**Resuming Operations During COVID-19 Phase 1-3**

**Karp Lab (Academic Surge 1352)**

**STANDARD OPERATING PROCEDURE (SOP)**

**Type of SOP:** Process/Equipment

**All personnel who are subject to these SOP requirements must review a completed SOP and sign the associated training record. Completed SOPs must be kept with the UC Davis Laboratory Safety Manual or be otherwise readily accessible to laboratory personnel. Electronic access is acceptable. SOPs must be reviewed, and revised where needed, as described in the** [**UC Davis Laboratory Safety Manual**](http://safetyservices.ucdavis.edu/article/laboratory-safety-manual)**.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date SOP Written: | | **5/5/20** | | |  | Approval Date: | | |  |
| SOP Prepared by: | | **Daniel S Karp** | | | | | | | |
| **WFCB COVID Committee, Adapted from CLSC SOP Task Force SOP Lab Template** | | | | | | | |
| SOP Reviewed and Approved by (name/signature): | | | | | **Daniel S Karp** | | | | |
| Department: | | **Wildlife, Fish, and Conservation Biology (WFCB)** | | | | | | | |
| Principal Investigator/ Laboratory Supervisor: | | **Daniel S. Karp** | | | | | Phone: | **530 219 9868** | | |
| Lab Manager/  Safety Coordinator: | | **Daniel S. Karp** | | | | | Phone: | **530 219 9868** | | |
| Emergency Contact(s): | | **Christine Crum** | | | | | Phone: | **530-219-8136** | | |
|  | |  | | | | | Phone: |  | | |
| Dept. Safety Officer | | **Dennis Cocherell** | | | | | Phone: | **925-963-1621** | | |
| Dept. WFCB CAO | | **Christine Crum** | | | | | Phone: | **530-219-8136** | | |
| Dept. WFCB Chair | | **Nann Fangue** | | | | | Phone: | **805-680-2481** | | |
| Location(s) covered by SOP: | Building: | | | **Academic Surge** | | | Lab Phone: | **NA** | | |
|  | Room#(s): | | | **1352** | | | | | | |
|  | Building: | | |  | | | Phone: |  | | |
|  | Room#(s): | | |  | | | | | | |
| Designated Areas: | | |  | | | | | | |

1. **HAZARD OVERVIEW**

COVID-19 is Coronavirus (COVID-19) an upper respiratory illness with fever, cough, and difficulty breathing that results from an infection with a novel coronavirus called SARS-CoV-2. Information from the World Health Organization (WHO) and the Center of Disease Control and Prevention (CDC) states that the virus is transmitted via respiratory droplets, produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. Spread is more likely when people are in close contact with one another (within about 6 feet). Evidence also suggests that transmission of the virus may occur through contact with contaminated surfaces. Transmission of the virus via asymptomatic carriers has also been documented.

1. **INHERENT RISK FROM HAZARD, SIGNS/SYMPTOMS OF EXPOSURE**

Currently, there is no laboratory in the Dept. of WFCB that works directly with SARS-CoV-2. The aim of this SOP is to minimize risk of exposure to COVID-19 through community transmission. The focus will be on maintenance of disinfecting standards and social distancing for working during Phases 1-3 of the *Guidelines for UC Davis Research Ramp-Up/Ramp-Down* (23 April 2020) <https://research.ucdavis.edu/guidelines-for-uc-davis-research-ramp-up-ramp-down/>. This SOP is to be followed when carrying out any essential work during COVID-19 Ramp-up/down Phases.

**SYMPTOMS OF EXPOSURE**

The CDC describes [symptoms of exposure](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) as:

**Older adults and people who have severe underlying medical conditions** like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness.

People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness.

These symptoms may appear 2-14 days after exposure to the virus:

* Fever
* Cough
* Shortness of breath or difficulty breathing
* Chills
* Repeated shaking with chills
* Muscle pain
* Headache
* Sore throat
* New loss of taste or smell

**WHEN TO SEEK MEDICAL ATTENTION**

If you have any of these emergency warning signs\* for COVID-19 get medical attention immediately:

* Trouble breathing
* Persistent pain or pressure in the chest
* New confusion or inability to arouse
* Bluish lips or face

\*This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning to you.

