Sizing up Summertime Water Recreation Exposures

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Summertime brings to mind thoughts of fun in the sum—swimming, camping, boating, fishing, hiking and mountain climbing to name a few. In New York State alone, there are 101 state parks and 49 state forests. In addition, the state offers over 10,000 miles of lake and marine shoreline, 3.5 million acres of lakes and ponds, and 70,000 miles of river and stream shoreline. While a majority of these resources are maintained by the state or other governmental entities, there are a large number of privately owned marinas, docks, beaches and of course swimming pools. Understanding the potential hazards of these exposures, and ways to reduce the frequency and severity of accidents and injury, is a key component of the successful underwriting process.

Recreational activities and facilities mean added jobs and income, but they are not without risk of damage, injury, illness and death. Water activities are especially hazardous. According to the Centers for Disease Control and Prevention (CDC), every day 40 people around the world drown. Drowning is the fifth leading cause of death for all ages, and the second for children from 1–14.

According the New York State Department of Health, the more than 7,400 public swimming pools are the number one type of bathing facility in New York, accounting for 85 percent of total bathing facilities, with the remaining 15 percent being the various beaches across the state. The vast majority are pools for apartments, health clubs,



aquatic amusement parks, homeowner associations and others. This does not include thousands of private homeowner pools. Pool safety begins with protecting the perimeter. The New York Pool Code calls for secure fencing, 4 feet in height and entrance security for all approved pools, with latches at least 40 inches high to prevent small children



from opening the gate. This is for public and residential pools. Residential pool alarms that will signal when a child enters the water are required.

Private residential pools with diving boards or slides have been disappearing due to the liability risk they pose. According to Nationwide Children's Hospital, the risk is great with over 6,500 children treated for diving-related injuries each year. Any homeowner inspection should note the presence of a diving board or slide as a special feature to the underwriter.

The CDC cautions about a variety of recreational water illnesses (RWIs) that can include infections of the ear, eye, gastrointestinal tract and skin, as well as neurological and wound injuries. RWIs are contracted through swallowing, breathing in mists, or skin contact in any type of water environment, including swimming pools, spas/saunas and hot tubs, as well as natural bodies of water such as rivers, lakes and oceans. The most common RWI is diarrhea. Swimming pools and bathing beaches that are commercially operated, whether public or private, must comply with local and state regulations, including monitoring of water quality.

In New York City, bathing establishments are governed by Article 165, which addresses requirements for







construction, modification, operation and maintenance of such facilities. The facility's operation must be safe, clean and sanitary at all times, employing certified pool operators. The Department of Health can close down any commercial facility at any time.

For swimming and boating facilities, the existence of water hazards, such as shallow depths, underwater rocks or the presence of dangerous currents or tides, should be posted prominently. Swimming areas should be clearly separated from boating areas. Adequate staffing of bathing areas, with qualified lifeguards during hours of operation, is essential. It is imperative that access to water recreation areas be prevented when there is no supervision present. This includes fences, locked gates and warning signs.



Boating is another popular recreational activity, participated in by over 87 million adults and generating approximately \$2 billion in revenue each year in New York State alone. There are over 460,000 boats registered in New York, making it one of the top 10 states. In New York, all partially or wholly power-driven watercraft that are used principally on the state's public waterways must be registered with the Department of Motor Vehicles.



Boats should always be equipped with personal flotation devices (PFDs). Boat owners, marinas and others who rent boats should stress the importance of wearing the PFD at all times. The United States

Coast Guard estimates that 85 percent of drowning deaths occur when victims

are not wearing a PFD. The Coast Guard reports that in 2015 there were 4,158 recreational boating accidents nationwide. These accidents resulted in 626 deaths and 2,613 injuries, and approximately \$42 million dollars of damage to property. The watercraft that comes to mind as the most dangerous is likely a power boat, but in fact 50 percent of the boating fatalities in New York in 2015 involved paddle craft, such as canoes, kayaks and rowboats.

Alcohol and drugs are an all too common component of boating accidents. In 2015 50 percent of the boating deaths in New York involved alcohol and/or drug use. Marinas and other facilities that rent or loan watercraft should have a strict policy, including written and signed contracts, prohibiting use of alcohol or drugs when operating watercraft.

