

New research has revealed that drowning is the major killer of children over the age of one year.

# Children Drowning Drowning Children

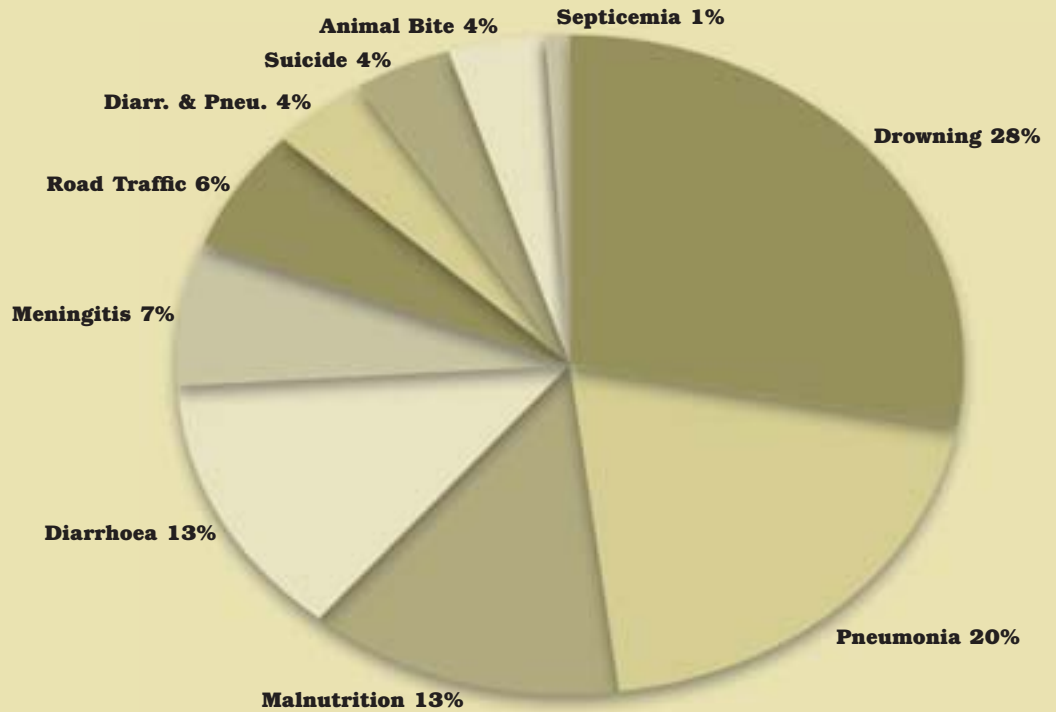


For every child  
Health, Education, Equality, Protection  
ADVANCE HUMANITY

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# What kills children in Bangladesh?

Among children aged between 1 and 17 years, drowning claims more lives than any other cause.



## The drowning epidemic

Death by drowning. So quick a child can be lost before anyone has time to call help. So common it happens day in and day out.

The first comprehensive research ever undertaken on child deaths from injuries in Bangladesh has revealed that drowning is the single leading cause of death among children over the age of one year. More die by drowning than from any other type of injury or from any one of the non-injury-related killers such as pneumonia, malnutrition or diarrhoea. Yet, to date, these deaths have gone relatively unnoticed by programme managers and policy makers. As a result, drowning prevention and management remain almost non-existent.

The Bangladesh Health and Injury Survey (BHIS) brings together for the first time the essential information on who is most at risk, where the dangers are and why some children are more likely to drown than others. With this new evidence it will now be possible to design and implement comprehensive prevention programmes that will save countless lives. The time has come to launch the offensive.

## Children at risk

Almost 17,000 children drown every year in Bangladesh – 46 every day. Around four times this number nearly drown – over 68,000 near-drownings a year.

The BHIS findings show that the greatest number of victims are children between the ages of one and four years. Small children lack judgment, are not able to swim and do not have the strength to pull themselves out of a ditch or pond. Those who are just learning to walk face the highest risk of all. A moment of distraction is all it takes. A busy mother doesn't expect her toddler to stray and by the time she realizes that the child has gone it is too late.

