations.

**Revision 1.2 – 09/15/12** – Update form to conform to electronic review.

**Revision 1.1 – 04/03/12** – Risk Code 0 switched to N to be consistent with [3210 T3 Risk Code Assignment](#).

**Revision 1.0 – 12/01/11** – Added reasoning for OSP to aid in appropriate review determination.

**Revision 0.0 – 10/05/09** – Updated to reflect current laboratory operations

| ISSUING AUTHORITY | FORM TECHNICAL POINT-OF-CONTACT | APPROVAL DATE | REVIEW DATE | REV. |
|-------------------|---------------------------------|---------------|-------------|------|
| ESH&Q Division    | <a href="#">Harry Fanning</a>   | 04/11/18      | 04/11/21    | 1.5  |

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## Pre-job Checklist for the COVID-19 OSP

**Division/Department/Group:**

**Date:**

**Time:**

**Briefing title: Initial Briefing for COVID-19 Controls**

**Obtain COVID-19 OSP and THA. Attach to this pre-job briefing.**

**Lead worker or Supervisor/Manager General Pre-job Talking-points:**

**1) Do you understand the requirements for performing work?**

- Remember to stay within scope of work and work to your document as written.
- If you find yourself outside the scope of work, or are unable to work to the document as written, use your stop/pause work authority and bring it to my attention immediately.

**2) PPE for work at distances of less than 6 ft. from your next nearest coworker: Tyvek<sup>®</sup> coveralls with hood, nitrile gloves, safety glasses or face shield, N95<sup>®</sup> respirator**

**3) Other:**

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**Additions to this OSP that result from careful application and consideration of this checklist shall be recorded in the Additional Notes section or appended as a separate form.**

**Those who sign this checklist in the Signature Section verify that they understand and agree to abide by the COVID-19 Pandemic Controls OSP and any additions as appended or listed in the Additional Notes section of this checklist.**

## On-site Reduced Mission Critical Operations During COVID-19 Pandemic

**General situations** when interacting with or around others, e.g. government vehicles, kitchens, restrooms, break rooms, lab spaces, shops, stairwells, walkways, aisle ways, copy/printer rooms, etc. Discuss requirement to:

- wear a cloth face covering *without an exhalation valve*
  - face covering does not need to be worn when engaging in outdoor recreational activities (walking, biking, running) or eating lunch or when working alone in a closed office space
  - face coverings can be brought from home
  - inspect your face covering for physical damage each time prior to use

- replace your face covering when it becomes damaged, soiled or if it becomes difficult to breathe through
- use hand sanitizer with at least 60% alcohol
- wash hands frequently with soap and warm water
- limit contact with common use surfaces (it may be prudent to wear gloves if there is frequent contact with walk ways railings, stairwell bannisters, and other safety related equipment)

### Using an elevator, office, or conference room

- identify posted person loading limit for room you are using
- do not exceed posted person loading limit for room you are using
- wear a face covering without an exhalation valve during meetings
- use supplies in the break room, office, or conference room to clean common surfaces for the next user

### Meeting with others in-person:

- use videoconferencing in MEDCON 5 and as first option for MEDCON 4
- do not exceed posted person loading limit for space
- wear a cloth face covering (without an exhalation valve) during meetings
- limit meeting time to 15 minutes for MEDCON 4

### Work situations when you cannot maintain 6ft separation between you and the next nearest person

- for lab spaces, shop spaces, do not exceed posted person loading limit
- for cubicle spaces do not exceed posted person loading limit
- discuss work process to determine if hazards can be eliminated with engineered controls or if PPE is required. Use of PPE requires Associate Director/Department Manager (AD/DM) review and approval
- wear the PPE specified above if approved by AD/DM
  - a cloth face covering for general use (even one with an exhalation valve) does not substitute for an N95<sup>®</sup> respirator
  - ensure no facial hair under the seal of N95 respirator, PPE is worn and stored consistent with training and instructions

**Discuss human performance implications** of planned work - including potential error traps (additional requirements that increase the likelihood of an error, e.g. increased task requirements, resource limitations, new requirements, lack of familiarity)

