

Aquatic Risk Management



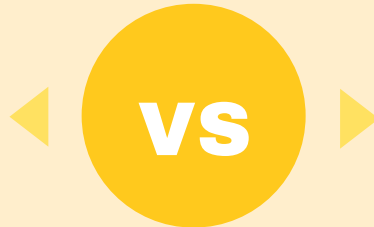
CPO

<https://www.phta.org/certification/service-operations-retail/cpo/>



General Aquatic Risk Management and Operations

RISK MANAGEMENT BASICS



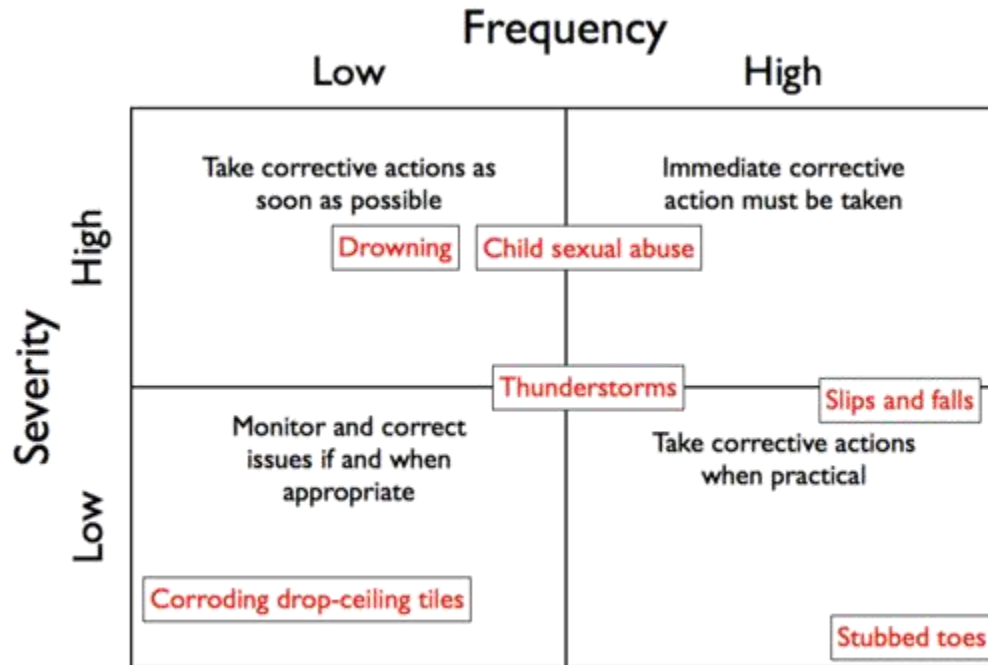
HAZARD

Events or physical conditions *potentially* causing fatalities, injuries, property damage, damage to environment, interruption to business, or other types of harms or losses

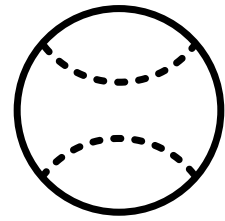
RISK

Likelihood x Consequence

Risk Management Matrix



Risk Management Baseball



"Walkabouts"

**Risk Management
Basics**

Four P's

*Physical
Personnel
Programs
Policies*



*Identify
Evaluate
Eliminate
Minimize
Warn
Document
(Insurance)*

**Local/State Codes, Standards
Guidelines
MAHC**

Standards of Care and Codes





Emergency Action Plan

- ✓ You must customize EAP to be site specific
- ✓ Good templates for EAPs (google "Aquatic Facility Emergency Action Plan Templates" and/or see links in handout):

USA Swimming

Boy Scouts of America

Prince William County Public Schools

Paseo Aquatics Swim Team

Washington County Family YMCA

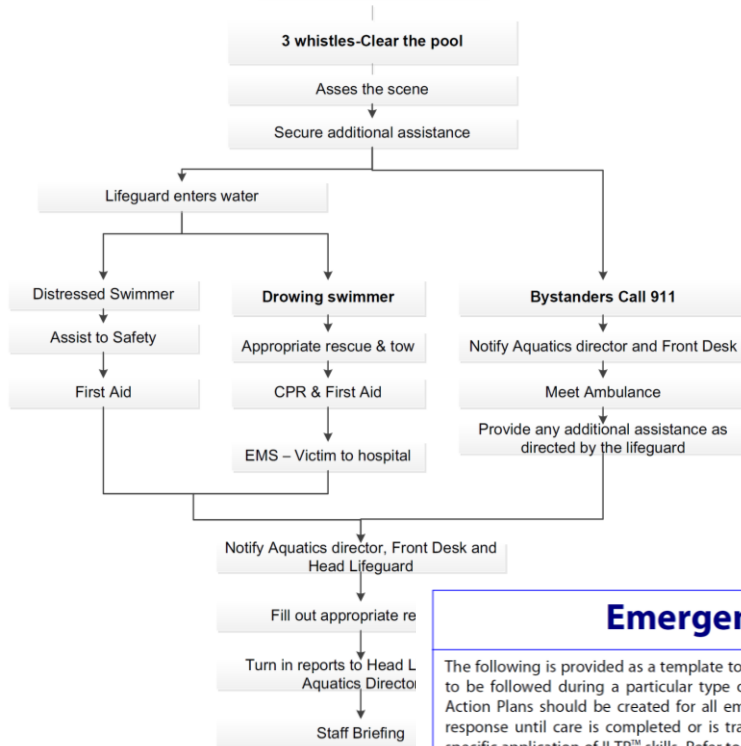
Redwoods Group EAP toolkit

Emergency Action Plan Examples

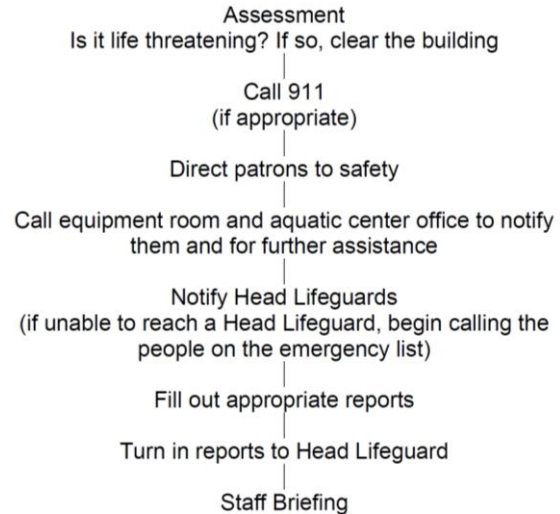
Courtesy of the University of Minnesota Aquatics Program

Paseo Aquatics
Swim Team

Drowning Emergency



FACILITY EMERGENCY



Emergency Action Plan (EAP)

The following is provided as a template to facilitate the documentation of a specific Emergency Action Plan (EAP) to be followed during a particular type of emergency event managed by aquatic staff. Individual Emergency Action Plans should be created for all emergency events involving the response of aquatic staff, detailing that response until care is completed or is transferred to emergency medical services. An EAP is the basis for site specific application of ILTP™ skills. Refer to the CARMP Handbook for additional information about EAPs, including operating criteria.



