



GUE Diving Activity: COVID-19 Protocols

Version 1.0



GENERAL NOTES

GUE's approach to training, standardization, and dive planning may play an important role in GUE's response to the SARS-CoV2 infection risk among its divers, students, instructors, and all involved in any dive operations.

General, local, and global health authorities' recommendations should be followed and may supersede these recommendations where local conditions warrant.

Common sense dictates to not engage in any diving activities when showing signs and symptoms of any disease. It is important in preventing infection of others as well as preventing any self-injuries, as it is yet unknown how the SARS-CoV2 virus affects lung capacity to exchange gas (under pressure and increased density).

Limit the number of people meeting together. Teams consisting of a maximum of three divers (plus an instructor and an assistant) are acceptable but should be kept at a safe distance from each other as well as other teams, both on the surface and on land. The teams should be timed to avoid congregating at water entry, exits, around descent/ascent lines, or boat ladders.

If the distance between participants is less than 2 m/7 ft, protective face masks should be used. If the distance is more than 2 m/7 ft, such masks are at the discretion of the participants.

Inform participants of diving activities, discuss the risks with everyone, and be assured of their willingness to participate in an activity. Explain what measures have been and will be implemented to minimize the risk of infection. COVID-19 slides should be added to course introductions and any diving activities.

Transmission routes and basic hygiene rules:

- 1. Transmission by contact (direct or indirect via contaminated items):**
 - Avoid direct contact, e.g. handshaking, hugs.
 - Avoid touching your face.
 - Avoid indirect contact of potentially contaminated belongings of other persons.
 - Wash hands:
 - After hand contact (direct or indirect)
 - After sneezing/coughing into a tissue
 - After other hand contact with respiratory secretions or saliva
 - Before touching food
 - Before touching other people's belongings
- 2. Transmission by droplets (most respiratory infections):**
 - Do not cough or sneeze in the direction of other persons. Use tissues. Throw away used tissues, and then wash hands. Students who are persistently coughing and sneezing are excluded from class. Instructors with relevant coughing/sneezing must not teach.
 - Keep locally-recommended distance (typically 2 m/7 ft) and use a facemask.
 - Avoid speaking when you cannot maintain safe distance and when you and the other person are not wearing facemasks.
 - Avoid sharing food, drinking from shared glasses, and eating from the same dishes/with the same utensils.
- 3. Airborne transmission**

Aerosol generation mainly in medical procedures, i.e. CPR, intubation – relevant in tuberculosis, varicella, measles, and potentially some viruses, e.g. SARS-CoV2.

RULES OF CONDUCT

General Rules of Conduct

Exceptional attention should be paid to good hygiene rules, i.e. regular and thorough handwashing, liberal use of disinfectant between washings, avoid close contact (maintain at least 2 m/7 ft distance), avoid sharing of personal items, avoid spitting, coughing/sneezing near others and do so into a tissue or the crease of the arm/elbow. It is advisable for all participants to wear a protective facemask at all times.

Close Proximity Rules of Conduct

The general rules of conduct apply in close proximity situations but with the required addition of facemasks when individuals operate within a 2 m/7 ft proximity to others.

On-surface Rules of Conduct

Establish 2 m/7 ft distance whenever possible. Individuals closer than 2 m/7 ft should be breathing regulators and wearing diving masks. Limit surface communication as much as possible. Any speaking diver should maintain a 2 m/7 ft distance from the team. Only one regulator should be removed at any given time.

GENERAL DIVING ACTIVITIES

OUT OF GAS EMERGENCIES (temporary adjustments for non-training dives)

GUE's sound dive planning and good situational awareness reduces the risk of emergencies significantly. In the context of SARS-CoV2 infection (the pulmonary CoVid-19 diseases), the most significant procedural emergency action to be considered very carefully is the actual out-of-gas situation.

Out-of-gas (OOG) is a very rare occurrence when dives have been planned and executed properly, but individuals should evaluate the risk and decide upon the options.

1. Execute dives while breathing from a stage cylinder. The long hose/primary regulator, disinfected properly, is clipped off, ready to donate in case of out-of-gas emergency. The dive is limited by the gas contained in the stage cylinder, and the back gas is not to be used via the long hose/primary regulator.
2. Execute dives while breathing backup regulator. The long hose/primary regulator, disinfected properly, is clipped off, ready to donate in case of out-of-gas emergency.
3. Proceed with standard gear configuration and OOG protocol only if all team members have agreed to the risk involved in sharing gas underwater with the use of a primary regulator prior to the dive.

Scenarios #1 and #2 require solid equipment awareness and the ability to react in stressful situations without the habitual behavior of donating the gas that the diver breathes. The use of stage cylinders is restricted to those who are trained on how to use them. Proper gas switching protocols must be utilized when starting to breathe from a stage cylinder.

