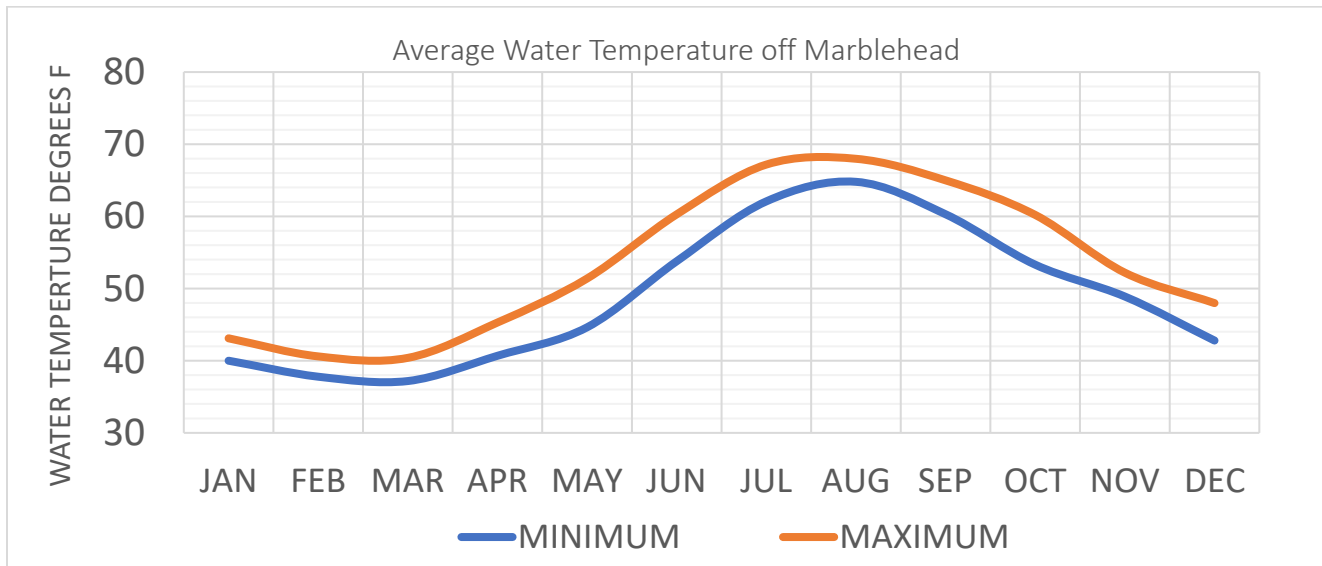


Hypothermia

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Anyone who has put their toe in the waters off New England knows that the water is on the cold side. Here is a plot of the average water temperature off Marblehead.



If you happen to fall into the water for any length of time, you may be subject to hypothermia. Here are expected times of risk for several water temperature ranges.

Water Temperature in Degrees F	Loss of dexterity with no protective clothing	Unconsciousness	Expected time of survival
32.5	Under 2 Minutes	Under 15 Minutes	Under 15 to 45 Minutes
32.5 to 40	Under 3 Minutes	15 to 30 Minutes	30 to 90 Minutes
40 to 50	Under 5 Minutes	30 to 60 Minutes	1 to 3 Hours
50 to 60	10 to 15 Minutes	1 to 2 Hours	1 to 6 Hours
60 to 70	30 to 40 Minutes	2 to 7 Hours	2 to 40 Hours
70 to 80	1 to 2 Hours	2 to 12 Hours	2 Hours to indefinite
Over 80	2 to 12 Hours	Indefinite	Indefinite

You can see from the top chart that the New England water is above 60 degrees for only a short period of time. If you are in a small boat you should dress accordingly. The Coast Guard takes this seriously. If they are out in a small boat and the air temperature is under 50 degrees or the water temperature is under 60 degrees, they must wear protective gear.

The stages of hypothermia are:

Stage	Body temperature	Signs and symptoms
Mild	90°F to 95°F (32.2°C to 35°C)	High blood pressure, shivering, rapid breathing and heart rate, constricted blood vessels, apathy and fatigue , impaired judgment, and lack of coordination.

Moderate	82.4°F to 90°F (28°C to 32.2°C)	Irregular heartbeat, a slower heart rate and breathing, lower level of consciousness, dilated pupils, low blood pressure , and a decrease in reflexes.
Severe	Less than 82.4°F (28°C)	Labored breathing, nonreactive pupils, heart failure , pulmonary edema , and cardiac arrest.

Anyone with symptoms of hypothermia will need immediate medical assistance. Until medical assistance arrives, taking the following action can help:

- moving the person to a warm, dry place, if possible, or sheltering them from the elements
- removing wet clothing, cutting items away if necessary
- covering their whole body and head with blankets, leaving only the face clear
- putting the individual on a blanket to insulate them from the ground
- monitoring breathing and carrying out CPR if breathing stops
- providing skin-to-skin contact, if possible, by removing clothing and wrapping yourself and the individual in the blanket together to transfer heat
- providing warm drinks, if the individual is conscious, but no alcohol or caffeine

It is vital not to use direct heat, such as heat lamps or hot water, as this can damage the skin. It can also trigger irregular heartbeats and, potentially, lead to cardiac arrest.

Do not rub or massage the person either, as these potentially jarring movements could also cause cardiac arrest.