Organization:

Prince William County Public Schools

Facility:

PWCS Aquatics Center

Pool / Attraction:

Competition/Leisure Pools

**Type of
Emergency Event:**

Unconscious Guest (On Land)

**Minimum Number of
Staff Involved:**

2

Emergency Action Plan Title:

Samples only



Washington County Family YMCA

Aquatic Safety Plan and Policy

Approved Dec. 2018

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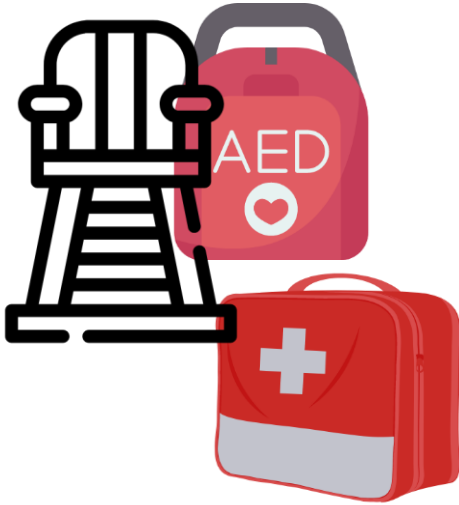
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EAP



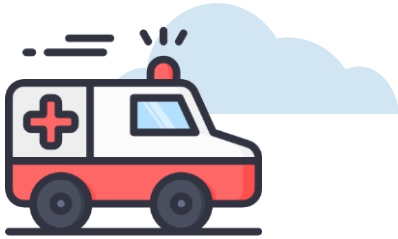
- ✓ Use an *Air Horn* or similar sound device to initiate EAP
- ✓ Create a *Rescue Station* and mark it conspicuously
- ✓ Ingress and Egress is marked and locked when not in use



EAP

- ✓ All rescue, EAP, and PPE equipment must be on the lifeguard or at the water's edge. This includes *Crash Bags*
- ✓ AEDs must be at poolside, not in a cabinet, closet or office
- ✓ Install an obnoxious Emergency Button at the pool for the entire facility.

For resuscitation drills for in-service see:
@petedequincy8132



EAP

- ✓ Have someone from EMS, Emergency Response inspect your pool and speak to your staff
- ✓ Emphasizes the use of the backboard
- ✓ EAP, in writing and practice it

Facility Considerations

- ✓ *Check your Pump Room often*
- ✓ *Check your Chemical Logs often*
- ✓ *Use chemical log /apps (free - paid; Google sheet - HydroApps and more) - Some experts recommend not using apps alone*
- ✓ *Non-slip decks and floors are more important than you think*
- ✓ *Look for glare; what to do about it*
- ✓ *Add additional life-line where you can*



1. Do not supply Personal Protective Equipment (PPE) for employees



3. Keep room disorganized; without signage or labels

2. Make PPE use voluntary

4. Keep incompatible chemicals in close proximity to each other

5. Allow the room to be accessible to patrons



7. Do not provide written and practiced Emergency Action Plan for chemical emergencies

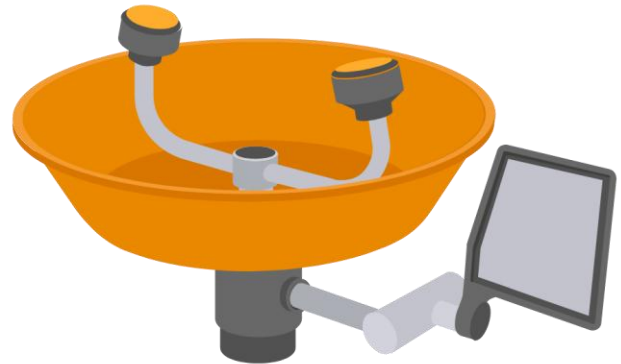


6. Do not provide contact names and phone numbers for emergencies

AquaticSafetyGroup.com

Facility Consideration

- ✓ *Spring Clean every two weeks*
- ✓ *Check and upgrade your Eyewash Station*



Daily

- ✓ Walkabouts at opening and closing
- ✓ EAP equipment functioning and placed
- ✓ Drain covers in place
- ✓ Flow Rate and Backwashing pressure
- ✓ Pool Chemicals checked and logged



Weekly

- ✓ Chemical log sheets completed accurately and honestly
- ✓ Water Balance
- ✓ CYA levels
- ✓ Backwash filters
- ✓ In-service training records
- ✓ *Brush pool bottom*





Weekly



- ✓ Power wash floors/pool decks
- ✓ Clean diving boards and other features
- ✓ House Keeping in Pump/Pool Chemical Room

Monthly

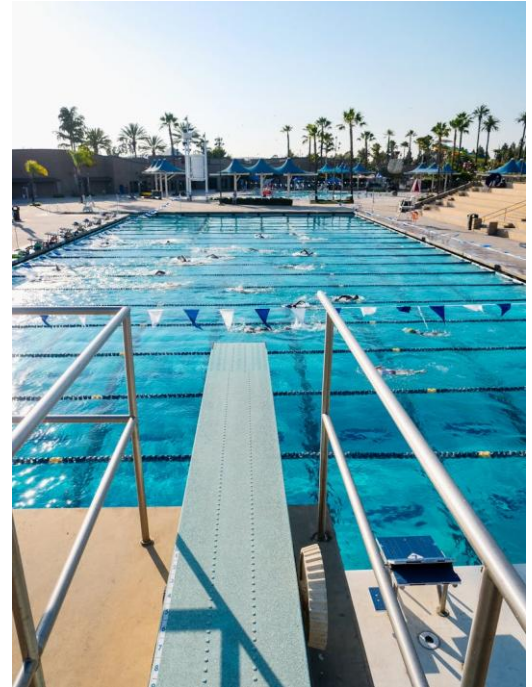
- ✓ Check in-service hours
- ✓ Check Filter media
- ✓ Batteries in AED, etc.



