



Media release

Flood deaths mostly preventable ... new study finds

Flood is the most common natural disaster in Australia and causes more loss of life than any other disaster.

In modern developed countries with adequate emergency response systems and extensive resources, deaths which occur in floods are almost all preventable, a new study has found.

The study, by Dr Gerry FitzGerald, Weiwei Du, Aziz Jamal, Michele Clarke, and Janet Hou, all from the Queensland University of Technology, is published in the latest issue of *Emergency Medicine Australasia*, the journal of the Australasian College for Emergency Medicine.

The researchers compiled a database of flood fatalities in Australia occurring during the period 1997-2008, with data derived from newspapers and historic accounts, as well as government and scientific reports.

At least 73 people died as a direct result of floods in Australia during that period.

The largest number of fatalities occurred in New South Wales and Queensland.

Most fatalities occurred during February, and most (71.2 %) were males.

The most common age groups were 10-29 and those over 70 years.

There is no evident decline in the number of deaths over time.

Almost half (48.5%) related to motor vehicle use, and 26.5% occurred due to inappropriate or high risk behaviour during floods.

"In Australia floods are viewed relatively benignly as they bring an end to drought and a promise of more fertile times in rural areas," the researchers commented.

"This perspective of floods is in contrast to that of less developed countries where floods pose not only an immediate risk to life but also a significant medium to long term risk from crop destruction and disease outbreak.

"However floods remain a real risk to health in Australia."

This study suggests that the vast majority of deaths in Australia (over 90%) that occur as a result of floods occur because of the choices made by the individual - choices to engage in inappropriate risk-taking behaviour or to enter flooded waterways either by foot or in a vehicle.

Despite public warnings to avoid the fording of flooded streams and waterways, almost half of the deaths were associated with driving motor vehicles across flooded waterways or driving on flooded roadways.

Drivers often underestimate the force of flowing water and its capacity to dislodge relatively large motor vehicles, the researchers found.

“An average car is 6-8 square meters in surface area and a displacement of 10-20 centimetres of water above the bottom of the chassis will cause the car to float and therefore be washed away.

“In addition, it is not possible for the driver to know the status of the roadway under the flood water or often the depth of the water.”

Despite the best efforts of emergency management agencies, the Australian public’s knowledge and awareness of flood threats is inadequate.

The researchers therefore are calling for flood safety awareness education programs which target the general population as well as specific high-risk groups such as young males, parents of teenagers and older people.

“The provision of information about the facts in both written (facts sheets) and broadcast format would be helpful.”

FURTHER INFORMATION

To interview Dr FitzGerald, please phone Marilyn Bitomsky (see below)

Issued for the Australasian College for Emergency Medicine (03 9320 0444) by Marilyn Bitomsky (07 3371 3057 or 0412 884 114)