MFRP — Michigan Fatality Review & Prevention

2020 Unintentional Drowning Fatalities
of Children Ages 0-18

3rd
Leading cause of accidental fatal injury in Michigan, and the 4th leading cause in the U.S., was due to unintentional drowning.

837
U.S. children died as a result of unintentional drowning.

20
Michigan children died as a result of unintentional drowning.
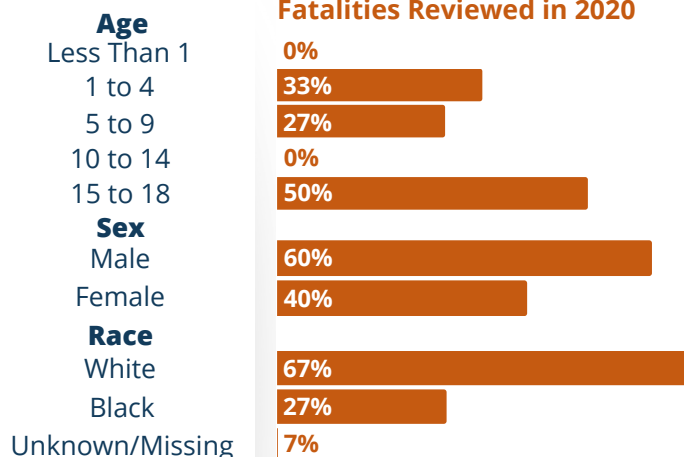
15 The circumstances leading to 15 unintentional fatal drownings were reviewed by local Child Death Review (CDR) teams.

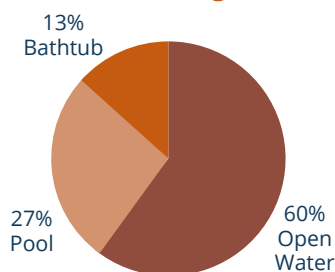## Child's Demographic Information

Michigan Fatalities in 2020 | **Age** | **Fatalities Reviewed in 2020**

	Michigan Fatalities in 2020	Age	Fatalities Reviewed in 2020
	0%	Less Than 1	0%
	20%	1 to 4	33%
	25%	5 to 9	27%
	15%	10 to 14	0%
	40%	15 to 18	50%
		Sex	
	85%	Male	60%
	15%	Female	40%
		Race	
	70%	White	67%
	10%	Black	27%
	20%	Unknown/Missing	7%

Characteristics of Unintentional Fatal Drownings Reviewed by Local CDR Teams

Of the 15 Deaths Reviewed by Local CDR Teams

Location of Fatal Drownings
- 13% Bathtub
- 27% Pool
- 60% Open Water

60% of children had supervision at the time of the incident (or didn't need it).

80% of the children who had supervision were supervised by someone who was impaired, including by someone who was distracted.

27% of the children were known to have had a prior disability or chronic illness.

Risk and Protective Factors for Fatal Drownings in Open Water or Pools

No lifeguards were present when any of the children fatally drowned in open water or a pool. Only 15% of the children were known to be able to swim.

Environmental factors, such as rough waves, current, temperature, weather, and riptide/undertow, contributed to more than half of the open water fatalities.

None of the children who fatally drowned in a pool were using a personal flotation device.

Barriers or protective layers, such as doors, fences, gates, and pool covers, were either not present or were breached by all children who drowned in a pool.

Child Death State Advisory Team Recommendations

The Michigan Child Death State Advisory Team (SAT) was established to identify and make recommendations on policy and statutory changes pertaining to child fatalities and to guide statewide prevention, education, and training efforts. The SAT reviews Michigan's child mortality data as well as local child death review team findings and recommendations to identify causes, risk factors, and trends in child deaths. The SAT offers the following recommendations to policymakers to prevent unintentional drowning deaths:

Require healthcare providers to include water safety in their anticipatory guidance with parents adding context that includes the discussion of the possibility of children drowning in bathtubs as well as in home or nearby pools and open water.

Institute and promote "water watching" programs to avoid the diffusion of responsibility that can occur when groups recreate around water, to include the assigning of constant supervision of all or a specific set of children to designated adults through the use of visual aids like lanyards or bracelets that can be transferred to another adult when necessary.

Encourage schools, other community-based organizations, and local jurisdictions to partner with the Great Lakes Water Safety Consortium to host a variety of local water safety presentations and to expand the reach of their piloted universal beach warning signs in both English and Spanish and include QR codes for instant access to warning signs from the National Weather Service.
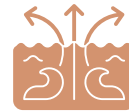
Opportunities for Prevention

Taking swim lessons from a qualified instructor until basic water competence is achieved.

Implementing additional measures to keep children with disabilities or chronic illnesses safe around water. Parents and caregivers can create a family wandering emergency plan.

Installing a four-foot, four-sided isolation fence that separates both above-ground and in-ground pools from the house and the rest of the yard with a self-closing, self-latching gate.

Choosing safe places to swim and learning to recognize hidden dangers, such as rip currents.

Ensuring all children and all adults wear properly fitted life jackets approved by the U.S. Coast Guard when on or in watercraft. Air-filled swimming aids (e.g., "floaties") should not be used in place of life jackets.

Local Initiatives:

CDR teams have implemented initiatives in their local communities to prevent unintentional drownings. **Grand Traverse County** formed a multi-disciplinary group that received grant funding to promote water safety. Activities included setting up 39 rescue stations around the area with throw rings, rope, and instructions, posting signage that describes what drowning looks like, hosting family-friendly water safety events, promoting swim lessons, and maintaining a robust social media presence with links to a wide variety of information and resources.

About This Data

The information presented in this brief is based on data gathered through Michigan's local CDR process. Data about deaths reviewed are presented by year of review by the local CDR team, which may not be the same as the year in which the child died. **It is important to note that not all child deaths in the state are reviewed. As not every child death is reviewed, Michigan's CDR Program dataset is not population-based and should not be directly compared with vital statistics data, nor should it be used to compute mortality rates.** It is recommended that complementary data sources are examined alongside the CDR Program data when making prevention, policy, or practice decisions.

References
- Michigan Department of Health and Human Services, Division for Vital Records and Health Statistics. (2022). *2020 Michigan resident death files* [Unpublished raw data set].
- United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released 2021. Data are compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Apr 3, 2023

Contact Us

Additional CDR data, reports, and fact sheets can be found on our website. Please contact the Michigan CDR Program at the Center for Child and Family Health (CCFH) at MPHI at MichiganCDR@mphi.org with any questions or requests for additional data.