Diving Boards

- ✓ Hose off daily
- ✓ Check handrails, steps/stairs
- ✓ Monthly scrub with chlorine or muriatic acid. If slippery or worn, REMOVE from service.
- ✓ Send to Duraflex in Sparks, NV for resurfacing

<https://duraflexinternational.com/maintenance/>





ADA

In 2010 the ADA was expanded to include public swimming pools



State of Colorado
Accessibility Newsletter



Accessibility testing tools
like WAVE and Siteimprove,
and the "Vendor
Accessibility Guide"



1-800-514-0301

“Funky” Pools

- Every Day is Different
- Cloudy one day, Clear the next
- Water is not monitored regularly
- Typically is NOT filtration
- Poor Water Chemistry; not enough chlorine
- Water is typically out of BALANCE
- pH, TA, CH



Red or Brown (Iron, Rust)

- Balance (pH, TA, CH)
- ***(pH 7.4-7.6; TA 100; CH 300)***
- Shock
- Sequester (*Iron-Out*)
- Clarify
- Pre-Filter Water
- Buy Good Water when you fill the pool
- ***Manganese, Green Sand Filter***

Clear Green (Copper)

- Balance (pH, TA, CH)
- **(pH 7.4-7.6; TA 100; CH 300)**
- Shock
- Sequester (*Cop-Out*)
- Clarify
- Pre-Filter Water
- Buy Good Water when you fill the pool



Green Hair

(Copper *not* Chlorine)



- Pour Concentrated Citric Juice (lemon, lime, grapefruit) through the hair.

- Crush six aspirin in a large, warm glass of water & slowly pour it through the hair.



Blue/Black Staining (Manganese/Cobalt)

- Balance (pH, TA, CH)
- ***(pH 7.4-7.6; TA 100; CH 300)***
- Shock
 - Sequester (*Mag-Out*)
 - Clarify
 - Pre-Filter Water
 - Buy Good Water when you fill the pool



Cloudy Green Water (**ALGAE**)

- ***PREVENTION: Brush, Brush, Brush!!!***
- Shock to 30 PPM
- Turn-Off Pump, scrub filter and parts
- Brush, brush, brush, again
- Copper Sulfate
- Only use Algaecide if you must (FL,AZ)
- ***But DO NOT let it get started!!!!!!!!!!!!***



Dull/Hazy Water (causes)

- Becomes hazy overtime...
- Chloramines
- High CYA
- High TDS

Dull/Hazy Water (treatment)

- Shock
- Dump and refill
- Zeolite

Cloudy/Milky Water (causes)

- No disinfectant/oxidizer
- No Filtration
- No Circulation
- Unbalanced Water+++ (high pH, TA, CH)
- D.E. in the pool
- Air



Cloudy/Milky Water (treatment)

- Add disinfectant/oxidizer
- Backwash filters
- Change Hair and Lint Strainer
- Re-start Pump
- Balance Water
- Fix filter or leak

Corrosion (unbalanced water)



- Balance water:
(pH 7.4-7.6; TA 100; CH 300)
- Increase pH (soda ash; caustic soda)
- Increase Total Alkalinity (Sodium Bicarb.)
- Increase Calcium Hardness (Calcium Chloride)

Scaling Water (clogging equipment)

- Unbalanced Water++++
- Balance it! (**pH 7.4-7.6; TA 100; CH 300**)
- Decrease pH (muriatic acid; CO2 gas)
- Decrease Total Alkalinity (slug muriatic)
- Decrease Calcium Hardness
(dump & refill; softener)

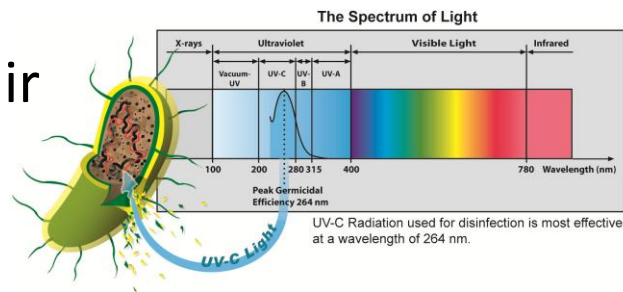
Malodorous, Irritating (Chloramines)



- Measure Chloramines with test kit
- Multiply times 10
- Shock quickly to 10 X C.C. PPM
- Non-Chlorine Shocking Agent ("**OXY....**")
- ***Always add fresh water if it is GOOD fresh water!!!***

Chronic Chloramines

- Maintain Break-point Chlorination
- Consider U/V light
- Consider Ozone
- Maintain a non-chlorine oxidizer residual
- Zeolite Filtration for a Quick Fix
- Constantly add fresh water
- More fresh air; exhaust more air
- GAC Filter
- Paddock's Evacuator



Foaming

- Balance Water
- Dump & Refill
- Add Defoamer
- Unbalanced water
- New vessel
- Detergent

Sand in the Pool (cracked lateral)

- Replace laterals and other parts
- Use smaller sized pea gravel
- Change pump?

Excessive Chlorine (above 8 PPM)

- ***Slowly*** add Sodium Thiosulfate
- Dilute
- Dump and refill

Dr. Tom's Tips

- Most pool problems stem from ***too little chlorine, not too much.***
- Just add more fresh water, your best chemical.
- Raise free Chlorine by ***.5 PPM's for six months.***
- Brush Daily!
- Don't close indoor pools during electrical storms.



Supervision

DROWNING Ds During SUPERVISION

Dereliction

Distraction

Disguise

Disbelief

Denial

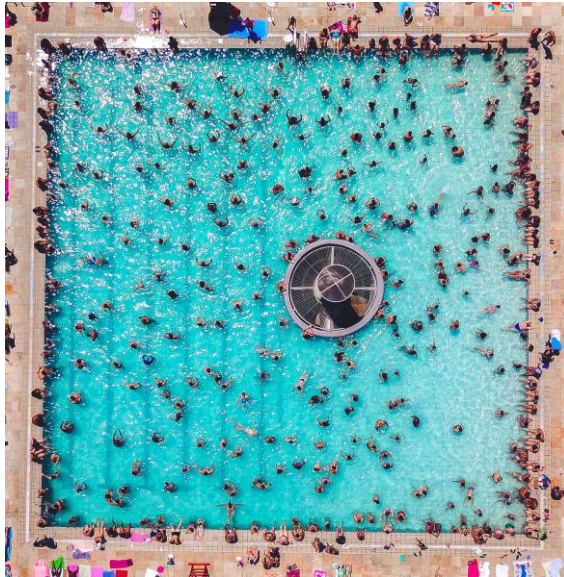
Delay

Death
and/or
Drowning?