**Call 911 if you have a medical emergency:** Notify the operator that you have, or think you might have, COVID-19. If possible, put on a cloth face covering before medical help arrives.

1. **ENGINEERING/VENTILATION CONTROLS**

Use available engineering /ventilation controls to keep exposure to COVID-19 as low as possible. If possible, increase ventilation rates. If possible, increase the percentage of outdoor air that circulates in to the system.

Social distancing is the practice of maintaining a distance of ~6ft from others when possible and avoid large gatherings. Maintain a distance of at least 6 feet between people unless PPE appropriate for the context is used. Laboratories and facilities with limited space that cannot ensure that personnel will meet these public health requirements must remain off-limits during Phase 1.

Physical space between employees will be increased to a minimum of 6ft at the worksite. Some locations may choose to reconfigure interior space to relieve bottlenecks and maintain space between research personnel. If necessary, operations will be downsized, and/or shift schedules implemented to adhere to social distancing requirements.

Do not gather in groups of size more than what is limited by the county officials. Research ramp-up should not result in crowded spaces or mass gatherings.

1. **ADMINISTRATIVE CONTROLS**

The following elements are required:

* 1. This laboratory’s activities have completed a two-step approval process:

a.) First, approved by the Dept. of WFCB COVID Research Committee;

b.) Second, the Dept. of WFCB COVID Research Committee will then file the plan with the Vice Chancellor’s Office of Research (VCR) for final approval by VCR;

* 1. Temporary Remote Work Agreements are filed with PI and CAO;
  2. Complete training on WFCB Injury Illness and Injury Prevention Program (IIPP);
  3. Complete training on Addendum to WFCB IIPP: Working During a Pandemic;
  4. Complete training on WFCB Emergency Action Plan;
  5. Demonstrate competency to perform essential work procedures to the Principal Investigator (PI), Laboratory Supervisor, laboratory-specific Safety Officer, and/or trainer;
  6. Be familiar with location of disinfecting products and PPE
  7. Implement good workplace (office, laboratory) practices, including good workspace hygiene;
  8. Perform routine environmental cleaning and disinfection as described in this SOP Section 9;
  9. Inspect all equipment prior to use;
  10. Do not deviate from the instructions described in this SOP without prior discussion and approval from the PI and/or Supervisor;
  11. Notify the PI or Supervisor of any exposure to COVID-19, accidents, incidents, near-misses, or upset condition;
  12. Abide by laboratory-specific working alone SOP, if applicable;
  13. Abide by Yolo County COVID-19 guidelines.

**ADDITIONAL ADMINISTRATIVE CONTROLS**

Employees will adhere to the [Guidelines for Ramping Up On-Campus Research](https://research.ucdavis.edu/guidelines-for-uc-davis-research-ramp-up-ramp-down/)(23 April 2020) document, and the [Phase 1x: Addendum](https://research.ucdavis.edu/wp-content/uploads/RR1X-5-7.pdf) (07May2020).

During COVID Ramp-up/Ramp Down Phases the following restrictions are in place.

|  |
| --- |
| **Restrictions on the following procedures/activities are in place:** |
| Personnel will not come into the lab to conduct any research. The lab will only be accessed for (1) obtaining critical field equipment and/or (2) conducting quick (<30 min) analyses or uploading/downloading data from the lab computer. Work in the lab will be allowed to resume during Phase 2 and 3 (at limited capacity and following all research directives regarding social distancing). |
| **Restrictions on the following work locations are in place:** |
| N/A |
| **Restrictions on the following work equipment are in place:** |
| N/A |
| **Restrictions on the following unattended operations are in place:** |
| N/A |

**See Section 9 “Detailed Procedures – Laboratory Specific Protocol During COVID-19 Pandemic”**

1. **PERSONAL PROTECTIVE EQUIPMENT**

Laboratory attire, at a minimum, long pants (covered legs) and closed toe/closed heel shoes (covered feet) are required to enter a laboratory or technical area where hazardous chemicals are used or stored.