The child need not wander far. Most deaths happen very close to home. Three quarters of all child drownings take place in water less than 20 metres from the house. The youngest usually die in water less than 10 metres away.

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**A child went out to the riverside to play and fell into the water. His companions rushed back home to inform the mother. The mother called for help and the local youths jumped into the river to rescue the child. After half an hour's search the dead body of the drowned child was found.**



**Most drowning deaths could be prevented by a sustained effort to implement safety interventions. The task ahead is clear — to translate what is now known into action on the ground.**



All water can be dangerous. Rivers, lakes and ponds claim many lives. Even greater numbers die in drainage ditches or puddles and in household water containers such as tubs, buckets and water drums.

The drowning death toll peaks at one year old. It falls steeply once children reach the age of five years and the reason for this is clear: they learn to swim.

Until around five years old most children lack the physical strength and coordination needed for swimming. However, as soon as they are old enough, many Bangladeshi children do learn. Those who cannot swim remain at great risk. The BHIS shows a direct link between the likelihood of drowning and lack of swimming skills. According to the survey, almost all of the children who drowned when they were between the ages of five and seventeen could not swim.

The BHIS sheds light on other trends in the drowning picture. Both girls and boys are at equal risk but there are much higher drowning rates among children who live in rural areas than among those who dwell in

the towns and cities where they face fewer water hazards. Almost all the drownings recorded occurred during the day time hours. In most cases the children were simply working or playing near the water.

The research also reveals a clear seasonal pattern to drowning. The death rates rise steeply during the summer months when the rainfall is high and shallow ditches and natural holes are frequently filled with flood water.

### **Danger signs**

Wherever and whenever the fatal drowning of a young child occurs there is one key factor at play: a lack of adequate supervision. Busy mothers with a large family, a home, and many children to care for are often unable to watch over the little ones. Responsibility for the infant or toddler commonly falls to one of the older siblings — most likely still children themselves. In about two thirds of instances when children drowned they were alone or accompanied by another child who was not capable of rescuing them. At the time of the drowning incident most mothers or caregivers were involved either in household activities, or were working outside.

CHILD + WATER = DANGER

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***“Child health programmes cannot any longer be considered complete without injury prevention at the core.”***

**Morten Giersing, Representative, UNICEF Bangladesh**



## Drowning is preventable

At the 2002 World Congress on Drowning, experts from all over the world gathered to agree a series of recommendations on the issue of drowning prevention, rescue and treatment. They concluded that *“the vast majority of drownings can be prevented”* and advised that *“prevention is the most important method by which to reduce the number of drownings.”*

(Recommendation 4, Final recommendations of the World Congress on Drowning, Amsterdam, 26-28 June 2002.)

Having a mother who is illiterate has been shown to significantly increase the chances of drowning. This can be explained by the fact that mothers who cannot read and write indicate families that stick to more traditional roles. These mothers have probably not had the opportunity to go to school and tend to lead lives that are circumscribed by childbearing and household chores. It follows that such women are less likely to have the information and skills to anticipate danger and take action to reduce risk. The same holds true for families in which there are five or more children – another factor strongly linked to high drowning risk. A tired mother with many children to care for may struggle to cope and is more likely to leave the youngest children in the charge of older siblings.

### Life-lines

As with most child survival interventions, such as immunization or treatment of diarrhoeal disease, protecting children depends on reaching parents and caregivers with information and advice that will encourage behaviour change. Immunization can protect children from killer diseases but parents must be convinced of the need for such

protection, and be willing to bring their children forward for routine vaccinations, if these interventions are to prove successful. Similarly, helping mothers to understand the risks their children face, and to assess danger around the home, is an essential first step in the effort to cut drowning deaths.

Then, these mothers can be educated on the need to improve the level of supervision, helped to understand that older siblings must be well developed before they are capable of adequately supervising younger brothers and sisters, and encouraged to explore alternatives.

