Poolside First Aid
Preventing Further Injury

- Provide appropriate first aid treatment after removing the patron from immediate danger
- Remain calm and in control of the situation
- Call for assistance and activate the EMS
- Try to identify the victim and determine what went wrong
- Deal with friends or family of the injured party
- Provide crowd control
- Conduct both a primary and secondary survey of the patron's injuries
- Continue to monitor vital signs
Preventing Further Injury

Treating for Shock

• Shock is a depression of vital bodily functions including reduced blood flow and inadequate oxygen supply that often occurs:
  • After a grave injury or trauma
  • Loss of blood or bodily fluids
  • A period of time without oxygen
  • Extreme stress
  • Shock can be life threatening if not treated
Preventing Further Injury
Treating for Shock

• Signs of shock include:
  • Weakness
  • Pale, clammy skin
  • Dilated pupils
  • Faint but rapid pulse
  • Irregular breathing
  • Vomiting
  • Restlessness or agitation
  • Loss of consciousness
  • Sensitivity to changes in ambient temperature
  • Lowering of body core temperature
Preventing Further Injury
Treating for Shock

• Have the victim lie down
• Raise the victim's legs unless spinal injury is suspected
• Raise the victim's head or upper body if experiencing breathing difficulties
• If the victim is already unconscious, but breathing, place him on his side
• Maintain an open airway
• Cover him with a blanket to prevent heat loss, or place a blanket under him if he's laying on a hot pool deck
• Although the victim may be complaining of thirst, do not give fluids including water, unless arrival of the EMTs will be delayed for an extended amount of time
Rescue Breathing & CPR

• After making a water rescue, it may be necessary to perform rescue breathing and CPR
• Rescue breathing is given to someone who has stopped breathing
• CPR, or cardiopulmonary resuscitation, combines rescue breathing with external cardiac compressions to provide a mechanical pumping of the heart muscle, to circulate blood and to provide oxygen to the brain
• CPR is used to help save a life when a victim experiences clinical death, when he has stopped breathing and does not have a pulse
Heimlich Maneuver for Drowning Victims

• Specified by AHA Guidelines (JAMA 1986 and 1992)
• Controversial: Not all lifeguard and CPR training agencies agree that the Heimlich Maneuver should always be performed on drowning victims
• Water in lungs or airway may be blocking attempts to give rescue breaths
• Resistance caused by water in the lungs may force air into the stomach causing the abdomen to distend and the victim to vomit
• Distended abdomen presses on the diaphragm which interferes with lung expansion
• Rescue breathing may push water deeper into lungs causing further complications
Heimlich Maneuver for Drowning Victims

• If the victim is still in shallow water
  • Place the victim in a vertical position
  • Stand behind the victim
  • Perform the Heimlich Maneuver until water stops flowing from the victim’s mouth
• If the victim is lying on his back on the ground or deck
  • Turn the victim’s head to the side to allow water to drain
  • Straddle the victim
  • Perform the Heimlich Maneuver until water stops flowing from the victim’s mouth
Initiating CPR

• Begin CPR if indicated (no pulse and no breathing) unless:
  • You would be putting yourself into a dangerous situation
  • There are signs, including rigor mortis, mutilation or decapitation, or tissue decomposition, that the person has been dead for a long time
  • There are written instructions not to resuscitate because of a terminal or fatal illness
Initiating CPR

• Once begun, do not stop CPR unless:
  • The victim recovers
  • It is unsafe to continue
  • You are too exhausted or otherwise unable to continue
  • You are relieved by trained medical personnel or a physician tells you to stop
• You may need to interrupt CPR for a short period to:
  • Call for help
  • Move a victim to a new or safer location
  • Check to see if you've been successful in restoring breathing and pulse
Initiating CPR

• Check that the environment is safe
• Observe the scene or question witnesses to find out what happened
• Check to see if the person is responsive by shouting "Are you OK?" or by gently shaking the person's shoulder
• If the person does not respond, phone for assistance by dialing 9-1-1
• While supporting the person's head and neck, carefully roll the person as a unit toward you and onto his back
• Put on protective equipment
Universal Precautions

- Take universal precautions to prevent disease transmission, particularly the spread of hepatitis and human immunodeficiency virus (HIV), during CPR
- Use barriers such as goggles, latex gloves and disposable gowns to protect you when there is a possibility that you may come in to contact with a victim's blood, saliva or other bodily fluids
- Remember, all blood and bodily fluids should be considered infectious
Universal Precautions

- Use pocket masks for performing rescue breathing
- Do not make direct mouth-to-mouth contact with a victim
Rescue Breathing

• Open the airway.
• If you see material in the victim's mouth, remove it with your finger using a hooking motion.
• Check for breathing.
• If the person is breathing: keep the airway open, monitor breathing and place the person on his side.
• If the person is not breathing: begin rescue breathing.
• Maintain an open airway.
• Pinch the victim's nose closed.
• Make a seal over the victim's mouth with the protective mask or airway barrier.
Rescue Breathing

