BEING PREPARED IN A TIME OF UNCERTAINTY:

Where we are now – where we will be when this subsides –
what will be different going forward?

Overview and Introductions

- *This live webinar will feature an aquatic panel of experts who be discussing what to do now, what to do when you open, and what you should be prepared for in the future.*

- Panel:
  - *Laurie Denomme – Founder: Water Exercise Coach*
  - *Mick and Sue Nelson – Founders: Total Aquatic Programming (TAP)*
  - *Jill White – Founder: Starfish Aquatic Institute*
  - *Kevin Post – Principal: Counsilman-Hunsaker*

Now - Facility

- Basic principles of water chemistry, RWI's, and COVID19 in pools
  - *Pools have other viruses, including norovirus that have always needed to be treated*
  - *COVID-2019 is one of a large family of other coronaviruses*
  - *COVID-2019 is not likely to be spread in swimming pool or spa water*

- Should we shut down or maintain our pool and how should we do it?
  - *Either is appropriate, but needs to be done right*
  - *Maintaining is better if you think you will re-open soon*
  - *Full shut-down will save money over a longer shut-down*

Identifying the ENEMY:

- Cryptosporidiosis: Parasite is resistant to germicides and bactericides and can live in the pool water for up to a week; highly contagious; transmitted by swallowing water and people contact; causes dehydration, weight loss, stomach cramps, fever nausea and vomiting; no treatment.
- Escherichia coli (E-coli): Bacteria controlled by proper chlorination; transmitted by swallowing water; causes bloody diarrhea, abdominal cramps, and kidney failure; treated with antibiotics.
- Giardiasis: Parasite can last less than an hour in a properly chlorinated pool; the cooler the water the longer it can survive; transmitted by swallowing water; causes diarrhea, gas, stomach cramps, nausea and upset stomach; treated with prescription drugs.
- Hepatitis A: Virus is mildly resistant to germicides and bactericides and can live approximately 15 minutes in a properly chlorinated pool; transmitted by swallowing water; causes jaundice, fatigue, loss of appetite, diarrhea, fever, stomach pain; vaccine available but no treatment after the fact.
- Legionnaires' Disease / Pontiac Fever: Bacteria killed in less than a minute in a properly chlorinated pool;
- transmitted by inhaling mist from hot tubs or spray features; not contagious; causes fever, chills, cough, aches, fatigue, diarrhea, kidney malfunction; treatable if diagnosed in time.
- Naegleria Infection: Microbe that enters through nose and affects brain and spinal nerves; (rare) this ameba lives less than a minute in a properly chlorinated pool; causes meningoencephalitis; prescription drugs available if immediately diagnosed.
- Norovirus Gastroenteritis: Virus that has a mild resistance to germicides and bactericides and can live approximately 30 minutes in a properly chlorinated pool; transmitted by swallowing water; causes nausea, vomiting, diarrhea, stomach cramps, flu like symptoms; no treatment specified; people usually recover on their own in 48 hours.
- Pseudomonas Dermatitis: Bacteria controlled by proper chlorination; hot tubs and pools; transmitted by direct skin contact with/in water; causes itching, rash, blisters; not contagious; clears up on it's own in about 48 hours.
- Salmonellosis: Bacteria controlled by proper chlorination; transmitted by swallowing water; causes diarrhea, fever, cramps; antibiotics available for more serious cases.
- Shigellosis: bacteria controlled by proper chlorination; transmitted by swallowing water; causes diarrhea, fever, cramps; treated with antibiotics.

Maintain

- The pool recirculation pump(s) remain operational 24/7 in the event of a facility closure. Where it is permissible per local/state code, the system may be turned down to 75% of the designed flow rate, should the system be able to accommodate such a reduction. Refer to the Model Aquatic Health Code, paragraph 4.7.1.10.5.

- Ensure the minimum disinfectant residuals, per local/state code, are maintained within the pool during these periods when the pool is unoccupied. If the pool typically maintains a 2.0 or 3.0 ppm residual in the pool, it may be reduced to 1.0 ppm, if allowed per local/state code.

