Risk management

In synch

Working with EMS can enhance your rescue services

by Gerry Dworkin

Special to Aquatics International

or aquatics facilities to effectively integrate rescue and safety services with those of the local fire and rescue agencies and emergency medical services (EMS), it's imperative that all agencies establish collaborative agreements and cooperative training programs.

Before local safety and rescue agencies can appropriately respond to an incident at an aquatics facility, the agencies must know exactly how to enter and progress through the facility. During hazardous-material or fire-suppression incidents, responding personnel must



Collaborative training with EMS agencies ensures that rescue procedures are consistent.

be familiar with the life-safety issues specific to that facility. Apparatus and personnel must be appropriately staged, and responding personnel must be knowledgeable about the types and locations of chemicals — liquid chlorine, chlorine gas, muriatic acid and the like — stored within the facility.

Aquatics facilities should contact their local EMS agencies to request assistance in the evaluation of rescue equipment and to provide guidance in the purchase

appropriate spinal immobilization and emergency resuscitation equipment.



Spinal injuries

Because spinal injuries almost always require transport to hospitals, spinal-injury equipment and protocols require close coordination with EMS agencies. Backboards used at aquatics facilities must be compatible with ambulance cots. If a backboard doesn't fit on a standard ambulance cot, it won't fit on a medical helicopter.

Backboards should be a maximum of 16 to 18 inches wide and 72 inches long, preferably with a narrowing taper from the top of the board down to the foot

section. Many plastic backboards have more flex than diving boards; facilities should not use these substandard backboards for a patient with an already compromised spine.

When EMS units transport a suspected spinal patient on a facility's backboard, the EMS unit should be able to leave a complete spinal-immobilization system with the facility until the facility can recover its equipment from either the hospital or the EMS agency.

EMS agencies also must be familiar with the spinal immobilization strapping systems used at aquatics facilities.

Because the American Red Cross and other guard-training organizations don't cover the use of cervical extrication collars, most aquatics facilities don't use collars in their spinal-injury management protocols. EMS agencies should work with guards on consistent immobilization methods to avoid a scenario where EMS personnel must undo head immobilizers or torso straps to properly employ a collar.

EMS agencies should establish spinal immobilization protocols with aquatics facilities whereby guards per-

form one of the following:

- Stabilize the patient in the water until the arrival of EMS personnel.
- Stabilize and package the patient in the water until the arrival of EMS personnel.
- Stabilize, package and extricate the patient from the water until the arrival of EMS personnel.

If EMS agencies expect guards to stabilize and package suspected spinal patients, the agencies must participate in in-service training to teach guards how to size and apply cervical extrication collars. Collars of varying sizes should then be part of the medical equipment inventory for that facility.

Other equipment

The following are examples of additional rescue equipment on which aquatics facilities and EMS agencies must collaborate:

Bag-valve-mask resuscitators. Many aquatics facilities stock "one-size-fits-all" bag-valve-mask (BVM) resuscitators, which are not acceptable within the EMS community. The American Heart Association and the Red Cross recognize three separate and distinct age groups—infant, child and adult — within their CPR performance standards. Also, BVMs used without an oxygen-delivery system must have their oxygen reservoirs removed before use.

Oxygen units. When a facility implements the use of oxygen in its rescue protocol, the equipment must be capable of delivering 15 to 25 liters per minute of oxygen through a BVM resuscitator. Many aquatics facilities use preset commercial units that flow at the rate of only 6 to 8 liters per minute; prehospital patients in respiratory or cardiac distress or arrest, however, need high-flow oxygen.

Defibrillators. Automated external defibrillators (AEDs) used by aquatics staff must be compatible with EMS defibrillators so EMS can share or exchange the electrodes. Compatible AEDs also allow a patient's resuscitation history to be downloaded into the hospital computer to generate a history for each patient.

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