

Accidental Drownings are Predictable and Preventable

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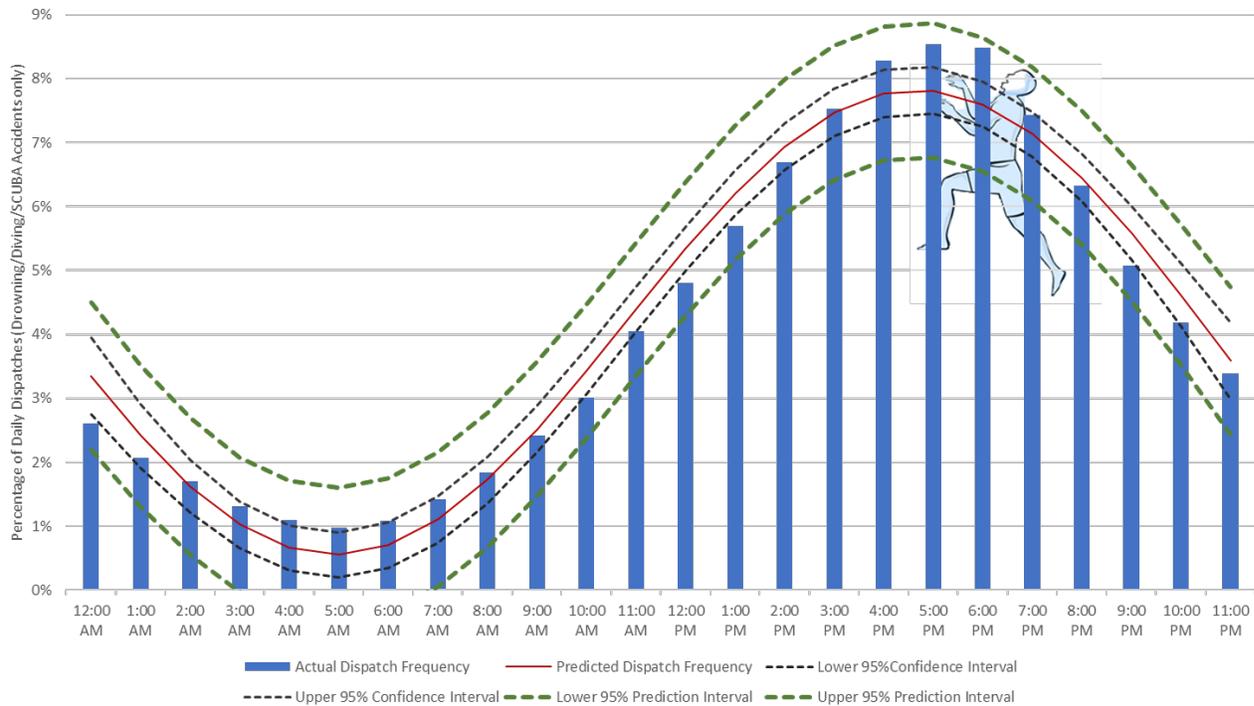


Figure 1. Emergency medical system (EMS) 9-1-1 dispatches by hour of day: Drowning/Diving/SCUBA Accidents (2010-2019)¹

Accidental drowning is a worldwide public health issue. It is the 3rd leading cause of unintentional injury-related death in the world for all age groups.² Less frequently reported are the serious health consequences of nonfatal drownings, such as learning disabilities, memory complications, and loss of basic functioning associated with brain damage. Non-fatal drownings are more common than drowning deaths. In the U.S., five times as many children experience nonfatal drowning incidents compared to drowning deaths.²

According to national 9-1-1 dispatch data, drowning accidents peak around dinner time, with one third of all fatal and nonfatal drowning events occurring between 4 PM and 8 PM. Alcohol/drug use and gender play a significant role in driving temporal patterns in drowning, according to indicators such as alcohol containers and drug paraphernalia found at the scene.¹

¹ Data are from dispatches recorded in the National Emergency Medical Services Information System (NEMSIS), 2010-2019. <https://nemsis.org>. Swimmer image adapted from: <https://creativecommons.org/licenses/by-nc/3.0/>

² Centers for Disease Control and Prevention (CDC). National Center for Health Statistics. <https://www.cdc.gov/nchs/index.htm>

Recommendations to prevent fatal and nonfatal drowning incidents and their serious health consequences include:³

- Avoid alcohol and drug use while recreating near water.
- Supervise children and weak swimmers, *closely, attentively and constantly*.
- Only swim where there are lifeguards.
- Develop water competency, including swimming skills as well as the ability to recognize when a swimmer is in danger.
- Wear a personal flotation device, i.e. *life jacket*, when boating. Children and weak swimmers should wear them when near open water.
- Learn cardiopulmonary resuscitation (CPR).

Accidental drowning is a public health risk that is preventable. Public awareness about the time of day most drownings occur, i.e. between 4-8 PM, can help people be more vigilant and avoid these preventable events. Community-wide awareness campaigns, and programs to enable access to swimming lessons and education for socio-economically disadvantaged youth and their families, are also recommended.

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³ Adapted from: Denny, S. A., Quan, L., Gilchrist, J., McCallin, T., Sheno, R., Yusuf, S., Hoffman, B., Weiss, J., and the Council on Injury, Violence, and Poison Prevention (2019). "Prevention of Drowning." *Pediatrics*. 43(5): e20190850. doi:10.1542/peds.2019-0850.