

## BODY FLOAT INFORMATION

This information was compiled by members John Sanders, Dr. John Whittington, and Mark Williams of the National Underwater Rescue-Recovery Institute and should only be used for estimating when a body should float.

WATER TEMPERATURE	DAYS TO SURFACE
40 degrees	14-20 days
50 degrees	10-14 days
60 degrees	7-10 days
70 degrees	3-7 days
80 degrees	1-2 days

1. Victims that have drowned in 30-40 degree water will not surface until water warms.
2. Victims that are 100 feet or deeper may not surface at all due to the combination of pressure and temperature.

## VARIABLES THAT AFFECT FLOAT TIME

1. When and What food was last consumed (***foods high in carbohydrates: beer, soft drinks, hot dogs, potato chips***) produce gases faster.
2. Medications, drugs, or alcohol.
3. Body composition – skinny, muscular, obese. (***fat float quicker***).
4. Age, weight, and height of victim.
5. Activity at the time of drowning (***hunting, fishing, swimming, skiing***).
6. Suicidal drowning – self weighting, stacked clothing.
7. Type and layers of clothing worn including footwear (***heavier winter clothing of hip boots***).
8. Gases produced in the intestinal tract are: methane, hydrogen sulfide, and carbon dioxide. These gases are soluble in water and compressible.
9. Any visible body wounds – previous or after drowning?
10. Type of water: River, Quarry, Lake, Pond, Freshwater, Saltwater?

11. Bottom temperature – currents, spring fed, stagnate, polluted water presents different problems for determining bacteria in intestinal tract.
12. Pressure exerted holding victim down varies with depth of water.
13. Any debris – stumps, trees, fence, fishing line that could cause entanglement. Water sheds and most State Parks are flooded farm land.
14. Adult men and women on the bottom weigh about 6-15 lbs. negative. Children weigh less and may not sink unless intentionally weighted. Some kids will float face up.
15. Victims who are dead before they enter the water will not sink and float. We had a victim travel 175 miles in 3 days who was thrown in the river from a motorcycle accident.
16. Most adult victims will float face down due to the weight of arms and legs. They float just like you recover a victim from the bottom face down.

**For additional information contact:**

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