TEAMWORK, EQUIPMENT HANDLING AND USE, WHILE OUT OF THE WATER

GUE emphasizes standardization and teamwork when it comes to executing dives. Often divers share pieces of gear in an emergency (i.e. OOG) or in standard operations (i.e. deployment of SMBs, sharing backup equipment, helping team members to don gear, and assisting with carrying heavy gear).

It is recommended that all pieces of gear be disinfected prior to any diving activities, with emphasis on items that can be shared:

- Boltsnaps, double-enders
- Wetnotes/pencils
- SMBs (especially the ones that are orally inflatable)
- Reels, spools
- Backup lights
- Backup masks
- Hoods and gloves
- Regulators (especially primary regulator if deciding for any of the two options mentioned in OOG temporary protocols)



Do not undertake any diving activity if uncomfortable about how to handle such procedures. Introducing additional stress in an already stressful environment will lead to an escalation of events and lead to incidents.

Any pre-dive checks and briefings (GUE EDGE) should be performed while maintaining a proper safe distance to all team members.

OPERATIONS ON THE WATER SURFACE

Divers will spend some time on the surface both prior to and after the dives, and water conditions may force them to stay closer than the recommended physical distancing. A sound evaluation of diver's safety vs. distance between divers on the surface of the water is needed.

It would be prudent to avoid briefing/debriefing on the water surface. When forced to keep the team together on the surface (prior to descent, ascent, jumping from the boat, or getting back to the boat) use measures to ensure proper distance:

- A floating line with marked distances when diving from a boat
- Inflated SMB to maintain distance between divers and to offer support when needed
- Three/four inflated SMBs connected together to create a platform for divers to hold and to allow them to keep a distance from each other
- When talking on the surface, masks should be placed on the face (in the diving mode, so protecting nose and eyes). Regulators should be in the diver's mouth, apart from the individual that is talking.

ADDITIONAL TRAINING CONSIDERATIONS

When deciding to commence training activities, instructors must follow local regulations, and use all available means to secure students' safety. Instructors should raise their awareness and be watchful for students' hygiene (i.e. washing hands/disinfecting, touching faces, exchanging gear, and sneezing/coughing etiquette).

Refer to the risk evaluation document for deciding on theory and dry-run components of the training, and plan your courses accordingly. All dry runs must be demonstrated and practiced in/with each individual's equipment – no sharing of equipment sets or equipment parts.

Field Drills (S-drills and Basic 5)

While executing field drills with a higher risk and with physical contact – Safety Drill (S-drill) and parts of Basic5 drills (B5#3 – holding on to teammates' primary regulator), special care should be taken.

Prior to and during any such drill, please watch out for proper hygiene (washed and/or disinfected hands). Regulators should be properly disinfected prior to and after the drill. If a regulator accidentally comes in contact with any saliva or other secretions, the drill needs to be interrupted to wash and disinfect again (hands and equipment).

During S-drill dry-runs, the donated regulator must not be placed in the mouth. The primary donated regulator should be held by the diver and could be clipped to the backup regulator bungee, simulating being in one's mouth. Touch contact should be avoided, and the concept of it explained without a demonstration.

After completing the drill, all participants should wash/disinfect their hands.

Skills present in GUE curricula that include potential gas sharing:

- Out-of-gas procedures – S-drill
- Sharing gas from stage/decompression cylinder
- Passing a stage/decompression cylinder to other team members

S-Drill Underwater Practice

While underwater, no actual exchange of regulators should take place. After receiving a donated regulator, the receiver must not switch to it.

The temporary training sequence should follow the steps below:

1. Donor – unchanged.
2. Receiver – the receiver holds the donated regulator with their left hand; with the right hand they remove their primary regulator and switch to back up. They then clip off their own primary regulator. They hold on to the donated regulator and proceed as per the rest of the procedure.
 - Optional/Environment Dependant: During travel and while holding the long hose regulator, the receiver may be asked by the instructor to clip the second stage to their chest D-ring. This practice frees both hands for line navigation or other drill management in a way that simulates normal OOG drills. This practice remains at the instructor's discretion.
3. Termination of the drill – the receiver unclips their own primary regulator, verifies its function by purging. With the same hand (while holding the primary) they remove the backup regulator and start to breathe from their own primary and they hand the donated regulator back.

NOTE: All GUE instructors, students, and divers are encouraged to reach out to GUE with any concerns, difficulties, comments, and feedback while participating in any diving activity and/or GUE training during the restriction times. Only together, with collective effort and cooperation, will we protect our global community and emerge from this crisis in good standing.

References:

DAN resources

- [General COVID-19 information](#)
- [10 Safety Recommendations](#)
- Gear disinfecting DAN written [recommendations](#)

Gear disinfection – other resources

- [Pharmacal](#) (Virkon S)
- [DAN webinar](#) on the virus characteristics and gear disinfection

WHO (World Health Organisation – [Coronavirus disease \(COVID-19\) Pandemic](#))