Distraction

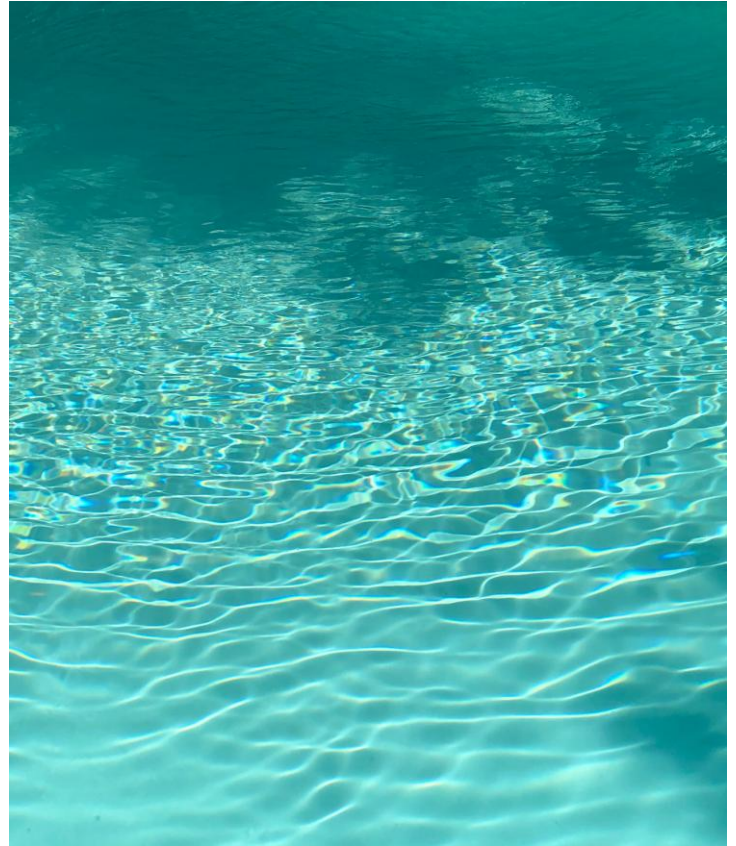
- ✓ RID Factor
- ✓ Phones, watches, earbuds
- ✓ Tracking sounds
- ✓ Tunnel Vision



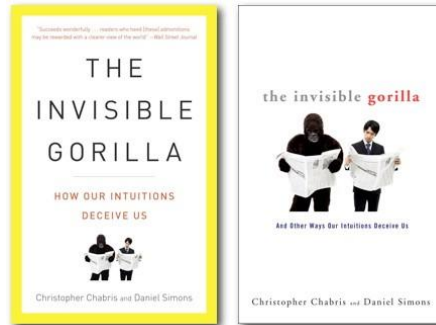
Disguise

PHYSICAL BODY BLINDNESS

- ✓ Reflection
- ✓ Refraction
- ✓ Glare
- ✓ The Ripple Effect
- ✓ Disappearing Dummies



Cognitive Blindness



[The Invisible Gorilla original video](#)

[Viscog Productions](#)

[Brain Games – Inattentional Blindness](#)

[Lifeguard Academy](#)

[LifeguardsLoveYouTube](#)

Disbelief

- ✓ This can't be happening
- ✓ Shock/panic
- ✓ Expect the unexpected



Unrealistic Optimism

- ✓ Belief that positive outcomes are more likely for yourself, than others
- ✓ Belief that negative outcomes are more likely for others than yourself
- ✓ Even though people are aware of drowning, no one feels it will *really* happen around them/on their watch



Denial

- ✓ They are not drowning
- ✓ Stress is an emotional trigger for denial
- ✓ They are just holding their breath
- ✓ If you don't believe it, you won't see it!



Emotions and Attentional Biases



"Emotional information induced a temporary inability to process stimuli that people actively sought."

(Most, Chin, & Widders, 2005)



"When experiencing a certain emotion - a transient one, such as a happy state or a chronic one, such as trait anxiety, an individual sees certain stimuli and ignores others."

(Niedenthal & Kitayma, 1994)

Emotions while Lifeguarding



A word cloud of emotions experienced while lifeguarding. The words are arranged in a roughly rectangular shape, with 'Bored' and 'Boredom' being the largest. Other prominent words include 'Nervous', 'Pool', 'Responsibility', 'Stress', 'Happy', 'Anxiety', 'Calm', 'Confident', 'Edge', 'Emotions', 'Enjoy', 'Focused', 'Happen', 'Proud', 'Ready', 'Satisfaction', 'Think', 'Vigilant', 'Worry', 'Hurt', 'Joy', 'Lives', and 'Look'.

Anxiety Aware Bored Boredom Calm Children
Confident Edge Emotions Enjoy Focused Happen
Happy Hurt Joy Lives Look Nervous Pool Powerful
Proud Ready Responsibility Satisfaction Stress Think
Vigilant Worry

Nervous/Scared/Overwhelmed about missing patrons, not getting there in time, and when it's crowded