Electricity can be an unseen and deadly hazard around water activities. Electric shock drowning (ESD) occurs when electricity from a boat or dock gets into the water and electrocutes or incapacitates a swimmer. Further tragedy results when an unknowing would-be rescuer jumps in to assist the victim. It only takes a small amount of electricity to paralyze a swimmer, which then leads to drowning. It is only recently that attention has been given to ESD. Since autopsies of ESD victims often do not show any sign of electric injury, many of these types of drownings are labeled as a common drowning.

ESD is a hazard that is predominantly associated with fresh water. The reason is that the conductivity of a human body when wet is close to that of salt



water. Therefore, the current passes through and around people in salt water without causing harm—the exception is if a person touches metal, such as on a ladder, which would complete the circuit. Fresh water causes the current to 'get stuck' in the body, so that even a small level of electricity is harmful. With the large amount of freshwater recreational activity in New York, awareness of this danger is imperative.

The National Fire Protection Association (NFPA) has issued standards about fire protection for marinas and boatyards, namely NFPA 303. A concern stated in NFPA 303 is that environmental conditions found at boatyards and marinas are often severe. "This increases the difficulty of properly maintaining electrical and firefighting equipment," Nils Deacon, senior inspector for MSO, and a member of several NFPA committees said. "A pre-fire plan is required to be submitted annually, including information on responsibilities the employees have in the event of an incident."

Underwriting guidelines should include checking to be sure that all electric fixtures and outlets on docks or near the water are installed and maintained following NFPA codes and standards. "No Swimming- Electric Danger" warning signs should be posted around docks. Ground Fault Circuit Interrupters (GFCI) are required on all shore power pedestals and all marine wiring circuits. Swimming should be prohibited around docks that have electrical outlets or fixtures. It should also be avoided from and around boats, especially if they are hooked up to onshore power sources. Boat owners should check their electrical systems annually to be sure electricity is not leaking into the water. This should be done by an electrician or technician certified by the American Boat and Yacht Council. In addition, equipment leakage circuit interrupters should be installed on all boats and tested monthly.

Lightning is another hazard for summer recreation activities. Recreational fishermen are especially at risk, and are the group most likely to be struck by lightning, followed by campers. The National Weather Service started its Lightning Safety Awareness Campaign in 2001, and the number of deaths from lightning since then has decreased markedly.

Boats and pools aren't the only way to enjoy summer water. New York has over 1,300 public bathing beaches, used by millions of people each year. Lakes, rivers, bays and the ocean are utilized by residents of the state to their fullest in warm weather. It also is the time seasonal facilities can make money but also be most exposed. Inspections and operations questionnaires are of immense value to the underwriter and allow for careful management of the risks.

When an insured is a beach facility, special attention should be made to supervision, signage and maintenance of equipment. Qualified life guards, with adequate staffing, should be guarding the beaches during hours of operation. Signage warning of ocean rip currents, dangerous river currents and underwater hazards (rocks, shallow bottom) should be posted. There is a strict permitting process in New York which includes the above directives.











Additionally, monitoring of water quality is very important.

While lightning is most dangerous for fishermen, it is also a real risk at beaches. Signage indicating proper precautions concerning lightning is appropriate. While people are killed by lightning year-round, the numbers spike in June and July, usually during leisure activities.

All equipment, such as rescue boats, life guard gear, lines and first aid kits should be well maintained and accessible. When possible, securing the perimeter with fencing can help protect against unwanted access, especially at night.

Not all hazards, especially on lakes, are caused by water or lightning. The Finger Lakes region has had serious issues because of the use of sky lanterns. These are small hot air balloons made of paper. They get their lift from a suspended candle. Under state code, they are classified as a recreational fire. If they are not tethered and attended, they are illegal. Free floating lanterns have come down and caused fires to docks and structures, as well as forest fires, especially in this region.

Maintenance of equipment and grounds, including beaches, trails, parking and picnic areas is another key component of a successful facility. Safety equipment should be easily accessible and in proper working order. Grooming of the grounds and beaches can reduce incidences of sprained ankles and other injuries. Safety maintenance and upkeep is not cheap. Poor financial strength can be another important indicator of potential problems down the road. Assessment of financial information should be a part of the underwriting process.

After a cold winter in the Northeast the last thing we want to think about are the dangers of enjoying a beautiful summer, but insurance companies need to fully assess these risks and determine the potential impact of the number of factors at play. Doing so not only helps with proper underwriting, but also in keeping facilities that have a water recreation component safer.

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