

## FACT SHEET

**The Australian Spinal Injury Alliance (*Spinal Alliance*) represents eight of Australia's state-based spinal cord injury organisations, and has been established to provide a national voice for Australians who have sustained a spinal cord injury (SCI).**

Members of the Spinal Alliance include: Australian Quadriplegic Association Victoria (AQA Victoria), Independence Australia, ParaQuad Association of Tasmania Inc, ParaQuad NSW, PARAQUAD SA, Spinal Cord Injuries Australia, Spinal Injuries Association and Spine & Limb Foundation, WA.

The Spinal Alliance is the first of its kind in Australia to bring together state-based SCI organisations in order to leverage their expertise and existing communities for the benefit of all Australians who have sustained an SCI. The Alliance will focus on five key priorities: government liaison, advocacy, injury prevention, awareness raising and information sharing.

*Follow the Australian Spinal Injury Alliance on Twitter - @SpinalAlliance*

\*\*\*

*The following statistics represent the latest available national statistics of spinal cord injuries, from case registrations to the Australian Spinal Cord Injury Registry (ASCIR).*

### Age and Sex Distribution

- Of reported traumatic spinal cord injury (SCI), 84% are male and 16% female.
- Spinal cord injuries were most frequent in 15-24 year old age group (accounting for 30%)
- A significant increase in the average age at injury is one that is being reported internationally and is likely to be a reflection of the ageing population
- An increase is also seen in the 65-74 year age group sustaining SCI

Individual state/territory incidence (based on usual residence of patient) is as follows (highest to lowest):

- Northern Territory (highest incidence rate)
- Western Australia
- South Australia
- Queensland
- New South Wales
- Tasmania
- Victoria
- ACT

### Causes of SCIs in Australia

Approximately 80% of newly reported SCI cases are due to traumatic injury (i.e. accident related). These consist of:

- 46% - motor vehicle related incidents
  - *Of these transport related incidents 51% were motor vehicle occupants and 49% were unprotected road users, predominantly motorcyclists (79%). The vast majority of unprotected road users were male (92%), and they tended to be younger with over half (56%) in the 15-34 years of age group.*

- 28% - related to falls
  - *Of all falls related incidents 64% were from a height of one metre or more, 41% of low falls (same level or less than one metre) involved people aged 65 years or over, compared to only 13% of falls greater than one metre involving this age group.*
- 9% - resulted from being hit or struck by an object
  - *Where an SCI incident happened when working for an income, of these 44% related to transport incidents, 23% as a result of falls over one metre and 23% reported as being struck or colliding with a person or object.*
- 9% - were water-related
  - *The activity being undertaken at the time of SCI was documented in half of the SCI cases. Leisure activities accounted for 35% of these with just over half being attributed to diving, surfing, swimming or jumping into bodies of water.*
- 8% - were from other causes
  - *Other leisure activities documented included; major football codes, pedal cycle races, horse-related activities.*

Approximately 21% of newly reported SCI cases are non-traumatic. This group consists of medical conditions such as vascular disorders, degenerative spinal conditions, genetic disorders and cancerous lesions.

### **Social impact**

- SCI has enormous health, social and economic impacts on individuals, families and communities. As well as the physical and psychological impact on those affected directly by SCI, there is also a heavy burden on those who support and care for them.
- Socio-economic factors known to be important in relation to injury and rehabilitation are marital status, employment status and educational level attained at the time of onset of the SCI.

The three statistics below are referenced from:

*Rowell D, and Connelly LB, Personal assistance, income and employment: the spinal injuries survey instrument (SISI) and its application in a sample of people with quadriplegia, Spinal Cord (2008) 46, 417-424.*

1. Employment rates have been shown to decline by nearly 50% (78% to 29%) pre and post SCI
2. Persons with quadriplegia spend an average of AUD\$8741 per annum on health care, approximately twice the community average of AUD\$4319 per annum
3. Families play an important ongoing role caring for people with an SCI. The 'shadow' price of family care was estimated to be AUD\$13262 per annum (an average of 80 hours per fortnight)

### **Economic impact**

- Patients with SCI tend to have lengthy hospitalisations. Overall, people with an SCI have a median length of stay in hospital of 133 days.
- The decreased mortality and improvements in life expectancy have resulted in an increasing prevalence of people living with SCI.
- The ongoing costs associated with the long-term care of the prevalent population are estimated to be nearly A\$500 million per year.

## Types of SCI

Every SCI is different reflecting the complexity of the spinal cord and the amount of damage to the nerves of the person's spinal cord.

A SCI is often described by the vertebral level at which the spinal cord is damaged – Cervical (7 levels), Thoracic (12 levels), Lumbar (5 levels), Sacral (5 levels) and by the extent of function below the level of damage, sometimes described as 'complete' or 'incomplete'. The vast majority of people with SCI have long-term neurological loss.

Common categories of SCI in order are;

**Incomplete Quadriplegia \* (38%)** – refers to spinal cord damage at a Cervical level with loss of function in neck, shoulders, upper chest, arms and legs, where some function is preserved below the level of damage.

**Complete Quadriplegia \* (15%)** – refers to spinal cord damage at a Cervical level with loss of function in neck, shoulders, upper chest, arms and legs where no function is preserved below the level of damage.

**Incomplete Paraplegia (27%)** – refers to spinal cord damage at a Thoracic, Lumbar or Sacral level with loss of function in the chest, trunk and lower limbs, where some function is preserved below the level of damage.

**Complete Paraplegia (20%)** – refers to spinal cord damage at a Thoracic, Lumbar or Sacral level with loss of function in the chest, trunk and lower limbs, where no function is preserved below the level of damage

\* **Quadriplegia is also known as Tetraplegia**

ENDS

All data referenced in this document is cited from the following source:

*Norton L, Spinal Cord Injury, Australia 2007-08, Australian Institute of Health and Welfare, Injury Research and Statistics Series Number 52. Canberra; 2010*

### Media Information:

To arrange an interview with Peter Trethewey, Spokesperson of the Australian Spinal Injury Alliance (*Spinal Alliance*) contact;

- QUAY Communications, Emma Norgrove, M: 0499 688 001, T: 02 9386 9161 or Cheryl Pettinau, M: 0424 157 714, T: 02 9386 9161