

DIRECT FROM CDC ENVIRONMENTAL HEALTH SERVICES

2021 Model Aquatic Health Code (4th Edition)

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ENVIRONMENTAL HEALTH SERVICES: The National Environmental Health Association (NEHA) strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, NEHA features this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the *Journal*.

In these columns, authors from CDC's Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.

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The 2021 Model Aquatic Health Code (MAHC) is the fourth edition of the code, which was first published in 1998. The MAHC is a set of minimum health and safety standards for public swimming facilities, including public pools, water parks, and splash pads. The code is designed to protect the health and safety of swimmers and to provide a consistent set of standards for public swimming facilities across the United States. The MAHC is developed and updated by the Council for the Model Aquatic Health Code, which is a non-profit organization that represents the interests of public swimming facilities and their operators. The code is based on the best available science and is designed to be flexible enough to accommodate new technologies and practices. The MAHC is a key resource for public swimming facilities and their operators, and it is an important tool for protecting the health and safety of swimmers.

Cyanuric Acid

Cyanuric acid is a chemical compound that is commonly used in swimming pools to stabilize chlorine. It is a white, crystalline solid that is soluble in water. Cyanuric acid is used to protect chlorine from being broken down by sunlight, which would otherwise reduce the effectiveness of the chlorine as a disinfectant. The concentration of cyanuric acid in swimming pools is typically measured in parts per million (ppm). The MAHC sets a maximum allowable concentration of cyanuric acid in swimming pools at 100 ppm. This concentration is designed to provide adequate stabilization of chlorine while minimizing the risk of cyanuric acid-related health problems. Cyanuric acid is generally considered safe when used in accordance with the MAHC, but it can cause irritation to the eyes, nose, and throat if it is inhaled or ingested. It can also cause skin irritation if it comes into contact with the skin. Therefore, it is important to use cyanuric acid in swimming pools carefully and to follow the MAHC guidelines for its use.

Giardia

Giardia lamblia is a parasitic protozoan that causes giardiasis, a common gastrointestinal infection. It is transmitted through contaminated water, food, or contact with an infected person or animal. Giardiasis is characterized by watery, foul-smelling diarrhea, abdominal pain, and bloating. It is generally self-limiting and resolves within a few weeks, but it can cause long-term complications in some people, including malabsorption and weight loss. Giardiasis is a significant public health problem, particularly in areas with inadequate water treatment and sanitation. The MAHC sets a maximum allowable concentration of *Giardia* in swimming pools at 100 organisms per liter of water. This concentration is designed to protect swimmers from giardiasis. The MAHC also sets a maximum allowable concentration of *Giardia* in drinking water at 10 organisms per liter of water. This concentration is designed to protect the general public from giardiasis. The MAHC is an important tool for protecting the health and safety of swimmers and the general public from giardiasis.

Did You Know?

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