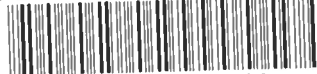


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# Lake Bathing Place Microbiological, Sanitary and Safety Guides

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New Jersey (State) Department of Health

**LAKE BATHING PLACE  
BACTERIOLOGICAL, SANITARY AND SAFETY GUIDES**

**BACTERIOLOGICAL**

**Section 1. Collection of Samples**

A. LOCATION: Samples of lake bathing waters shall be taken at the inlet(s) and bathing areas. Samples shall also be obtained at outlets when sufficient discharge is occurring. Additional samples shall also be obtained at any critical points subject to known or possible pollution from developments, individual dwellings, streams or other sources.

B. FREQUENCY: Sufficient samples should be taken at weekly intervals. However, the time between sampling shall not exceed two weeks.

C. SAMPLING PERIOD: A program of sampling shall be instituted at least one week before Memorial Day and shall continue in a manner as prescribed herein until the end of the bathing season.

D. TIME OF SAMPLING: Whenever possible, samples shall be obtained during, or soon after, peak bathing load periods.

E. FIELD DATA: Physical conditions noted at the time of sampling shall be recorded on a suitable form including sample number, name of collector, source, location, time of sampling, water and air temperature, wind direction and velocity, bathing load, and the possible effect of recent rainfall on bacteriological quality.

F. METHOD OF SAMPLING: Samples shall be obtained at depths representative of the body of water in use for bathing. Method of sampling shall be in accordance with procedures as found in "Standard Methods for the Examination of Water and Wastewater," current edition.

G. SAMPLING PERSONNEL: Samples shall be taken by the local health officer or by persons authorized by or under the supervision of the laboratories responsible for the analyses.

**Section 2. Bacteriological Examinations**

A. LABORATORIES: Bacteriological analyses of bathing lake waters shall be made by laboratories acceptable to the New Jersey State Department of Health. In addition, all laboratories doing such analyses shall be thoroughly familiar with all requirements contained herein.

B. METHOD OF ANALYSIS: Bacteriological analyses of bathing lake waters determining the presence and density of organisms of the coliform group shall either conform with (1) the method prescribed in "Standard Methods for the Examination of Water and Wastewater," current edition, or (2) other methods acceptable to this Department.

C. NUMBER OF PORTIONS AND DILUTIONS: Although the number of portions and dilutions used will depend on the expected character of the water,

it is recommended that three (3) portions at the following dilutions be used: 10, 1.0, 0.1, and 0.01 ml.

D. METHOD OF REPORTING: The number of positive findings shall be reported in terms of Most Probable Number per 100 ml. (MPN per 100 ml.).

E. TOTAL BACTERIA DETERMINATION: As an aid to interpretation of the results, agar plate counts shall be made in accordance with "Standard Methods." 1 ml. shall be planted on at least two plates and the resultant counts averaged arithmetically.

### **Section 3. Bacterial Limits**

When the arithmetic average coliform MPN of a set of samples taken at any particular time exceeds 2400 per 100 ml. another set of samples shall be taken as soon as possible from the same locations. If the arithmetic average of this set of samples still remains above 2400 per 100 ml., a sanitary survey shall be instituted by the local health officer or laboratory responsible for the analyses, provided the local health officer will accept the inspection findings of such laboratories.

### **Section 4. Chemical Analysis**

pH values of every sample obtained shall be determined as an aid to interpretation of bacteriological results.

### **Section 5. Physical Analysis**

Determination of turbidity, color and odor should also be made as an aid to the interpretation of quality of bathing lake waters. Such determinations shall be in accordance with "Standard Methods."

## **SANITATION**

### **Section 1. Bathhouses and Dressing Rooms**

A. DRESSING ROOMS: Where dressing rooms or bathhouses are made available to the bathing public and when used simultaneously by both sexes, such structures shall consist of 2 sections, entirely separated by partitions.

B. FLOORS: Floors of all dressing and locker rooms shall be constructed of smooth, finished material impervious to moisture. Floors shall have sufficient pitch or be constructed so as to permit proper drainage after washing down. Walk areas used by patrons shall be non-slip construction.

C. WALLS AND PARTITIONS: Walls and partitions of all dressing rooms, and bathhouses shall be of smooth, impervious material. If walls of wood or other similar material are used, all cracks and joints shall be filled and the surface kept finished with paint, creosote or other sanitary waterproof coating. Partitions between dressing rooms should terminate a sufficient distance above the floor to permit flushing of the entire floor area.

D. FURNITURE AND LOCKERS: All furniture used in dressing rooms shall be of simple character and easily cleaned. Lockers, where provided, shall be properly ventilated and be of vermin proof construction with tight joints.

E. CLEANING AND DISINFECTION: All dressing rooms, bathhouses and appurtenances shall be kept clean and orderly at all times. A suitable disinfectant shall be used at daily intervals on floors, walls, seats and other interior portions of dressing rooms and bathhouses. Foot baths are not required.

## **Section 2. Toilets, Lavatories and Showers**

A. NUMBER: An adequate number of conveniently located and properly designated toilets shall be provided for each sex. Readily accessible washing facilities should be provided.

B. TYPE: Flush type toilets should be used provided waste waters can be disposed of properly. If soil, groundwater conditions, location or space limitation do not permit the use of flush type toilets, properly constructed and located privies or chemical toilets may be used subject, however, to local ordinances.

C. MATERIAL: Floors, walls and fixtures shall be constructed of durable easily cleaned material.

D. MAINTENANCE: All toilets, lavatories and showers shall be cleaned and disinfected daily and kept in good repair. Toilets shall be kept supplied with a sufficient amount of toilet tissue. Lavatories shall be supplied with soap and suitable receptacles for disposal of paper towels. Common towels shall not be permitted.

