NCMD
National Child Mortality Database

Child drowning deaths in England 1 April 2022 to 31 March 2023

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Introduction

In 2015, the National Water Safety Forum published the UK's Drowning Prevention Strategy, with the aim of halving the number of accidental drownings across the UK by 2026. However, in 2023, the National Drowning Report UK[1] highlighted a 46% increase in child drowning deaths, compared to the 5-year average. In line with this, the National Child Mortality Database (NCMD) thematic report [Deaths of children and young people due to traumatic incidents] also reported evidence of an increase in the number of child drownings in England from 20 in 2019-20 to 37 in 2021-22[2].

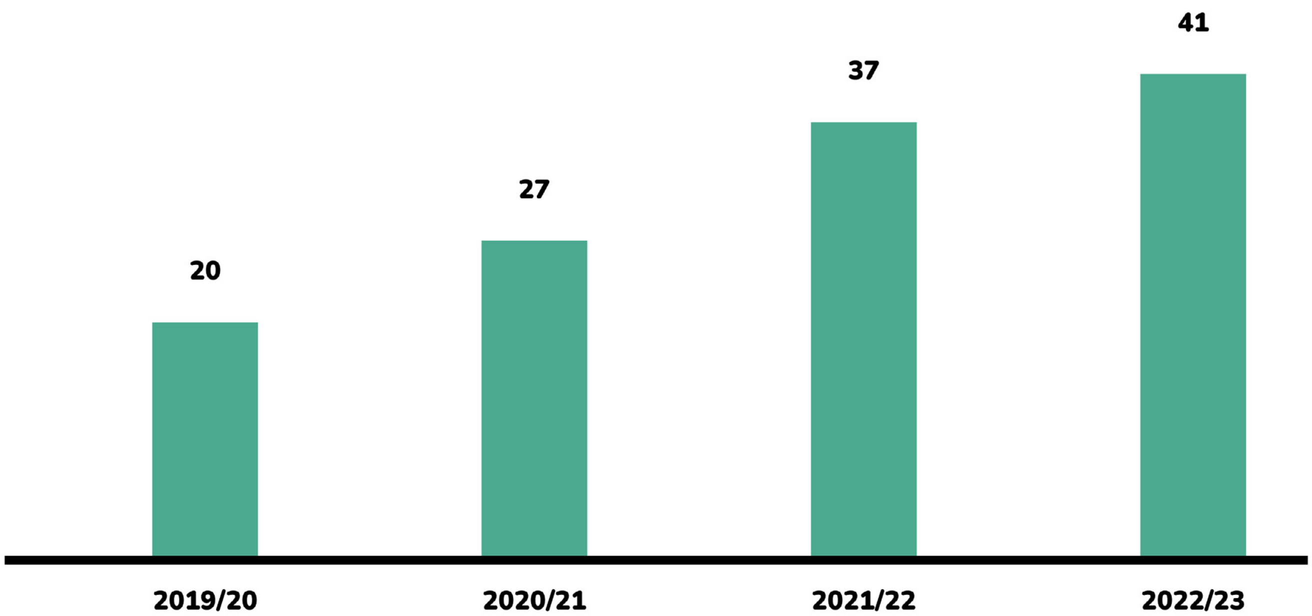
This summary report aims to describe the number and characteristics of child drowning deaths in England, based on the latest available data from the NCMD, which covers the period 1 April 2022 to 31 March 2023.

Findings

Deaths occurring between April 2022 and March 2023

There were 41 child drowning deaths in England between 1 April 2022 and 31 March 2023. This is an increase of 4 deaths compared to the previous year and is double the number of drowning deaths in 2019-20 when reporting began.

Figure 1: Child drowning deaths in England between 1 April 2019 to 31 March 2023



Historical data, source: National Child Mortality Database (NCMD), July 2023, Deaths of children and young people due to traumatic incidents

1 Royal Life Saving Society UK (June 2023), National Drowning Report UK
2 National Child Mortality Database (NCMD), July 2023, Deaths of children and young people due to traumatic incidents

Age and sex of children and young people who died by drowning

There were 16 (39.0%) deaths due to drowning of children aged under 5 years, 17 (41.5%) aged 5-14 years and 8 (19.5%) aged 15-17 years. When adjusting for the population of children within these age groups, drowning rates are higher for children under 5 (5.22 per 1 million children) as well as those aged between 15 and 17 years (4.03 per 1 million children).

There were almost twice as many drownings of male children (n=27, 65.9%) as female children (n=14, 34.1%), in line with the characteristics of all drowning deaths in the UK, where 83% were male.[3]

Table 1: Number of child deaths as a result of drowning between 1 April 2022 and 31 March 2023, by age and sex

	Number with data	Number of deaths	Estimated population of children	Drowning rate per 1,000,000 population
All deaths	**41**		**11,886,906**	**3.45 (2.48-4.68)**
Age at death (years)	**41**			
<5 years		16 (39.0%)	3,067,382 (25.8%)	5.22 (2.98-8.47)
5-14 years		17 (41.5%)	6,836,863 (57.5%)	2.49 (1.45-3.98)
5-12 years		10 (24.4%)	5,447,766 (45.8%)	1.84 (0.88-3.38)
13-14 years		7 (17.1%)	1,389,097 (11.7%)	5.04 (2.03-10.38)
15-17 years		8 (19.5%)	1,982,661 (16.7%)	4.03 (1.74-7.95)
Sex	**41**			
Female		14 (34.1%)	5,799,018 (48.8%)	2.41 (1.32-4.05)
Male		27 (65.9%)	6,087,888 (51.2%)	4.44 (2.92-6.45)

Season

Drowning deaths were recorded throughout the year, with the majority (n=25, 61.0%) occurring during the summer months (June, July, August).