In addition to the minimum attire required upon entering a laboratory, the following PPE is required for all work during COVID-19 Ramp-up Phases:

1. Nose/Mouth Protection: Face coverings are required as per Yolo County Health Order issued 24 April 2020 found here: <https://www.yolocounty.org/home/showdocument?id=64126>
   1. It is required to cover your mouth and nose with a face cover when around others and when moving through common spaces.

**About Facial Coverings:** *From* [*https://hr.ucdavis.edu/coronavirus*](https://hr.ucdavis.edu/coronavirus) *(Accessed 24 APR 2020)*

A facial covering is a handmade cloth covering, bandana, or scarf that covers the mouth and nose.

* Cloth facial coverings should:  
         - fit snugly but comfortably against the side of the face  
         - be secured with ties or ear loops  
         - include multiple layers of fabric  
         - allow for breathing without restriction  
         - be able to be laundered and machine dried without damage or change to shape
* Facial coverings can be used in public settings where other social distancing measures are difficult to maintain, such as grocery stores and pharmacies.
* Facial coverings are an additional, voluntary measure that help prevent people who are infected and have no symptoms from unknowingly spreading the virus.
* **There is no evidence that wearing a face covering will prevent you from getting COVID-19.**
* Facial coverings DO NOT replace social distancing.
* Facial coverings DO NOT replace the stay at home order.
* Scientific evidence shows that the BEST way to protect yourself is by staying at home.
* The public does NOT need to wear a surgical mask or N95 respirator unless told to by a healthcare professional.
* Learn how to make or wear a facial covering from the CDC, [click here](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html)

1. Hand Protection:
   1. Gloves (latex, nitrile, or rubber) are required for disinfecting. Gloves are required for other procedures in our lab. Refer to chemical or procedure specific SOPs for information when working with hazardous materials not covered by this SOP.
   2. PPE and hygiene practices should adhere to the directions found on the bottle of disinfectant.
2. **REPORTING PROCEDURES**

**If you are sick:**

1. **CAMPUS REPORTINC REQUIREMENTS**

**Notify ASAP:**

<https://www.ucdavis.edu/coronavirus/news/letter-provost-reporting-positive-tests-covid-19>

The campus has an obligation to review, verify and report when this happens. When you have personal knowledge of testing positive yourself for COVID-19, or an immediate family member testing positive, or know of a colleague who has tested positive, please adhere to the campus reporting protocol and immediately notify:

**For Main Campus Employees and Staff**

**1. Campus Privacy Office**, [**privacy@ucdavis.edu**](mailto:privacy@ucdavis.edu)

**2. For faculty and staff,**Occupational Health, [**occupationalhealth@ucdavis.edu**](mailto:occupationalhealth@ucdavis.edu) or 530-752-6051

**3. For students,**Mary Macias at Student Health, [**memacias@ucdavis.edu**](mailto:memacias@ucdavis.edu) or 530-752-6559

**For Health Campus Faculty, Students, Employees and Staff**

**Kirsten C. Stevenson,**interim deputy chief human resources officer,[**deputychro@ucdavis.edu**](mailto:deputychro@ucdavis.edu)

1. **PROTOCOL WHEN SICK**

The following procedures must be adhered to when sick, as [recommended by the CDC](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html).

Notify your supervisor immediately. Follow Campus Reporting Requirements listed above in Section 6.

Stay home except to get medical care.

* **Stay home.** Most people with COVID-19 have mild illness and can recover at home without medical care. Do not leave your home, except to get medical care. Do not visit public areas.
* **Take care of yourself.** Get rest and stay hydrated.
* **Stay in touch with your doctor.** Call before you get medical care. Be sure to get care if you have trouble breathing, or have any other [emergency warning signs](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html#warning-signs), or if you think it is an [emergency](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html#emergency).
* **Avoid public transportation**, ride-sharing, or taxis.

Separate yourself from other people.

