

ADPA Diving Best Practices

This document presented is a list of current best practices for diving in the zoo and aquarium industry. In the process of the AZA Safety Committee creating the zoo and aquarium industry Example Safety Practices document, Arnold Postell (on behalf of ADPA) was asked to help develop the dive best practices for inclusion into the AZA document.

These current best dive practices were formulated from surveys of the professional members of the Association of Dive Program Administrators (ADPA). At that time the ADPA included over 50 institutions and over 100 dive safety professionals from the United States and Canada and membership has since grown dramatically. These best practices were created to provide consensus minimum guidelines for institutions that immerse staff or visitors in water using either compressed gas or snorkels.

A preliminary survey was sent on a broad scope of topics. ADPA members responded with how they were **currently** running their dive programs. For these survey results, a consensus best practice was considered to achieve a minimum of 75% agreement with at least of 50% of institutions responding on each topic. After reviewing the results from the first survey, responses realizing the 75% consensus were then resent to the ADPA membership for a second review. All came through at a minimum 75% consensus during this second iteration.

These best practices should not (does not) contradict any applicable Federal OSHA Occupational diving guidelines that can be referenced in 29 CFR Part 1910 Subpart T - Commercial Diving Operations or the applicable state OSHA guidelines found in California, Michigan, Washington, and Oregon.

ADPA Best Practices Committee

- Arnold Postell – South Carolina Aquarium
- Mike Terrell – Florida Aquarium
- George Peterson – Monterey Bay Aquarium
- Gavin Wuttken – Point Defiance Zoo and Aquarium
- Todd Hall – Landry’s Downtown Aquarium - Denver
- Katie Shoultz – Florida Aquarium
- Tom Saylor – Adventure Aquarium
- Windsor Gray – Georgia Aquarium

Organizations that need help developing their dive program or need to evaluate their diving standards can visit www.adpa.org for more information.

OSHA Commercial Diving Standards (CFR 1910 Subpart T)

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10139

OSHA Commercial Diving Directive

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=4995

Diving Best Practices

Minimum prerequisite for entering a dive program

- Entry level recreational scuba or equivalent
- Pass a basic scuba skills evaluation
- Pass a swimming evaluation
- Medically Screened
- Trained in CPR, First Aid, AED and Emergency Oxygen use
- Complete facility specific rescue training
 - Response to an unconscious diver underwater
 - Response to an unconscious diver at the surface
 - Emergency Scene Management (Topside response)

Prerequisite to stay current in a dive program

- Periodical Medical rescreening
- Current in CPR, First Aid, AED and Emergency Oxygen use
- Participate in one dive drill annually which simulates response to unconscious diver underwater

Institution Dive Program

- Has a standalone budget
- Is under the direction of a dive control board
- Develops and maintains a manual for dive safety
- Has a Dive Safety Officer
 - Individual that oversees dive program
 - Paid staff member
 - Certified recreational scuba instructor or equivalent
 - Devotes the majority of their time to the dive safety program
- Has a Designated Person in Charge (DPIC) at the facility while diving is being conducted
- Maintains training records and dive logs for each diver

Maintains records of equipment maintenance, modification, repair, test and calibration

Have specific training for diving with hazardous marine life

Have specific training for diving with sharks

Have protocols for diving in medicated water

Have protocols for diving in contaminated water

Oversee snorkeling or free-diving

First Aid, Emergency Oxygen Kit, and AED are available

Has written Standard Operating Procedures (SOP) for:

- Exhibit Dive Plans

- Pre and Post dive checklists

- Emergency Procedures

Guest Immersion Programs

Follows WRSTC guidelines

Require in-water guides to be certified as recreational Divemasters (or higher)

Post a topside observer during in-water activities