Happy to get paid to watch people

Responsibility leading to feeling important or scared

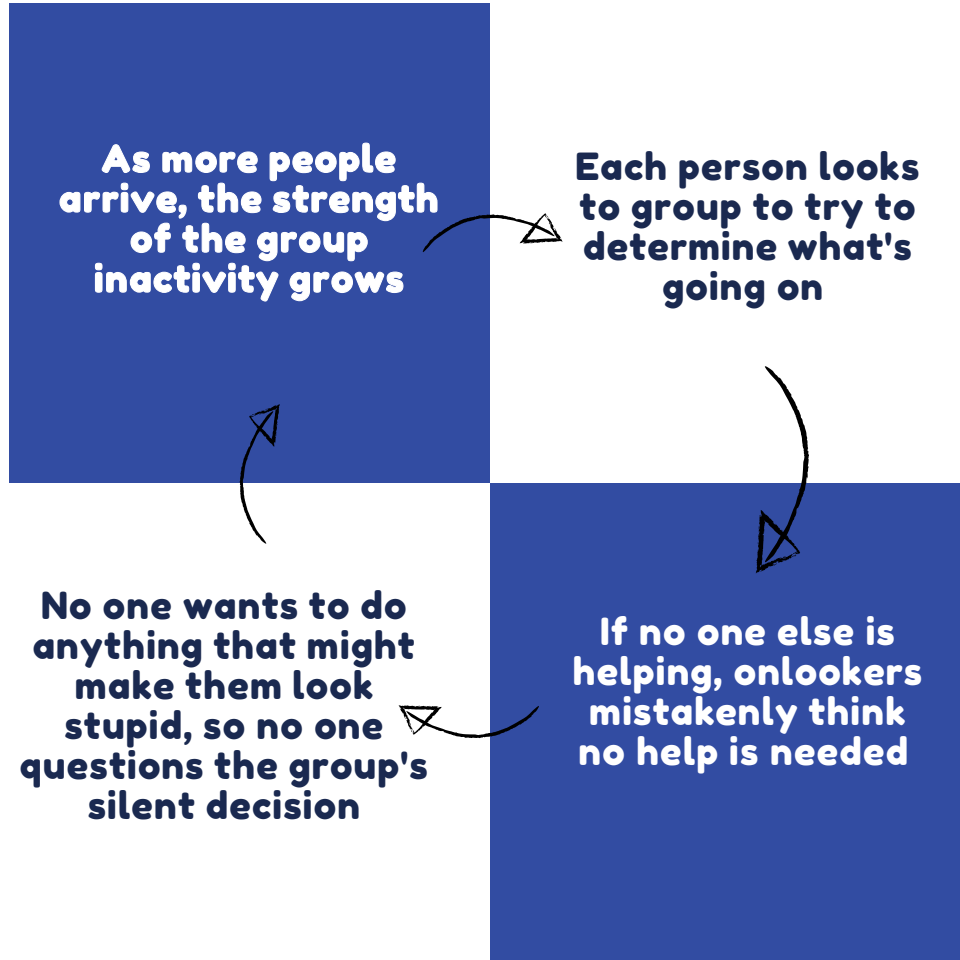
Bystander Effect

**As more people
arrive, the strength
of the group
inactivity grows**

**Each person looks
to group to try to
determine what's
going on**

**No one wants to do
anything that might
make them look
stupid, so no one
questions the group's
silent decision**

**If no one else is
helping, onlookers
mistakenly think
no help is needed**



Bystander Effect

Intention Barriers Action



*Distracted or in
a Hurry*

- Learn about the Bystander Effect
- Awareness



People around
you aren't
helping so you
think nothing's
wrong (Group
Ignorance)

- Figure out for yourself what is happening
- Don't assume the crowd is well-informed



You assume that
someone else
will help even if
you don't
(Diffusion of
Responsibility)

- Take personal responsibility to act
- Assume no one will help if you don't



You worry about
what others might
think if you act and
are wrong about the
situation (Spotlight
Effect)

- Remember the Spotlight Effect
- Asking someone if they need help can make a big difference

Action Items

- ✓ Disconnect with what you think you would do
- ✓ Stand up. Speak out. Be a Hero
- ✓ Be aware! Decide for yourself. Don't look to the crowd for guidance
- ✓ Be the one! Remember, if you don't step up, no one else probably will. Don't trust that passive bystanders have interpreted the situation correctly

Delay

- ✓ Seconds can mean life or death
- ✓ The Ds lead to significant delay
- ✓ Delays lead to death and litigation
- ✓ Delay is directly correlated to the settlement



Death and/or Drowning?

- ✓ Victim dies quickly and quietly
- ✓ Drowning can be secondary to death
- ✓ If the victim aspirates water, the coroner will rule drowning
- ✓ Do not determine whether the incident was a drowning

Often incidences are brought to attention of lifeguards by bystanders



Guests: If you see something, Say something



Lifeguards: If you see or hear something, Do something

Nonswim times

When you are not expecting children to be swimming

- Children access the water without your knowledge

EPIC Supervision Blinders

Why we fail to see drowning

External distractions

Everyone is subject to distractions

- Earbuds
- Conversations
- Other kids

Internal noise

Thoughts and emotions can preoccupy your mind

- Can distract you from seeing, even when your eyes are on the water
- Difficult to manage

Physical blindness

Factors that physically disguise a body under the water

- Reflection
- Refraction
- Ripple effect
- Glare

Cognitive blindness

You don't see what you don't want/expect to see

- Denial
- Disbelief

Technology

Lynxight

Wave

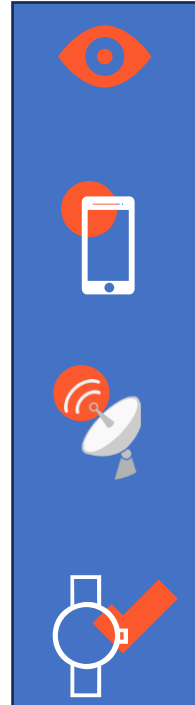
Poseidon

SwimEye

AngelEye

Sentag

Coral Drowning
Detection Systems



Extra Eyes



Older Adults Lifeguards //

Photo Courtesy: Chris
Biswick, Upper St.
Clair, PA

More available,
less inhibited



Junior Lifeguards //

Lifeguard feeder
program



Lifeguard Buddies //

Concept: Chris
Biswick, Upper St.
Clair, PA

Jr. Lifeguard
feeder
program



Volunteers //

Extra Water
Watchers, Stay-
at-home moms



Community
Members //
Neighborhood
watch, neighbors



Public Service Drive-by //

Park Rangers,
Police

L4L: Look for LifeTM

On Surface, Breathing, Meaningful Movement, Happy

YES!



Yay!

NO!



GO!

Maybe?



Quick Check,
if No → Go!



Supervision

1. Human supervision is subject to lapses from physical and psychological challenges
2. There are a number of drowning detection technologies available to supplement supervision
3. Enlisting a community approach can help address lifeguard shortages and lifeguard shortcomings
4. Awareness of supervision challenges can help improve supervision
5. Consider positive approaches for vigilance including, being a “hero” and Looking for Life

3

Supervision of Staff and Training and Documentation for Staff

Have a Properly Trained and Certified Pool Operator

✓ Aquatic Facility Operator (AFO)

Good for 5 years

In-Person or Online!

<https://www.nrpa.org/certification/AFO/become-an-afo/>

✓ Certified Pool Operator (CPO)

Good for 5 years

In-Person or Online

<https://www.phta.org/certification/certification/cpo-for-operators/find-a-cpo-class/>

Size of Zone and Need for Guards

- ✓ Guards are often trained for 10-20 rule - 10 to scan 20 to get them
- ✓ If conditions are too crowded to allow for 20 second response, more guards would be needed
- ✓ MAHC says just need to be able to reach furthest extent of zone within 20 seconds

Supervision of Supervisors

5-30 Model of Accountability

Guards move every 5 minutes,
supervisors checks-in every 30



Lifeguard Managers

- ✓ Crucial to preventing drowning
- ✓ Have obligation to take steps to reduce boredom and increase attention/vigilance
- ✓ Lifeguards should be training in ways to help stay alert
- ✓ Lifeguards need stimulation and supervision

Lifeguard Training

- ✓ Lifeguard certification is like a learner's permit
- ✓ Pre-service training
- ✓ Regular in-service training conducted and documented

How much In-service Training?

