

PART 4

DROWNINGS & OTHER INJURY FATALITIES DURING BATHING

Drownings in the bathtub are an important category of drownings in Canada and account for about 6 to 10% of drownings, excluding land and air transport. Most occur during daily living activities such as bathing. Bathtubs and swimming pools represent the main drowning hazards in or near Canadian homes. There were about 1.5 times more drownings in bathtubs than in home swimming pools during 1991-1999. Drownings in bathtubs accounted for about 30% of drownings of females during 1991-1998, but only about 4% of drownings of males. In 1999, the proportion of drownings of females due to bathtubs has fallen to 18%, while females are becoming more represented among aquatic victims and even boating fatalities. Since the total number of all drownings is much higher among males, the actual number of bathtub deaths was only 1.5 times higher among females.

Deaths in the bathtub fall into three main categories:

- Individuals who drown while bathing immersed in the water. This appears to be the largest group;
- Individuals who are preparing to bathe and either fall into the bathtub or slip and fall in the bathtub;
- Persons who are in a bathroom for other reasons and fall into a bathtub containing water.

In the case of falls in the bath, death may occur from drowning, from head injury or from a combination of both. In some cases, it is unclear whether the victim was preparing to take a bath or was engaged in other activities. Finally, there are occasional deaths in the bathroom in locations other than the bathtub, such as toilets, laundry buckets, and hand basins.

While there are certain similarities between the groups at risk from drowning in bathtubs and home pools, there are also differences that should be considered when planning interventions. These become apparent upon reviewing the age groups at risk in these two locations, and personal risk factors, especially epilepsy. It is clear that bathing infants in large adult bathtubs is hazardous, since infants are unsupported on a large slippery surface and can topple over and slip beneath the water at any time if the parent or caregiver is momentarily distracted. Hence, infant tubs should be purchased or supplied at the time of the birth of a first child. Infant bath seats or rings are hazardous and should not be used as a substitute for an infant tub (Brenner et al., 1995). Nevertheless, while infant bathtubs can help to reduce the risk, constant adult supervision is still essential. Elderly persons who are physically or mentally handicapped, as well as alcoholics, may not be able to use a bathtub safely by themselves, and other methods of bathing should be considered.

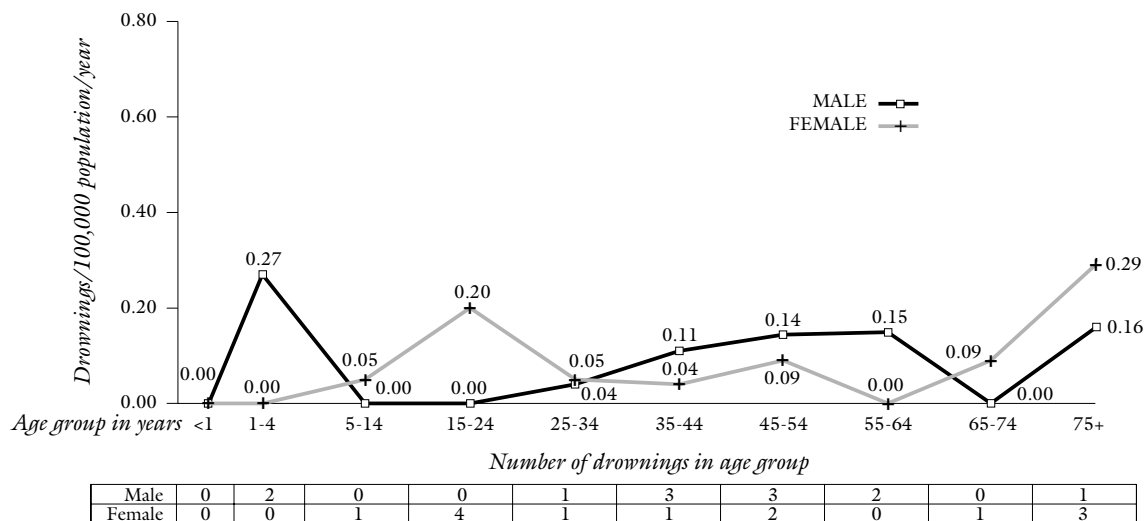
Because of the risk of seizures, persons with epilepsy need to shower and avoid ever being alone in or close to bodies of water such as bathtubs or pools. Further details of drownings among persons with epilepsy are included in Part 6.

While the highest rates of drowning in bathtubs are seen among infants and toddlers and the elderly, the majority of victims are people in the economically productive period of life between 15 to 54 years. While prevention of bathtub drownings among infants and toddlers needs to focus on use of child bathtubs and constant adult supervision, prevention among adults must focus on safe bathing practices for people with epilepsy.

While infants accounted for between 10 and 20% of drownings in bathtubs during 1991-1994, these have decreased to nearly zero since then. Hence, people with epilepsy are now the leading group to be addressed to help further reduce the toll of bathtub drownings.

