

# Proving injury prevention works

A seven-year-old boy was playing with his friends, laughing and running through the Bangladeshi village. He tripped and fell on a boti, a mounted curved knife, that had been left laying out. It slit his throat and he died immediately.

Stories like this are common in Bangladesh, where 30,000 children die from injury every year and almost another million children suffer injuries that range in seriousness from missing school or work, to permanent disability. Across Asia, for children older than one, injury has taken over from infectious and chronic diseases as the leading cause of death. The statistics are staggering: 200 children die every day in just four countries surveyed, Bangladesh, Thailand, Viet Nam and in China, the capital Beijing and Jiangxi Province. The true burden of injury in Asia — where two thirds of the world's children live — is much higher still. But the real tragedy is that these injuries, and injury deaths, are so easily preventable.

There is a non-government organization (NGO) in Bangladesh that is proving just how easily injuries can be prevented. The Center for Injury Prevention and Research Bangladesh (CIPRB) is piloting interventions in five districts, covering 120,000 homes, designed as "community laboratories" to prove that cost-effective injury prevention programs really can save lives.

## The community laboratory experience

Much of what is known about preventing communicable diseases among children was proven in another such Bangladeshi laboratory, in Matlab, 55km south east of Dhaka, the community-based field site of the International Center for Diarrheal Disease Research, Bangladesh, or ICDDR,B. Matlab proved to the world that interventions such as vaccinations, oral rehydration solution, home treatment of acute respiratory infections and provision of antenatal care by trained midwives - could be provided in an economical, sustainable and effective way.

The success of these tried and tested interventions reduced deaths related to nutrition, infection and communicable disease. As deaths from these causes decrease, the injury toll has become even more pronounced. It was the community laboratory that helped prove this epidemiological shift to injury: the ICDDR,B Demographic Surveillance System from Matlab shows drowning deaths for children aged 1-4 increased from 9 per cent of all deaths in 1983 to 59 per cent in 2003. This increasing trend in child drowning is mirrored across Asia. CIPRB, with support from regional injury prevention NGO The Alliance for Safe Children (TASC) and other partners, is setting out to prove that injury is just as preventable as infectious and non-communicable diseases.

## Who is CIPRB?

CIPRB – the Center for Injury Prevention Research Bangladesh – was born out of the groundbreaking Bangladesh Health and Injury Survey (BHIS). The BHIS was the largest household health survey ever conducted in a developing country and it was this survey that revealed the magnitude of injury in Bangladesh. Faced

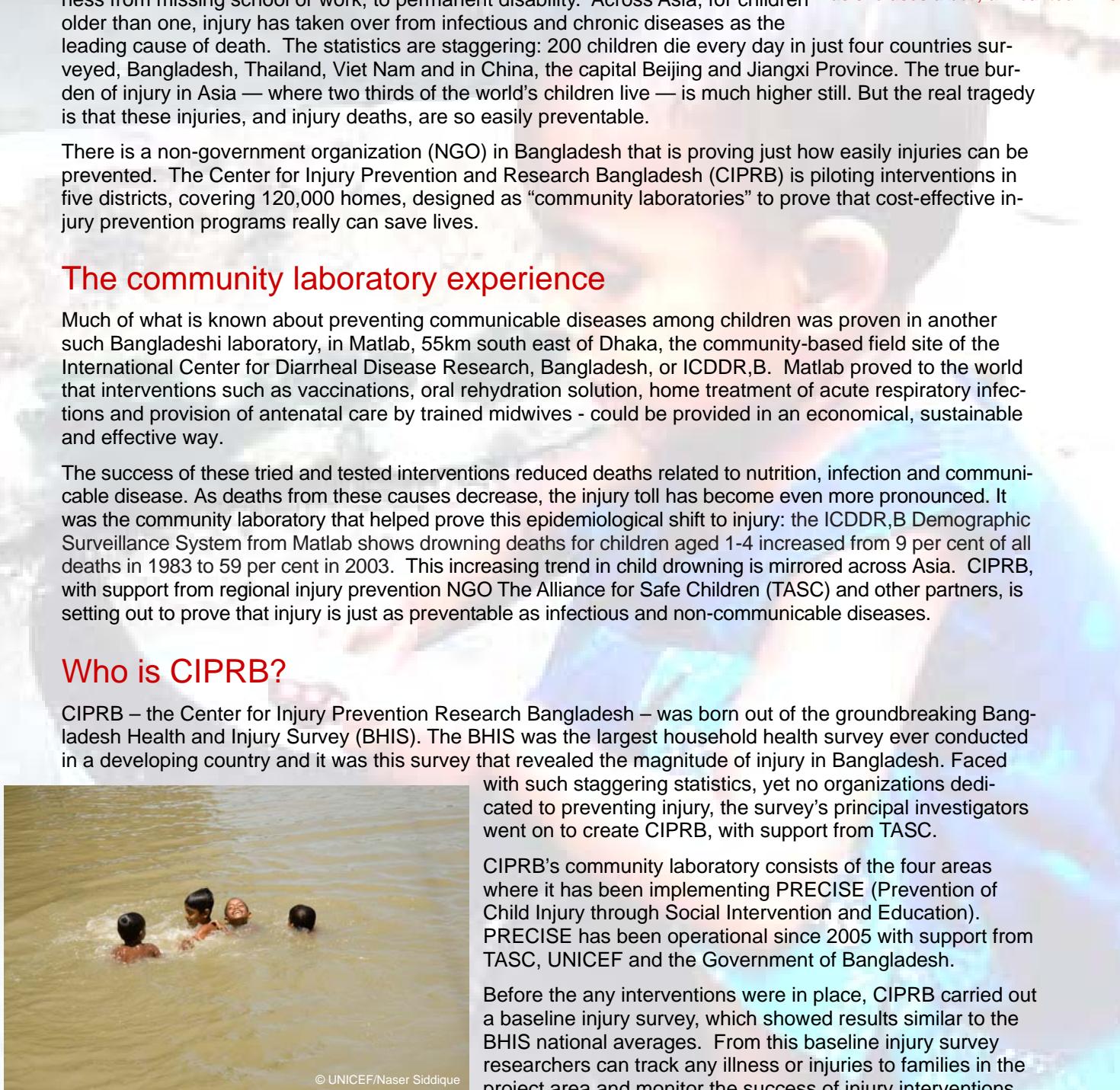
with such staggering statistics, yet no organizations dedicated to preventing injury, the survey's principal investigators went on to create CIPRB, with support from TASC.