- ✓ 2-4 hours per month is recommended
- ✓ Varies by state
- ✓ **Councilman Hunsaker** recommends 1 hour per week
- ✓ **Redwoods Group** recommends 2 hours per month

MAHC's take on In-service Training

- ✓ MAHC says "periodic" in-service to maintain skills
- ✓ Documentation should be completed by person conducting training, available at facility for at least 3 years and available for inspection
- ✓ Documentation should include
 - Names
 - Content of Training
 - Date
 - Name of Trainer(s)
 - In-service training plan
 - In-service training frequency
 - Documentation of in-service training
 - Maintenance of certifications
 - Demonstrations of test ready skills

What counts for In-service?



Physical Conditioning



Common Safety Concerns



Scanning and Surveillance Drills



Rescue and First Aid Skills



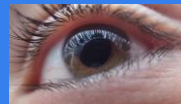
Mock Water Rescues
(involve EMS)



Customer Service/Interacting with Public



Education



Mental Preparation

5

Minute Scanning Strategy



Even minimally increased movement or exertion stimulates the body resulting in increased **respiratory** and heart rates

Lifeguards should change their **posture**, **position** and scanning **pattern** every **five minutes**

Aim: Rapid Response

Tools to Manage Distraction, Anxiety, Internal Noise



Breathing

Mindfulness

<https://www.uclahealth.org/marc/audio>

Insight Timer app



Vigilant Voice

<https://us.humankinetics.com/blogs/excerpt/scanning-strategies>

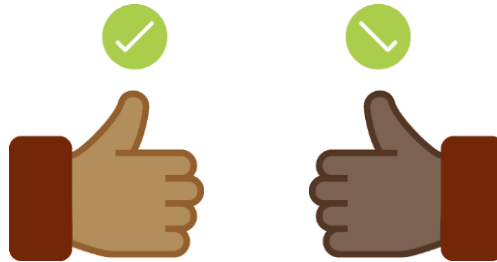


Lifeguard Playbook/ Parent Playbook

Audits

- ✓ Dummy Drops
- ✓ Variations of Dummy Drops
- ✓ Audits - Partner with other Pools

Introduce Interaction



Active vs. Passive Lifeguarding

Helps remove questioning variable

Quick Checks

Emergency Action Plans (EAP)

- ✓ Lifeguarding courses teach only general concepts to follow during an emergency
- ✓ Lifeguard certification is like a learner's permit
- ✓ EAP should be FACILITY-SPECIFIC
- ✓ Practice and Rehearse BEFORE the first day of work – involve EMS
- ✓ Pre-service training
- ✓ Test emergency entrance/exit to the pool (and keep closed when not in use)

Safety Checks



Clear the water of all swimmers and visually inspect the water area



"Train" patrons from beginning of season that safety checks will be conducted regularly



Address safety concerns, bathroom breaks for patrons and lifeguards, lifeguards can reapply sunscreen, and test chemicals (if trained)



Not unsupervised adult swim times



No longer than 10-15 mins



Do not conduct if not feasible for your facility

Chemical Storage



What together and what separate

- Store chemicals in separate waterproof storage bins
- Separate incompatibles



Keep clean and organized

- Off the ground
- Do not stack



Properly label

- All chemicals should be labeled
- Have required signage for room

Use Resources



- EPA.org
- OSHA
- [CDC](https://www.cdc.gov/)

PPE



Eye Wash Station



***Boots, Gloves,
Goggles, Masks***

4

Addressing Specific Risks



Catastrophic Injury

- ✓ Headfirst entries into **shallow water** can result in permanent paralysis or death
- ✓ Nearly **70%** of all sport-related spinal cord injuries are the result of **headfirst entries into shallow water**
- ✓ Often males, experienced divers

Starting Blocks

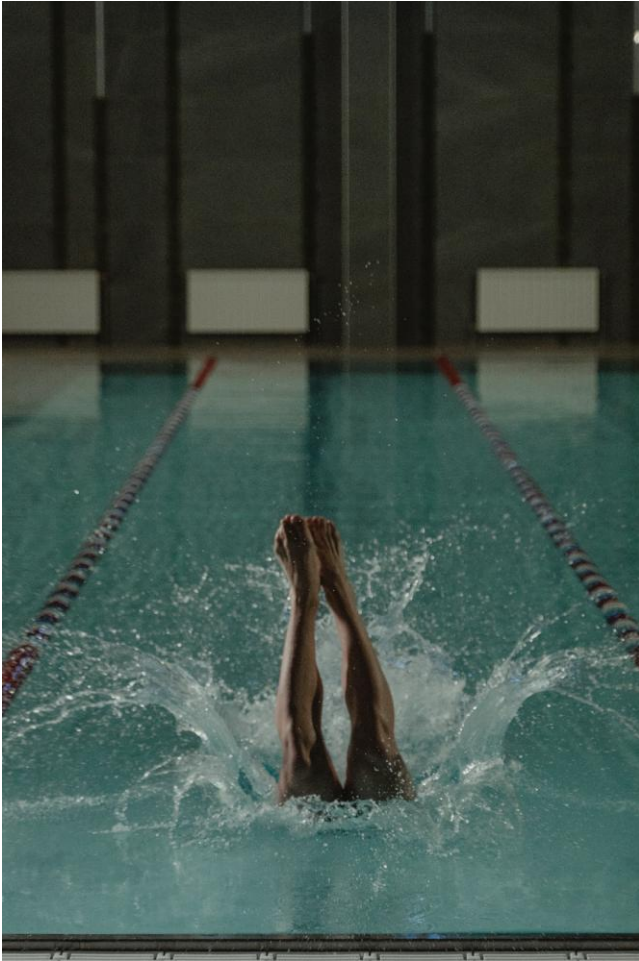
✓ Of the sport-related spinal injuries 95% occur in water less than 5 feet deep

✓ Check with your local health department

✓ **USA Swimming:** in-water starts less than 5'
YMCA: 5'
FINA: 4'5"
USA Swimming: 4' for competition, 6' for teaching, 6' 7" inches for championship meets
NCAA & NFSHSA: 4'
MAHC: 6'7" (proposed)

✓ COVER or Move to deep water if possible when not in use





Lifelines and Depth Markings

- ✓ Install at least one lifeline to separate shallow from deeper water
- ✓ Additional lifelines shallower as needed
- ✓ Depth markings vertically AND horizontally
- ✓ Use No Diving warnings

3-Meter Diving Boards

- ✓ RENOVATE OR REMOVE
- ✓ Activities for Deep water areas:

[Wibit](#)

[Log Rolling](#)

Aquatic Climbing Wall-[Kersplash](#),
[Aquaclimb](#)



NOTICE

IF SWIMMING UNDERWATER:

1. Do NOT TRY TO SEE HOW FAR YOU CAN GO OR HOW LONG YOU CAN STAY UNDERWATER.

2. Do NOT HYPERVENTILATE (OVER-BREATHE) BEFORE STARTING.

IF YOU NEGLECT THESE WARNINGS, YOU COULD PASS OUT UNEXPECTEDLY AND DROWN, EVEN IN A WELL GUARDED POOL, OTHERS HAVE.