Figure 4.1

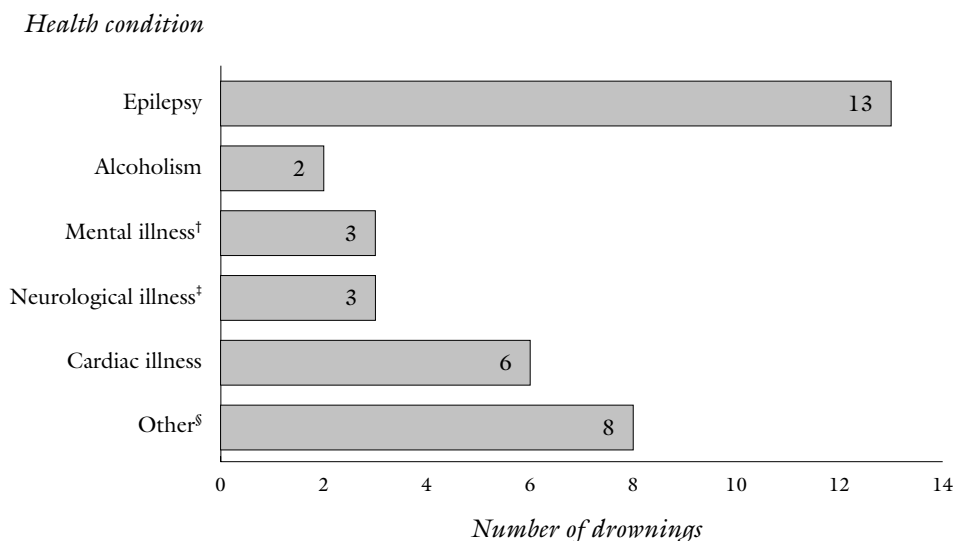
RATE AND NUMBER OF BATHTUB DROWNINGS BY AGE & SEX, CANADA 1999 (n=25)



Source: The Canadian Red Cross Society & the Canadian Surveillance System for Water-Related Fatalities, 2001

Figure 4.2

HEALTH CONDITIONS* OF VICTIMS OF BATHTUB DROWNINGS, CANADA 1999 (VICTIMS ≥15 YEARS OF AGE; n=22)



* Includes conditions with possible effect on consciousness, alertness, or balance; victims may suffer from more than one condition

† Including depression 2, schizophrenia 1

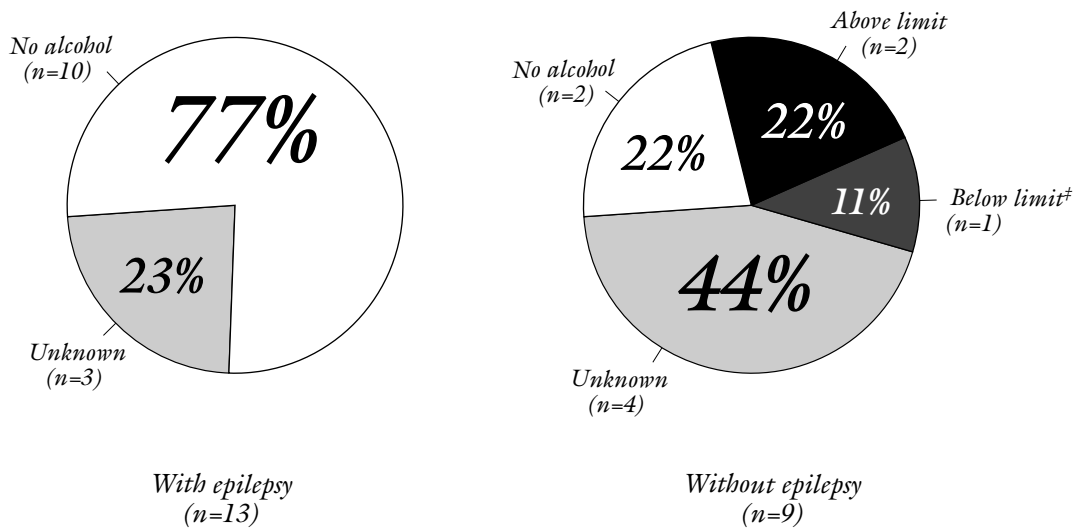
‡ Including 1 each of cerebral atrophy, ataxia, sleep apnea

§ Including diabetes 2, & 1 each of emphysema, pneumonia, asthma, chronic back pain, burns, renal failure

Source: The Canadian Red Cross Society & the Canadian Surveillance System for Water-Related Fatalities, 2001

Figure 4.3

BLOOD ALCOHOL LEVELS* FOR BATHTUB DROWNING VICTIMS WITH & WITHOUT EPILEPSY,† CANADA 1999 (VICTIMS ≥15 YEARS OF AGE; n=22)



* Legal limit is 80 mg % † See Part 6 for more information about epilepsy ‡ 1 at 50-80 mg %

Source: The Canadian Red Cross Society & the Canadian Surveillance System for Water-Related Fatalities, 2001