* As much as possible, stay in a specific room and away from other people and pets in your home. Also, you should use a separate bathroom, if available. If you need to be around other people or animals in or outside of the home, wear a cloth face covering.

Monitor your symptoms.

* **Common symptoms of COLVID-19 include fever, cough or other symptoms**. Trouble breathing is a more serious symptom that means you should get medical attention.
* **Follow care instructions from your healthcare provider and local health department**. Your local health authorities may give instructions on checking your symptoms and reporting information.

When to Seek Medical Attention

* If you have any of these **emergency warning signs\*** for COVID-19 get **medical attention immediately:**
* Trouble breathing
* Persistent pain or pressure in the chest
* New confusion or inability to arouse
* Bluish lips or face
* \*This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning to you.

**Call 911 if you have a medical emergency**: Notify the operator that you have, or think you might have, COVID-19. If possible, put on a cloth face covering before medical help arrives.

**Refer to Section 9 in this SOP for detailed procedures on how to clean and disinfect routinely.**

1. **WASTE MANAGEMENT AND DECONTAMINATION**

**WASTE MANAGEMENT**

Cover your cough or sneeze with a tissue, then throw the tissue in the trash. Soiled PPE, paper towels, disinfecting wipes can be discarded in the trash.

Gloves and any other disposable PPE used for cleaning and disinfecting should be removed and disposed of after cleaning; [wash hands](https://www.cdc.gov/handwashing/when-how-handwashing.html) immediately after removal of gloves and PPE with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not available. If a disposable gown was not worn, work uniforms/clothes worn during cleaning and disinfecting should be laundered afterwards using the warmest appropriate water setting and dry items completely. Wash hands after handling laundry.

**DECONTAMINATION FOR SICK STAFF MEMBER**

**Contact UC Davis Custodial Services for clean-up and disinfection services: (530) 752-1655**

In addition, the [CDC recommends](https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html) the following if COVID-19 is confirmed in a staff member:

* Close off areas used by the person who is sick.
* Open outside doors and windows to increase air circulation in the areas.
* Wait up to 24 hours or as long as possible before you clean or disinfect to allow respiratory droplets to settle before cleaning and disinfecting.
* Clean and disinfect all areas used by the person who is sick, such as offices, bathrooms, and common areas.
* If more than 7 days have passed since the person who is sick visited or used the facility, additional cleaning and disinfection is not necessary.
* Continue routine cleaning and disinfection.

**Refer to Section 9 in this SOP for detailed procedures on how to clean and disinfect routinely.**

1. **DETAILED PROCEDURES – LABORATORY SPECIFIC PROTOCOL DURING COVID-19 PANDEMIC**
2. **SCOPE**

Karp lab Critical and Essential laboratory research activities will adhere the following protocol.

Only personnel with a need to access physical locations to advance research should be on-site. Even those personnel should minimize time on campus. All others should remain sheltered-in-place and/or off-site to help maintain physical distancing. Meetings should be conducted remotely.

Checklist for resuming operations:

X Operations plan is approved and filed with Dept. WFCB Chair, CAO, and Vice Chancellor’s Office of Research for every project and every phase transition;

X Complete the COVID-19 Risk Assessment;

X Completed training on relevant documents and SOPs listed below in “Safe Work Practices”

**SAFE WORK PRACTICES**

|  |
| --- |
| * WFCB Injury and Illness Prevention Program |
| * WFCB Emergency Action Plan |
| * Animal Care and Use 101 |
| * UC Safe Driver Awareness Training |
| * Heat Illness and Prevention Training |
| * Working Alone in the Laboratory Standard Operating Procedure (SOP) |
| * Disinfecting Chemicals Standard Operating Procedure (SOPs) and Safety Data Sheets (SDS) |
| * UC Davis SafetyNet #13: Guidelines for Chemical Spill Control |
| * UC Davis SafetyNet #8: Chemical Waste Disposal Guidelines |
| * UC Davis SafetyNet #5: Eye and Face Safety Protection for Laboratory Workers |
| * UC Davis SafetyNet #52: Emergency Medical Care |
| * UC Davis SafetyNet #523: Flammable liquid storage |

* Cover your mouth and nose with a face cover when around others and when moving through common spaces. Please follow the Human Resources guidance regarding face coverings.
* Wash your hands often with soap and water for at least 20 seconds. Routinely and regularly disinfect common contact sites (keyboards, door handles, multi-user equipment, etc.).