Ask the lifeguard for details or read: A. B. Craig, Jr., Loss of consciousness during underwater swimming. Journal of the American Medical Association. April 29, 1961, Vol. 176, pp. 255-258.

Underwater Hypoxic Blackout

Shallow Water Blackout

✓ *Use preventive signage*

✓ *Lifeguard enforcement*

✓ *Staff education*

Michael Phelps PSA

✓ *Awareness any swimmer can be a victim, rather than "tuning out" confident swimmers*

✗ *Ban breath-holding that is prolonged, repeated, or for games or competition*

✗ *Address competitive swimmers, adults, lifeguards, and others*



Genetic Drowning Triggers and Death in the Water

- ✓ Long QT
- ✓ Hypertrophic Cardiomyopathy
- ✓ RYR2
- ✓ Seizure Disorders
- ✓ Autism (Attraction to water)
- ✓ Aging, Active Population
- ✓ Use of prescription medications
- ✓ Drugs and Alcohol
- ✓ Full face snorkeling masks

Pool Covers

Benefits

- ✓ Saves energy
- ✓ Saves \$

Hazards

- ✗ Potential entrapment hazard for staff
- ✗ Potential entrapment hazard for intruders

***Signage/Warnings**

***Safe Protocols for handling - ensure all staff know the safest way to handle the cover and practice**

***DO NOT SWIM UNDERNEATH!**

**If you can't see the bottom drain,
close the ENTIRE pool**

Improving Water Clarity Quick Tips

- ✓ Check and empty hair and lint strainers regularly
- ✓ Check flow and turnover rates
- ✓ Raise Chlorine at least .5 PPM
- ✓ Backwash filters as needed
- ✓ Add an alternative sanitizer or non-chlorine shocking agent
- ✓ Implement these as preventive, before water turns cloudy

Note & Float

1. *IDENTIFY* all non-swimmers &
2. *FLOAT* them in USCG-Approved PFDs

- ✓ Use *BOTH* wristband and life jacket
“Guardians” must be 16 years old;
within arm’s reach of child
- ✓ Parents/guardians receive site-specific water safety information and
“learn to swim” materials
- ✓ Particularly target large groups



Height Quick Check

- ✓ Encourages self-selection of life jackets, whether or not facility is staffed to help with life jackets



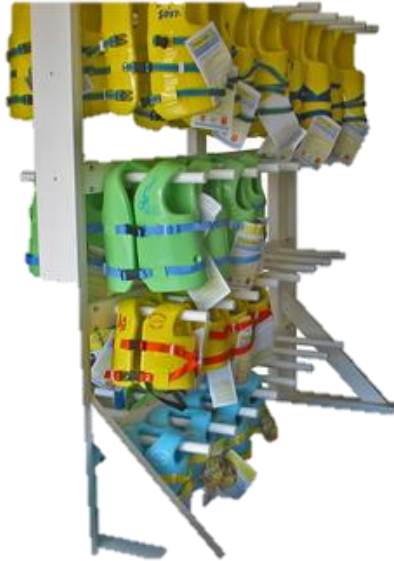
Fit Guide

- ✓ Post "key" for weight ranges for each life jacket (infant life jackets = up to 30lbs; small blue life jackets = 30-50lbs; puddle jumpers = 30-50lbs; med yellow life jackets = 50-90lbs)
- ✓ Post instructions for fitting, whether or not facility is staffed
 1. Make sure USCG life jacket is correct for child's weight
 2. Fasten all snaps, zipper, and buckles snugly
 3. Check fit by lifting life jacket. If it the child's chin or ears, it is too big

<https://www.safekids.org/video/how-fit-life-jacket>

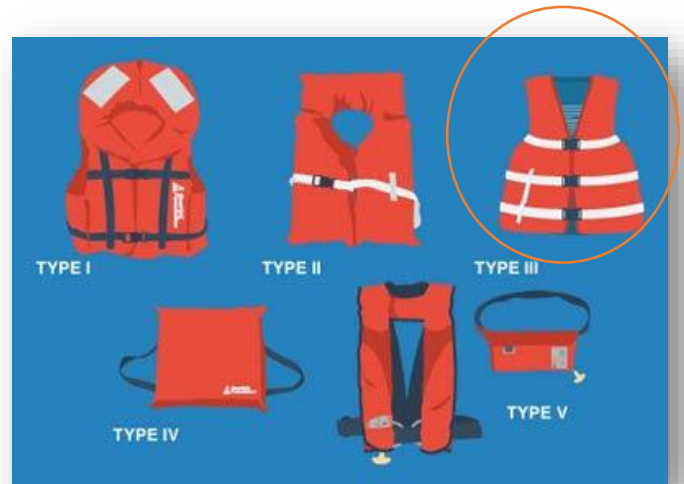
Availability

- ✓ Life jackets should be available in different sizes
- ✓ Consider storage options



Life Jacket Types

- ✓ **Type I:** Boating alone or in stormy conditions, racing, fishing offshore
- ✓ **Type II:** Boating in light craft, cruising
- ✓ **Type III:** Supervised activities
- ✓ **Type IV:** Throwable devices



<https://www.boatus.org/life-jackets/types/>

Sizing Considerations



Puddle Jumper®
Life Jackets



Infant Life Jackets



Life Jackets + Swim Lessons

Puddle Jumpers

Start at 30lbs, about 3 yrs

Up to 30lbs

12 at every facility

- ✓ Swim in designated areas supervised by lifeguards. Always swim with a buddy; do not allow anyone to swim alone.
- ✓ Provide close and constant attention to children you are supervising, even when a lifeguard is present, no matter how well the child can swim or how shallow the water. Avoid distractions including cell phones.
- ✓ Never leave a young child unattended near water and do not trust a child's life to another child; teach children to always ask permission to go near water.
- ✓ Designate a "water watcher" whenever in a group setting.

Take smart precautions and use layers of protection.

- ✓ Stay within an arm's reach of any weak or inexperienced swimmer who is in the water.
- ✓ Have young children or inexperienced swimmers wear U.S. Coast Guard-approved life jackets around water, but do not rely on life jackets alone.
- ✓ Do not rely on the use of water wings, swim rings, inflatable toys or other items designed for water recreation to replace adult supervision.
- ✓ If you have a pool, secure it with appropriate barriers to prevent unsupervised access to the water.
- ✓ Many children who drown in home pools did so during non-swim times – when they weren't expected to be in the water, including as the swimming activity was coming to an end and everyone was thought to be out of the water.
- ✓ Children were often out of sight for less than 5 minutes and in the care of one or both parents at the time.

