

Spinal cord injury guidelines

These guidelines have been developed for assessors, rehabilitation service providers and ACC staff, who work with clients who have a significant impairment due to a traumatic injury to the spinal cord.

Guidelines introduction

The Guidelines aim to increase assessors' and rehabilitation service providers' understanding of the typical range of supports needed by people with different levels of spinal cord injury.

Assessors can cross-reference their advice about levels of attendant care, against the typical range of responses for people with the same level of injury recommended in these Guidelines. This process will also help assessors justify any levels of proposed attendant care that are above or below the levels recommended in the Guidelines.

The Guidelines will help ACC staff and their clients make objective and consistent decisions about the supports needed to enable clients to participate in everyday life - particularly regarding the level of attendant care needed.

We suggest ACC staff also use the Guidelines to review assessors' advice and to make decisions about the amount of attendant care that will be funded by ACC.

The recommendations made in these Guidelines refer to the total number of hours of attendant care required by the person with that level of injury, regardless of who provides the care. The recommendations are based on:

- the level of injury to the person's spinal cord
- an assessment of the person's upper extremity motor function and related motor scores using the American Spinal Injury Association (ASIA) Standard Neurological Classification of Spinal Cord Injury
- an assessment of the person's ability to walk.

These Guidelines do not apply to:

- a child (under 14 years of age) with a spinal cord injury
- a person whose spinal cord damage has been caused by illness or a congenital condition
- a person who has either a pre-existing disability such as epilepsy, or other co-existing impairments such as a severe brain injury (sometimes referred to as 'dual diagnosis' when detected together) - these make management of their spinal cord injury much more complex
- a person living in institutional or residential care (eg a nursing home).

Disclaimer

These Guidelines do not intend to set a minimum or maximum standard of care, nor do they make recommendations about providers of support services.

The amount of support recommended in these Guidelines is for a 'typical' person with a spinal cord injury who lives independently (alone or with others) in the community in an appropriately modified environment.

When assessing a person's support needs, individual circumstances will always need to be taken into account. There are a range of factors that can put a person outside the range typically required by people with the same level of injury.

An individual's amount of support may fluctuate. In most cases the change is not permanent and the support can return to the 'typical' range indicated in these Guidelines. Any request for a change in the amount of support will be considered by ACC staff, who may ask for a re-assessment if it appears there has been a change in need.

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Background to the ACC Spinal injury guidelines

The New Zealand Accident Compensation Scheme provides lifelong support for people who have had a traumatic injury to their brain or spinal cord (or both), multiple amputations, serious burns or blindness. Coverage under the Scheme is provided regardless of fault.

In 2002 the New South Wales Motor Accidents Authority (MAA) released Guidelines for levels of attendant care for people who have a spinal cord injury. The MAA Guidelines have been used within the New South Wales Motor Accidents Scheme to determine care levels for people with a spinal cord injury living in the community. Since then, the 2002 version has been revised and superseded by the 2007 version.

ACC obtained permission to use the MAA 2007 Guidelines on a temporary basis, while an expert informant group adapted the contents for New Zealand conditions.

Note:

The MAA Guidelines had been adapted from Outcomes following traumatic spinal cord injury: clinical practice guidelines for healthcare professionals, an American guide developed in 1999 by a multidisciplinary expert panel funded by Paralyzed Veterans of America. In May 2006 ACC verified that these guidelines were developed following a robust and valid process, using an Appraisal of guidelines for research and evaluation (AGREE) instrument.

Adapting the Guidelines for New Zealand conditions

ACC convened a group of expert informants, comprising representatives from a range of organisations with wide experience in assessing the needs of people with a spinal cord injury.

The purpose of the expert informants group was to review the MAA Guidelines, and use a consensus model to:

- recommend to ACC whether the MAA Guidelines are applicable to people with spinal cord injuries in New Zealand
- specify to ACC any changes which would be required of the MAA Guidelines to enable them to be applicable to people with spinal cord injuries in New Zealand.

Three workshops were run between 16 December 2007 and 17 March 2008. In the first workshop the expert informant group reviewed the content relating to complete spinal cord injuries.

In the second workshop a sub-committee of the expert group revised content relating to incomplete spinal cord injuries.

The sub-committee considered that a better option for defining incomplete spinal cord injuries in the New Zealand environment would be to use the American Spinal Injury Association (ASIA) Standard Neurological Classification of Spinal Cord Injury, and the Functional Independence Measure (FIM) and Functional Assessment Measure (FAM) findings from the Serious Injury Support Needs Assessment.

This would mean the Upper Limb Motor Score (ULMS) utilised in the MAA guidelines would not be used and the potential categories of incomplete spinal cord injury would reduce from the 24 listed in the MAA Guidelines to eight new categories.

It was considered that the ULMS tool did not necessarily translate well to actual functional independence in activities of daily living and the associated support needs required.

The sub-committee recommended a matrix as illustrated below to categorise incomplete spinal cord injury.

Level of lesion				
ASIA score	C1-5	C6-8	T1-L1	L2-S5
B	Refer to complete ASIA A	Refer to complete ASIA A	Refer to complete ASIA A	Refer to complete ASIA A
C	New Category	New Category	New Category	New Category

D	New Category	New Category	New Category	New Category
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For each of the new categories listed in the matrix above, relevant content was created on Abilities & Assistance Typically Needed and Levels of Human Support. The sub-committee's recommendations were subsequently endorsed by the full expert informant group.

In the third workshop a sub-committee of the expert informants group developed equipment lists for all types of complete and incomplete spinal cord injury. These have been published in a separate document, as the purpose of these Guidelines was recommendations about attendant care.

The expert informant group made its full recommendations to ACC on 31 March 2008. The majority of the expert informant group's recommendations have been adopted for this publication (the only recommendations not adopted were those which were inconsistent with ACC's operational policies).

Note:

The sub-committee would like to acknowledge the immense work the Australian team had undertaken in providing Guidelines for this very complex area of spinal cord injury management.

Acknowledgements

ACC extends thanks to the expert informant group for their assistance in adapting the NSW Motor Accidents Authority Guidelines for New Zealand conditions. The work of Jo Hinds-Brown in independently facilitating the work of the expert informant group and the various sub-committees is gratefully acknowledged.

Workshop 1 members

- Marianne Cox, Occupational Therapist and Operations Manager, Auckland Spinal Unit
- Jonathan Kwan, Physiotherapist and Section Head, Auckland Spinal Unit
- Maria Low, Clinical Nurse Specialist, Burwood Spinal Unit
- Viv Mulgrew, Speech Language Therapist, Burwood Spinal Unit
- Xianghu Xiong, Director and Spinal Consultant, Burwood Spinal Unit
- Andrew Hall, Chief Executive New Zealand Spinal Trust
- Cecelia Elderkamp, Community Occupational Therapist, Hawkes Bay
- Thomas Callagher, The Association for Spinal Concerns (TASC) Representative, Auckland
- Corrie Pascoe, Occupational Therapist, Senior Support Co-ordinator, ACC National Serious Injury Service
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Apologies were received from Tracey Emmerson, Community Registered Nurse, Wellington.

Workshop 2 members

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- Maria Low, Clinical Nurse Specialist, Burwood Spinal Unit
- Andrew Hall, Chief Executive New Zealand Spinal Trust
- Cecelia Elderkamp, Community Occupational Therapist, Hawkes Bay
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- Janice McIntyre, Occupational Therapist, Programme Manager Rehabilitation Service Delivery Unit, ACC Corporate Office
- Tracey Emmerson, Community Registered Nurse, Wellington.

Apologies were received from Xianghu Xiong, Director and Spinal Consultant, Burwood Spinal Unit.

Workshop 3 members

- Jonathan Kwan, Physiotherapist and Section Head, Auckland Spinal Unit
- Cecelia Elderkamp, Community Occupational Therapist, Hawkes Bay
- Xianghu Xiong, Director and Spinal Consultant, Burwood Spinal Unit.

Structure of these guidelines

There are sixteen sets of recommendations corresponding to different types of spinal cord injury, determined by the level of lesion and the score on the ASIA impairment scale.

The recommendations for each type of spinal cord injury includes a brief description of abilities and types of assistance that are typically required, followed by recommended total hours of human support that are typically needed.

Assessor instructions for using these guidelines

Assessors must use the Serious Injury Support Needs Assessment form (ACC4202), which contains the FIM/FAM tools for determining the support needs of people with a spinal cord injury.

Assessors should use the findings of their assessment to back up their professional advice about the amount (total number of hours) of attendant care likely to be needed by the injured person.

