## RESEARCH, EDUCATION & MEDICINE RISK MITIGATION

## **EMERGENCY PLANNING: WHY DO WE NEED IT?** By Francois Burman, Pr. Eng, MSc.

ne good definition of an emergency action plan (EAP) is *a predetermined course of action intended to mitigate a potential emergency or damaging situation that might endanger or harm people, property or a business's* 

*or professional's ability to function safely.* In this article we will explore the underlying purpose and essential elements of an EAP. The needs of a dive business can be distilled into five areas:

- 1. protecting its staff, clients and the public from injuries
- 2. protecting its equipment and facilities, such as dive gear, boats, vehicles and the dive center itself
- 3. avoiding exposure to liability risks
- 4. considering the environmental impact especially the long-term impact — on the diving attraction, local communities and wildlife
- 5. retaining its clients, business and sources of income

Ensuring a plan is effective requires a more detailed assessment and an understanding of what actions may be necessary. We start with a vulnerability assessment in which we consider the probable hazards and then decide which of these are real and which are purely hypothetical. To help decide which hazards are important, we use the following simple riskassessment tool, as described in the DAN Hazard Identification and Risk Assessment (HIRA) program:

- How likely is exposure to the hazard (*probability*)?
- How often will there be exposure to this hazard (*frequency*)?
- What is the likely outcome of an accident (*severity*)?

The answers to these three questions provide us with a realistic assessment of any risk. We then determine how to prevent, control or mitigate the risk.

To apply the tool, we must identify the hazards in need of assessment. The principal areas we review are the following:

- environment (in and out the water)
- diving risks



Part of a good emergency action plan is ensuring effective means of communication that are appropriate for the locale.

- staff exposures
- breathing gases
- equipment

Much of the world's best diving is found in remote, lessdeveloped and sometimes less-stable regions — getting help might be more involved than simply making a phone call. This must be considered when evaluating hazards.

Once the various hazards and their probability, frequency and severity are established, we should be able to respond immediately and without any doubt about what to do. First, we should mitigate the initial situation:

- Extinguish, contain, control and react appropriately.
- We must communicate the situation to rapidly obtain assistance.
- We need to take care of any injured people.
- Emergency equipment needs to be readily available and functional.
- We must follow the plan, react appropriately and not overthink our actions.

Other elements can be put into practice to mitigate emergencies and help you defend yourself and your business in the event of accusations, investigations or criminal hearings. These include the following items:

- *Standard operating procedures*, when followed, promote avoidance of emergencies.
- *Checklists* provide structured reactions, reduce the need to think, ensure consistency in actions taken and assist in training staff.
- *Reporting documents* provide excellent learning opportunities and at a minimum reduce liability due to the timely recording of events.
- *Training* is the cornerstone of prevention, preparedness and competence.
- *Practice* through realistic and frequent drills will enable you to react appropriately, rapidly and calmly. AD