- Give the victim 2 full, slow breaths.
- If the victim's chest does not rise and fall with the breaths, re open the airway, and try again.
- If still not successful at giving the breaths, begin first aid for a choking, unconscious victim.
- Check for a carotid pulse for 5 to 10 seconds
- If the person does not have a pulse and is not breathing: start CPR.
- If the person has a pulse but is not breathing: continue rescue breathing.
- After about 1 minute, check again to see if the person is breathing and has a pulse.
CPR

- Open the airway.
- If you see material in the victim's mouth, remove it with your finger.
- Check for breathing.
- If the person is breathing: keep the airway open, monitor breathing and place the person on their side.
- If the person is not breathing: begin rescue breathing.
- Maintain an open airway.
- Pinch the victim's nose closed.
- Make a seal over the victim's mouth with the protective mask.
- Give the victim 2 full, slow breaths.
CPR

- If the victim's chest does not rise and fall with the breaths, re-open the airway, and try again.
- If still not successful at giving the breaths, begin first aid for a choking, unconscious victim.
- Check for a carotid pulse for 5 to 10 seconds
- If the person has a pulse but is not breathing: continue rescue breathing.
- If the person does not have a pulse and is not breathing: start CPR.
- Find the correct hand position.
- Press down on the sternum 1 and 1/2 to 2 inches to compress the heart between the sternum and spine.
CPR
Find Correct Hand Position
CPR

• Perform 15 compressions, while counting "one and, two and, three and...15".
• Open the airway and give 2 breaths.
• After 4 compression and breath cycles, stop and check for breaths & pulse.
CPR

• If the person is breathing, roll him on his side, keep the airway open and monitor breathing. If the person has a pulse but is not breathing, begin rescue breathing.
• If the person still does not have a pulse and is not breathing, give 2 breaths and continue CPR.
• Continue to check for pulse and breathing every few minutes.
CPR

• If a second rescuer is available to assist:
  • Finish the cycle
  • Check for pulse and breathing
  • Start CPR again with one rescuer performing the compressions and one giving the breaths
  • Change to one breath for every 5 compressions
Choking (Unconscious)

- Open the airway.
- If you see material in the victim's mouth, remove it with your finger using a hooking motion.
- Check for breathing.
- If the person is breathing: keep the airway open, monitor breathing and place the person on his side.
- If the person is not breathing: begin rescue breathing.
- Maintain an open airway.
- Pinch the victim's nose closed.
- Make a seal over the victim's mouth with the protective mask or airway barrier.
Choking (Unconscious)

- Give the victim 2 full, slow breaths.
- If the victim's chest does not rise and fall with the breaths, re-open the airway, and try again.
- If still not successful at giving the breaths, begin first aid for a choking, unconscious victim.
- Climb on top of the victim and straddle their thighs.
- Place the heel of the palm of one hand on the victim's abdomen, and place your other hand on top.
- Using both hands, press forcefully inward and upward on the victim's abdomen.
- Repeat the thrusts 5 to 10 times.
Choking (Unconscious)

- Open the victim's mouth.
- Place your thumb on the victim's tongue, and lift his jaw with your fingers.
- Use a hooking motion to dislodge and remove any visible object.
- Open the airway and attempt to give 2 breaths.
- Repeat the cycle of abdominal thrusts, finger sweeping, and attempting to ventilate.
Choking (Conscious)

• If able to breathe, stay with the person and encourage them to keep coughing
• Do not interfere with the victim’s attempts to clear his airway.
• Assume complete obstruction if:
  • Turning blue
  • Unable to breathe, speak or cough
  • Clutching at their throat
• Ask "Are you choking?"
• Yell for help.
Choking (Conscious)

• Perform the Heimlich maneuver by standing behind the victim and putting both of your arms around the victim's waist.
Choking (Conscious)

- Lower your center of gravity so you don't fall over.
- Be ready to support the victim's weight if he should become unconscious.
- Position your fist on the victim's abdomen.
- Press your fist inward and upward into the victim's abdomen.
- Repeat the thrusts.
- If the victim becomes unconscious, help them onto the floor.
CPR for Children Ages 1-8

- Reduce ventilation for to half a breath
- Use a smaller airway mask if necessary
- Reduce chest compression depth 1/3 to 1/2
- Perform chest compressions using the heel of only 1 hand
- Use a ration of 5 compressions to 1 breath
- Count “1 and 2 and 3 and 4 and 5 breathe”
- Increase compression rate to 100 per minute
CPR for Children Ages 1-8

• When performing rescue breathing without compressions, use a 1:3 ratio, and count “1 one thousand, 2 one thousand breathe”
• Perform abdominal thrusts with less force
• Visualize an object causing airway obstruction in finger sweeps
First Aid

Bleeding

• Symptoms:
  • Blood
  • Rapid pulse
  • Pain
  • Bruising

• Treatment:
  • Apply direct pressure
  • Elevate bleeding limb above the heart
  • Apply pressure to arterial pressure points
First Aid

Heat Stroke

• Symptoms:
  • Hot, red, dry skin
  • Strong, rapid pulse
  • High temperature
  • Life threatening

• Treatment:
  • Quickly cool down body
  • Get the victim out of the heat
  • Immerse in cold water or wrap in wet towels
  • Treat for shock
  • Call 9-1-1
First Aid