Assessors should pay particular attention to the definitions in these Guidelines for:

- Level 1 and Level 2 attendant care
- Supervision
- Active nights
- Sleepover care

If Level 2 attendant care is advised, then this will need to be corroborated by the information provided in the FIM or FAM Score of 5 or Less section and the Medical Support Needs section on the Support Needs Assessment form ACC4202.

Assessors' advice about the total number of hours of attendant care should be cross-referenced against the recommendations in these Guidelines ('Section 2: Client Circumstances' of the Support Needs Assessment form provides the relevant level of lesion and ASIA score information). The calculation of FIM/FAM scores should be double-checked for errors if the assessor's view of the amount of attendant care needed falls outside those recommended by these Guidelines.

Assessors who propose attendant care hours above or below the levels recommended in these Guidelines must provide information in the Individual Home Support & Like Services section of their Support Needs Assessment that provide the reasons why an exceptional response is required. The information must include:

- evidence about the person's individual circumstances that makes their needs for attendant hours different to a typical person with the same level of injury
- evidence of what other alternatives to attendant care have been considered, and for what reasons those alternatives have been discounted.

ACC staff instructions for using these guidelines

Before their first meeting with the client, Support and Service Coordinators need to access the client's medical notes for the level of lesion and ASIA score information, and then review the relevant section of the Guidelines to familiarise themselves with the nature of their client's injury.

The client's first Support Needs Assessment needs to be completed as part of planning for discharge from the spinal unit or rehabilitation facility. Support and Service Coordinators need to carefully review the advice given in the assessment against the recommended number of hours of support given in these Guidelines. Support and Service Coordinators should pay particular attention to the definitions in these Guidelines for:

- Supervision
- Active nights
- Sleepover care.

These Guidelines do not have recommendations for hours of supervision as these are incorporated into the recommended hours for attendant care. The recommendations for the total number of hours of attendant care are given without specific reference to whether this care is at Level 1 or Level 2.

A high proportion of Level 2 attendant care is to be expected for clients with spinal cord injuries at C1-C3, but would be exceptional for clients with an injury at C4 and below.

Any advice that Level 2 attendant care is needed should be cross-checked with the evidence that the assessor has provided in the FIM or FAM Score of 5 or Less section and the Medical Support Needs section on the Support Needs Assessment form (ACC4202).

When reviewing provider options for Level 2 attendant care, bear in mind that if family members are being considered they will need extensive additional training before they start providing attendant care, and they will require on-going supervision to ensure Level 2 standards of care are being provided consistently and reliably.

Assessor advice for hours within guidelines

If the proposed hours of attendant care are within the parameters set out in the Guidelines, then move directly onto researching provider options for discussion with the client and their partner/family supporters.

Assessor advice for hours outside guidelines

If the proposed hours of attendant care are outside the parameters set out in these Guidelines, check the reasons why an exceptional response is required (refer to the 'Individual Home Support & Like Services' section on the Support Needs Assessment form). If the reasons are absent or insufficient, phone the assessor to obtain it. No additional fees will be paid to the assessor for this. Make sure the reasons justifying an exceptional response are properly documented and attached to the assessment for future reference.

Adapted (with permission) for New Zealand conditions from the NSW Motor Accidents Authority 2007 publication Guidelines for Levels of Attendant Care for People with Spinal Cord Injury.

Definitions

Active nights

This refers to the continuous or regular attention by an attendant care worker to perform such tasks as ventilator management or tracheal suctioning throughout the night. The attendant care worker must be awake throughout the night.

Active night care is definitely required on a permanent basis by people with a lesion at C1-C3 and an ASIA score of A. This requirement has been built into the guideline's recommended total hours for attendant care.

At other levels of lesion, active night care may be required but only in exceptional circumstances. Such circumstances could include people suffering a temporary health crisis such as a severe chest infection or receiving treatment for major medical conditions such as cancer.

ASIA impairment scale

The American Spinal Injury Association (ASIA) Standard Neurological Classification of Spinal Cord Injury is a standard method of assessing the neurological status of a person who has sustained a spinal cord injury. ASIA scale assessments are usually carried out by specialist medical staff at the hospital the person is admitted to.

[ASIA international standards for neurological classification of spinal cord injury worksheet \(PDF 579KB\)](#)

It is important to include the score on the ASIA impairment scale in the referral for a spinal injured client. This score can usually be found in the medical notes of a client who has been admitted into either of the spinal units.

The ASIA impairment scale has five categories as follows:

Category	Definition
A = Complete	No motor or sensory function is preserved in the sacral segments S4-S5
A = Complete	No motor or sensory function is preserved in the sacral segments S4-S5
B = Incomplete	Sensory but not motor function is preserved below the neurological level and includes the sacral segments S4-S5
C = Incomplete	Motor function is preserved below the neurological level, and more than half of key muscles below the neurological level have a muscle grade of less than 3
D = Incomplete	Motor function is preserved below the neurological level, and at least half of the key muscles below the neurological level have a muscle grade of 3 or more

Attendant care

Attendant care is a technical term that describes the support that a person with a spinal cord injury needs, in order to do tasks they would have been doing for themselves prior to their accident.

The legislation that ACC operates under (the Accident Compensation Act 2001) defines attendant care as:

- personal care (physical assistance to move around and to take care of basic personal needs such as bathing, dressing, feeding, and toileting)
- assistance with cognitive tasks of daily living such as communication, orientation, planning, and task completion
- protection of the person from further injury in his or her ordinary environment
- attendant care does not include child care, domestic activities, or home maintenance.

ACC distinguishes between two types of attendant care, according to the client's level of medical and behavioural needs. Level 1 attendant care is what people with a spinal cord injury will typically require in most circumstances. Level 1 attendant care includes:

- assistance with undressing and dressing, transferring into and out of the bath or shower, washing and drying, hair washing and monitoring the condition of skin/scalp
- assistance with personal grooming activities, hair maintenance, teeth cleaning, cleaning & trimming finger/toe nails
- assistance with eating and drinking, observing and monitoring food intake, helping with sticking to special diets, preparing food, ensuring the person is positioned correctly and has access to any specialist utensils needed
- assistance with transfers to and from the toilet/commode and hygiene activities, assistance with the use of appliances and aids such as day/night urinary collection bags and associated hygiene
- transferring from bed to wheelchair and vice versa, ensuring safe mobility around the home including making sure aids such as walking sticks, frames and wheelchairs are maintained and safe
- physically assisting the person's mobility inside and outside their home
- coaching in activities of daily living, in conveying and receiving information and interacting with other people
- developing personal skills such as planning, communication, task completion, and maintaining emotional control
- giving support to protect the person from further injury in their normal home environment.

Level 2 attendant care includes all of the above activities, but due to the injured person's high medical or behavioural needs, the complexity of all of these tasks is greatly increased. The consequences of performing these tasks incorrectly are usually severe and prolonged for the injured person. Therefore, providing Level 2 attendant care requires a level of knowledge and skill that is equivalent to that possessed by a registered nurse.

Autonomic dysfunction

Autonomic dysfunction (or dysautonomia) is a medical term which means the body's regulatory system is not working. The body's regulatory system is very complex and controls heart rate, blood pressure, temperature and the secretion of hormones and digestive enzymes.

Autonomic dysreflexia

Autonomic dysreflexia is a medical term that refers specifically to problems with a person's blood pressure. It is very common amongst people with a spinal cord injury.

It refers to a condition where the person's blood pressure spikes to dangerous levels, risking stroke or possibly death if untreated. It is usually triggered by something like a bladder infection, which people with spinal cord injuries are often unaware that they have. People with spinal cord injury at the T6 level or above are at greater risk.

Complete versus Incomplete spinal cord injury

A 'complete lesion' or complete spinal cord injury means there are no messages transmitted by the nerves at the level of injury. Clinically it means there is no movement and no sensation below the level of injury, and this type of condition is described as ASIA classification A.

An incomplete spinal cord injury means there is partial damage and some (or all) feeling and movement remains below the level of lesion. The amount lost will depend on how much damage is done to the spinal cord. Individual circumstances will need to be taken into account when assessing a person's care needs. For example spasticity may severely reduce function and increase the support requirements. There are five main types of incomplete injury syndrome.

Central cord syndrome

People with central cord syndrome have their spinal cord damaged usually in the centre part of the spinal cord, and would usually experience more profound weakness and a lack of function in the upper limbs compared with the involvement of the lower limbs. They might have reasonably good chances of recovery and further improvement. Most people with central cord syndrome will have an ASIA scale classification of C or D.