1. **SCHEDULE**
2. How many individuals can be in a space at any given time?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **# individuals during** | | |
| **Building** | **Room** | **Area** | **Phase 1** | **Phase 2** | **Phase 3** |
| Academic surge | 1352 | Karp lab | 1 | 1 | 2 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |
| --- |
| Describe in detail below a clear process to ensure work shifts do not accidentally overlap: |
| No work is allowed is currently allowed in Academic Surge 1352. If a lab member needs to visit the lab to either obtain field equipment or access the field computer, then the lab member will (1) send an email to all lab members notifying them that they intend to access the facility and (2) log their intended visit time on the lab calendar. Only one person will be allowed access per day. Work in the lab will be allowed to resume during Phase 2 and 3 (at limited capacity and following all research directives regarding social distancing). |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of Host of shared calendar** | **Email of Host** | **Calendar App** | **Name of calendar** |
| Daniel Karp | [dkarp@ucdavis.edu](mailto:dkarp@ucdavis.edu) | Google Calendar | Karp Lab Calendar |
|  |  |  |  |

1. Establish a **check-in plan** – Every PI should have a check-in plan for all students and employees when they are either working on campus (especially if alone) or in the field. Names and contact information for all students and staff should be complied and readily available.

**Check in plan:** All personnel using the lab will email the entire lab with their intended day/time of accessing the lab. In addition, the person will text Daniel Karp (530 219 9868) before and after entering the lab. If any research occurs in the field, personnel will text Daniel Karp both prior to leaving for the field and upon returning (that same day).

1. **DISINFECTION SUPPLIES**

|  |  |
| --- | --- |
| **Room: 1352** | |
| **Supply** | **Location** |
| gloves | Large cabinets near wall |
| face masks | Large cabinets near wall |
| soap | Next to and under sinks |
| disinfectant spray | Next to sink. More can be prepared using ethanol in flammables cabinet or bleach under the sink. |
| Hand sanitizer | On lab bench |
| paper towels | Under sink. |
| first aid kits | Above computer. |

1. **ROUTINE DECONTAMINATION PROCEDURES**

Routine cleaning and disinfecting are an important part of reducing the risk of exposure to COVID-19. Normal routine cleaning with soap and water alone can reduce risk of exposure and is a necessary step before you disinfect dirty surfaces.

Describe in detail procedures to clean/wipe down shared items, equipment, cars, and work surfaces before and after usage.

**DAILY PRACTICES**

* **Wash your hands often** with soap and water for 20 seconds.
  + Always wash immediately after removing gloves and after contact with a person who is sick.
  + Hand sanitizer: If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.
* **Additional key times to wash hands** include:
  + After blowing one’s nose, coughing, or sneezing.
  + After using the restroom.
  + Before eating or preparing food.
  + After contact with animals or pets.
  + Before and after providing routine care for another person who needs assistance (e.g., a child).
* Avoid touching your eyes, nose, and mouth with unwashed hands.
* Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow. Throw used tissues in the trash and immediately wash hands with soap and water for at least 20 seconds. If soap and water are not available, use hand sanitizer containing at least 60% alcohol. Learn more about [coughing and sneezing](http://www.cdc.gov/healthywater/hygiene/etiquette/coughing_sneezing.html)etiquette on the CDC website.
* Clean AND disinfect frequently touched objects and surfaces such as workstations, keyboards, telephones, handrails, and doorknobs. Dirty surfaces can be cleaned with soap and water prior to disinfection. To disinfect, use [products that meet EPA’s criteria for use against SARS-CoV-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2), the cause of COVID-19, and are appropriate for the surface.
* Avoid using other employees’ phones, desks, offices, or other work tools and equipment, when possible. If necessary, clean and disinfect them before and after use.

