

Welcome to the  
CDC's Model Aquatic Health Code Network Webinar

## Cold Plunge Pools & Safety Measures

3/31/26

2:00 PM ET

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**Questions may be submitted/upvoted via the Q&A box.**

**This webinar is being recorded.**

**NACCHO**  
National Association of County & City Health Officials

# Webinar Agenda

NACCHO Announcements

Presentation: Cold Plunge Pools & Safety Measures

Questions & Answers

# NACCHO Announcements



**View recent MAHC Network webinar recordings and slides at <https://www.naccho.org/mahc>**

**View all 39 MAHC Network webinar recordings at <https://www.youtube.com/watch?v=8tiHVMCpKAQ&list=PLIMrymKEFdbeEPkoj2mStPeoIFLhloYGc&pp=iAQB>**

# Today's Presenter

**NACCHO**  
National Association of County & City Health Officials

**Sarah Cheshire, REHS**



# Cold Plunge Pools

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NACCHO Webinar—March 31, 2026



# History of cold plunging





# SPA WATER ANALYSIS

## Minerals present in milligrams per litre (2012 analysis)

Sulphate (SO <sub>4</sub> )	891.0000
Calcium (Ca)	406.4000
Chloride (Cl)	333.6000
Sodium (Na)	205.0000
Bicarbonate (HCO <sub>3</sub> )	151.0000
Magnesium (Mg)	53.7000
Silica (SiO <sub>2</sub> )	21.4200
Potassium (K)	17.5000
Strontium (Sr)	6.6000
Fluoride* (F)	3.2500
Bromide (Br)	1.9300
Iron (Fe)	0.8000
Ammonium (NH <sub>4</sub> )	0.4860
Manganese (Mn)	0.0500
Boron (B)	0.4500
Iodine (I)	0.0400
Barium (Ba)	0.0270
Nickel (Ni)	0.0054
Zinc (Zn)	0.0028
Selenium (Se)	0.0026
Total mineral content	2270.0000

\*not suitable for regular consumption by infants and children under 7 years of age

## Mineral content of some well known waters

Bath natural mineral water	2270
Vichy Célestins	3325
San Pellegrino	948
Perrier	480
Evian	320







LIFE

# Rising trend of cold plunge baths in wellness centers

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# Going for the COLD with Michael Phelps



# Transition from homeowner setups to commercial applications



# Transition from homeowner setups to commercial applications



# Health and safety considerations

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A photograph of two men in a hot spring. The man on the left is shirtless and has a goatee, looking towards the man on the right. The man on the right is also shirtless and is laughing with his mouth open. The background is a misty, mountainous landscape.

RUNNING WILD WITH BEAR  
GRYLLS: THE CHALLENGE

# Health benefits of cold-water



## Physical health benefits

- Reduces muscle soreness and inflammation
  - Improves circulation
  - Boosts metabolism and brown fat activation
  - Supports the immune system
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# Health benefits of cold-water



## Mental health benefits

- Enhances mood and focus
  - Increases mental resilience and stress management
  - Alleviates symptoms of depression
  - Improves sleep quality
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# Dangers of cold plunging



- **Cold shock response**
  - Drowning
  - Cardiovascular stress
  - Autonomic conflict