## Are there issues related to

- Training – do any of the instructions in ESH003, COVID-19 Hazard Awareness and Controls create complications or present conflicts for existing training, how are they resolved
- Communications – what additional communications may be needed to augment your work, and how frequent
- Planning and Scheduling
  - time differential between work planning and work execution
  - added time for staging, donning, doffing and storing PPE for reuse
  - added time for cleaning work surfaces, tools, commonly reused surfaces
- Design/Process Change – what new processes are required to implement COVID-19 controls in your work area, during your work; will a change to a work specific T/OSP be required?
- Values, Priority, Policies – do you have a clear understanding of the priority and the role for COVID-19 controls
- Procedural Development or Use / Work Practices – what general changes do you anticipate and do these changes require additional instructions for work; does the OSP need modification/updating?
- Supervisory Involvement – what additional roles have supervisory staff taken on
- Organizational Interfaces – do you have clear lines of communication worked out with your technical interfaces considering the possible modification of regular coordination meetings' format due to COVID-19 controls?

## What are the unique task demands associated with COVID-19 controls?

- time pressure / schedule pressure – extra time to implement controls
- high workload
- simultaneous multiple or complex interrelated tasks
- unclear requirements
- reliance on other groups or dependencies on other unfinished work
- resource availability
- need for a cleaning procedure for PPE reuse?
- other \_\_\_\_\_

## Are there challenges with respect to individual capabilities – are there new limitations due to any inability to use COVID-19 PPE?

- new techniques – forgetting/ misplacing respirator
- lack of knowledge
- unfamiliar or first time task
- illness, fatigue

- fear of COVID-19 or COVID-19 controls?
- other \_\_\_\_\_

**Are there challenges with respect to the work environment during the implementation of COVID-19 controls?**

- distractions and interruptions
- changes
- possible unexpected conditions?
- does PPE create heat stress as a potential hazard?
- other \_\_\_\_\_

**Are there tendencies or habit patterns that can interfere with implementation of COVID-19 controls; can they contribute to errors?**

- habit patterns
- assumptions
- complacency
- peer pressure to return to work
- mental health / anxiety?
- other \_\_\_\_\_

Are there resource issues

- adequate resources to perform the work

**When working indoors,**

- open windows and/or doors, where possible, to increase air flow and ventilation?

**Additional Notes** on issues that develop during the pre-job briefing:

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## Pre-job Checklist for Task or Area-Specific (T)OSP/LOSP

Obtain COVID-19 OSP and THA, OSP and THA for Work or Task-Specific (T)OSP and/or LOSP. Attach to this pre-job briefing.

(T)OSP and /or LOSP Number(s):

Brief Job Description: \_\_\_\_\_

### Lead worker or Supervisor/Manager General Pre-job Talking-points:

**1) Do you understand the requirements for performing work?**

- Remember to stay within scope of work and work to your document as written.
- If you find yourself outside the scope of work, or are unable to work to the document as written, use your stop/pause work authority and bring it to my attention immediately.

**2) PPE for work at distances of less than 6 ft. from your next nearest coworker: Tyvek® coveralls with hood, nitrile gloves, safety glasses or face shield, N95 respirator**

**3) Other task-specific PPE:**

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Additions for (T)OSPs or LOSPs that result from careful application and consideration of this checklist shall be recorded in the Additional Notes section or appended as a separate form.

Those who sign this checklist in the Signature Section verify that they understand and agree to abide by the (T)OSPs and or LOSPs identified above and any additions to those (T)OSPs and/or LOSPs as appended or listed in the Additional Notes section of this checklist.

### Discuss steps associated with planned work

- use the (T)OSP and/or LOSP description of work to discuss the steps involved
- use the (T)OSP and/or LOSP THA to review the consequences and mitigations associate with work
  - special attention to most hazardous task steps OR elevated hazards
  - discuss the overall risk
  - what controls are needed AND what controls are already in-place
  - are there any Credited Controls involved

Discuss human performance implications of planned work - including potential error traps (additional requirements that increase the likelihood of an error, e.g. increased task requirements, resource limitations, new requirements, lack of familiarity)