Heat Exhaustion

• Symptoms:
  • Cool, moist, pale skin
  • Sweating excessively
  • Normal temperature
  • Nausea and vomiting
  • Headache, dizziness
  • Dilated pupils

• Treatment:
  • Have victim lie down in a cool and shady area
  • Stop all activity and rest
  • Replace fluids
First Aid

Hypothermia

• Symptoms:
  • Shivering
  • Low temperature, blue lips and skin
  • Confusion
  • Sleepiness
  • Loss of muscle control
  • Slowed pulse and breathing rate

• Treatment:
  • Warm the body gradually
  • Get out of the cold
  • Change into dry clothing
  • Drink warm fluids
Poisoning

• Symptoms:
  • Nausea, vomiting, and abdominal pain
  • Dilated or constricted pupils
  • Diarrhea
  • Convulsions
  • Breath odor
  • Unconsciousness
  • Presence of poisonous substance
  • Tissue damage or burns
First Aid

Poisoning

• Treatment:
  • Call 9-1-1 or the Poison Control Center
  • Dilute poison -- have a conscious victim drink a glass of water
  • Induce vomiting (only upon medical advice) by giving 1 tablespoon (children) or 2 tablespoons (adult) of Syrup of Ipecac, then a glass of water
  • Send container, label, substance or vomit to hospital with the victim
First Aid

Convulsions / Seizures (Land)

• Symptoms:
  • Rigid muscles
  • Spasms, flailing, jerky movements
  • Drooling
  • Loss of bladder or bowel control
  • May stop breathing

• Treatment:
  • Protect from further injury
  • Do not try to restrain the victim
  • Do not put anything in the victim's mouth
  • Perform rescue breathing or CPR if necessary
Symptoms:
- May aspirate water and drown due to unprotected airway
- Rigid muscles
- Spasms, flailing, jerky movements
- Drooling
- Loss of bladder or bowel control
- May stop breathing
Seizures (Water)

- Treatment:
  - Use a rescue tube to support victim and keep victim's head above the surface of the water
  - Maintain an open airway
  - Stay away from the pool edges to prevent victim from harming himself
  - After seizure has stopped, remove the victim from the water
  - Place victim on deck and on his side
  - Monitor vital signs
  - Perform rescue breathing if necessary
First Aid

Fainting

• Symptoms:
  • Unconsciousness due to reduced blood supply to the brain
  • Dizziness
  • Sudden collapse
  • Pale
  • Sweating and cool skin
  • Tingling sensation
  • Blurred vision
First Aid

Fainting

- Treatment:
  - Lay victim down flat on the pool deck
  - Lower victim's head below his heart
  - Loosen tight clothing
  - Do not throw cold water at or on the victim
  - Once conscious, have the victim sip water
First Aid

Electrocution

- Symptoms:
  - Tissue burns
  - Smell of burning flesh
  - Ventricular fibrillation
  - Respiratory arrest
- Treatment:
  - Disconnect source of electrical current
  - Separate victim from source of electricity with an object made of a non-conducting material
  - Provide rescue breathing and CPR if necessary
  - Treat burns
First Aid

Burns (1st Degree)

• Symptoms:
  • Redness
  • Swelling
  • Pain

• Treatment:
  • Submerge burned area in cool water till pain subsides
  • Cover with a dry, clean cloth
First Aid

Burns (2nd Degree)

• Symptoms:
  • Redness
  • Swelling
  • Pain
  • Blisters

• Treatment:
  • Submerge in cool water
  • Cover burn area with a moist, clean cloth
  • Treat for shock
First Aid

Burns (3rd Degree)

• Symptoms:
  • Red, black, gray or white charred looking skin
  • Swelling
  • Extreme pain away from burn area
  • Blisters
  • Deep tissue damage

• Treatment:
  • Cover burn area with a dry, clean cloth
  • Keep airway open, monitor breathing and pulse
  • Treat for shock
  • Call 9-1-1
First Aid
Pool Chemicals on Skin

• Symptoms:
  • Itching
  • Swelling
  • Pain
  • May cause serious burns and tissue damage

• Treatment:
  • Rinse with fresh water for at least 15 minutes
  • Remove contaminated clothing
First Aid

Pool Chemicals in Eyes

- Symptoms:
  - Pain
  - Burning sensation
  - Inability to see clearly
  - Eyes tearing

- Treatment:
  - Rinse the eyes with fresh water for at least 15 minutes
  - Patch both eyes
  - Transport lying down to the emergency room
First Aid

Pool Chemicals Inhaled

• Symptoms:
  • Coughing, wheezing
  • Respiratory distress
  • May stop breathing

• Treatment:
  • Get in fresh air immediately
  • Provide rescue breathing if necessary
First Aid

Pool Chemicals Swallowed

• Symptoms:
  • Nausea, vomiting, and abdominal pain, diarrhea
  • Dilated or constricted pupils
  • Convulsions
  • Breath odor
  • Unconsciousness
  • Presence of poisonous substance
  • Tissue damage or burns

• Treatment:
  • Drink plenty of water (if directed)
  • Do not induce vomiting
  • Treat for poisoning