Anterior cord syndrome

Anterior means 'the front'. Damage to the front part of the spinal cord will usually result in partial or complete loss of movement as well as pain, temperature, and touch sensations below the level of injury. Some pressure sensation and position sense may be retained. Most people with anterior cord syndrome will have an ASIA scale classification of B.

Posterior cord syndrome

Posterior means "the back". Damage to the back of the spinal cord may leave good muscle power, pain and temperature sensation, but create difficulties in movement coordination. This is very rare.

Brown-Sequard syndrome

Where damage is mainly on one side of the cord. On the injured side, muscle power may be reduced or absent, and pressure and position sense are disordered. The other side experiences loss of, or reduced sensations of pain and temperature but movement, pressure and position sense tend to remain. Most people with Brown-Sequard syndrome will have an ASIA scale classification of C or D and are more likely to be in the D category, indicating good chances of recovery and improvement.

Cauda equina lesion

Cauda equina is the medical name for the “horses tail” of nerves that spread out from the base of the spinal cord. An injured cauda equina may result in patchy loss of power and sensation in the lower limbs. The bladder and bowel are usually severely affected. Functional recovery can happen over 12-18 months if the roots of the nerves are not permanently damaged.

Child-care services

Involves the supervision of children for the purpose of ensuring their welfare due to the absence or limitations of a parent, guardian or other suitable carer.

Community access

Includes social, recreational and other activities, and facilitation of community access through transport and mobility. Community access support is a need that is additional to attendant care, and hours should be allocated accordingly.

Educational support

Includes those services (including resource preparation and planning) required to allow the individual to enter and remain at school or other educational facility.

Functional Independence Measure (FIM)

A measure of disability, not impairment. The FIM measures what a person with a disability actually does, NOT what he or she ought to be able to do, or might be able to do if certain circumstances were different. It assesses the need for assistance, and the type and amount of assistance required for a person with a disability to perform basic life activities effectively.

A FIM score of 5 or less indicates there is a need for human assistance.

Note:

Some information sourced from Adult FIM Workshop Training Manual (ver. 5.0 AUS). This manual is currently being used for the training of ACC Assessors and Staff.

Functional Assessment Measure (FAM)

The functional assessment measure (FAM) is an expansion of the FIM, which allows for measurement of 12 additional items. The FAM has been designed to measure disability following injury, by assessing the patient’s level of independence in a number of daily activities.

A FAM score of 5 or less indicates a need for human assistance.

Note:

Some information sourced from [The Centre for Outcome Measurement in Brain Injury](#) (external link).

Home help

Refers to tasks that are involved in the everyday operation and maintenance of a household, including:

- meal preparation, cooking, dish washing, and kitchen cleaning
- laundry including washing, drying, folding and ironing
- household shopping

- vacuuming, dusting, cleaning bathroom and toilet, rubbish, and bed making
- minor repairs to clothing and linen.

Home nursing

Home nursing refers to specific clinical interventions that are required to be performed by a registered nurse in the home environment. The clinical interventions include:

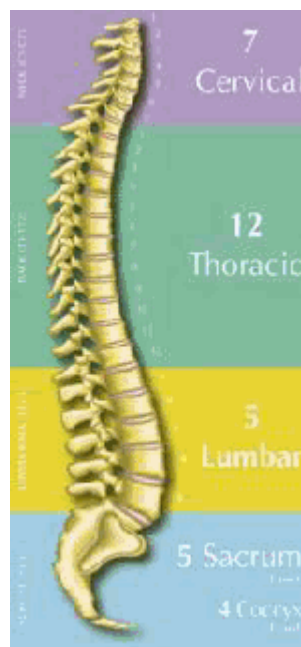
- wound care
- medication management and intravenous therapy
- pain management
- educating the injured person and their family and carers about nutritional and hydration needs, including the use of special equipment
- monitoring a bowel care regime to make sure it conforms to best practice
- monitoring a bladder care regime to make sure it confirms to best practice
- implementing an incontinence management programme
- monitoring skin integrity and administering care to maintain or repair the injured person's skin integrity
- implementing and monitoring an immobility management programme to prevent complications arising from immobility or restricted range of movement (such as contractures, muscle wasting or decreased bone density).

Level of injury or level of lesion

These are medical terms that all relate to where the damage to a person's spinal cord has occurred. Spinal cord injuries are classified by the point at which the spinal cord is damaged.

This is sometimes called the 'level of lesion' or 'level of injury' and is usually referred to by the name of the vertebrae in the spinal column (see the diagram opposite).

Generally speaking, the level of injury and the degree of injury (determined by clinical syndromes and ASIA scales) are the most important determination as the basis for recommendations for these Guidelines.



Motor function

Loss of motor function means a person has no voluntary control of their muscles.

Neurological level

Neurological level is usually described as the normal level immediately above the damaged level. By definition, the level of neurological lesion refers to the lowest segment of the spinal cord with normal sensory and motor function on both sides of the body.

Orthostatic hypotension

Orthostatic hypotension is a medical term which describes a condition which results in a decrease in blood pressure, usually occurring in upright postures, especially on moving from lying down to upright sitting/standing/head-up tilt.

Paraplegia and tetraplegia

Paraplegia refers to spinal cord injuries that do not affect the upper limb functions. Medically it is determined at the level of T1 and below that level. People who have paraplegia have a partial or total paralysis of their legs and trunk but no abnormalities to the upper limbs including the arms and hands.

Tetraplegia is the term used to describe spinal cord injuries or lesions in the cervical region. People with tetraplegia have compromise of motor/sensory functions to their upper limbs as well as to the lower limbs. Quadriplegia describes the same condition and is the term more commonly used in North America.

Respite care

Respite care is a term that refers to a flexible short-term break from the regular support routine for the individual or their family/carer (sometimes referred to as 'relief care' or 'relief attendant care'). It can be provided at home or in a separate location.

These Guidelines do not have recommendations for hours of respite care as these are incorporated into the recommended hours for attendant care and domestic services. Separate funding of respite care would be unnecessarily complicated, involving a corresponding reduction in personal assistance and domestic services for the period of the short-term break.

Sensory function

Loss of sensory function means a person has no sense of touch and cannot feel hot or cold, pain, or pressure. They also have no sense of where in space their limbs are.

Sleepover

This refers to the occasional or intermittent attention by an attendant care worker to perform such tasks as turning someone or getting a drink during the night. The attendant care worker is permitted to sleep during the night but must be prepared for up to two wake-ups in an eight-hour period overnight, with each wake-up being for a maximum of 30 minutes.

Sleepover care to provide safety in the event of an emergency or pressure care and positioning can only be considered if these needs cannot be satisfied by other reliable means such as personal alarms, smoke alarms & sprinklers, and pressure-relieving mattresses.

Supervision

In the past ACC has used the term supervision to describe attendant care that is indirect or 'hands off' as opposed to personal care. Supervision can be provided to:

- prompt the injured person to complete physical tasks (e.g. reminding them to have a drink of water)
- help with cognitive tasks
- protect the injured person from further injury.

These Guidelines do not have recommendations for hours of supervision as these are incorporated into the recommended hours for attendant care.

Vocational support

Includes those services required to assist the individual obtain and maintain paid employment.

Factors that affect attendant care

Factors that may reduce the amount of attendant care

Factors that may reduce the amount of attendant care below the recommendations in these Guidelines include:

Increased functional independence from the rehabilitation process, and adjustment over time to the injury, can decrease the amount of attendant care.

Individual choice. Allowance must be made to enable an individual to exercise choice. For example an individual may choose to carry out a task with less assistance, although assistance is available, and the task takes a longer time to complete; or, an individual may choose to restrict the number of agencies involved in providing their support.

Being a **young adult** is a time of increased independence away from the family and social activity where the person would be expected to start accessing some levels of natural support from their peers and the wider community.

Living situation. A highly modified environment or moving into a shared household where the other residents share some domestic tasks can reduce the requirement for support. Unsuitable accommodation can increase the need for support.

Assistive technology and modified equipment for communications and transport can increase a person's independence and reduce their reliance on an attendant carer to perform these tasks for them.

Factors that may increase the amount of attendant care

Factors that may increase the amount of attendant care above the recommendations in these Guidelines include:

The period following initial **discharge from hospital** until a home routine is established.

Age at time of injury. An older individual may have different support requirements than a younger person with the same level of injury. For example, an older person may not have the same level of upper body strength as a young person with the same level of injury and thus may require human assistance with wheelchair transfers.

Body weight, strength and body shape e.g. extra personnel may be required to safely assist with transfers.

Sleepover care may be required if the person has [autonomic dysreflexia](#) and lives alone. A person who experiences autonomic dysreflexia should have a medical assessment by a spinal cord injury specialist to determine if sleepover care or registered nursing care and supervision are necessary.

