

Drowning Facts



Drowning is a leading cause of death for children.



In the United States:

- More children ages **1–4** die from drowning than any other cause of death except birth defects.
- For children ages **1–14**, drowning is the second leading cause of unintentional injury death after motor vehicle crashes.¹

What is drowning?

Drowning is the process of experiencing respiratory impairment from submersion or immersion in liquid. Not all drownings are fatal.

Fatal drowning happens when the drowning results in death.

Nonfatal drowning happens when a person survives a drowning incident with a range of outcomes, from no injuries to very serious injuries or permanent disability.

While children are at highest risk, anyone can drown.

Every year in the United States there are an estimated:

- **3,960*** fatal unintentional drownings, including boating-related drowning—that is an average of 11 drowning deaths per day.
- **8,080†** nonfatal drownings—that is an average of 22 nonfatal drownings per day.



Nonfatal drowning can result in long-term health problems and costly hospital stays.



- For every child who dies from drowning, another eight receive emergency department care for non-fatal drowning.¹
- More than **40%** of drownings treated in emergency departments require hospitalization or transfer for further care (compared with 8% for all unintentional injuries).¹
- Drowning injuries can cause brain damage and other serious outcomes, including long-term

Some people have a higher risk of drowning.



Children

Children ages 1–4 have the highest drowning rates. Most drownings in children 1–4 happen in swimming pools.² Drowning can happen anytime, including when children are not expected to be near water, such as when they gain unsupervised access to pools. Fatal drowning is the second-leading cause of unintentional injury death behind motor vehicle crashes for children ages 1–14.¹



Males

Nearly 80% of people who die from drowning are male.¹ Many factors might contribute to higher rates of drowning among males, including increased exposure to water, risk-taking behaviors, and alcohol use.^{6,7,8}



Some racial and ethnic groups

Drowning death rates for American Indian or Alaska Native people ages 29 and younger are 2 times higher than the rates for White people, with the highest disparities among those ages 25-29 (rates 3.5 times higher).^{9,10} Drowning death rates for Black people are 1.5 times higher than the rates for White people. Disparities are highest among Black children ages 5-9 (rates 2.6 times higher) and ages 10-14 (rates 3.6 times higher).⁹

In swimming pools, Black children ages 10-14 years drown at rates 7.6 times higher than White children. Black children and youth are more likely to drown in public pools, and white children and youth are more likely to drown in residential pools.¹¹ In natural water, American Indian or Alaska Native people have the highest drowning death rates, with rates 2.7 times higher than White people.⁹



People with seizure disorders or certain medical conditions

People with seizure disorders such as epilepsy are at a higher risk of fatal and nonfatal drowning than the general population. Drowning is the most common cause of unintentional injury death, with the bathtub being the most common site of drowning for people with seizure disorders.^{7,12,13} Other medical conditions such as autism and heart conditions are associated with a higher risk of drowning.^{7,14-16}

Certain factors make drowning more likely.



Not being able to swim

Many adults and children report that they can't swim or that they are weak swimmers.¹⁷⁻¹⁹ Participation in formal swimming lessons can reduce the risk of drowning among children and young adults.^{7,20-23}



Missing or ineffective fences around water

Barriers such as pool fencing prevent young children from gaining access to the pool area without caregivers' awareness.^{7,23-25} A four-sided isolation fence which separates the pool area from the house and yard reduces a child's risk of drowning by 83% compared to three-sided property-line fencing (which encloses the entire yard, but does not separate the pool from the house).²⁶



Lack of close supervision

Drowning can happen quickly and quietly anywhere there is water, especially to unsupervised children. It happens in lakes and oceans, pools, bathtubs, and even buckets of water.^{7,27-29} Drowning can occur when lifeguards are present.³⁰



Location

The highest risk locations for drowning vary by age. Two thirds of infants under 1 year old drown in bathtubs.² Most drownings happen in home swimming pools among children ages 1–4.² More than half of fatal and nonfatal drownings among people 15 years and older occur in natural waters like lakes, rivers, or oceans.²



Not wearing life jackets

Life jackets can prevent drowning during water activities, especially boating and swimming.^{7,31} The U.S. Coast Guard reported 613 boating-related deaths in 2019—79% of these deaths were drowning related, and of those who died from drowning 86% were not wearing life jackets.³²



Drinking Alcohol

Among adolescents and adults, alcohol use is involved in:

- up to 70% of deaths associated with water recreation,
- nearly 1 in 4 emergency department visits for drowning, and
- about 1 in 5 reported boating deaths.^{2,32,33}

Alcohol impairs balance, coordination, and judgment, and it increases risk-taking behavior.³³



Using drugs and prescription medications

Certain medications can increase the risk of drowning, especially psychotropic medications commonly prescribed for depression, anxiety, bipolar disorder, schizophrenia, and other conditions.³⁴ Side effects from these medications can be similar to the effects of alcohol, such as a difficulty thinking clearly and decreased motor skills.³⁴ Other drugs and prescription medications might also increase drowning risk.^{35,36}

*An average of 3,957 unintentional drowning deaths occurred each year from 2010–2019.²

† An average 8,080 estimated emergency department visits due to non-fatal drowning occurred each year from 2010–2019 (excludes boating-related non-fatal drowning).¹

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