Adhere to the following guidelines when cleaning and disinfecting.

**BEFORE YOU DISINFECT**

* Wash your hands with soap and water for 20 seconds.
* Wear disposable gloves (and gown if necessary) to clean and disinfect.
* Wear gloves when handling trash.
* Additional personal protective equipment (PPE) might be required based on the cleaning/disinfectant products being used and whether there is a risk of splash.
* Gloves and gowns should be removed carefully to avoid contamination of the wearer and the surrounding area.

**WHEN TO DISINFECT**

* At the beginning of a shift:
  + Wash your hands with soap and water for 20 seconds. Use hand sanitizer with at least 60% alcohol if soap and water are not available.
  + Inspect workspace and equipment to ensure they are clean before handling. If they appear dirty, don appropriate PPE and clean and disinfect items and the area you will be using.
* At the completion of a shift:
  + Wash your hands with soap and water for 20 seconds. Use hand sanitizer with at least 60% alcohol if soap and water are not available.
  + Cleaned with soap and water if dirty, then disinfected items and areas used.

**DISINFECTING AND CLEANING SCHEDULE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KarpLab 1352 Routine Schedule for Cleaning and Disinfecting** | | | | | |
| **AREAS** | **AFTER EACH USE** | **DAILY (AT THE END OF THE DAY)** | **WEEKLY** | **MONTHLY** | **COMMENTS** |
| Door, cabinet handles, light switches |  | Clean, Disinfect |  |  | Spray and wipe; occurs once per day or after use. |
| Lab bench, chairs | Clean | Clean, Disinfect |  |  | Spray and wipe; occurs once per day or after use. |
| Sinks & faucets |  | Clean, Disinfect |  |  | Spray, ok to let air dry; occurs once per day or after use. |
| Floors |  |  | Clean |  | Sweep, then damp mop w/ a floor cleaner/disinfectant |
| Computers/keyboards | Clean, Disinfect |  |  |  | Sanitizing wipes, do not use spray |
| Phone receiver |  | Clean |  |  | Sanitizing wipes, do not use spray; occurs once per day or after use. |
| Communal equipment (keys, spray bottles, containers, etc.) | Clean, Disinfect |  |  | Clean | Spray or wipe; occurs once per day or after use. |

**HOW TO DISINFECT**

|  |
| --- |
| The following disinfectants will be used:   * Complete training on the following Disinfecting Chemicals SOPs prior to disinfecting * Ethanol solution (70%) * Bleach solution |

* Don appropriate PPE. Refer to manufacturer’s Safety Data Sheets PPE requirements and necessary practices.
* Clean surfaces using soap and water.
* Practice routine cleaning of frequently touched surfaces.
* Spray or wipe hard surfaces and leave wet for the period of time indicated on the disinfectant manufacturer’s instructions. Follow the manufacturer’s instructions for concentration, application method, and contact time for all cleaning and disinfection products.
* Clean and disinfect tables, lab benches, sinks and faucet handles, doorknobs, light switches, countertops, handles, desks, chairs, phones, keyboards.

**AFTER DISINFECTING**

* Remove gloves and other PPE and discard disposable items, wipes, and soiled paper towels in the trash.
* Wash your hands with soap and water for 20 seconds. Use hand sanitizer with at least 60% alcohol if soap and water are not available.

**DISINFECTING A VEHICLE**

At a minimum, clean and disinfect commonly touched surfaces in the vehicle at the beginning and end of each shift. Ensure that cleaning and disinfection procedures are followed consistently and correctly, including the provision of adequate ventilation when chemicals are in use. Doors and windows should remain open when cleaning the vehicle. When cleaning and disinfecting, individuals should wear disposable gloves compatible with the products being used as well as any other PPE required according to the product manufacturer’s instructions. Use of a disposable gown is also recommended, if available.