## Are there issues related to

- Training – do any of the instructions in ESH003, COVID-19 Hazard Awareness and Controls create complications or present conflicts for existing training, how are they resolved
- Communications – what additional communications may be needed to augment your work, and how frequent
- Planning and Scheduling
  - time differential between work planning and work execution
  - added time for staging, donning, doffing and storing PPE for reuse
  - added time for cleaning work surfaces, tools, commonly reused surfaces
- Design/Process Change – what new processes are required to implement COVID-19 controls in your work area, during your work
- Are there adequate resources to perform the work
- Values, Priority, Policies – do you have a clear understanding of the priority and the role for COVID-19 controls
- Procedural Development or Work Practices – what general changes do you anticipate and do these changes require additional instructions for work
- Supervisory Involvement – what additional roles have supervisory staff taken on
- Organizational Interfaces – do you have clear lines of communication worked out with the primary resource providers for COVID-19 controls?

## What are the unique task demands associated with COVID-19 controls?

- time / schedule pressure
- high workload
- simultaneous multiple or complex interrelated tasks
- unclear requirements
- PPE resource limitations / need for PPE cleaning procedure for reuse
- reliance on other groups or dependencies on other unfinished work?
- other \_\_\_\_\_

## Are there challenges with respect to individual capabilities – are there new limitations due to any inability to use COVID-19 PPE?

- new techniques
- lack of knowledge
- unfamiliar or first time task
- illness, fatigue, heat stress from PPE
- fear of COVID-19 or COVID-19 controls?

other \_\_\_\_\_

**Are there challenges with respect to the work environment during the implementation of COVID-19 controls?**

- distractions and interruptions
- changes
- possible unexpected conditions?
- other \_\_\_\_\_

**Are there tendencies or habit patters that can interfere with implementation of COVID-19 controls; can they contribute to errors?**

- habit patterns
- assumptions
- complacency
- peer pressure to return
- anxiety / mental health issues
- other \_\_\_\_\_

**When working indoors,**

- contact FM&L for increased ventilation **or**
- open windows and/or doors, where possible, to increase air flow and ventilation?

**Discuss possible interferences / complications related to COVID-19 controls with planned work**

- added time to complete work (include PPE donning / doffing)
- additional physical stress from PPE use
- emotional stress form new working conditions ( conditions at home)
- task steps in THA most impacted by COVID-19 controls
  - added complexity
  - limited dexterity
  - obstructed vision
  - limited assistance
- discuss how tasking can be adjusted to respond to interferences / complications
- avoid sharing work equipment and tools to the greatest extent possible
  - if you need to share tools/equipment – clean/disinfect before and after use and consider the use of gloves. Don't share personal items.

- Clean/disinfect your work surfaces/area frequently, e.g. workstations, keyboards, telephones, door handles, routinely.
- Discuss whether a P95<sup>®</sup> or an N95<sup>®</sup> respirator is specifically required for this work and for which tasks if not all tasks
  - organize tasks to minimize the number of times you don / doff covering N95<sup>®</sup> respirator
  - focus on avoiding touching the inside of your face covering or N95<sup>®</sup> respirator
  - clean hands with soap and water or an alcohol-based hand sanitizer ( $\geq 60\%$  alcohol) before and after donning/doffing or adjusting your face covering or N95<sup>®</sup> respirator.
  - facial hair interferes with the ability to generate a good seal between your face and an N95<sup>®</sup> respirator which reduces the effectiveness of the protection provided by the N95<sup>®</sup> respirator - make sure you have a good seal between your face and your N95 respirator prior to starting work
  - inspect N95<sup>®</sup> respirator for physical damage each time prior to use
  - replace N95<sup>®</sup> respirator when it becomes damaged, soiled or if it becomes difficult to breathe through
  - store N95<sup>®</sup> respirator in a clean paper bag according to the JLab PPE Reuse Policy and discard paper bag after use
  - if N95<sup>®</sup> respirator causes labored breathing, discomfort or irritation, or thermal fatigue, rest and to allow your breathing to return to normal
- contact Occ. Med. and consult with IH on thermal stress during respirator use and for ways to adjust respirator to minimize discomfort or irritation

**Additional Notes** on issues that develop during the pre-job briefing:

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# Task Hazard Analysis (THA) Worksheet

(See [ES&H Manual Chapter 3210 Appendix T1](#)  
[Work Planning, Control, and Authorization Procedure](#))

