

Risk Assessment Worksheet		1. Project/Incident/Work Activity: Resource Crew Activities COVID-19	2. Location: Eldorado National Forest
3. Specific Objective: COVID-19 prevention during resource crew activities		4. Name and Title of Preparer: Matt Brown Botanist	5. Date Prepared: Monday, May 4, 2020
6. Risk Decision Authority: The risk decision authority block should be signed after the worksheet is completed. Use the Risk Decision Authority matrix to determine the authorization required to sign in block 6.			
Signature:		Title: Acting Forest Supervisor	Date:

Identify Hazards		Assess Hazards			Risk Control Options	Residual Risk			Decision	Implement
7. Task	8. Hazard	9. Hazard Probability	10. Severity / Consequence	11. RAC	12. Identify hazard mitigations & abatement measures (press [alt + enter] to add a line)	13. Hazard Probability	14. Severity / Consequence	15. RAC	16. Task Necessary?	17. Hazard Control Assigned to:

ITEMS HERE ARE APPLICABLE TO THIS RA AND SHOULD BE CONSIDERED PART OF CONTROL FOR RESPECTIVE TASKS/HAZARDS. Reference to R5 eBinder documents necessitate opening/reviewing latest guidance found there both during initial review of this RA and subsequent reviews such as during a tailgate safety session. Additionally, cloth face coverings, cleaning/disinfecting hands/surfaces, and some PPE are addressed. Use the following as more detailed controls for individual tasks/hazards:

- **Social Distancing and Cloth Face Coverings.** Employees are directed to maintain at least six feet social distance from other persons at all times. If social distance cannot be maintained, cloth face coverings are required to be worn by employees. (They will also be required when returning to work “at all times when in Forest Service buildings and while visiting public spaces.”) They reduce exposure to both the wearer and others within the social distance, but they are not respirators and are not certified to protect wearers to any standard. Some particles are captured by cloth face coverings but widely vary and do not to the extent as NIOSH-approved respirators. Particles stopped by coverings will normally be captured in the breathing zone of the wearer, so if someone coughs or sneezes when within the social distance or if within social distance for extended periods (see Response Action Process in the eBinder), the particles captured by the covering will continue to be inhaled after initial exposure by other person(s). In those cases, replace cloth face coverings quickly after these exposures
- **Approved Chemicals/Materials. Surfaces** – Use surface disinfectants on EPA register COVID-19 list. Materials need to be wet for durations according as listed. Use according to manufacturer directions. Do not use expired products. **Hands** – Clean hands by rinsing with hot or cold water, then thoroughly wash with soap and water for at least 20 seconds. If unable to wash with soap and water, follow CDC recommendation with hand sanitizers. Currently the CDC recommends alcohol-based products with at least 60% ethanol or 70% isopropanol. Materials on the EPA registered list are for surfaces only. Hand sanitizers are regulated by the Food and Drug Administration. The CDC shared these recommendation for household bleach. Some bleaches have lower sodium hypochlorite (NaClO) concentration, so confirm at least 4.8% NaClO in undiluted household bleach using the following:
Per CDC diluted household bleach solutions (at least 1000 ppm sodium hypochlorite) can be used if appropriate for the surface. Prepare a bleach solution by mixing:
 - 5 tablespoons (1/3rd cup) bleach per gallon of water or
 - 4 teaspoons bleach per quart of water

Bleach solutions will be effective for disinfection up to 24 hours.

- **Cleaning/Disinfecting Surfaces.** As noted above, use approved materials to clean and disinfect work areas. This may include GOVs. If you are able, review the USFS video on cleaning vehicles that has applicability for other work areas surfaces. See link at right from eBinder.
- Gloves. Reusable Gloves** – If you use reusable gloves, properly clean them after use and store them so they are properly protected. Always check for damage before use. **Disposable Gloves** – Nitrile gloves are preferred over other glove such as latex for potential allergies. Wear gloves that fit your hands. If while donning gloves, they become damaged, ensure to don other glove(s). It is important also to doff (remove) gloves properly so contamination outside surfaces do not contact one’s skin. Always wash hands after removing gloves. Below are instructions to use when doffing gloves:

****Never mix household bleach with ammonia or any other cleansers****

- eBinder documents/resources referenced:
- [Cleaning Vehicles to Protect Against COVID Video](#)
 - [Employee Self-Assessment Questionnaire](#)
 - [Fleet Operational Guidance](#)
 - [Response Action Process \(flowchart\)](#)
 - [Workplace Cleaning and Disinfecting Brief](#)

How to Remove Gloves

CDC Guidance

To protect yourself, use the following steps to take off gloves



Any ESSENTIAL field or office work where recommended social distance of 6-feet or more is not attainable	Asymptomatic carrier of COVID-19 transmitting virus to people within close proximity	Possible	Catastrophic	Extremely High	Employees should make every effort to maintain 6-ft social distance as referenced elsewhere in this RA. If this is absolutely unattainable, then employees are required to wear cloth face covering. See first page for additional face-covering RA requirements.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
General field work	Exposure to employees infected with COVID-19	Possible	Catastrophic	Extremely High	To maintain health and reduce risks of exposure, maintain crew staffing as an individual unit. Any variation in staffing configuration will require supervisor approval. Maintain social distancing at all times and when unable to, wear cloth face covering. See social distancing and cloth face covering information on first page of RA. To maintain spacing, consider using multiple vehicles to further limit risk of transmission.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
General field work	COVID-19 transmission	Unlikely	Catastrophic	High	Hand wash station will be kept in vehicles when conducting field work. Wash station will include enough water, soap, and paper towels for all crew members to wash hands throughout the day.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Field Emergency Procedures (Refers to injury/illness of a coworker or incidental response to public injury/illness - NOT dispatched EMS Assists)	Exposure to patients infected with COVID-19	Possible	Catastrophic	Extremely High	Carry full bloodborne pathogens (BBP) control kits in every vehicle. Follow established protocols for emergency field evacuation and BBP control. From a 6' or further distance, ask the patient if they have experienced any of the symptoms of COVID-19 or been in close contact with anyone in the past 14 days who has had symptoms. • If they say no, use normal precautionary BBP and sanitary measures based on the nature of the illness/injury. Use a cloth face covering or other mask if available. • If they say yes, use extra BBP and sanitary measures, including face shield/eye protection, medical gown, and mask. See additional social distancing and cloth face covering requirements on first page of RA. During the COVID-19 pandemic, it is possible that emergency medical services will be delayed. Extra precautions should be considered to minimize risk of work-related activities that may lead to injury and the need for emergency rescue personnel.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Field-Going Employee Operations	Human-to-human contact and exposure to COVID-19	Possible	Catastrophic	Extremely High	Maximize the use of telework or altered work schedules. Practice appropriate personal protective measures (hand washing techniques, respiratory etiquette, etc.). Be familiar with signs and symptoms of COVID-19. Employees that need to be at work to perform essential duties that cannot be performed remotely should continue to implement social distancing (stay more than 6-feet away). Clean and/or disinfect all "high touch" surfaces often. See Workplace Cleaning and Disinfection Brief in the eBinder. Limit the number of personnel to no more than 10 in close proximity. Perform normal duties and responsibilities and provide the same level of support, availability, and accessibility to customers, co-workers, and managers as if working at their official duty location. Properly clean and disinfect equipment used (GOV, tools, materials, etc.). Follow provisions of Workplace Cleaning and Disinfection Brief . Also follow Fleet Operational Guidance "Cleaning and Disinfecting Equipment/Vehicles" section and review Cleaning Vehicles to Protect Against COVID Video in the eBinder. Reassess operations as needed.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees

General Cleaning & Disinfecting	Exposure to COVID-19 on surfaces	Possible	Catastrophic	Extremely High	<p>Wear disposable gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. Eye protection should also be considered when there is a chance of chemicals splashing.</p> <p>If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection. Clean according to <u>Workplace Cleaning and Disinfecting Brief</u> in eBinder.</p> <p>Clean and disinfect frequently touched surfaces.</p>	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
General Office Work	Human-to-human contact and exposure to COVID-19	Possible	Catastrophic	Extremely High	<p>Maximize the use of telework or altered work schedules.</p> <p>Practice appropriate personal protective measures (hand washing techniques, respiratory etiquette, etc.).</p> <p>Be familiar with signs and symptoms of COVID-19.</p> <p>Implement social distancing (stay more than 6 feet away). Wear cloth face coverings all times as directed when at the office or visiting in public spaces.</p> <p>Clean and/or disinfect all "high touch" surfaces often.</p> <p>Limit the number of personnel to no more than 10 in close proximity.</p> <p>Limit access and/or provide customer service and staffing telephonically for information about Forest operations. Schedule appointments to limit the number of people in close proximity.</p>	Rare	Catastrophic	Moderate		Supervisors and Employees
General Office Work Cont	maintaining social distancing	Unlikely	Catastrophic	High	<p>Maximize the use of telework and/or altered work schedules to reduce potential for exposure. Workstations will be arranged to maintain 6-ft separation from all employees while working in the office. If it is absolutely necessary for staff to be in the office, there should be no more than 4 individuals in the botany offices at one time. Employees are to wear cloth face coverings at all times when in USFS buildings. See additional cloth face covering requirements at beginning of RA.</p>	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Laundering Clothes/PPE	Exposure to surfaces infected with COVID-19	Unlikely	Catastrophic	High	<p>Take precautions to prevent possible transmission when taking soiled clothing home to wash by containing the clothing in a heavy-duty, disposable plastic bag at the worksite. Staff members should only remove the clothing from the bag when putting it into the washing machine at home.</p> <p>Follow these protocols provided by the CDC (these protocols also apply when washing at a public facility):</p> <ul style="list-style-type: none"> • Wear disposable gloves. • Do not shake dirty laundry. • Launder items according to the manufacturer's instructions, using the warmest appropriate water setting and drying items completely (laundry from a person who is ill can be washed with other items). • Clean and disinfect all surrounding surfaces (including clothes hampers) using the same guidance provided for cleaning and disinfecting surfaces. • Wash hands with soap and water immediately after removing the gloves. 	Rare	Catastrophic	Moderate	YES	Supervisors and Employees

Reporting for Daily Duties	Exposure to Employees infected with COVID-19	Possible	Catastrophic	Extremely High	<p>People with these symptoms may have COVID-19:</p> <ul style="list-style-type: none"> •Cough •Shortness of breath or difficulty breathing •Fever (100.4F or higher) •Chills •Muscle pain •Sore throat •New loss of taste or smell <p>If someone is showing any of these signs, CDC recommends to seek emergency medical care immediately</p> <ul style="list-style-type: none"> •Trouble breathing •Persistent pain or pressure in the chest •New confusion •Inability to wake or stay awake •Bluish lips or face <p>Employees MUST NOT report to work if sick.</p> <p>Follow the Employee Self-Assessment Questionnaire in the eBinder prior to coming to work. If indicated, contact your supervisor notifying that you cannot come to work. Provisions of the Response Action Process, also in the eBinder may also need to be followed. To reduce cross contamination between home and work, consider traveling to and from work in a separate set of clothes and changing immediately upon arrival and prior to leaving the workplace. Bring an extra set of work clothes in case of unplanned exposure.</p>	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Reporting for Daily Duties	Self-identified High-risk Employee Exposure to Persons Infected with COVID-19	Possible	Catastrophic	Extremely High	If employee self identifies as being in a high-risk category, notify local pandemic coordinator, recommend maximum telework and allow for use of Safety Leave per current USDA policy.	Rare	Catastrophic	Moderate	YES	Self-identified High-risk Employee Employees
Tool/Equipment Use	Exposure to surfaces infected with COVID-19	Unlikely	Catastrophic	High	<p>Each employee should be assigned their own tools & equipment for field use. If unable to assign individuals their own equipment, disinfect before transferring equipment. Consider labeling/markings assigned tools. Transport tools in your assigned vehicle. Disinfect tools and allow to air dry overnight. Food and cooking equipment/utensils should not be shared between field crew members. Do not share ice or water coolers. If camping overnight, each person should have their own tent, sleeping bag, and cooking equipment.</p>	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Trash Pick-up	Exposure to surfaces infected with COVID-19	Unlikely	Catastrophic	High	<p>Do not pick up trash or other possible contaminated waste unless you have the proper PPE and safety equipment. Wear nitrile gloves and gown if available. If gown is not available, wear coveralls or outer clothing layers that can be removed without being pulled over the head (zipper or buttons). Use "trash-picker" tools rather than your hands to grab garbage. If unable to clean up any items, document and notify your supervisor.</p>	Rare	Catastrophic	Moderate	NO	Supervisors and Employees

Vehicle Operations	Exposure to surfaces infected with COVID-19	Possible	Catastrophic	Extremely High	<p>Make sure each vehicle is stocked with a disinfectant (spray or wipes), nitrile gloves, and an alcohol-based hand sanitizer. Do not store alcohol-based sanitizers in vehicles for possible explosion/fires. Have a vehicle occupant log sheet for each use/trip so that if an asymptomatic passenger is later determined to have the COVID-19 virus the other passengers can be quarantined and the vehicle immediately receives a deep cleaning (en lieu of deep cleaning, may set vehicle aside without use for 7 days).</p> <p>If possible, go straight from personal vehicle to work vehicle without entering building. If you must enter building maintain social distance of 6 feet and wash hands upon entering and just prior to exiting.</p> <p>Reduce or eliminate the sharing of vehicles.</p> <p>Minimize touching surfaces outside the vehicle.</p> <p>While gassing up, use disposable nitrile glove(s). Throw away glove(s) after use. See task "Vehicle Operations (fueling)" and follow risk control options.</p> <p>Wash hands or use hand sanitizer after opening gates to parking areas.</p> <p>Disinfect the vehicle prior to first use and after anyone else has been allowed entry.</p>	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Vehicle Operations (cleaning prior to and after operations)	Contact with infected surfaces/air particles	Possible	Catastrophic	Extremely High	Follow Fleet COVID-19 Cleaning and Disinfecting of Equipment/Vehicles guidelines in eBinder " R5 COVID-19 Fleet Operations Guidance "	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Vehicle Operations (fueling)	Contact with public infected surfaces	Possible	Catastrophic	Extremely High	Wear disposable nitrile or food service gloves when touching public surfaces pumping gas and touching other commonly touched surface areas, such as door handles, etc. If you do not have gloves, wash with soap and water or use hand sanitizers effective against COVID-19 prior to re-entering and touching surfaces in the vehicle. Utilize "pay at the pump" when available.	Rare	Catastrophic	Moderate		Supervisors and Employees
Vehicle Operations (pool vehicles)	Contact with infected surfaces. Unknown previous driver.	Possible	Catastrophic	Extremely High	Follow all mitigations listed in cleaning and disinfecting vehicles. In addition all vehicles that have been cleaned will have a piece of tape across the steering wheel with a name and date printed clearly as to who cleaned it. If there is no tape indicator present, then the vehicle will be treated as needing cleaning before operation. Clean vehicle after use and mark/tape as indicated.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
Vehicle Operations (traveling with multiple employees in one vehicle)	Exposure to Employees or surfaces infected with COVID-19	Possible	Catastrophic	Extremely High	<p>where possible, do not share vehicles. If not possible, limit the number of people in the vehicle so that all riders can remain a minimum of 6 ft apart. Note also that with little ventilation and smaller confined space, 6-ft spacing may not be sufficient to control exposures. Leave windows rolled down while staff are inside vehicle to reduce exposure. If 6-ft spacing is not possible, separate as far apart as possible. See direction about social distancing and cloth face covers at beginning of RA. Review and follow any updated information in the e-binder regarding vehicle use.</p> <p>Drivers should not use a face covering that reduces visibility, response time to sudden risks, or otherwise impedes safe driving procedures.</p> <p>Only have the operator drive the vehicle.</p> <p>It is recommended that the same people share the same vehicle to minimize exposure. Stay in the same seat for both directions.</p>	Rare	Catastrophic	Moderate	YES	Supervisors and Employees
General Office Work	Sharing computers, microscopes, dissecting tools	Unlikely	Catastrophic	High	Each employee will be assigned a computer for the season that should be only used by that employee. If using unassigned computer or other office resources (microscope, telephone, etc) disinfect before and after use.	Rare	Catastrophic	Moderate	YES	Supervisors and Employees