Diving Example Practices for Zoos and Aquariums

This document lists current practices for diving in AZA accredited institutions.

These current (example) diving practices were formulated from surveys of dive program administrators at AZA accredited institutions. The AZA Safety Committee's Aquarium Safety Example Practices Subcommittee developed the dive example practices in conjunction with the Association of Dive Program Administrators (ADPA) External Affairs committee, as a resource for the AZA community. This initiative was originally completed in 2013 and needed to be updated due to changes in the regulatory landscape. The total number of responses received for this survey was 67. These example practices provide consensual minimum guidelines for institutions that engage in diving as defined by the AZA Accreditation Standards.

The survey used to develop these diving example practices covered a broad scope of topics. Dive program administrators responded with how they are **currently** running their dive programs. For these survey results, consensus was considered a minimum of two-thirds (66%) majority agreement of respondents.

These diving example practices apply to all AZA-recognized diving modes, including SCUBA, surface-supplied air (including hookah), and breath-hold diving (e.g., snorkeling or skin diving). Institutions should review these practices for consistency with applicable federal and state OSHA diving regulations, as required by AZA Accreditation Standard 11.7.1.

Diving Example Practices

Institutional Dive Program

- Is part of the Animal Care team/department/division
- Has a stand-alone operating budget
- Is under the direction of a Dive Control Board
- Follows a dive manual which has, as one of its components, a section on diving safety*
- Has a Dive Safety Officer, or equivalent position*
    - Individual that oversees the dive program
    - Full time, paid staff member
    - Certified recreational scuba Instructor or equivalent
    - Is a member of the Association of Dive Program Administrators (ADPA)

- Has a Designated Person in Charge (DPIC) at the facility while diving is being conducted
- Maintains training records and dive logs for each diver
- Has specific training for diving with hazardous marine life, as determined by the institution (i.e. sharks, sting rays, pinnipeds, sea otters, etc.)
- Dive staff provides First Aid (CPR, FA, AED) and Emergency Oxygen training for all divers
- Conducts dive rescue drills in all diveable exhibits
- Utilizes routine testing to determine water quality
- Does not allow diving in medicated or contaminated (i.e. elevated coliform counts) water.
- If diving in medicated or contaminated water is required, protocols have been established
- Oversees “breath-hold” diving operations (i.e. snorkeling or skin diving)*

Minimum Diver Qualifications (Staff and Volunteer)

- Entry level recreational scuba certification or equivalent
- Pass a basic scuba skills evaluation
- Pass a swimming evaluation
- Medically screened by a licensed physician
- Trained in CPR, First Aid, AED and Emergency Oxygen use
- Facility specific training
    - General procedures for responding to dive related emergencies
    - Exhibit specific dive emergency procedures
    - Hazardous marine life (as necessary)
    - Animal interactions (handling, feeding, etc.)

Diver Requirements to Stay Active in a Dive Program

- Periodic medical rescreening by a licensed physician for all divers
- Current in CPR, First Aid, AED and Emergency Oxygen use
- Participate in at least one dive rescue drill annually

- Maintain proficiency in emergency procedures for each tank in which they dive*
- Maintain minimum number of dives annually as required by the institution

Returning to Diving

- Has an established timeline (1 year or less) of non-diving when a diver is considered inactive
- There is an evaluation of diving skills after being cleared to return to diving after a period of injury or inactivity
- Has an established policy for returning to diving after a medical injury or illness

Equipment

- Provides shared dive equipment for both staff and volunteers
- Services equipment in-house in some capacity
- In-house service work on equipment is performed by staff
- Institution provides or facilitates equipment service training
- At a minimum, equipment maintenance is performed at intervals that meets manufacturer recommendations*
- Maintains records of dive equipment and air compressor service and maintenance
- Conducts routine air quality testing on their air compressor
- First Aid, Emergency Oxygen Kit, and AED are available at the dive location for every dive
- Reserve breathing gas supply carried by divers dependent on task and regulation

Guest Immersion Programs

- Staff of the guest immersion program are employed by the institution
- Follows WRSTC guidelines
- Require in-water guides to be certified as recreational Divemasters (or higher)
- Post a topside observer during in-water activities

Mermaid Events

- Staff of mermaid events are outsourced
- Institution requires the mermaids to conduct emergency response drills

> **Requirement of AZA Accreditation Standards*

Resources and References

Organizations that need help developing their dive program or reviewing their diving standards can contact the Association of Dive Program Administrators for more information.

- AZA Accreditation Standards
- OSHA Commercial Diving Standards (CFR 1910 Subpart T)
- OSHA General Duty Clause
- Cal-OSHA Diving Operations Standards (Subchapter 7. Group 26.)
- AAUS Standards for Scientific Diving
- WRSTC Standards