**Click  
For Word**

|                |               |              |         |                                 |     |
|----------------|---------------|--------------|---------|---------------------------------|-----|
| <b>Author:</b> | ES&H Division | <b>Date:</b> | 5/20/20 | <b>Task #:</b><br>If applicable | N/A |
|----------------|---------------|--------------|---------|---------------------------------|-----|

**Complete all information. Use as many sheets as necessary**

|                          |   |                       |                      |
|--------------------------|---|-----------------------|----------------------|
| <b>Task Title:</b>       | Working at the lab under COVID-19 protection measures | <b>Task Location:</b> | Jefferson Lab campus |
| <b>Division:</b>         | All   | <b>Department:</b>    | All                  |
| <b>Frequency of use:</b> | Daily   |                       |                      |
| <b>Lead Worker:</b>      | JLab staff  |                       |                      |

|   |  |
|---|--|
| <b>Mitigation already in place:</b><br><a href="#">Standard Protecting Measures</a><br><a href="#">Work Control Documents</a> | <p>Medium and high-hazard work is addressed by work control documents; task or area specific (T)OSPs are already in place.</p> <p>NOTE: Controls related to task or area specific (T)OSPs must be evaluated in light of SARS-CoV-2 (COVID-19) controls; expect human performance error traps from issues related to additional training requirements for the use and reuse or COVID-19 PPE, or the use of COVID-19 PPE complicating task specific PPE, plus job sequence interruptions related to use of COVID-19 controls, and fatigue due to the use of COVID-19 PPE, any “working alone” considerations due to social distancing, and longer than usual times to complete work.</p> |
|---|--|

| Sequence of Task Steps | Task Steps/Potential Hazards | <u>Consequence Level</u> | <u>Probability Level</u> | <u>Risk Code</u><br>(before mitigation) | Proposed Mitigation<br>(Required for <u>Risk Code</u> >2) | Safety Procedures/<br>Practices/Controls/Training | <u>Risk Code</u><br>(after mitigation) |
|------------------------|------------------------------|--------------------------|--------------------------|---|---|---|--|
|------------------------|------------------------------|--------------------------|--------------------------|---|---|---|--|

# Task Hazard Analysis (THA) Worksheet

(See [ES&H Manual Chapter 3210 Appendix T1](#)  
[Work Planning, Control, and Authorization Procedure](#))

| Sequence of Task Steps | Task Steps/Potential Hazards                | <u>Consequence Level</u> | <u>Probability Level</u> | <u>Risk Code</u><br>(before mitigation) | Proposed Mitigation<br>(Required for <u>Risk Code</u> >2)  | Safety Procedures/<br>Practices/Controls/Training  | <u>Risk Code</u><br>(after mitigation) |
|------------------------|---|--------------------------|--------------------------|---|--|--|--|
| Case #0                | Return to work on campus/COVID-19 infection | high                     | medium                   | 4                                       | <p>Self-quarantine 14-days if exposed to a person who tested positive. Consult JLab Occupational Medicine if returning from travel that involves commercial air flight or if you are unsure about what to do.</p> <p>Avoid close contact with people who are sick.</p> <p>Perform Daily Worker Health Self-Certification: do not come to work if you or a partner/housemate is sick.</p> <p>No work until completion of pre-job briefings on COVID-19 controls and area or task-specific (T)OSP and/or LOSP review and re-sign, AND pre-job briefing PLUS supervisory work re-authorization before start</p> | <p>SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan</p> <p>Clean-as-you-go approach to using all facilities</p> <p>FM&amp;L special cleaning plan for employees who test positive (or presumptive positive) for COVID-19</p> | 2                                      |

