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Abstract Book

**Epidemiology: a key to achieve  
the Millennium  
Development Goals**

Main Organizer



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major cause of illness due to injury was fall (432.6 per 100000population) second position was cut by sharp weapon. RTA, Burn, poisoning, Blunt object, Strain was the following cause of injury morbidity. A higher rate of hospitalization due to injury was found in age group 1-4 which is 289 per 10000 populations.

There are widespread injury risks and hazards for children like poisonous substance, sharp cutting instrument, fire, water reservoir etc with in the residence premises.

### **Conclusion**

Injury prevention efforts should focus in urban area for safety of the children.

## **WATER TRANSPORT ACCIDENTS & INJURIES IN BANGLADESH**

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### **Introduction**

Bangladesh is a riverine country and three major river systems and their confluence form the world's largest delta here. The inland water transport system provide naturally suitable and relatively cheaper means of transportation and is being considered as one of the most popular modes for carrying passengers and commodities in the country. However, the problems relating to maritime safety are emerging with new dimensions with many passenger launch accidents resulted in several thousands of injuries (both fatal and non fatal) in the past few years. The extent of damage, loss of property and the severity of the injuries are putting tremendous amount of burden on the society and on the national economy as well.

### **Objective**

In view of the growing concern for safety scenarios in the inland water transport sectors of Bangladesh, a study has been undertaken with the following objectives: to collect accident and injury data for the past fifteen years, statistically analyse the injury trends and characteristics and discern an overall situation of water transport accidents and injuries in Bangladesh. In this paper, some striking findings of the main study are discussed with particular emphasis on the trends, characteristics and factors involved in accidents and injuries and safety improvement options.

### **Method**

The study considers three hundred and twenty three accident cases that took place in the inland water ways of Bangladesh during the years 1991 to 2005. The fundamental sources of the accident and injury data were the national daily news papers. Other sources such as reports of Department of Shipping (DOS) and Bangladesh Inland Water Transport Authority (BIWTA) also contributed towards this endeavour. Factual information on accidents and injuries has been extracted from the published reports and subsequent matching with different sources of individual accidents. A data collection form and a database have been developed using Microsoft Access which comprises nineteen different parameters. These parameters are then grouped into six major categories. The accident and injury data have been analysed using Microsoft Excel to provide outputs in the form of various distributions and cross-tabulations.



## Results

Studies reveal that the numbers of water transport accidents and injuries are increasing quite steadily during the past fifteen years. Particularly from the study on the total number of accident cases it is observed that in 2005 there were seventy one accident cases which is an increase of more than fifteen times in comparison to the year 1991 (where only 4 accident cases were recorded). It was also revealed that the trend of accidents was comparatively steady until the year 2000 and afterwards there has been a sudden rise the total number of accidents and injuries.

Most of the accidents in Bangladesh result in both fatal and non fatal injuries. The fatal injuries constitute a significantly higher percentage of total casualties which is about sixty six percent. However, the non fatal injuries and missing constitute around twenty one percent and thirteen percent respectively. In recent times particularly during the year 2000 to 2005, the numbers of fatal injuries have increased very sharply. Since the total numbers of casualties (including fatal injury, non fatal injury and missing) have increased during this period, it is therefore, evident that accidents are becoming comparatively more fatal than the previous years. Analysis of vessel involvements suggests that passenger vessels are involved more in accidents than the cargo vessels and others. Passenger launches, passenger trawlers, ferries, engine boats and country boats constitute around fifty two percent of total accidents and while cargo ships, cargo trawlers and other cargo vessels constitute forty percent of the total vehicle involvement. Warships, tugs and other vessels constitute only eight percent of the total. Further investigation on fatal injury-vessels involvement suggests that around sixty seven percent of injury occurs on the passenger vessels alone and thirty three percent on the multiple interaction of cargo vessels, passenger vessels and other vessels. Importantly, passenger vessels are contributing significantly to higher proportion of fatal injuries to the total casualties.

## Conclusion

Considering the importance of water transportation system in the context of Bangladesh, pragmatic actions and cost-effective scientific approaches should be taken with due urgency in order to reduce the number injuries and accidents. Injuries in passenger and cargo transports are quite recurrent and therefore, needs urgent attention regarding prevention of casualties in these particular types of water transports. More in-depth research is fundamentally important in this regard to explore detailed insights into the causation factors and regulatory as well as operational aspects of accidents and injuries for safety improvements.