## **Section 3. Water Supply**

A. TYPE: Whenever possible, a water supply should be obtained from an approved public system. Where private wells are used, such wells shall be located and constructed so as to prevent surface or subsurface contamination.

B. QUALITY: Any water used or available for use for drinking or culinary purposes or for the cleaning of utensils used in preparing or serving food or drink for public consumption shall be of a quality safe for such use and shall meet the standard of quality fixed by the New Jersey State Department of Health.

## **Section 4. Sewage Disposal**

A. TOILET WASTE: Any toilet or receptacle for human excrement shall be constructed and maintained so that flies cannot gain access to the excremental matter contained therein and such excremental matter shall at all times be prevented from flowing over or upon the surface of the ground and shall be prevented from gaining access to any of the waters of this State.

B. OTHER WASTE WATERS: No dish water, shower water, drainage from plumbing fixtures or other foul or putrescible waste liquids shall be permitted to accumulate on the surface of the ground or be disposed of in a manner that will pollute any water supply or create a nuisance.

### **Section 5. Food Handling**

A. PROTECTION: Food offered for sale or intended for public consumption shall be protected from flies, dust and dirt.

B. CLEANLINESS: Where food or drink is offered for sale or public consumption, adequate washing facilities for thoroughly cleaning utensils used in preparing or serving the same shall be provided and such utensils and counters, table tops, shelves, boxes, refrigerators, and other receptacles on or upon which food or drink is stored, prepared, handled, displayed or served shall be kept clean.

### **Section 6. Garbage Disposal**

GENERAL: Garbage cans shall be emptied daily and kept clean.

### **Section 7. Rodent Control**

GENERAL: All areas so far as may be practicable shall be kept free from rats, mice, roaches and other vermin.

### **Section 8. Weed Control**

GENERAL: Noxious weeds such as ragweed, poison ivy, poison sumac, etc., should be properly controlled in those areas open to the public.

## **SAFETY**

### **Section 1. Lifeguards**

A. NUMBER: There shall be at least one (1) competent lifeguard (as hereafter defined) on duty at all times when the area is open for bathing and stationed at least every 500 feet of visible bathing area shore line.

B. COMPETENCE: A competent lifeguard shall be defined as a person holding a valid Senior Red Cross certificate or equivalent. Additional lifeguards, if required, shall be considered competent if so judged by the senior lifeguard in charge.

All persons acting as lifeguards shall be capable swimmers, proficient in lifesaving and artificial respiration procedures.

C. IDENTIFICATION: All lifeguards on duty shall be identified by distinguishing apparel, emblems or signs.

## **Section 2. Emergency Equipment**

A. **FIRST AID:** Properly stored and maintained first aid equipment shall contain, as a minimum, the following items:

1. Aromatic ammonia.
2. Tincture of iodine or equivalent.
3. Individually compressed sterile gauze.
4. Absorbent cotton.
5. Adhesive tape.
6. Bandages of various widths.
7. Rubbing alcohol.
8. Woolen blankets (2 or more).
9. Stretcher or equivalent.

There shall also be at least one (1) person available at all times when the bathing area is open for the public who is capable of administering first aid.

B. **FIRE EXTINGUISHERS:** Regularly serviced fire extinguishers, meeting the requirements of the Fire Underwriters Association shall be at locations where food is prepared.

C. **LIFE RINGS:** There shall be available a sufficient number of life rings at least 14 inches in diameter with 50 to 75 feet of 1/4 inch manila line firmly attached to each ring. Life rings shall be placed at every 150 feet of bathing beach shore line over 3 feet in depth. Such rings shall be properly stored and readily accessible.

D. **LIFE BOATS:** Where bathing is permitted a distance greater than 100 feet from the bathing shore line, floats or towers, there shall be provided at least 1 stable, flat bottom, square stern boat, 12 feet or more in length and equipped with oars and oar locks, one pole and one ring. Such boats shall be located so as to be immediately available and shall be used for their intended purposes only. If because of the shape or nature of a bathing area, adequate coverage can be effected by tower(s) or raft(s) or similar devices for lifeguards, they may be considered satisfactory in lieu of boat(s).

E. **MARKERS:** Safety regulations pertaining to swimming and boating shall be conspicuously posted at each water front. At every bathing beach where safe limits are required, such limits shall be marked by buoys, poles or other markers located not over 100 feet apart and of a type visible to bathers from a distance of at least 100 feet and there shall be provided suitable signs on the beach describing such markers and stating that they indicate the limits of safe bathing.

## **Section 3. Diving Towers, Spring Boards and Floats**

A. **DIVING TOWERS:** Diving towers, when provided, shall be rigidly constructed and properly anchored at the bottom with sufficient bracing to insure stability under the heaviest possible load.

B. PLATFORMS AND FLOATS: Fixed platforms shall be constructed with a visible 1 foot air space. There shall be as little underwater construction as is consistent with strength, and all braces and struts shall be designed to prevent entanglement or trapping of bathers beneath fixed platforms and floats.

C. HEAD ROOM: At least 13 feet free and unobstructed head room shall be provided above diving boards and towers.

D. HEIGHT AND WATER DEPTH: No diving board or platform available for use by the general public should be more than 10 feet above water level. The minimum water depth below any diving board or platform shall be 10 feet.

E. COVERING: Spring boards, diving platforms and floats shall be covered with cocoa matting, carpeting, or other non-slip material wherever necessary. The use of canvas for such purpose is not recommended.

#### **Section 4. Night Bathing**

A. LIGHTING FACILITIES: Where night bathing is allowed, adequate lighting shall be provided so that lifeguards can observe all parts of the bathing area and appurtenances without being blinded by glare.