Next, there are a number of simple, affordable and appropriate safety measures that mothers and families can be taught to implement for themselves. For example, covering water containers and wells so that children cannot easily fall in the water and putting up barriers around nearby ponds can provide effective, although not total, protection.

Beyond this, parents need information aimed at encouraging them to teach their children to swim as soon as they are able. Parents also need

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## THE FOUR INTERVENTIONS THAT CAN

### Risk awareness-raising

Inform families of the risks facing children and the need to make themselves aware of the dangers present around their own homes.

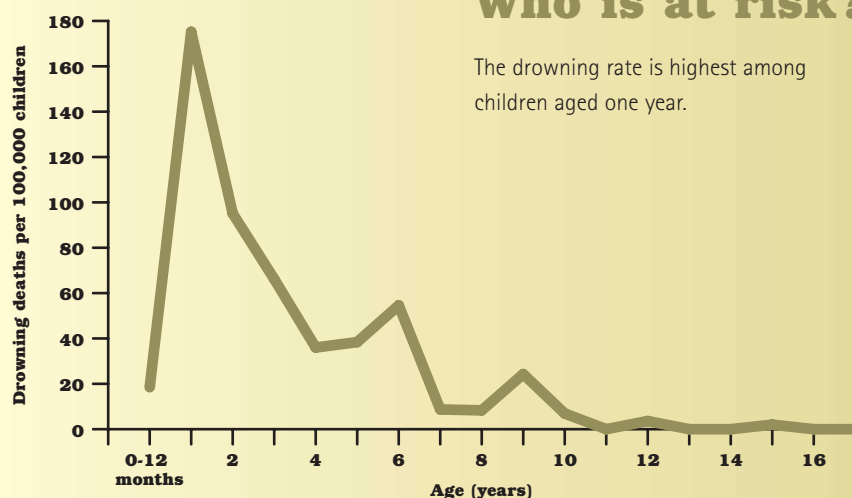
### Supervision

Educate mothers about the need to supervise young children more closely – especially when they are just learning to walk. Make people aware that supervision of small children by older siblings is not adequate supervision.

**A two-year old child was drowning in a neighbouring pond. A four-year old child witnessed the incident and rushed to the house to inform the mother who rushed out and rescued the child.**

## Who is at risk?

The drowning rate is highest among children aged one year.



to teach their children other water skills. For example, diving into water of unknown depth is very dangerous.

Bangladesh is a country without public swimming pools, without certified swimming instructors and without the kind of infrastructure that may be necessary for teaching swimming on a large scale. But even so, it is clear that the children who live there can gain adequate swimming skills simply by growing up around water and learning from those around them. By age 16, over 80 per cent of children in Bangladesh can swim. But the need to swim is universal. In Bangladesh, there is water everywhere. The earlier children can learn, the safer they will be.

### Action now

The pledge to reduce by two thirds the child mortality rate from 1990 levels by the year 2015 is one of the cornerstones of the Millennium Development Goals and, as such, represents a commitment by all members of the United Nations. In Bangladesh, meeting the target will mean cutting the under-five mortality rate (U5MR) from where it

stood in the year 2000 (at 94 per 100,000) to 31 per 100,000 by 2015.

As drowning is the single largest contributor to under-five deaths post infancy it is clear that the goal may be missed unless reductions in child deaths from disease and poor nutrition go hand in hand with a fall in deaths by drowning.

Bangladesh has an opportunity to integrate drowning prevention into existing child survival and development programmes. The information provided by the BHIS on who is most at risk can help ensure effective targeting of key interventions.

Existing programmes, such as the Expanded Programme on Immunization (EPI), provide direct contact with every mother at the point when their children reach the age of nine months. This is exactly when children are taking their first steps and entering the high risk period for drowning. As well as advising on immunizations, the health workers could use this visit to counsel mothers on the need to increase supervision of their infants in the coming months as they begin to

CHILD + WATER = DANGER

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SAVE CHILDREN FROM DROWNING :

### Barriers around water

Establish fences or other types of barrier between children and water bodies and encourage families and communities to devise their own safety measures where water is present.

