

The British Columbia Brain Injury Association strongly believes that the majority of acquired brain injuries are preventable and the most cost effective approach to the problem is the development of prevention strategies.

The following excerpts are taken from: *Guidelines for Planning Brain Injury Services and Supports in BC 2002 Ministry of Health Services and Ministry of Health Planning January 2002.*

Brain injury is forever. A major emphasis must be placed on prevention activities. Brain injury prevention must be one of the provincial injury prevention priorities. Public awareness and education must emphasize safety and the reduction of risk factors for injury, and these activities must be promoted to support the health and safety of all British Columbians.

In Canada, estimates for brain injuries are usually extrapolated from United States studies. The estimates of incidence of people who acquire brain injury after birth range from 195/100,000 to 350/100,000. Therefore, with a population in British Columbia of about four million people, the province would have an incidence rate of acquired brain injury of between 7,800 and 14,000.

The estimates for traumatic brain injury (an injury to the brain resulting from a blunt instrument or other cause) range from 100/100,000 to 200/100,000. Using a rate of 150/100,000, this translates into about 6,000 traumatic brain injuries. Based on US statistics, about 20% of individuals will die as a result of a traumatic brain injury before reaching a hospital, which translates into a surviving 4,800 individuals with traumatic brain injuries in the province. Of these remaining 4,800 individuals, the following has been observed, based on US statistics:

- 3,840 will acquire a mild brain injury, requiring services in 10% to 18% of the cases (384 to 691);
- 480 will acquire a moderate brain injury and 7% (34) of these will die. Of the remaining 446, one-third (47) will have no disability and two-thirds (399) will have

a disability; and,

- 480 will acquire a severe brain injury - 50% (240) will die. All the remaining 240 will have a disability.

This leaves 1,023 to 1,330 people of all ages requiring rehabilitation every year as a result of a traumatic brain injury. There is minimal data to determine exactly how many require services as a result of a non-traumatic brain injury. An estimate in Alberta places the number at 40% of the total number of individuals who receive a traumatic brain injury (409 to 532). Extrapolating this to the population in British Columbia, this brings the total to between 1,432 to 1,862 British Columbians requiring rehabilitation services per year.

Considering the complex needs of persons with brain injury, the regional disparity in current resources, lack of a comprehensive database to reflect the true incidence of brain injury in the

regions, lack of acute awareness in the communities of the varying and sometimes life-long needs of this population, and geographic moves by persons with brain injury between regions, health authorities have a challenging task ahead. However, providing services within an integrated regionalized structure will assist in providing more effective access to the various health services for this population. Integrated planning must occur at the local level and will require establishing and sustaining broader partnerships across all social policy ministries as well as with community partners. Health authorities will be required to place a greater emphasis on creating collaborative partnerships and networking with all partners to build capacity and effective services within their regions.

The 1999/2000 data from the British Columbia Injury Prevention Registry reports 2,734 cases of brain injury. However, it should be noted that current epidemiological research services and supports. Brain injury affects a person's cognitive, physical, psychological and social well-being. Consequences of brain injury typically include difficulties with memory, slowed ability to process information, difficulty in concentrating, seizures, double vision, headaches, fatigue, increased need for sleep, difficulty in completing tasks without reminders, increased anxiety, depression and mood swings, impulsive behaviour, difficulty making decisions and behaviours that may result in harm to self or others. In addition, the personal cost of reorienting to a new identity and of rebuilding on the day-to-day functioning lost due to the brain injury affects the person's current and future quality of life.

For families and significant others, the effects are equally devastating. There is a struggle to understand the full impact of the brain injury on the loved one, issues of grief, loss and intimacy, reorientation of roles and responsibilities within the family and the impact on one's own coping skills and resourcefulness. The costs to society are enormous, not only for care, treatment and rehabilitation but also in lost productivity, the personal contribution to society and the generational impact on the community.