Table 2: Number of child deaths as a result of drowning between 1 April 2022 and 31 March 2023, by season

	Number with data	Number of deaths
All deaths	**41**	
Season^	**41**	
Winter		7 (17.1%)
Spring		5 (12.2%)
Summer		25 (61.0%)
Autumn		4 (9.8%)

^Winter (December, January, February); Spring (March, April, May); Summer (June, July, August); Autumn (September, October, November).

3 Royal Life Saving Society UK (June 2023), National Drowning Report UK

Location of drowning

The highest proportion of child drowning deaths occurred in inland open water, such as lakes and rivers (48.8%, n=20). There were 10 (24.4%) deaths that occurred in the bath at home, and 6 (14.6%) child drowning deaths in 'other residential' water, including 3 in residential hot tubs. In all deaths where the child drowned in 'other residential' settings, the absence of appropriate barriers was recorded, for example residential hot tubs where the cover had not been replaced after use.

Of the 5 drowning deaths in a swimming pool or on the coast, 2 occurred when the child was on holiday abroad.

Table 3: Number of child deaths as a result of drowning between 1 April 2022 and 31 March 2023, by location

	2022-23
All deaths	**41**
Inland (Lake, river, quarry, public pond, canal)	20 (48.8%)
Residential bath	10 (24.4%)
Other residential (includes garden pond, paddling pool, hot tub, water container)	6 (14.6%)
Other (includes swimming pool (abroad, public and private swimming pools), coastal (includes sea, harbour, dock, marina, port)^^	5 (12.2%)

^^ Swimming pool and Coastal combined to avoid disclosure.

Of the 16 children who drowned aged under 5, 8 (50%) were in the bath at home. In 2 out of 3 infant (aged under 1 year) child deaths in the bath, the infant was known to be using a bath seat at the time.

Of the 8 children aged 15–17-years who drowned, 7 (n=7/8, 87.5%) did so in inland water.

Presence of adult supervision

In 90.0% (n=36/40) of drowning deaths the child was not being supervised by an adult at the time of their death. This included all deaths where the drowning occurred in the bath (n=10), as well as those in ‘other residential’ water (n=6), such as hot tubs.

1 in 4 (n=9/36, 25.0%) of the children who were not under adult supervision at the time of drowning were accompanied by their peers. All these children drowned in inland open water.

Table 4: Number of child deaths as a result of drowning between 1 April 2022 and 31 March 2023, by presence of adult supervision

	2022-23
All deaths	**40***
Supervised by adult	4 (10.0%)
Not supervised by adult	36 (90.0%)

*There was one case where presence of supervision was not recorded.

Table 5: Number of child deaths as a result of drowning between 1 April 2022 and 31 March 2023, by type of supervision (deaths without adult supervision)

	2022-23
All deaths without adult supervision	**36**
Child with peer group	9 (25.0%)
Child with sibling/other child family member	9 (25.0%)
Child alone	18 (50.0%)

Methodology and limitations

Cohort identification

Deaths of children aged 0-17 years that occurred between 1 April 2022 and 31 March 2023 and notified to NCMD were identified, where they were categorised as drowning at notification.

At the time of extraction, two-thirds (66%) of the cases had been reviewed by a CDOP and all of these remained categorised as death by drowning.

Drowning Definition

Deaths where drowning was suspected or confirmed to be the cause of death at the point of notification. This is defined as where two or more clinicians coded the death as by drowning, based on information recorded within the notification form.

The definition includes deaths across a range of locations, including in residential settings e.g., baths, hot tubs, ponds, private swimming or paddling pool, those in public swimming pools, as well as those in open water e.g. sea, lake, quarry, reservoir, river, harbour, or canal.

Data Extraction

The data extract used for deaths that occurred between 1 April 2022 and 31 March 2023 within this report was extracted on 23 April 2024.

Population estimates data

To calculate drowning rates, the latest version of ONS data for mid-year population estimates were used as denominators to calculate rates of drowning. For age and sex calculations, this was the mid-year population estimates for 2022 for 0-17-year-olds.

In all cases, the rate of drowning was calculated per 1 million children and are presented alongside their appropriate 95% confidence intervals.

Limitations

This publication had limitations. This work is based on statutory data reported to NCMD, and previous work has shown good validation and coverage. However, whilst 66% of deaths had been reviewed by a CDOP, the reviews of the remaining deaths had not concluded, meaning that in some cases information was limited, such as supervision, which should be considered when interpreting this work. Ethnicity and deprivation data was not reported due to limited robustness for one year's worth of data. The suspected category of death in this work is provisional, based on information available at 48 hours, and further CDOP investigations may modify this in some cases. The main limitation of this work is likely to be the precision of the estimates, with childhood death by drowning a rare event, and as this only includes one year of data, small numbers make interpretation difficult.