- For indoor pools, the HVAC/DX system should remain operational to maintain the natatorium at a negative pressure relative to adjacent spaces.

- A certified pool operator should inspect the pool and its related systems at least once per day. Chemical quantities should be inspected and procured, as needed. The filter may also require backwashing, especially if the pool is outdoors, depending on the loading and type of filter system.

- The facility should be secured to prevent public access.

- Prior to the pool being re-opened to the public, the certified pool operator will need to do a full inspection of the mechanical and chemical treatment systems as well as the water quality.

Close

- Balance the water chemistry.
- Remove skimmer baskets, wall fittings, cleaners, ladders, and any other loose equipment from the pool.
- Clean the pool walls and surfaces
- Lower the water level in the pool
- Drain all pool equipment
- Lubricate the o-rings on equipment
- Winterize plumbing to and from the pool
- Add winterizing algaecide
- Cover the pool
- The facility should be secured to prevent public access.

- Prior to the pool being re-opened to the public, the certified pool operator will need to do a full inspection of the mechanical and chemical treatment systems as well as the water quality.

Now – Safety and Risk Management

- Education
  - *Stay informed about COVID-19 recommendations and fact-based evidence*
  - *Obtain (or conduct) virtual training as much as possible for continuing educational and professional development*
  - *Update or obtain certifications*
- Establish a systematic risk management process: eliminate, control, warn
- Plan and prepare
  - *Risk assessments: operating procedures, EAP's through the airborne and contact transmission lens for PATRONS and STAFF and SELF*
  - *Review and update operating procedures, documents, manuals, contracts, etc.*
  - *Signage and informational documents (what you are doing, what is expected)*
  - *Equipment and supplies ordering – especially PPE and cleaning supplies*

Now - Programming

- Keep on Moving
  - *Worried about COVID-19? Exercise can help*
  - *Connect with your clients/participants and build a new following*
- Education
  - *Opportunity to sharpen skills and learn new ones*
- Plan for a Fresh Start
  - *Registration and check-in procedures*
  - *Put new knowledge into action*
  - *Plan and prepare for safety/risk management*

Later - Facility

- Pre-opening cleaning
  - *Start-up equipment, give time to make sure things are working*
  - *Water management program for stagnant systems (bacteria testing)*
- On-going cleaning protocols
  - *New hourly or periodic disinfection checklists for ANY hard surface.*
    - Tables, chairs, lounges, lifeguard stands, etc.
  - *Better documentation and transparency to public comfort*
- User involvement
  - *User provide personal training equipment*
  - *Clean general use equipment before and after use*

Cleaning - Best for combating virus

- Clorox Commercial Solutions Disinfecting Bio Stain & Odor Remover
- Clorox Pet Solutions Advanced Disinfecting Stain & Odor Remover
- Lysol Hydrogen Peroxide Action Multi-Purpose Cleaner, Oxygen Splash
- Lysol Hydrogen Peroxide Bathroom Cleaner, Cool Spring Breeze
- Lysol Hydrogen Peroxide Multi-Purpose Cleaner, Citrus Sparkle Zest
- Lysol Hydrogen Peroxide Multi-Purpose Cleaning Wipes, Oxygen Splash
- Lysol Power Bathroom Cleaner, Island Breeze
- Purell Multi Surface Disinfectant, Fragrance Free
- Seventh Generation Disinfectant Spray, Eucalyptus, Spearmint & Thyme
- Seventh Generation Disinfectant Spray, Fresh Citrus & Thyme
- Seventh Generation Disinfectant Spray, Lavender Vanilla & Thyme
- Seventh Generation Disinfecting Bathroom Cleaner, Lemongrass Citrus Scent
- Seventh Generation Disinfecting Multi-Surface Cleaner, Lemongrass Citrus Scent
- Seventh Generation Disinfecting Wipes, Lemongrass Citrus Scent
- Windex Multi Surface Disinfectant Cleaner
- Windex Multi Surface Disinfectant Cleaner, Glade Rainshower

Cleaning - Safer active ingredients

- Hydrogen peroxide
- Ethyl alcohol (ethanol)
- Citric acid
- L-lactic acid
- Caprylic acid (octanoic acid)
- Thymol