* For hard non-porous surfaces within the interior of the vehicle such as hard seats, arm rests, door handles, seat belt buckles, light and air controls, doors and windows, and grab handles, clean with detergent or soap and water if the surfaces are visibly dirty, prior to disinfectant application. For disinfection of hard, non-porous surfaces, appropriate disinfectants include:
  + [EPA’s Registered Antimicrobial Products for Use Against Novel Coronavirus SARS-CoV-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2), the virus that causes COVID-19. Follow the manufacturer’s instructions for concentration, application method, and contact time for all cleaning and disinfection products.
  + [Diluted household bleach solutions](https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html) prepared according to the manufacturer’s label for disinfection, if appropriate for the surface. Follow manufacturer’s instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser.
  + Alcohol solutions with at least 70% alcohol.
* For soft or porous surfaces such as fabric seats, remove any visible contamination, if present, and clean with appropriate cleaners indicated for use on these surfaces. After cleaning, use [products that are EPA-approved for use against the virus that causes COVID-19](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2) and that are suitable for porous surfaces.
* For frequently touched electronic surfaces, such as tablets or touch screens used in the vehicle, remove visible dirt, then disinfect following the manufacturer’s instructions for all cleaning and disinfection products. If no manufacturer guidance is available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect.

Gloves and any other disposable PPE used for cleaning and disinfecting the vehicle should be removed and disposed of after cleaning; [wash hands](https://www.cdc.gov/handwashing/when-how-handwashing.html) immediately after removal of gloves and PPE with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not available. If a disposable gown was not worn, work uniforms/clothes worn during cleaning and disinfecting should be laundered afterwards using the warmest appropriate water setting and dry items completely. Wash hands after handling laundry.

1. **PROCESS TO MAINTAIN ACCESS AND ACTIVITY LOGS TO TRACE CONTACT SHOULD SOMEONE BECOME SICK WITH CORONAVIRUS**

Describe in detail a process to maintain access and activity logs in order to trace contact should someone become sick with coronavirus.

|  |
| --- |
| The Google Calendar of the KarpLab will serve as an access and activity log. The schedule records times when people are working in the same areas and the activity.  Personnel will report to their Daniel Karp immediately when they feel sick.  Sick personnel, or those living with sick family/housemates, are required to stay home.  Sick personnel should not return to work until they have met the [criteria to discontinue home isolation](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html). |

**TEMPLATE REVISION HISTORY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date Approved** | **Author** | **Revision Notes:** |
| 1.5 | 12/6/2017 | Chris Jakober | Reformatted hand protection PPE language, added “Equipment” into SOP category type checkbox. |

**LAB-SPECIFIC REVISION HISTORY**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date Approved** | **Author** | **Revision Notes:** |
| 1 |  | Irene Engilis | New |

**Resuming Operations During COVID-19 Phase 1-3: KarpLab 1352**

**STANDARD OPERATING PROCEDURE (SOP)**

**Training Documentation**

Sign here to verify you read this SOP, understand its contents, and agree to comply with its requirements.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name/Phone Number** | **Signature** | **Date** | **Emergency Contact/**  **Phone Number** |
| Daniel Karp/ 530 219 9868 | A necklace on a black background  Description automatically generated | 5/15/19 | Rachael Bay/ 530 304 8231 |
| Daniel Paredes/ 530 760 8958 |  | 5/22/20 | Gema Méndez/ 530 219 3722 |
| Naresh Devarajan / 805 637 7897 |  | 5/22/20 | Sarayu Krishnamoorthy / 805 724 9535 |
| Alison Ke / 215 582 4848 | A picture containing drawing  Description automatically generated | 5/22/2020 | Alison Ke / 215 582 4848 |
| Katherine Lauck/540 923 0228 |  | 5/23/20 | Elizabeth Lauck/ 540 817 0607 |
| Elissa Olimpi / 412.977.9822 | Macintosh HD:Users:wawa:Desktop:Screen Shot 2018-09-06 at 11.39.11 AM.png | 5.24.20 | Jeff Nelson / 408.489.2805 |
| Katia Goldberg / 443 949 4675 |  | 5/23/20 | Michael Goldberg 4439494656 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |