**Drowning: a public health emergency**

Drowning kills one child every 15 minutes in Asia according to extensive household surveys in Bangladesh, Cambodia, Thailand, Vietnam and two areas in China. The total child drowning toll for all of Asia would far exceed this already staggering amount. While injury is the leading killer of children older than one in these places, drowning is the leading injury killer and a leading killer in its own right.

Despite the fact that drowning is as preventable as infectious and non-communicable diseases there are few drowning prevention programs in developing countries. In some parts of Asia, drowning alone kills more children than infectious and non-communicable diseases. In these areas, drowning is considered a public health emergency. In the other parts of Asia surveyed, it is an epidemic.

Drowning is largely a silent epidemic because drowning deaths are rarely reported to hospitals, the source of data for most national health statistics. In a community survey in Thailand, which went from house to house to interview family members, nearly three out of four of all the drowning cases were never reported to a hospital — this is 2000 deaths that were missed in hospital data.

<table>
<thead>
<tr>
<th>Children drowning per year</th>
<th>Drowning per day</th>
<th>Near drowning per year</th>
<th>Near drowning per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>16,890</td>
<td>50</td>
<td>66,650</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2,100</td>
<td>10</td>
<td>2,930</td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beijing</td>
<td>170</td>
<td>One every two days</td>
<td>170</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>4,630</td>
<td>10</td>
<td>3,420</td>
</tr>
<tr>
<td>Thailand</td>
<td>2,650</td>
<td>10</td>
<td>3,000</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>11,670</td>
<td>30</td>
<td>11,800</td>
</tr>
<tr>
<td>Total</td>
<td>38,110</td>
<td>110</td>
<td>87,970</td>
</tr>
</tbody>
</table>

**Drowning by the ages**

Children aged 1-9, are at highest risk of drowning, as the graph below shows. However, drowning risks differ according to a child’s age.

- **Toddlers**, those aged 1-4, make up nearly one half of all child drownings in Asia. Toddlers are more likely to wander off while their mothers are busy with household chores. Mothers may not be used to their children being able to walk, or think others are watching them. Another key risk factor is that toddlers can drown in a bucket or any other small amount of unattended water.

- For children older than five, those who can swim simply do not drown. However, many can’t swim and young school aged children, those aged 5-9, account for more than one out of three child drownings in Asia. In Bangladesh, drowning was the single leading cause of death for children this age — and 93 per cent of children older than 4 who drowned couldn’t swim. Swimming becomes more critical for children this age, who are more adventurous. Barriers or supervision alone won’t stop them exploring water.

- Drownings drop off by more than 50 per cent for children aged 10–14, with an estimated 4,500 drownings per year, and again for late adolescents, 15-17, with 300 drownings. Children this age are more likely to be able to swim, or to be swimming with children who can.

[Diagram: Age children drowned]

Photograph © UNICEF Viet Nam. For more injury information see [www.tasc-gcipf.org](http://www.tasc-gcipf.org)
Cures for drowning — swimming and supervision

Drowning is preventable

Drowning rates in developing countries are 10 to 20 times as high as those in industrialized countries. The Alliance for Safe Children (TASC) finds this unacceptable and believes this 10-fold difference sets the minimum benchmark for the number of lives that should be saved each year through drowning prevention activities.

Child health programs are not complete unless they address the leading cause of child death: drowning.

Supervision

Infants are protected by their mothers but once they are old enough to walk, drowning becomes a major hazard. Most drownings and near-drownings for toddlers, aged 1-4 years, occur while mothers or primary caretakers are busy with other chores. These young children are supervised poorly or by siblings, who may need supervision themselves.

TASC is working with local partners such as the Center for Injury Prevention Bangladesh (CIPRB) to create better ways for parents to supervise young children. This includes local community day care centers, or crèches, such as those in a pilot program in Bangladesh. A local woman volunteers her home to become the crèche six days a week, four hours a day, and supervises the children in a safe environment away from any water hazards, while the other mothers finish their housework. These crèches can also serve as immunization points, early childhood development centers and a place for mothers to meet to discuss other issues.

From earlier studies, CIPRB has found a comprehensive package of water safety interventions can reduce child drownings by two-thirds.

Survival swimming

Children who can swim rarely drown. TASC is working to provide survival swimming classes throughout Asia to teach children how to save themselves and others from dangerous situations. These classes, for children aged 4-10, are not about shaving seconds off lap times. In local ponds, children learn basic swimming but more importantly water safety: learning not to swim without supervision, how to save a peer if they get into trouble, how to keep themselves afloat until help arrives.

In Bangladesh, CIPRB is running a pilot survival swimming program with support from TASC, the Royal Life Saving Society of Australia, UNICEF Bangladesh, the Bangladesh Swimming Federation and others. There is a huge community demand for more classes in Bangladesh. More countries are planning survival swimming programs for 2008.

By teaching children to swim, and more importantly safe rescue techniques, these children will have the life-saving skills they need to know how to swim safely; to save themselves and to rescue their peers. These skills will stay with them for life.

The time to act is now

The magnitude of drowning is such that prevention initiatives must be implemented as soon as possible. The social costs for the families and the communities that suddenly lose children are enormous. The financial costs of inaction are also substantial: nine out of 10 children who drowned in Bangladesh were fully vaccinated. From a purely financial view, money for vaccines, school and other health investments are wasted every time a child drowns.