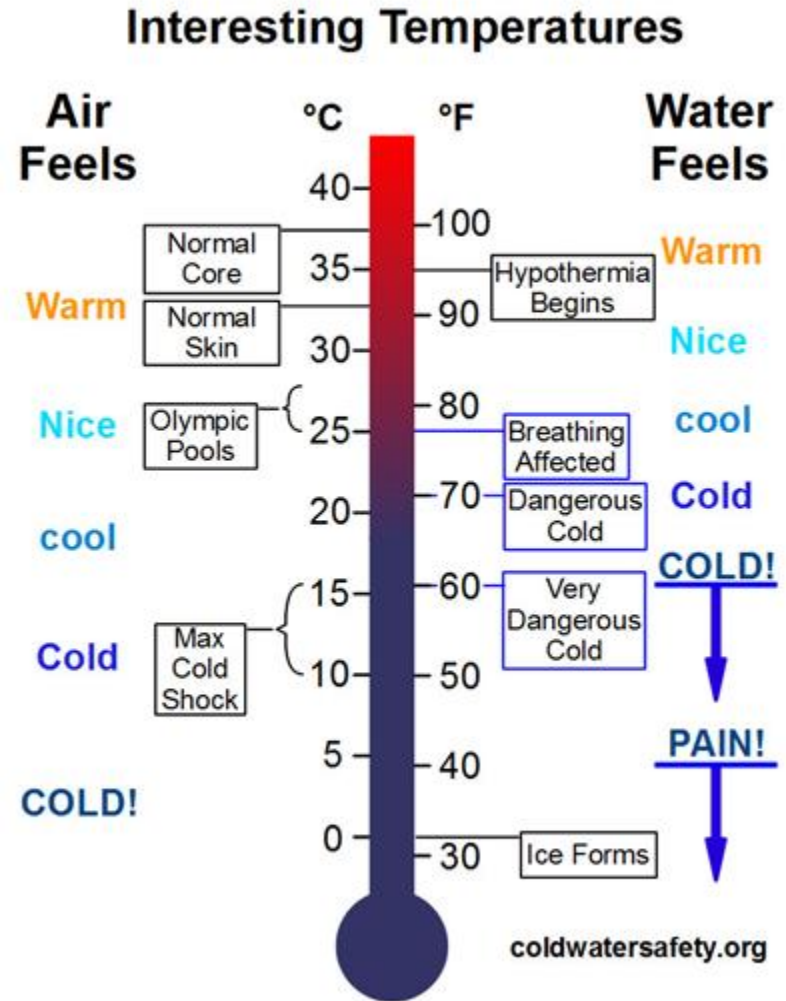
# Dangers of cold plunging



## Other physical risks

- Hypothermia
- Frostbite
- Infection
- Disinfection chemicals and testing equipment
- Entrapment
- Injuries from slips and falls

# Operational considerations: Who should avoid cold plunges?

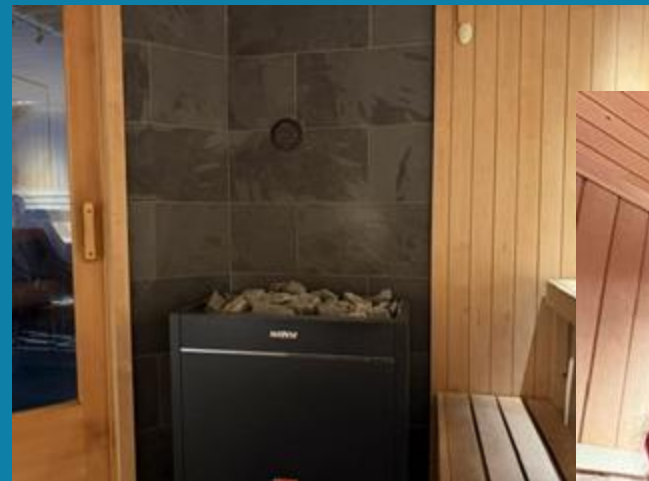


# My experience:

**HOT  
COLD  
REST  
REPEAT**



# Sauna



# Bucket shower



# Cold water



# Amenities at the facility

Restrooms and cleansing showers





## SAUNA USAGE AND REGULATIONS:

USE OF THE SAUNA OCCURS AT THE USERS OWN RISK.

NO FOOD OR DRINK BESIDES WATER IS ALLOWED IN THE SAUNA.

DO NOT TOUCH OR TAMPER WITH THE THERMOSTAT IN THE SAUNA. DOING SO CAN RESULT IN EXPULSION FROM PLUNJ.

IF YOU WOULD LIKE TO CHANGE THE TEMPERATURE IN THE SAUNA, PLEASE DO NOT TOUCH THE CONTROLLER. PLEASE TALK TO AN EMPLOYEE.

PLEASE DO NOT SLEEP IN THE SAUNA. DOING SO IS DANGEROUS AND CAN LEAD TO OVER-EXERTION.

PLEASE USE THE PROVIDED TOWELS TO SIT ON WHILE IN THE SAUNA.

PERSONS FEELING ILL OR OTHERWISE UNWELL ARE PROHIBITED FROM USING THE SAUNA.

PREGNANT WOMEN SHOULD NOT USE THE SAUNA WITHOUT CONSULTING THEIR PHYSICIANS.

RUNNING OR ENGAGING IN UNSAFE ACTIVITIES OR HORSEPLAY IN OR AROUND THE SAUNA IS PROHIBITED.

PLEASE BE MINDFUL OF OTHER GUESTS AND THEIR PERSONAL SPACE.

THE MAXIMUM SAUNA CAPACITY IS 12 PEOPLE.

PLEASE USE CAUTION WHEN APPLYING WATER TO THE HOT STONES. ENSURE THAT NO PART OF YOUR BODY IS DIRECTLY OVER ANY OF THE STONES. THE STEAM COMING OFF OF THE ROCKS IS VERY HOT AND CAN BURN YOU.

# Behind the scenes tour of the pump room

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# Behind the scenes tour of the pump room



# Behind the scenes tour of the pump room





# Mitigation of health and safety risks

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# Operational Considerations:

- Biological contamination
  - Plunge duration and temperature
  - Water balance challenges
  - Bather risk and operator liability
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# Preventing biological contamination

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# Water testing protocols and water balance

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# Water balance

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# Bather risk and operator liability

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# Utah's rule



**“With the growing popularity of cold plunge therapy, sharing knowledge and training operators to ensure their facilities are safe is essential. The lack of regulation around these facilities makes these conversations even more important!”**

# Thank you!

**Sarah Cheshire**

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