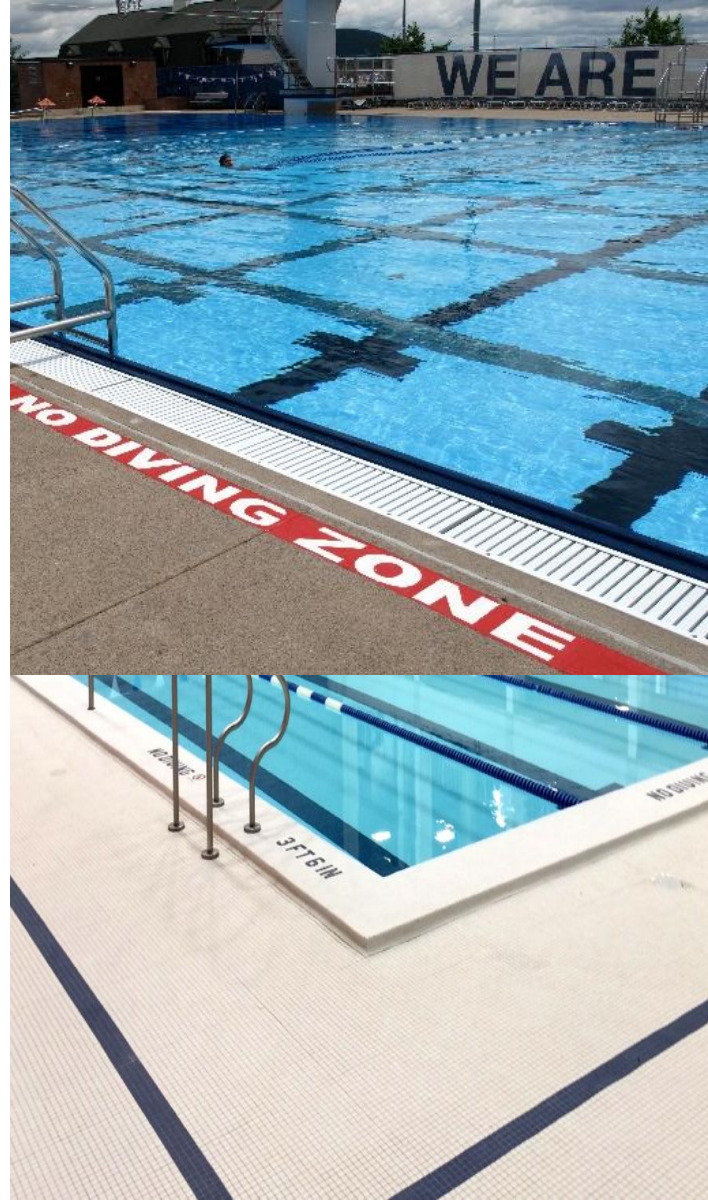
Establish and Enforce Group Use Policy

- ✓ Lifeguards assume teachers, counselors, and/or parents are watching the children - Teachers, counselors and/or parents assume that lifeguards are watching the children - **BUT NO ONE IS WATCHING!!!**
- ✓ If using a buddy system, practice it regularly
- ✓ Sample Guideline Group Use Policy



Paint, Tape, Tile

- ✓ All leading edges
- ✓ Pool area, water slide steps, pump room (sump pit), other steps
- ✓ Significant drop-offs should ALSO include rope off, gate, or other barriers



5

Educating the Public

75%

of parents primarily get water safety information from Aquatic Facilities



Other locations parents receive water safety information:

38%



at least
sometimes
online

42%



at least sometimes
from the
pediatrician

22%



at least sometimes
from the child's
school

Education and Materials for the Public whether Facilities are Open or Closed

✓ [Colin's Hope](#)

*Water Safety Card (includes water watcher card) – distribute at facility – (\$1.00 per card or contact them directly for discounted or free cards)

✓ [American Red Cross Swimming Safety](#)

Online [Course for Parents and Caregivers \(Free\)](#)

Online [Course for Ambassadors \(Free\)](#)

✓ Note & Float Parent Cards and Life Jacket Loaner Stations

✓ Staff or volunteers go into schools to teach water safety/fit life jackets

✓ [Stewie the Duck](#)

Book, App, Education

6

Warnings, Documentation, Insurance

EMPHASIZE AND HIGHLIGHT MOST IMPORTANT WARNINGS



Must know

No Diving Shallow Water, Non-swimmers Wear Life Jackets, Watch Children, No Prolonged Breath-holding

Should know

No Running, No Glass



Nice to know

No horseplay

Keep health department required signage

De-clutter signage - consider removing warnings that are not required and are not significant - The more warnings, the more ignored



Warning Shapes, Colors, and Symbols



Three Strikes and You're Out!

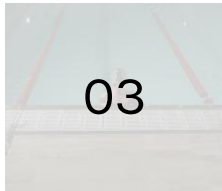
Most important warnings ideally
three conspicuous places



In the parking lot/locker room



At the entrance



At Poolside or Water Edge

Documentation

- ✓ Consult legal counsel to determine what level of documentation is appropriate
- ✓ At a minimum consider:
 - Rescue and accident reports
 - First Aid logs
 - Safety Checks
 - In-service training



Documentation



- ✓ Documents are considered **legal documents** and may be used in court
- ✓ Include only the **facts**: No **personal opinions**
- ✓ Person involved in incident/rescue should complete the report and sign it

Insurance

- ✓ Learn more about opportunities and education provided by insurance
- ✓ Check local law; you may be covered by other factors

Delevop your Risk Management Priorities and Strategies

- ✓ Identify, Evaluate, Minimize, Eliminate, Warn
- ✓ "Seven Deadly Sins of Aquatic Risk Management"
 - 1.Failure to have a **CPO/AFO**
 - 2.Failure to warn vs. **headfirst entries**
 - 3.Failure to warn vs. **breath-holding**
 - 4.Failure to have a **group use policy**
 - 5.Failure to warn **parents to watch their children**
 - 6.Failure to **Note & Float**
 - 7.Failure to reduce **sign pollution**

ARM Summary

1. What is Aquatic Risk Management
2. Supervision
3. Supervision of Staff and Training and Documentation for Staff
4. Addressing Specific Risks
 - a. Diving
 - b. Lifelines and Depth Markings
 - c. Shallow Water Blackout
 - d. Pool Covers
 - e. Cloudy Water
 - f. Protecting Little Ones
5. Educating the Public
6. Warnings, Documentation, Insurance

THANK YOU

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www.DrTomsLifeguardVision.com

www.NoteandFloatLifeJackets.org

<https://aquaticsafetygroup.com/PDF/Aquatic-Risk-Management.pdf>