# Task Hazard Analysis (THA) Worksheet

(See [ES&H Manual Chapter 3210 Appendix T1](#)  
[Work Planning, Control, and Authorization Procedure](#))

| Sequence of Task Steps | Task Steps/Potential Hazards   | <u>Consequence Level</u> | <u>Probability Level</u> | <u>Risk Code</u><br>(before mitigation) | Proposed Mitigation<br>(Required for <u>Risk Code</u> >2)   | Safety Procedures/<br>Practices/Controls/Training   | <u>Risk Code</u><br>(after mitigation) |
|------------------------|--|--------------------------|--------------------------|---|---|---|--|
| Case #1                | Office Work – conservatively assume “open cubicles”/COVID-19 infection   | high                     | low                      | 3                                       | working from home and teleconferencing, social distancing, follow person loading limitations, using face coverings, limiting exposure times, HVAC systems adjusted for maximum fresh air intake and improved filtration | SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan - capacity of all rooms and work spaces will not exceed one person every 170 ft <sup>2</sup> . When implementing person loading restrictions in cubicle areas, cubicles located directly under air returns should be given priority for exclusion. | 2                                      |
| Case #2                | Casual Exposure (short duration incidental exposure, e.g. people passing by each other in corridors, stairwells, limited space < 6 ft.)/COVID-19 infection | high                     | low                      | 3                                       | social distancing, face coverings, minimize dwell time, person loading limitations,   | SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan  | 2                                      |
| Case #3                | Work with separation ≥ 6ft/COVID-19 infection  | high                     | low                      | 3                                       | Face coverings, social distancing, minimized time in the presence of others, person loading requirements  | SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan  | 2                                      |
| Case #4                | Work at <6ft separation/COVID-19 infection   | high                     | high                     | 4                                       | PPE: N95 <sup>®</sup> respirator, gloves, face shield/goggles. Tyvek <sup>®</sup> coveralls/overalls with hood, or other equivalent PPE as specified by ES&H for specific tasking                                       | SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan<br><br><a href="#">Respirator Use/Medical Approval Form</a><br><br>Respiratory protection: training, fit test, PPE: donning/doffing or gloves, face shield/goggles, gloves, storage for reuse  | 3                                      |

For questions or comments regarding this form contact the Technical Point-of-Contact [Harry Fanning](#)

# Task Hazard Analysis (THA) Worksheet

(See [ES&H Manual Chapter 3210 Appendix T1 Work Planning, Control, and Authorization Procedure](#))

| Sequence of Task Steps | Task Steps/Potential Hazards  | Consequence Level | Probability Level | Risk Code (before mitigation) | Proposed Mitigation (Required for Risk Code >2)   | Safety Procedures/Practices/Controls/Training  | Risk Code (after mitigation) |
|------------------------|---|-------------------|-------------------|-------------------------------|---|--|------------------------------|
| Case #5                | Developing symptoms while at JLab/infecting co-worker with COVID-19 | high              | high              | 4                             | Perform Daily Worker Health Self-Certification and discussion with Occupational Medicine  | SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan | 2                            |
| Case #6                | In person meetings/COVID-19 infection                               | high              | high              | 4                             | Face coverings, social distancing, maintaining exposure time ≤ 15 minutes, hold meetings whenever possible remotely, person loading requirements, hold outdoors, meetings are standup only, use designated large “common areas” only. | SAF003, COVID-19 Hazard Awareness and Controls training, precautions and control requirements in TJNAF Resumption of On-Site Operations Plan | 2                            |

When completed, if the analysis indicates that the [Risk Code](#) before mitigation for any steps is “medium” or higher (RC≥3), then a formal [Work Control Document](#) (WCD) is developed for the task. Attach this completed Task Hazard Analysis Worksheet. Have the package reviewed and approved prior to beginning work. (See [ES&H Manual Chapter 3310 Operational Safety Procedure Program](#).)

### Form Revision Summary

**Periodic Review – 08/29/18** – No changes per TPOC

**Periodic Review – 08/13/15** – No changes per TPOC

**Revision 0.1 – 06/19/12** - Triennial Review. Update to format.

**Revision 0.0 – 10/05/09** – Written to document current laboratory operational procedure.

| ISSUING AUTHORITY | TECHNICAL POINT-OF-CONTACT    | APPROVAL DATE | REVIEW DATE | REV. |
|-------------------|-------------------------------|---------------|-------------|------|
| ESH&Q Division    | <a href="#">Harry Fanning</a> | 08/29/18      | 08/29/21    | 0.1  |

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**Task Hazard Analysis (THA) Worksheet**  
(See ES&H Manual Chapter 3210 Appendix T1  
Work Planning, Control, and Authorization Procedure)