### Swimming and water safety

Make every parent aware of the need to teach children to swim as early as possible. Include the need for other water safety skills and knowledge. Support the efforts of parents through a nationwide early childhood swimming programme.

# The Bangladesh Health and Injury Survey

The Bangladesh Health and Injury Survey (BHIS), conducted in 2003, is the largest injury survey ever conducted at the community level in a developing country. 171,366 households were included representing 819,429 infants, children and adults. The BHIS is a product of collaboration between the Institute of Child and Mother Health (ICMH), the Directorate General of Health Services (DGHS), The Alliance for Safe Children (TASC) and the United Nations Children's Fund (UNICEF).

The BHIS is available at: [www.unicef.org/bangladesh](http://www.unicef.org/bangladesh)

walk. A drowning hazard checklist could be given to mothers so that they are alerted to the risks that may be present in and around their own home. Particular attention should be paid to households with four or more children, and where the mother is illiterate, as this will help to reach some of the most vulnerable children.

Health workers can also play a role in encouraging all mothers to teach their children to swim at a young age. With this in mind, research by UNICEF and The Alliance for Safe Children (TASC) is currently underway to ascertain safe methods and possible hazards involved in the practice of teaching swimming, without formal qualifications, to family and friends. This information will help in developing an appropriate, effective and sustainable early childhood swimming skills programme that can benefit children throughout the country.

## **Drowning is preventable**

Child drowning rates in Bangladesh are between 10 and 20 times higher than the rates in Western Europe and North America.

However, the overall trends on child deaths reveal significant similarities. In the world's rich industrialized countries, the 25 years between the early 1970s and the mid-1990s saw child deaths from disease decline rapidly with the vigorous implementation of child health programmes and advances in medical science. As in Bangladesh, this resulted in a rise in the share of injury deaths as a proportion of all deaths for those over the age of one year. But here the similarity ends. For as well as bringing most killer diseases under control, the rich industrialized countries have also now succeeded in dramatically reducing child death rates from traffic accidents, drowning, fires and other injuries. For example, Sweden now has a child injury death rate of around only 5 per 100,000 children aged 1 to 14 years.

It would be wrong to conclude that these gains are simply the result of economic progress. Those countries which have seen the greatest success have made a significant investment, in terms of both resources and political commitment, to cutting child injury deaths – including deaths by drowning. To the extent that deaths have been reduced, they have been reduced by a long process that has involved educating target

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**The relatives of the child searched every pond around the house. At last the grandmother found the drowned child's dead body in a pond by probing a bamboo stick into the water.**



**A seven year old boy fell from a bamboo bridge into the canal and no one was there to rescue him. In the evening the grandfather of the drowned child pulled out the dead body using a fishing net.**



populations about injury risk; providing skills for practising safe behaviours; modifying environments to remove hazards; providing safety devices to reduce harm; establishing safety legislation; and ensuring enforcement of safety laws.

Road traffic accidents are the leading cause of child injury deaths in all the rich industrialized nations but drowning is the second major threat in Australia, Canada, New Zealand, the United States of America and in many countries throughout Europe. The experience of these countries has proved that most drowning deaths can be prevented by a sustained effort to implement safety interventions.

In Bangladesh, the task ahead is clear – to translate the evidence now before us into action on the ground. Children are drowning. It is time to come to the rescue. ■

**Hazard warning:  
pond, ditch, stream,  
river, lake, flood,  
water, water, water.**

CHILD + WATER = DANGER

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***“Bangladesh is no longer the country where more children are killed from diarrhoeal diseases than any other cause. It is now a country where more children are killed by drowning.”***

**Ambassador Pete Peterson, President TASC**

**In Bangladesh 46 children drown every day; 17,000 every year.  
In Bangladesh there are no drowning prevention programmes.  
Children are drowning. It is time to come to the rescue.**



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