EPA-registered products

Cleaning - Active ingredients to avoid

- When considering a product, read the labels and be on the lookout for these ingredients that may be best to avoid.
  - ***Sodium hypochlorite**: EWG notes that this is "linked to harm to the skin and respiratory system and the environment. When improperly mixed with other cleaners or acids, sodium hypochlorite can be fatally poisonous." It is also found in chlorine bleach.*
  - ***Quaternary ammonium compounds**: Also known as quats, which, according to EWG, are linked to asthma and suspected of causing reproductive toxicity and birth defects in humans. They also take an environmental toll.*
  - ***Hydrogen peroxide and vinegar mixed together**: the combination forms caustic peracetic acid.*


A HIGH-RISK ENVIRONMENT
Restrooms are not only the most challenging and costly areas in a facility to clean, they are also the most critical areas to clean properly. Biological waste and residue quickly lead to an explosion of odor and disease causing bacteria. Customer loyalty and occupant health both hinge upon hygienic and fresh-smelling restrooms. Unfortunately, according to our research, most restrooms fall short.
TRANSMISSION POINT
Hepatitis A, Norovirus and E. coli spread quickly from the restroom to the rest of the building
TOILET SNEEZE
When flushed, a toilet emits a fine mist of aerosolized fecal matter, urine, and bacteria
HOME FOR GERMS
Disease causing organisms on surfaces can survive for weeks
COSTLY TO MAINTAIN
Restrooms require over 60% of all supplies in a building
THE INVESTMENT
Highest cleaning and construction costs per square foot in the building
FOOD SOURCE
Bacteria thrive on urine residue
SMELLS LIKE TROUBLE
Strong odors are evidence of biological activity
SOURCE OF COMPLAINTS
Restrooms are the #1 source of building complaints
RING AROUND THE RESTROOM
The telltale sign that the ineffective cleaning of mops is at its worst
LIABILITY
Restrooms see the highest number of slip and fall incidents

Later – Safety and Risk Management

- Pre-opening site-specific training
  - *New policy/procedure/expectations*
  - *Making sure everyone is on the same page and consistent*
    - Virtual or live small groups
- On-going risk assessments
  - *How are things going? Are there new risks? What are any unintended consequences and can these be reduced?*
- Engagement
  - *How can we continue to thrive and deliver?*

Later – Programming

- Pre-opening site-specific training
  - *What new skills do you have and how can you use them?*
  - *Implementation plan / re-educate clients/members*
  - *New members orientation / back to basics*

- Be a Water Exercise Coach
  - *Monitor: Observe participant response*
  - *Evaluate: Ask for feedback*
  - *Adapt: Do more of what works and what people enjoy*

Different- Facility

- Business model – how do you sustain PT staff without government support?
  - *Plan for the unknown*
  - *Build cash reserves*
  - *Offer alternate programming*
- Sustainability – How do we handle smaller crowds but maintain revenue
  - *Private experiences need to have a higher value*
  - *Can we utilize historically underutilized times?*
  - *Do we need to offer smaller classes to spread people out?*
  - *Limit to crowds of 50?*

Different- Safety and Risk Management

- Renewed focus on risk assessment methods, implementation, documentation
- Training and information delivery – online/virtual is here to stay
  - *Plan for keeping up with technology and resources*
  - *Develop a way to cut through the clutter*
  - *Information and content sharing*
  - *Develop a way to cut through the clutter and poor quality information*
- Emergency care
  - *How will CPR and first aid change?*
  - *Will the role of the lifeguard change due to exposure concerns? Will this be practical/manageable to keep facilities open?*
  - *Deciding the risk-reward for operating – being clear on who's responsibility this is. Some decisions may be out of your hands. Accept and control what you can.*

Different – Programming

- Program Delivery
  - *Personal training, small group training*
  - *Educate clients/participants how to keep moving*
  - *Use of technology within the facility and out to keep members connected*

- Continuing Education and Team Building
  - *Plan for keeping up with technology and resources*
  - *Build a team that grows together and can adapt to new situations*

Questions / Discussion

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