Medication, including the administration and side effects of medication.

Co-existing conditions, such as arthritis, obesity, depression, spasms, contractures, pressure sores, spinal syndromes, or poorly controlled neuropathic bowel dysfunction.

The period following **hospitalisation, surgery, or acute treatments**.

Major life transitions such as the loss of employment, moving from school to work, relationship difficulties, illness, loss of informal support system, death/separation/divorce or retirement. However, attendant care should only be considered as a last resort after more appropriate responses such as referral to a psychologist or counsellor have been tried and have proved to be not viable

Ageing – general and specific factors related to the disability. For example, a person who has been independent in transfers and has used a manual wheelchair may over time develop early onset of arthritis or over-use syndrome because of the additional strain on their arms.

Pregnancy

Responsibility for children. There may be a need for greater flexibility in hours and the provision of services.

Access to all **appropriate support**, eg housing modifications

Geographical location of the individual e.g. increased travel time to specialist appointments and access to community facilities.

At work, school or study, if the appropriate level of support cannot be provided by the facility.

The person's potential function should be considered against their life factors and the need to **conserve energy** for more intensive functional tasks and / or the prevention of overuse injuries. For example, a person may choose to use their energy to participate in work and therefore requires attendant care on work days, despite being capable of independence in that area.

Potential for harm – some people can actually harm themselves by doing things independently that other people with the same level of injury would have an attendant carer support them with. For example, a person transferring independently can inadvertently damage their skin through a shearing motion, which they don't notice because of lack of sensation. If this person also has very little attendant care, the damage may go unnoticed for some time, thereby risking infection and major skin breakdown.

Extreme independence leading to possible self-harm should be considered before approving any request for amounts of attendant care significantly below the recommendations in these Guidelines.

Conversely, some people may ask for an attendant carer to help them with tasks that others with the same level of injury carry out independently. In such cases, options for building up the person's confidence and belief in their abilities, and some social contact with others with a similar level of injury would be a more appropriate response than increasing the amount of attendant care.

Recommendations for attendant care

There are sixteen sets of recommendations corresponding to different types of spinal cord injury.

The different spinal cord injury classifications

Each type of spinal cord injury classification listed below is linked to a description of abilities and types of assistance typically required, and the recommended total hours of human support the injured person would need.

The recommendations are based on:

- the level of injury to the person's spinal cord
- an assessment of the person's upper extremity motor function and related motor scores using the American Spinal Injury Association (ASIA) Standard Neurological Classification of Spinal Cord Injury
- an assessment of the person's ability to walk.

The recommended hours of human support are for a 'typical' person with a spinal cord injury who lives independently (alone or with others) in the community in an appropriately modified environment.

When assessing a person's support needs, individual circumstances will always need to be taken into account.

There are a range of factors that can put a person outside the range typically required by people with the same level of injury.

C1-C3 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of trunk, upper and lower extremities
- No elbow, wrist or finger movement
- Limited active head and neck movement.

Breathing (respiratory function)

- Respiratory muscle function impaired and respiratory capacity and endurance compromised - requires ventilator support
- Inability to clear secretions - intermittent suction and manual assisted-cough required
- Ventilator is necessary, however portable ventilator will attach to back of chair
- Oxygen and humidification are also required.

Autonomic dysfunction

- Vulnerable to autonomic dysreflexia and orthostatic hypotension, and has impaired thermoregulation.

Personal care activities

- Full assistance required for bowel/bladder management, bathing/showering, lower body dressing and upper body dressing.

Daily living activities

- Full assistance required with all domestic duties
- Range of abilities varies from limited to good use of head mouse for computers, keyboards, telephones, turning pages and environmental controls
- Range of assistance required varies from full assistance to independence when using communication technology, depending on workstation set-up and equipment availability
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home (for example, more space to accommodate the turning radius of a power wheelchair), space to accommodate equipment (for example, electric bed), and appropriate facilities to maintain personal hygiene and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or travel as a passenger in a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Full assistance required for all transfers – including use of a hoist with 1-2 assistants – due to a range of factors such as the weight of the person and spasms
- Possible ability to manoeuvre power chair with head, chin, or sip control or other adaptive device
- Full assistance required with transport.

Levels of human support

Home nursing: 2 to 5 hours per week

For a medically stable person who is receiving attendant care services, routine monitoring visits and clinical interventions by an appropriately skilled registered nurse are required. This would include catheter changes, skin integrity checks, medication review, trachea tube changes and identifying and addressing training needs.

Attendant care: Minimum 190 hours per week/28 hours per day

Total required support is 28 hours daily. This level of support for adults is based on 24-hour active care, plus additional:

- two hours (morning care for bowel management, showering, grooming, transfers)
- one hour (afternoon care for transfers and skin integrity)
- one hour (night-time care for transfers, skin integrity, and settling).

If the person is medically stable, attendant care is generally provided under the supervision of a registered nurse, by people who have successfully completed competency-based training. The competency-based training needs to cover:

- administration of medication
- autonomic dysreflexia
- bagging
- bladder management – female/male catheterisation and supra-pubic catheterisation
- bowel management
- emergency tracheostomy change
- equipment use and maintenance
- oxygen therapy
- percutaneous endoscopic gastrostomies (PEG) feeding
- respiratory function
- skin integrity
- spinal cord injuries
- suctioning
- tracheostomy care
- ventilator management and failure.

If the treating team identifies that the person is significantly medically unstable (eg with severe dysreflexia) this situation may best be managed with appropriately skilled registered nurses providing all attendant care. However, there may be some circumstances where this level of care is not available (eg in remote geographic areas).

In all cases, access to a registered nurse for support and advice is required at all times with all programs routinely and regularly reviewed by an appropriately skilled registered nurse.

Each situation requires individual assessment of needs and circumstances. Support arrangements should always be negotiated with the family as they may wish to have some family time with minimal staff disturbance.

Home help: 5 to 12 hours per week

These duties may include meal preparation, personal laundry, shopping (with the person) and specific household tasks. If the person is medically stable, these routine daily domestic duties can be performed by a home helper without any additional training. It is recommended that the home helper be provided with a contact system such as a transportable intercom or monitor that they carry with them.

Community access: 0 to 7 hours per week

A second person is required as a driver for all community access for people who require ventilator support. The other hours are highly variable depending on the individual's age, lifestyle, and the amount of support the activity requires (eg playing cards, fishing, going to the movies, socialising with friends).

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C1-C5 ASIA C recommendations

Abilities and assistance

Movement and motor control

- Severe or significant paralysis of trunk. Impaired sitting balance
- Minimum to moderate control of lower extremities
- Minimum to moderate control of upper limbs
- May have impaired head and neck control.

Breathing (respiratory function)

- Respiratory muscle function may be impaired and respiratory capacity and endurance compromised
- May require ventilator support.

Autonomic dysfunction

- People with incomplete spinal cord injuries at C5 and above are vulnerable to autonomic dysreflexia and orthostatic hypotension, and may have impaired thermoregulation.

Personal care activities

- May require arm and wrist supports, splints and palmar bands
- Moderate to full assistance required for bowel/bladder management
- Moderate to full assistance required for bathing/showering, dressing and grooming
- Moderate to full assistance required for food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- May require full assistance or be able to independently use communication technology, depending on workstation set-up and equipment availability
- May be able to turn pages and use computers, keyboards, telephones and environmental controls with adaptive equipment/devices
- Moderate to full assistance required with domestic duties
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home (eg more space to accommodate the turning radius of a power wheelchair), space to accommodate equipment (eg electric bed), appropriate facilities to allow meal preparation and maintaining personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require a mobility taxi, or travel as a passenger in a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Moderate to full assistance required for all transfers – including use of a hoist with 1-2 assistants - due to a range of factors
- Moderate to full assistance required for manual wheelchair or power chair
- May need full assistance with lifting and carrying objects.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as-needed basis.

Attendant care: 35 to 91 hours per week

Note: If the person requires ventilation, refer to the section for people with an injury at C1-C3 and an ASIA score of A or B.

This range allows for full to moderate assistance with all personal care. Generally, the higher level of support hours refers to the higher level of injury. The upper range allows for 24-hour care when combined with sleepover and home help services. When 24-hour care is provided, additional care hours will not be necessary for community access.

Greater independence may be achieved through the use of adaptive environmental equipment such as personal alarms and environmental control systems.

Sleepover: 0 hours or 56 hours per week as identified by assessment

Sleepover means a continuous period during which an employee is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the sleepover period.

Some people may prefer not to have sleepover care. If so, a personal alarm, full environmental control for lights/TV, air conditioning etc, would need to be fully operational and the person able to independently access a drinking system during the night.

Home help: 14 to 21 hours per week

The range at this level includes moderate to full assistance with tasks such as washing, ironing and shopping.

To allow a more flexible routine or to limit the number of support staff, the injured person may negotiate times with their attendant care, home help and community access assistants.

Community access: 0 to 10 hours per week

The seven-hour lower range can be interpreted as an hour per day for transport including medical and other personal appointments (eg hairdresser, dentist). The other hours are highly variable depending on the person's age, past social habits and the amount of support the activity requires (eg playing cards, fishing, going to the movies, socialising with friends).

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C1-C5 ASIA D recommendations

Abilities and assistance typically needed

Movement and motor control

- Minor to moderate paralysis of trunk
- Moderate to good control of lower limbs
- Moderate to good control of upper limbs.

Breathing (respiratory function)

- Minimal compromise of respiratory muscle function.

Autonomic dysfunction

- People with spinal cord lesions at C5 and above are vulnerable to autonomic dysreflexia and orthostatic hypotension, and have impaired thermoregulation.

Personal care activities

- May require arm and wrist supports, splints and palmar bands
- Minimal to moderate assistance with bowel/bladder management
- Minimal to moderate assistance with bathing/showering, dressing and grooming
- Minimal to moderate assistance with food/meal preparation, cutting food and eating
- Adaptive equipment may be required
- Able to independently use communication technology.

Daily living activities

- Assistance required with heavy housework and home maintenance. Independent in other domestic duties.
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home, appropriate facilities to allow meal preparation and maintain personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Minimal or no assistance required for floor-to-chair transfers
- Independent with all other transfers
- Independent in using a manual wheelchair on indoor and outdoor surfaces
- Independent in using a power wheelchair (if required)
- May have difficulty walking quickly and require mobility aids
- May need assistance with lifting and carrying objects
- May need a wheelchair for activities in the community.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as-needed basis.

Attendant care: 0 to 28 hours per week

This range allows for moderate levels of attendant care. However, the amount of care may vary on a day-to-day basis with some days requiring more (eg bowel management days).

Sleepover: 0 hours or 56 hours per week or as identified by assessment

Sleepover means a continuous period during which an employee is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the end of the sleepover period.

Some people may prefer not to have a sleepover. If so, a personal alarm, full environmental control for lights/TV and air conditioning etc, would need to be fully operational and the person able to independently access a drinking system overnight.

Home help: 0 to 21 hours per week

The range at this level includes full assistance with tasks such as washing, ironing and shopping, etc., and moderate assistance with other home duties.

To allow a more flexible routine or to limit the number of support staff, the injured person may negotiate times with their attendant care, home help and community access assistants.

Community access: 0 to 10 hours per week

The 10-hour upper range can be interpreted as including an hour per day for transport including medical and other personal appointments (eg hairdresser, dentist). The other hours are highly variable depending on the person's age, past social habits and the amount of support the activity requires (eg playing cards, fishing, going to the movies, socialising with friends).

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C4 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of trunk and lower extremities
- No elbow, wrist or finger movement
- Can move head and neck, minimal movement of shoulders.

Breathing (respiratory function)

- Respiratory muscle function impaired and respiratory capacity and endurance compromised
- May require non-invasive/invasive ventilator support for part of the day. Able to breathe without a ventilator
- Will require assistance to clear secretions.

Autonomic dysfunction

- Vulnerable to autonomic dysreflexia and orthostatic hypotension, and has impaired thermoregulation.

Personal care activities

- Will require arm supports and wrist/hand splints
- Full assistance required for bowel/bladder management
- Full assistance required for bathing/showering, dressing and grooming
- Full assistance required for food / meal preparation, cutting food and eating.

Daily living activities

- Full assistance required with domestic duties
- Range of abilities varies from limited to good use of head mouse for computers, keyboards, telephones, turning pages and environmental controls
- Range of assistance required varies from full assistance to independence when using communication technology, depending on workstation set-up and equipment availability
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home (eg more space to accommodate the turning radius of a power wheelchair), space to accommodate equipment (eg electric bed), and appropriate facilities to maintain personal hygiene and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or travel as a passenger in a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Full assistance required for all transfers – including use of a hoist with 1-2 assistants – due to a range of factors including the weight of the person and spasms
- Full assistance required for propelling a manual wheelchair
- Can use chin/head control for power wheelchair on flat ground and ramps of low gradient.

Levels of human support

The upper range of personal assistance hours allows for 24-hour care when combined with domestic and sleepover services. When 24-hour care is provided, additional care hours will not be necessary for community access.

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as-needed basis.

Attendant care: 49 to 91 hours per week/7 to 13 hours per day

Full assistance is required with personal care.

If a person is not living with someone in attendance, then the maximum level of adaptive environmental equipment is necessary. This includes access to a personal alarm, and security and environmental control systems.

The higher range of attendant care hours should apply where the person is older, requires more regular turning, or has any of the following: spasms, postural hypertension, wound care requirements, pain, or autonomic dysreflexia.

Sleepover: 56 hours per week/8 hours per day

Sleepover means a continuous period during which an attendant care worker is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the sleepover period.

Some individuals may prefer not to have sleepover care. If so, a personal alarm system, full environmental control for lights/TV and air conditioning etc, would need to be fully operational and the person able to independently access a drinking system.

Home help: 18 to 21 hours per week

The range at this level includes total assistance with washing and ironing, shopping etc.

To allow a more flexible routine or to limit the number of support staff, the injured person may negotiate times with their attendant care, home help and community access assistants.

Community access: 7 to 10 hours per week

The seven-hour lower range can be interpreted as an hour a day for transport, including medical and other personal appointments (eg hairdresser, dentist) The other hours are highly variable depending

on the individual's age, past social habits and the amount of support the activity requires (eg playing cards, fishing, going to the movies, socialising with friends).

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C5 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of trunk and lower extremities
- Limited movement in elbow with active control of flexion, but no extension and limited forearm movement
- Minimal wrist movement and no finger movement
- Can move head and neck with moderate shoulder control.

Breathing (respiratory function)

- Respiratory muscle function impaired and respiratory capacity and endurance compromised
- Will require assistance to clear secretions.

Autonomic dysfunction

- Vulnerable to autonomic dysreflexia and orthostatic hypotension, and has impaired thermoregulation.

Personal care activities

- Splints or palmar bands may be needed for any activity needing hand or digital grip
- Full assistance required for bowel/bladder management, bathing/showering, lower body dressing and upper body dressing
- Assistance required for grooming (with adapted equipment) varies from full to minimal.
- Full assistance required with bed/wheelchair transfers and assistance in positioning with equipment
- Full assistance required for food/meal preparation and cutting food
- Range of assistance required for eating with equipment/splints varies from full to moderate.

Daily living activities

- Full assistance required with all domestic duties
- Range of assistance required varies from full assistance to independence when using communication technology, depending on workstation set-up and equipment availability
- Can turn pages and use computers, keyboards, telephones and environmental controls with adaptive equipment/devices
- Likely to require extensive housing modifications to resolve barriers to getting into and out of the home (eg more space to accommodate the turning radius of a power wheelchair), space to accommodate equipment (eg electric bed), and to address issues around body temperature regulation, personal safety and the provision of appropriate facilities to undertake personal hygiene

- Transport via motor vehicle will require either a mobility taxi or travel as a passenger in a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Full assistance usually required for all transfers, including use of a hoist with 1–2 assistants, due to a range of factors including the weight of the person and spasms
- Range of assistance required varies from full assistance with manual chair with capstans, pushing uphill, downhill, on rough surfaces and outdoors
- Able to use power wheelchair with hand control
- Rarely able to drive motor vehicle, but possible with appropriately modified vehicle, adaptive equipment and assistance with transfer and positioning chair
- Full to moderate assistance required with transport.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as-needed basis.

Attendant care: 42 to 49 hours per week/6 to 7 hours per day

Full assistance required with personal care.

If the person is not living with someone in attendance, the maximum level of adaptive environmental equipment is necessary, including access to a personal alarm system and environmental control systems.

The higher range of attendant care hours should be applied where the person is older, requires more regular turning or has any of the following: spasms, postural hypertension, wound care requirements, pain, or autonomic dysreflexia or physique which requires two attendants for transfers (eg extreme obesity).

Sleepover: 56 hours per week/8 hours per day

Sleepover means a continuous period during which an employee is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the sleepover period.

Some individuals may prefer not to have sleepover care. If so, a personal alarm system, full environmental control for lights/TV and air conditioning etc, would need to be fully operational and the person able to independently access a drinking system.

Home help: 18 to 21 hours per week

The range at this level includes full assistance with tasks such as washing, ironing, shopping, etc.

To allow a more flexible routine or to limit the number of support staff, the injured person may negotiate times with their attendant care, home help and community access assistants.

Community access: 7 to 10 hours per week

The seven-hour lower range can be interpreted as an hour per day for transport including medical and other personal appointments (eg hair dresser, dentist).

The other hours are highly variable depending on the individual's age, past social habits and the amount of support the activity requires (eg playing cards, fishing, going to the movies, socialising with friends.)

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C6 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of trunk and lower extremities
- Moderate movement in elbow (controlled elbow flexion and wrist extension but no elbow extension), forearm and wrist
- Can move head and neck with moderate shoulder control.

Breathing (respiratory function)

- Respiratory muscle function impaired and respiratory capacity and endurance compromised
- May require assistance to clear secretions.

Autonomic dysfunction

- Vulnerable to autonomic dysreflexia and orthostatic hypotension, and has impaired thermoregulation.

Personal care activities

- Minimal assistance may be required to apply applying adaptive bands. Assistance may not be necessary when using appropriately engineered bands.
- Palmar bands needed for writing, typing, grooming, feeding etc
- Full to moderate assistance required with bowel management
- Range of assistance required varies from full to moderate assistance with bladder management. Emptying own leg bag may be possible but usually requires assistance
- Range of assistance required when bathing and dressing the lower body varies from full to moderate.
- Range of assistance required when bathing upper body and grooming using adaptive equipment, varies from minimal to independent.
- Moderate assistance required with upper body dressing
- Full assistance needed when cutting food, but independent eating is possible when using adaptive equipment.

Daily living activities

- Independent when using communication technology, depending on workstation set-up and equipment availability.
- Can prepare basic meals using adaptive equipment. Requires assistance with complex meal preparation
- Moderate to full assistance required with all other house cleaning and domestic duties
- Full assistance required with home maintenance
- Likely to require extensive housing modifications to resolve barriers to getting into, out of and around the home (eg more space to accommodate the turning radius of a power

wheelchair), space to accommodate equipment (eg electric bed), and to address issues around body temperature regulation, meal preparation, personal safety and the provision of appropriate facilities to undertake personal hygiene

- Transport via motor vehicle will require a mobility taxi, or an ability to drive or travel as a passenger in a vehicle that provides accessibility, safety during transportation and adequate room for equipment.

Mobility

- Full assistance required for floor to chair transfer.
- Range of assistance required varies from maximum assistance to independence moving between wheelchair and bed, bed and commode, and other transfers
- Minimal to moderate assistance required with other transfers depending on a range of factors including age, strength, upper torso mobility, size, hand function, upper limb length, and current wellbeing. A higher level of assistance may be required with other transfers
- Independent using manual wheelchair on even surfaces, sometimes requires capstans on hand rims.
- Range of assistance required varies from full to moderate assistance with manual wheelchair outdoors. Independent with standard hand-control power wheelchair on all surfaces
- May choose to use a power wheelchair with hand control for long distance travel.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as-needed basis.

Attendant care: 28 to 35 hours per week/4 to 5 hours per day

On average, 4 hours per day is usual; however there are some circumstances where the upper range will be necessary – for example where assistance with bladder management does not fit into a four-hour per day routine.

Sleepover: 0 hours or 56 hours per week or as identified by assessment

Sleepover means a continuous period during which an employee is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the sleepover period.

At this level of injury, the need for sleepover assistance is usually due to reduced hand function.

Some individuals may prefer not to have sleepover care. If so, a personal alarm system, full environmental control for lights/TV and air conditioning etc, would need to be fully operational and the person able to independently access a drinking system.

Home help: 18 to 21 hours per week

A breakdown of the hours could be interpreted as:

- two hours per day meal preparation
- three hours week shopping
- four hours cleaning, washing, ironing and other domestic duties a week.

Community access: 7 to 10 hours per week

The seven-hour lower range can be interpreted as an hour per day for transport including medical and other personal appointments (eg hairdresser, dentist). If a person has a fully modified vehicle that they can access and drive independently, then transport hours would be reduced. The other hours are highly variable depending on the individual's age, past social habits and the amount of support the activity requires (eg playing cards, fishing, going to the movies, socialising with friends).

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C6-C8 ASIA C recommendations

Abilities and assistance typically needed

Movement and motor control

- Severe to significant paralysis of trunk. The lower the level of injury, the better the balance
- Minimal to moderate control of lower extremities
- Moderate to good control of upper limbs.

Breathing (respiratory function)

- Respiratory muscle function may be impaired and respiratory capacity and endurance compromised.

Autonomic dysfunction

- People with incomplete spinal cord injuries at C8 and above are vulnerable to autonomic dysreflexia and orthostatic hypotension, and may have impaired thermoregulation.

Personal care activities

- May require arm and wrist supports, splints and palmar bands
- Full to moderate assistance required for bowel/bladder management
- Full to moderate assistance required for bathing/showering, dressing and grooming
- Full to moderate assistance required for food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- May be able to independently use communication technology, depending on workstation set up and equipment availability
- Full to moderate assistance is required with heavy housework and home maintenance. Independence in other domestic duties may be possible if the person is living in an appropriately modified environment
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home (eg more space to accommodate the turning radius of a power wheelchair), space to accommodate equipment (eg electric bed), appropriate facilities to allow meal preparation and maintaining personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require a mobility taxi, or the ability to drive/travel as a passenger in a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

Full to moderate assistance may be required for floor-to-chair transfers, including use of a hoist and possibly two assistants

May require moderate assistance or be independent for all other transfers.

May require moderate assistance or be able to independently use a manual wheelchair depending on terrain and surface

Independent using a power wheelchair.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 35 hours per week

There is a wide variation in the level of personal assistance required for this level of injury. Generally, the higher level of support hours refers to the higher level of injury.

Sleepover: 0 hours or 56 hours per week as identified by assessment

Sleepover means a continuous period during which an employee is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the sleepover period.

Some individuals may prefer not to have sleepover care. If so, a personal alarm system, full environmental control for lights/TV and air conditioning etc, would need to be fully operational and the person able to independently access a drinking system.

Home help: 3 to 18 hours per week

The range of support hours is due to the large variance in function at this level of injury. The 18 hours per week may be required if the person has poor trunk control and poor balance.

Domestic services may include washing shopping and ironing.

Community access: 0 to 7 hours per week

This figure reflects the assistance required to use transport and access the community. Although some people may be independent with transfer and wheelchair loading/unloading and able to drive, there is still an allowance of hours available to access the community.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C6-C8 ASIA D recommendations

Abilities and assistance typically needed

Movement and motor control

- Minor to moderate paralysis of trunk. The lower the level of injury, the better the balance
- Moderate to good control of lower extremities
- Moderate to good control of upper limbs.

Breathing (respiratory function)

- Minimum to no compromise of respiratory function.

Autonomic dysfunction

- People with incomplete spinal cord injuries at C8 and above are vulnerable to autonomic dysreflexia and orthostatic hypotension, and may have impaired thermoregulation.

Personal care activities

- May require arm and wrist supports, splints and palmar bands
- Minimal or no assistance with bowel/bladder management
- Minimal or no assistance with bathing/showering, dressing and grooming
- Minimal or no assistance with food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- Able to independently use communication technology.
- Assistance required with heavy housework and home maintenance. Independent in other domestic duties if the person is living in an appropriately modified environment
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home, appropriate facilities to allow meal preparation and maintain personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Minimum or no assistance with floor-to-chair transfer
- Independent in all other transfers
- Independent using a manual wheelchair on indoor and outdoor surfaces
- Independent in operating a power wheelchair but power chair is usually only required for long distances and community access. In the short term a power chair may be required to assist community transition post spinal cord injury, but it is generally not expected that a power chair is required long term

- May have difficulty walking quickly and require mobility aids
- May need assistance with lifting and carrying objects.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 21 hours per week

There is a wide variation in the level of attendant care required for this level of injury. Generally, the higher level of support hours refers to the higher level of injury.

Sleepover: 0 hours to 56 hours per week as identified by assessment

Sleepover means a continuous period during which an employee is required to sleep at the workplace, and be available to deal with any urgent situation which cannot be dealt with by another worker or be dealt with after the end of the sleepover period.

Some people may prefer not to have a sleepover. If so, a personal alarm, full environmental control for lights/TV and air conditioning etc, would need to be fully operational and the person able to independently access a drinking system during the night.

Home help: 0 to 14 hours per week

The range of support hours is due to the large variance in function at this level of injury. The higher level of hours per week may be required if the person has poor trunk control and poor balance.

Domestic services may include washing, shopping and ironing.

Community access: 0 to 7 hours per week

This figure reflects the assistance required to use transport and access the community. Although some people may be independent with transfer and wheelchair loading/unloading and able to drive there is still an allowance of hours available to access the community.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

C7-C8 Asia A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of trunk and lower extremities
- Full elbow movement
- Moderate arm, wrist and finger control. A person with an injury at C7 has movement in thumbs and gross grip
- Can move head and neck, with good shoulder control.

Breathing (respiratory function)

- Respiratory muscle function impaired and respiratory capacity and endurance compromised
- Rarely requires assistance to clear secretions.

Autonomic dysfunction

- Vulnerable to autonomic dysreflexia and orthostatic hypotension, and has impaired thermoregulation.

Personal care activities

- Moderate to minimal assistance with bowel/bladder management
- Independent in upper body showering /bathing and dressing, may require assistance in lower body showering/dressing
- Independent in grooming
- Range of assistance required for complex meal preparation varies from moderate to minimal
- Independent with light meal preparation and eating
- Independent in most other activities with minimal use of adaptive equipment.

Daily living activities

- Independent with light house duties. Full assistance with heavy housework and home maintenance
- Other domestic duties possible if living in an appropriately modified house
- Likely to require extensive housing modifications to resolve barriers to getting into, out of and around the home, (eg more space to accommodate the turning radius of a power wheelchair), space to accommodate equipment (eg electric bed), and to address issues around body temperature regulation, meal preparation, personal safety and the provision of appropriate facilities to undertake personal hygiene
- Transport via motor vehicle will require a mobility taxi, or an ability to drive or travel as a passenger in a vehicle that provides accessibility, safety during transportation and adequate room for equipment.

Mobility

- Moderate to minimal assistance with floor-to-chair transfers
- Usually independent in transferring to and from level surfaces with aid of transfer board. May require moderate to minimal assistance with uneven transfers
- Independent using manual wheelchair on indoor surfaces and level outdoor terrain
- Range of assistance required with manual wheelchair on uneven surfaces
- Independent using power wheelchair on outdoor surfaces. May choose to use a power wheelchair with hand control for long distance travel.

Levels of human support

Home nursing: 0.5 hour per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as-needed basis up to approximately 26 hours per year.

Attendant care: 14 to 28 hours per week/2 to 4 hours per day

Generally requires two hours of assistance in the morning and one hour in the evening, this may vary depending on individual needs. The upper range of four hours allows for additional time which may be required on days when bowel care is being administered.

Home help: 7 to 21 hours per week

A break down of the hours could be interpreted as:

- two hours per day meal preparation (assuming breakfast is independent)
- three hours shopping
- four hours cleaning, washing, ironing and other domestic duties per week.
- Less than two hours meal preparation may be required on some days if lunch is prepared beforehand or purchased while out.

Community access: 0 to 10 hours per week

The lower range only applies to individuals who are independent in transfer.

This figure includes transport assistance. Although some individuals may be independent with transfer and wheelchair loading / unloading and be able to drive an appropriately modified vehicle, there is still an allowance of 7 hours per week assistance with transport. Assistance with transport will still be necessary for those who do not have a licence and / or do not have access to an accessible vehicle. A reduction in transport assistance would be justified if the person had an accessible vehicle and was an independent driver. The other hours are highly variable depending on an individual's age, past social habits and interests (eg playing cards, fishing, going to the movies, socialising with friends)..

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to

the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

T1-T6 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of the lower trunk and lower extremities.
- Limited upper trunk stability. Impaired sitting balance
- Full control of upper limbs. A person with an injury at the T1-T2 level may not have fine hand control.

Breathing (respiratory function)

- Respiratory muscle function impaired. Compromised respiratory capacity and endurance.

Autonomic dysfunction

- Vulnerable to autonomic dysreflexia and orthostatic hypotension, and has impaired thermoregulation.

Personal care activities

- Minimal assistance in all personal care is required if the person has no other complicating factors (eg health, weight) and living in an appropriately modified environment.

Daily living activities

- Will need assistance with heavy housework and home maintenance
- Other domestic duties are possible if the person lives in an appropriately modified environment
- Likely to require housing modifications to resolve barriers to getting in and out of the home, solve mobility issues inside the home, provide appropriate facilities to undertake meal preparation, appropriate facilities to undertake personal hygiene, and address issues around body temperature regulation and personal safety.
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- May require assistance with floor-to-chair transfer due to a range of factors including age, strength, upper torso mobility, size, hand function, upper limb length and current wellbeing
- Independent in transfer on level surfaces with or without equipment. Minimal assistance with uneven transfers
- Independent using manual wheelchair. A power wheelchair will not usually be required.

Levels of human support

Home nursing: 0.5 hour per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 14 hours per week

There is a wide variation in the level of personal assistance required for this level of injury. Generally, the higher level of support hours refers to the higher level of injury.

Home help: 5 to 14 hours per week

The range of support hours is due to the large variance in function at this level of injury. Fourteen hours per week would be required if the individual had poor trunk control, balance, or hand control.

Domestic assistance required including shopping, cleaning, washing and ironing. If assistance with shopping was required then the upper level of support hours would be necessary.

Community access: 0 to 7 hours per week

This figure reflects transport assistance. Although some individuals may be independent with transfer and wheelchair loading/unloading and able to drive there is still an allowance of seven hours per week assistance with transport. Assistance with transport is still necessary for those who do not have a licence and/or do not have access to an accessible vehicle. No transport assistance may be justified if the person had an accessible vehicle and is an independent driver.

Child-care services, educational support and vocational support

The categories of child-care services, educational support and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

T1-T10, L1 ASIA C recommendations

Abilities and assistance typically needed

Movement and motor control

- Severe to significant paralysis of trunk. The lower the level of injury, the better the balance
- Minimal to moderate control of the lower extremities
- Full control of upper limbs.

Breathing (respiratory function)

- Minimal to no compromise of respiratory function.

Autonomic dysfunction

- People with incomplete spinal cord injuries at T6 and above are vulnerable to autonomic dysreflexia and orthostatic hypotension, and may have impaired thermoregulation.

Personal care activities

- Minimal to no assistance with bowel/bladder management
- Minimal to no assistance with bathing/showering, dressing and grooming
- Minimal to no assistance with food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- Able to independently use communication technology.
- Assistance required with heavy housework and home maintenance. Independent in other domestic duties if the person is living in an appropriately modified environment
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home, appropriate facilities to allow meal preparation and maintain personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- May require assistance with floor-to-chair transfer due to limited upper body balance and movement
- Independent in all other transfers with or without equipment
- Independent using a manual wheelchair on all surfaces
- Independent in operating a power wheelchair (usually not required).

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 10 hours per week

There is a wide variation in the level of attendant care required for this level of injury. Generally the higher level of support hours refers to the higher level of injury.

At this level the injured person is usually independent but may require up to one hour per day of attendant care for bowel/bladder management. If the injured person has poorly controlled bowel function or poor trunk control/balance, the upper level of 10 hours for attendant care may be inadequate.

Sleepover: 0 hours

Not required

Home help: 0 to 10 hours per week

The range of support hours is due to the large variance in function at this level of injury. Ten hours per week would be required if the injured person has poor trunk control/balance and needs greater assistance with shopping and laundry tasks (eg pushing and loading the shopping trolley, or carrying and hanging washing).

Community access: 0 hours

Assistance with transport and community access would not usually be required at this level of injury.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

T1-T10, L1 ASIA D recommendations

Abilities and assistance typically needed

Movement and motor control

- Minor to moderate paralysis of trunk. The lower the level of injury, the better the balance
- Moderate to good control of lower extremities
- Full control of upper limbs.

Breathing (respiratory function)

- Minimal to no compromise of respiratory function.

Autonomic dysfunction

- People with incomplete spinal cord injuries at T6 and above are vulnerable to autonomic dysreflexia and orthostatic hypotension, and may have impaired thermoregulation.

Personal care activities

- Minimal to no assistance with bowel/bladder management
- Minimal to no assistance with bathing/showering, dressing and grooming
- Minimal to no assistance with food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- Able to independently use communication technology.
- Assistance required with heavy housework and home maintenance. Independent in other domestic duties if the person is living in an appropriately modified environment.
- May require housing modifications to resolve barriers to getting into, out of, and around the home, appropriate facilities to allow meal preparation and maintain personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Generally independent with floor-to-chair transfer
- Independent in all other transfers with or without equipment
- Independent using a manual wheelchair on all surfaces
- May have difficulty walking quickly and is likely to require mobility aids
- May need assistance with lifting and carrying objects
- Likely to need a wheelchair for activities in the community.

Levels of human support

Home nursing: 0.5 hours per week as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 7 hours per week

There is a wide variation in the level of personal assistance required for this level of injury. Generally the higher level of support hours refers to the higher level of injury.

At this level the person is usually independent but may require up to one hour of attendant care per day for bowel/bladder management. If the person has poorly controlled bowel function or limited hand function, the upper level of seven hours may be inadequate.

Sleepover: 0 hours

Generally not required.

Home help: 0 to 7 hours per week

The range of support hours is due to the large variance in function at this level of injury. Seven hours per week would be required if the person has poor trunk control/balance and needs greater assistance with shopping and laundry tasks (for example, pushing and loading the shopping trolley, or carrying and hanging washing).

Community access: 0 hours

Assistance with transport and community access would not usually be required at this level of injury.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

T7-T10, L1 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Total paralysis of the lower trunk and lower extremities
- Moderate upper trunk stability. Moderately impaired sitting balance
- Full control of upper limbs.

Breathing (respiratory function)

- May have compromised respiratory capacity and endurance.

Personal care activities

- Minimal assistance is required with personal care if the person lives in an appropriate accessible environment and has no other complicating factors, e.g. health, weight, or other disability.

Daily living activities

- Will need assistance with heavy housework or home maintenance
- Other domestic duties are possible if the person lives in an appropriately modified environment
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home, provide appropriate facilities to allow meal preparation and maintaining personal hygiene, and address issues around body temperature regulation and personal safety.
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- May require assistance with floor-to-chair transfer due to a range of factors including age, strength, upper torso mobility, size, upper limb length and current wellbeing.
- Independent in transfers on level surface. Minimal to no assistance with uneven transfers.
- Independent using manual wheelchair on indoor and outdoor surfaces.

Levels of human support

Home nursing: 0.5 hours per week, or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 10 hours per week

There is a wide variation in the level of personal assistance required for this level of injury. Generally, the higher level of support hours refers to the higher level of injury.

Home help: 5 to 10 hours per week

The range of support hours is due to the large variance in function at this level of injury. Ten hours per week would be required if the individual had poor trunk control and needed greater assistance with heavy domestic duties such as pushing and loading a shopping trolley, or carrying and hanging washing.

Community access: 0 to 7 hours per week

Assistance with transport would not usually be required at this level of injury. The upper range may be required for assistance with transport where the person is unable to transfer, clamp and unclamp the wheelchair in the vehicle, or load and unload the wheelchair.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

L2-L5, S1-S5 ASIA A or B recommendations

Abilities and assistance typically needed

Movement and motor control

- Good trunk stability
- Moderate to good control of the lower extremities. Unimpaired sitting balance
- Variable hip, knee, ankle control and foot movement, may use option of knee-ankle-foot orthoses
- Full control of upper limbs

Breathing (respiratory function)

- No compromise of respiratory function is expected.

Personal care activities

- Minimal to no assistance is required with personal care if the person lives in an appropriate accessible environment and has no other complicating factors (eg health, weight).

Daily living activities

- May need assistance with heavy housework and home maintenance. Other domestic duties possible if lives in an appropriately modified environment
- May require housing modifications to resolve barriers to getting into, out of, and around the home, and provide appropriate facilities to allow the maintenance of personal hygiene and meal preparation.
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- There is a broad range of abilities at this level, from being completely wheelchair dependent to being independent in walking. Even if the person can walk they may still have difficulty walking quickly and need assistance with lifting objects
- Independent with floor-to-chair transfer
- Independent in other transfers with or without equipment. May be independent in standing
- May require assistance in walking with aids
- Independent in using a manual wheelchair on all surfaces. A person with a spinal cord injury at L4 or below will not usually require a manual wheelchair.

Levels of human support

Home nursing: 0 to 0.5 hours per week, or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 to 7 hours per week

At this level the person is usually independent but may require up to one hour per day personal assistance (eg for bowel/bladder management).

Home help: 3 to 10 hours per week

The range of support hours is due to the large variance in function at this level of injury. Ten hours per week would be required if the individual requires mobility aids or has impaired balance (eg for pushing and loading the shopping trolley or carrying and hanging washing).

Community access: 0 hours

Assistance with transport would not generally be required at this level of injury, unless assistance was required with unloading or loading a wheelchair into a vehicle.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the individual's circumstances and should be based on a specialist assessment of the individual's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

L2-L5, S1-S5 ASIA C recommendations

Abilities and assistance typically needed

Movement and motor control

- No paralysis of trunk. Good truncal balance
- Moderate to good control of lower extremities
- Full control of upper limbs.

Breathing (respiratory function)

- No compromise of respiratory muscle function is expected.

Autonomic dysfunction

- People with incomplete spinal cord injuries at this level are generally not vulnerable to autonomic dysreflexia and orthostatic hypotension.

Personal care activities

- Independent in bowel/bladder management
- Independent in bathing/showering, dressing and grooming
- Independent in food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- Able to independently use communication technology
- Assistance required with heavy housework and home maintenance. Independent in other domestic duties
- May need some housing modifications to resolve barriers to getting in and out of the home, mobility issues inside the home, appropriate facilities to undertake personal hygiene, and appropriate facilities to undertake meal preparation.
- Likely to require housing modifications to resolve barriers to getting into, out of and around the home, appropriate facilities to allow meal preparation and maintain personal hygiene, and address issues around body temperature regulation and personal safety
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Independent in all transfers.
- A person with a spinal cord injury at the level of L4 or below will not usually require a manual wheelchair
- May have difficulty walking quickly and will likely require mobility aids
- May need assistance with lifting and carrying objects

- May need a wheelchair for some activities in the community.

Levels of human support

Home nursing: 0.5 hours per week or as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 hours

At this level the person is usually independent.

Sleepover: 0 hours

Generally not required.

Home help: 0 to 7 hours per week

The range of support hours is due to the variance in function at this level of injury. Seven hours per week may be required if the person has poor lower limb control and needs greater assistance with heavy housework, shopping and laundry tasks.

Community access: 0 hours

Assistance with transport and community access would not usually be required at this level of injury.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.

L2-L5, S1-S5 ASIA D recommendations

Abilities and assistance typically needed

Movement and motor control

- No paralysis of trunk. Good truncal balance
- Moderate to good control of lower extremities
- Full control of upper limbs.

Breathing (respiratory function)

- No compromise of respiratory muscle function is expected.

Autonomic dysfunction

- People with incomplete spinal cord injuries at this level are generally not vulnerable to autonomic dysreflexia and orthostatic hypotension.

Personal care activities

- Independent in bowel/bladder management
- Independent in bathing/showering, dressing and grooming
- Independent in food/meal preparation, cutting food and eating
- Adaptive equipment may be required.

Daily living activities

- Able to independently use communication technology
- Assistance required with heavy housework and home maintenance. Independent in other domestic duties
- May require housing modifications to resolve barriers to getting into, out of, and around the home, appropriate facilities to allow meal preparation and maintain personal hygiene.
- Transport via motor vehicle will require either a mobility taxi or the ability to drive a vehicle that provides accessibility, safety during transportation, and adequate room for equipment.

Mobility

- Independent in all transfers
- A person with a spinal cord injury at the level of L4 or below will not usually require a manual wheelchair
- May have difficulty walking quickly and will likely require mobility aids
- May need assistance with lifting and carrying objects
- May need a wheelchair for some activities in the community.

Levels of human support

Home nursing: 0.5 hours per week as identified by assessment

The allocation of 0.5 hours per week is not an indication that home nursing will be required weekly, rather it is to allow home nursing on an as needed basis.

Attendant care: 0 hours

At this level the person is usually independent.

Sleepover: 0 hours

Generally not required.

Home help: 0 to 7 hours per week

The range of support hours is due to the variance in function at this level of injury. Seven hours per week may be required if the person has poor lower limb control and needs greater assistance with heavy house hold tasks, shopping and laundry.

Community access: 0 hours

Assistance with transport would not usually be required at this level of injury.

Child-care services, educational support and vocational support

The categories of child-care services, educational support, and vocational support have not been allocated a range of support hours. The support requirements in these categories are very specific to the person's circumstances and should be based on a specialist assessment of the person's needs.

For example, if eight hours of educational/vocational support is required at an education facility or workplace, there is likely to be a reduced need for domestic meal preparation in the home.