**DRAFT Infectious Disease Protocol – Carp and Buffalo Fieldwork 2020**

**Summary:**

In light of the global COVID-19 pandemic and subsequent restrictions to university travel and research, this document will describe measures that will be taken to arrest the spread of infectious disease while conducting fieldwork. Acknowledging that the primary defense against infectious virus spread is personal hygiene and social distancing, and secondary defenses include disinfection and material quarantine, this protocol has been developed to protect worker and public safety. Current university policy is that social distancing must be maintained while conducting fieldwork unless employees live together. Therefore, remote summer lodging will begin at Iowa Lakeside Laboratory at the end of April 2020, but we acknowledge that this does not preclude other safety protocols regarding infectious disease. The specific protocols below will describe how we will take individual and team measures to prevent the spread of infectious diseases while completing field-based research.

**Individual safety protocol:**

All personnel will take their body temperature daily to ensure they do not have a fever, and any personnel who has a fever or any other symptoms of COVID-19 will be required to leave Lakeside Laboratory housing and self-quarantine for 14 days, or until documentation is provided that the employee has been cleared to work by a medical professional. Every effort will be made to maintain social distancing while conducting fieldwork. For example, a crew of three on an electrofishing boat will maintain separation by permanently assigning employees to workspaces at the bow, amidships, and the helm. In addition, personal safety will be enforced through sanitization of workspaces and frequent hand washing and sanitization. After each cleaning and application of disinfectant, the employee must thoroughly wash their hands before moving on.

As an added precaution, nitrile gloves and masks that completely cover the nose and mouth will always be worn (e.g., on the boat, in the work vehicle, etc.). Communication will occur at six feet or greater distances, often by visual communication. Visual hand signals are already employed while conducting fieldwork as the sound of the boat motor and generator often drown out vocal communication.

**Equipment safety protocol:**

All necessary field equipment will be assigned to specific individuals, labeled with that user’s name/initials, and located in an employee-specific tote bin that contains field equipment. This includes fish handling gloves, earmuffs, life jackets, writing utensils, waders, etc. Field equipment will never be shared among workers. Any resupply to the tote bin will take place from a central store of supplies independently of other workers. During boat set up and packing (launching/landing), a minimum of six feet distance will be maintained between all workers. Further, workers will be required to maintain sanitation of their own equipment at the end of the workday and will be required to thoroughly wash their hands after packing field gear at the end of a shift.

In the laboratory, permanent workstations will be assigned and equipment (e.g., microscopes) will not be shared among employees. Employees will sanitize their own workstation with disinfectant at the beginning and end of every shift. At Iowa Lakeside Laboratory, employees will be isolated by walls and individual buildings. Gloves and masks will be mandatory personal protective equipment in the lab as well as the field. All efforts will be made to prevent cross-contamination of samples and equipment in the lab, and new shipments of materials and samples collected from the field and transferred between employees will undergo a four-day material quarantine period.

**Site safety protocol:**

No visitors, field days, public events, or extension work will be permitted in the field or at Iowa Lakeside Laboratory. Lodging is limited to only the employees conducting field research. Every effort must be made to practice social distancing, including in field housing. Each employee will be given their own bedroom. Although kitchens and bathrooms are shared, surface disinfectants will be available in each room (personal and common) and surfaces, dishes, utensils, etc. must be cleaned after every use. In the field and in the lab, personal workstations will be cleaned and disinfected at the end of the workday, and every effort will be made to complete tasks individually.

If one of the crew members becomes ill and was recently engaged in work, they are required to notify their direct supervisor and fieldwork will be suspended for at least one day. After 24 hours, all surfaces in the boat, truck, lab, and housing will be disinfected and cleaned, then left to air dry another 24 hours. The ill person may not return to work for 14 days or until documentation is provided that they have been cleared to work by a medical professional. Each portion of the carp and buffalo sampling protocol (field and lab) will be video recorded in segments to allow for remote training in the event an employee becomes ill and requires a temporary replacement.

**Travel safety protocol:**

The current ISU protocols for field research under the COVID-19 pandemic require individual transportation unless researchers live together. Employees will continue to wear face masks and nitrile gloves while riding together in a vehicle. Travel will be strictly limited to the field site (lake) and back to Iowa Lakeside Lab. All other travel in the university vehicle is prohibited, and all travel in a personal vehicle is strongly discouraged and permitted only for essential needs (e.g., prescription medications, groceries). Any out of state travel will require a 14-day isolation period until the employee can return to Iowa Lakeside Laboratory.

Even in the absence of the COVID-19 pandemic access to clean restrooms in the field can be problematic. This will be exacerbated by the fact that state and municipal restrooms will be closed to use. We are therefore limited to restrooms at Lakeside Laboratory and public restrooms at gas stations and truck stops. Disinfectant and paper towels will be provided to all employees in these instances before entering the restroom. Employees are required to wash their hands immediately after using the restroom and must put on a new pair of nitrile gloves before leaving the restroom. Once outside, all employees must remove and throw away those gloves, sanitize hands, and put new nitrile gloves on before re-entering the work vehicle. Filling up fuel in the ISU vehicle and ISU electrofishing boat will require similar protocols: before any part of the pump is touched, we will wipe surfaces with sanitizer or disinfectant, and nitrile gloves will be replaced after filling up fuel but before re-entering the vehicle.

Fieldwork is likely to require material transport of water samples from Iowa Lakeside Laboratory to the Limnology Laboratory in Bessey Hall on ISU’s Central Campus. We will limit this transport to once or twice monthly. Materials will be quarantined in cold storage for at least four days at Iowa Lakeside Laboratory, and additionally, treated as contaminated and quarantined in cold storage at ISU Central Campus.