



University of California, Davis Diving Safety Program

SPECIAL DIVING PROVISIONS DURING COVID19 PANDEMIC – April 2020

In compliance with CDC, UC, and State of California directives, and with consideration of the special potential exposure conditions posed by diving and associated auxiliary activity, **the UC Davis Diving Control Board on March 26, 2020 approved the following, *effective immediately*, for diving activity under UCD auspices:**

UCD DSP COVID19 ADVISORY #1:

- **NON-ESSENTIAL DIVING STANDDOWN**

UCD DSP COVID19 ADVISORY #2:

- **REQUIREMENTS FOR CONDITIONAL APPROVAL OF ESSENTIAL DIVING UNDER UCD AUSPICES DURING THE COVID PANDEMIC**

UCD DSP COVID19 ADVISORY #3:

- **MINIMUM COVID19 EXPOSURE CONTROL GUIDELINES TO BE EMPLOYED DURING ESSENTIAL UCD DIVING ACTIVITY DURING PANDEMIC-CAUSED STAND-DOWN**

- **Approved by the UC Davis Diving Control Board: March 26, 2020**

Jason S Herum, Diving Safety Officer, University of California, Davis

Dr. Robert B. Kimsey, DCB Chair, Professor of Entomology, UC Davis



University of California, Davis Diving Safety Program

UCD DSP COVID19 ADVISORY #1: NON-ESSENTIAL DIVING STANDDOWN

In consideration of the impending impacts of the COVID19 Pandemic on UCD scientific diving research and education projects, the UCD Diving Control Board is ordering a general stand-down of non-essential diving activity under University auspices until further notice. It is anticipated that as the Pandemic progresses, assuring exposure protection of UCD divers from COVID19 infection in the field will become increasingly difficult to impossible. As all divers know from experience, diving and its surrounding activities are messy, wet undertakings, commonly requiring close personal contact in a highly variable environment. For these reasons, the DCB finds diving activity (including skin diving work) is an area of special concern for COVID19 exposures.

In compliance with CDC, UC, and State of California directives, and with consideration of the special potential exposure conditions posed by diving and associated auxiliary activity, the DCB on March 26, 2020 approved the following, effective immediately for diving activity under UCD auspices:

TRAINING ACTIVITY:

- All practical, face-to-face UCD diver training is suspended until further notice. This covers all training or proficiency dives, pool swim and dive evaluations, open water skill evaluations, or dives conducted to extend depth ratings or specialized endorsements and lab courses and field schools.
- This suspension also covers emergency responder training such as the DAN DFA-Pro course.
- These suspensions are in effect at least until the end of the duration of the State of California Stay at Home Order or the duration of any superseding order, whichever is longest.
- Academic training such as SDQC lectures and eLearning may continue via remote learning platforms.
Participants should contact UCD DSO Jason Herum for more information.
- Provisions will be developed to extend “grace periods” for divers whose status is impacted by lack of required dive activity or expiring emergency response training.

RESEARCH DIVE ACTIVITY:

- Project proposal approval applications and dive plan approval applications may continue to be submitted per standard procedures. However,
- No new dive plans or projects will be approved to start prior to the end of the duration of the State of California Stay at Home Order or the duration of any superseding order, whichever is longest.
- Effective immediately, until the end of the duration of the State of California Stay at Home Order or the duration of any superseding order, a suspension of diving is ordered for all existing approved dive plans.
 - The DCB will be working with guidance from UCD Leadership to fairly and equitably identify specific instances where a delay or cessation of diving would unalterably harm the University’s research mission, and where limited short-term activity might be allowed under special circumstances to mitigate these impacts. More information on this point will be provided in coming days. However,
 - PI’s and Lead Divers are advised to develop contingency plans to wind down most projects in short order to a stasis point, after which little or no diving might be approved for an extended period.

I want to assure you that the DCB and the UCD DBSO Staff very much appreciate the hardship these decisions will place on many of you, our students and investigators. These are in fact issues being addressed in a similar manner by our peer institutions within AAUS, as well as our Federal partner agencies such as NOAA, NASA, and USEPA. In all instances, the overriding consideration will always be the health and safety of our divers and our community. For discussion of specific concerns, Please feel free to talk to your DCB representative, DBSO staff, or myself.

Thank you for your time,

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University of California, Davis Diving Safety Program

REQUIREMENTS FOR CONDITIONAL APPROVAL OF ESSENTIAL DIVING UNDER UCD AUSPICES DURING THE COVID PANDEMIC

While The UCD Diving Control Board's COVID Pandemic stand-down orders are in effect, no dive plan will be considered for approval by the DCB excepting under following conditions:

- Verification and Approval must be obtained at the Dean or Director Level, after consultation with the appropriate senior campus administrator (e.g., Vice-Chancellor for Research, UCD) that the specific diving activity is highly time-critical, absolutely essential to the University's research mission, and meets the following criteria:
- The diving activity proposed is of a small scale and short duration intended to:
 - Wind down ongoing research infrastructure to a point of stasis, after which a non-diving period can be sustained; or
 - Recover previously deployed equipment or instruments which would be damaged or data lost by a lengthy delay in recovery (deployment of additional equipment is not approved); or
 - Prevent serious injury or significant environmental damage.
- The dive team must consist of no more than one buddy pair, one standby diver/support staff and one vessel operator.
- The dive plan for the specific task must include measures approved by the DCB for prevention of COVID transmission between any participants or support personnel during diving, and during ancillary activities such as vehicular and boating transits and operations.

All approvals by the DCB will be contingent on the logistic feasibility of the proposed activity under current conditions and are subject to change as events dictate.