CIPRB's community laboratory consists of the four areas where it has been implementing PRECISE (Prevention of Child Injury through Social Intervention and Education). PRECISE has been operational since 2005 with support from TASC, UNICEF and the Government of Bangladesh.

Before the any interventions were in place, CIPRB carried out a baseline injury survey, which showed results similar to the BHIS national averages. From this baseline injury survey researchers can track any illness or injuries to families in the project area and monitor the success of injury interventions.



*A young girl risks slicing her fingers as she uses a boti, a mounted knife.*



*Nearly 17,000 children drown every year in Bangladesh, making it one of the leading killers of children.*

# CIPRB and TASC: proving injury prevention works

## CIPRB

CIPRB is well on the way to creating the best solutions to prevent child injury in a developing country through PRECISE (Prevention of Child Injury through Social Intervention and Education), which covers more than 750,000 parents and children. CIPRB is staffed by experienced national public health professionals, contracts 100 field staff and counts the U.S. Centers for Disease Control (CDC) and the Royal Life Saving Society of Australia (RLSSA) among its international technical partners. CIPRB is already regarded as a regional leader in injury prevention.



© UNICEF/Naser Siddique

*Children learn survival swimming at a local pond in Raiganj, a PRECISE district 170km north of Dhaka*

## How are injuries being prevented?

CIPRB is implementing PRECISE, the biggest injury prevention project in a developing country, with support from its partners. PRECISE reduces injuries by:

**ESTABLISHING** community crèches (day care centers)

**PROVIDING** survival swimming classes

**HOLDING** courtyard meetings to raise awareness and develop local prevention ideas

**MAKING** house to house visits to promote and check basic child injury prevention practices, such as storing knives and poisons out of children's reach

**HOSTING** social autopsies to discuss specific injury deaths and consider ways to prevent further deaths

**DEVELOPING** school curricula that teaches older children first aid and younger children how to avoid injury hazards. This is part of a *Safe School* initiative that also encourages school leaders to make schools safer

**TRACKING** the occurrence of injuries, using local surveillance data collectors who register any injuries in the project areas. This data is monthly fed back to a computerized surveillance system in CIPRB's Dhaka office

**RAISING** awareness at a local level and a national policy level

## Drowning prevention

Drowning prevention is core to the PRECISE project, based on the BHIS findings that 17,000 Bangladeshi children drown every year. The BHIS found drowning accounts for 26 per cent of all the deaths of children aged 1-4. For all drowning deaths, two-thirds of mothers were doing household chores when their children died. To prevent drowning, PRECISE offers supervision in crèches and survival swimming classes:

- Community crèches provide a safe space where mothers can leave their young children in a supervised environment – and away from water hazards - while they take care of the housework. The volunteer crèche mother supervises 15-20 children and allows her home to double as a crèche from 10am to 2pm six days a week. The crèche is designed to function as an early childhood development center, a place where children can also receive immunizations and nutritional supplements from local health providers.
- Survival swimming, or *Swim for Life*, lessons are for children aged 4-10. This is a critical age to learn water safety and swimming skills. The BHIS found drowning was the lead cause of death for children aged 5 - 9 years and that 93 per cent of children older than 4 who drowned couldn't swim. The survival swimming classes are held in local ponds, with platforms and barriers made from local materials to make them more safe and learner-friendly. These local swimming spots make the lessons accessible - and cheaper - than a pool, and are more likely to be where the children actually swim. Learning water safety means children are less likely to deliberately enter water unsupervised and that they will have some rescue and survival skills if they or their peers get into trouble. There is huge community demand for survival swimming lessons.

## Raising awareness and political will

TASC's partnership with CIPRB works to promote injury prevention in Bangladesh. CIPRB works closely with UNICEF Bangladesh, through PRECISE and also in raising awareness about injury at a community and national level. Injury prevention is a priority area for UNICEF and is one of the Government of Bangladesh's five priority areas for public health interventions.