- Rev. 1 APPROVED BY UCD DCB 3/26/2020



University of California, Davis Diving Safety Program

MINIMUM COVID19 EXPOSURE CONTROL GUIDELINES TO BE EMPLOYED DURING ESSENTIAL UCD DIVING ACTIVITY DURING PANDEMIC-CAUSED STAND-DOWN

The following are considered minimum requirements as of the date of this document. Additional measures may be required by the DCB based upon specific characteristics of the planned operations, environmental conditions, current community public health situation, or further guidance from UCD.

- No diver will participate who feels ill or has reasonable cause to believe they have been exposed to COVID-19.
- All diving operations must be conducted under the assumption that at least one unknown member of the operations is currently asymptomatic, infected, and contagious.
- Dive teams and auxiliary personnel must be kept to a minimum.
 - At maximum, this must be no more than two divers, one standby diver/topside assistant, and one vessel operator.
- During all aspects of the operation, adequate interpersonal distancing must be maintained unless appropriate PPE are employed. Minimum surface interpersonal distances must not be less than 6 feet. It must be recognized that the 6-foot distance is generally specified for indoor, land-based conditions. In a windy and moisture-laden environment such as on a dive boat, downwind positions require greater distancing. Interpersonal distancing procedures apply to all surface activities associated with the dive including:
 - Vehicular and vessel transit to dive sites
 - Vessel and vehicle sizing must be planned to allow adequate interpersonal distancing, and will be reviewed by the DCB as part of dive plan evaluation.
 - At a minimum all personnel while on the surface must wear a covering over their mouth and nose in order to reduce respiratory droplet dispersal from coughs and sneezes into the air and onto vehicle and vessel surfaces, and discourage the inadvertent face touching.
 - If standard PPE equipment is not available, all team members must use the best available substitute, such as sunglasses, and balaclavas, neck gaiters/buffs, etc... which cover the mouth and nose.
 - Pre-and post-dive briefings and debriefings
 - Primary dive team operational planning and briefing should be conducted prior to departing for the dive site.
 - On site discussions and prep must be minimized to essential items.
 - Buddy and equipment checks
 - Each diver must only handle and test their own equipment.
 - Each diver will perform functional testing and demonstrate operation of his/her equipment while observed by the buddy.
 - During pre-dive checks, divers must not breathe from their own secondary second stage. Pre-dive functional testing must be accomplished via depressing the purge and listening for free flows.
 - Entries, exits and surface swims
 - Diving must only be conducted under conditions in which normal (non-emergency) entries and exits can be made unassisted and in full gear.
 - These must be accomplished with each diver's mask in place and the divers breathing from their regulators.

- If air sharing is required, refrain from sharing a single second stage unless to refrain would result in injury or loss of life. Responding divers will establish contact and control, and then donate the secondary second stage.
 - Equipment configurations with auxiliary second stages integrated into a BC inflator are not compatible with this requirement and cannot be used until further notice.
- Diver assist, rescues, and first aid must be approached with extra safety precautions in mind.
 - Reinforce with all participants the need for standard use of PPE whenever available. This includes face masks and eye shields in all first aid situations, when available.
 - If standard PPE equipment is not available, team members must use the best available substitute, such as sunglasses, and balaclavas, neck gaiters/buffs, etc... which cover the mouth and nose.
 - In surface rescue and assist scenarios, unless an immediate assist is necessary to prevent loss of life, responding divers must stop a safe distance (at least two full body lengths, approximately 12 feet) from the distressed diver to perform initial assessment ("Are you OK? Inflate your BC! Drop your weights!").
 - Where possible, divers should remain on their scuba regulators with their dive masks in place during surface activity.
 - Surface tows should be performed with the primary objective of expediting extraction without attempting rescue breathing during transport.
- Dive equipment and any personal auxiliary equipment used must be dedicated to an individual diver for the duration of the diving operation.
- Each diver will only prepare, maintain and handle their own diving equipment including during transportation and exit and entry from the water.
- All dive equipment and vehicles and vessels used must be properly disinfected according to CDC procedures before and after use, by the diver using it.
 - Each diver must be responsible for disinfecting his/her own equipment. All regulator second stages and BC oral inflators must
 - Receive an initial freshwater rinse, then
 - Be immersed in a 10% bleach solution or other EPA-approved disinfectant, remaining wetted for at least 4 minutes, and then
 - Receive a final freshwater rinse before drying.
 - Equipment used by one diver will not be used by a different diver without an intervening period of at least 5 days and a re-disinfection prior to use.
 - O2 kits, first aid supplies, etc... must be disinfected and disposed after use, using best practices.
- Upon completion of a day's operations, the Lead Diver must communicate a log of the day's dive to the DSO, including
 - Time, date, location, nature of diving activity;
 - Names and contact information of all participants, their roles, and dive parameters (number of dives conducted, diver pairings, dive time and depths, and dive modes used);
 - Any incident or accident, including possible breaches of exposure protocols.

WHILE THE UCD DCB SETS THESE GUIDELINES AS A MINIMUM FOR RESEARCH DIVING OPERATIONS DEEMED ESSENTIAL TO THE UNIVERSITY'S RESEARCH MISSION, THE DCB ALSO REMINDS RESEARCHERS, PRINCIPAL INVESTIGATORS AND ADMINISTRATORS THAT SIMILAR CONDITIONS AND CONCERNS EXIST IN ALL MARINE FIELD OPERATIONS, INCLUDING BOATING AND SNORKELING/SKIN DIVING. ALL PARTIES ARE ADVISED TO CONSIDER WHETHER A PARTICULAR ACTIVITY IS TRULY ESSENTIAL, AND ENSURE SIMILAR PROCEDURES ARE FOLLOWED IN OTHER ACTIVITIES.

APPROVED BY UCD DCB 3/26/2020

REV 3/26/2020