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## ***Safer Walking for People with Dementia: Approaches and Technologies***

Walking is something that most of us take for granted, as a means of getting from place to place or getting our daily exercise. People with dementia can derive great benefit from continuing to enjoy walking, however, for some there may be an increased risk of wandering, injury or getting lost. This Update Sheet provides information about how walking can be made safer for people with dementia, and less worrying for their families and carers.

### **Independence and dementia**

People with dementia experience many changes in memory and other important functions and may need help from others to do some things. Walking is a source of exercise, pleasure and independence that needs to be supported for as long as possible.

### **What is safe walking?**

#### **Physical competence**

Safe physical walking means that a person walks independently, is steady on their feet and has no history of falling. Many people with dementia are physically capable of safe walking until very late in the course of their illness.

#### **Awareness**

One aspect of safe walking is being aware of where you are, where you are going and how to get home again. This is called orientation to place, i.e. not becoming lost. The ability to do this is a complex cognitive skill called wayfinding. Leaving home alone is not necessarily problematic for people with dementia unless the person cannot find their way back. Individuals with dementia and their family members are not always aware of changes that have occurred in wayfinding ability until a problem is encountered. In advanced dementia, some people get lost even

within their own homes and when they leave familiar surroundings.

### **Recognising and understanding important cues in the environment**

A part of safe walking involves continuing to recognise one's own home, roads and traffic, and take notice of and obey signs and other cues to safely cross roads. Retaining a realistic sense of distance is important. For example it is important for safety to know how the distance and how long it takes to walk between important landmarks such as home and the shops, and to recognise what is passed on the way.

### **Resting**

The ability to rest is another aspect of safe walking. Some people walk for very long periods of time during the day and/or night. They get tired, hungry and thirsty but may not be able to stop walking. When tired, they are more likely to fall or bump into things and hurt themselves. Walking to this extent can lead to weight loss, especially if food intake is reduced by an inability to sit still.

## What aspects of walking may result in negative outcomes for the person with dementia?

The greatest risk associated with independent walking as the person with dementia declines is that he or she will leave the safety of their home unaccompanied and get lost.

Many people with dementia are at risk of becoming lost. Important factors to be aware of include the physical and emotional status of the person with dementia, particularly their physical competence, the landscape and terrain they are walking in, their familiarity with the locale and the weather conditions.

## Things you can do to reduce the risk of unsafe walking

There are several things you may consider to reduce the risk of negative consequences to a person with dementia if they leave home unaccompanied.

### 1. Help maintain physical conditions for safe walking

Ensure that the person with dementia always wears comfortable, well-fitting shoes that are difficult to remove. Someone who is lost and continues walking will do so in any footwear, including slippers and thongs. Improving their stability with good footwear will help lower their risk of falling, tripping or injury to their feet.

### 2. Prepare for rapid identification of the person if required

It is important that a person with dementia who goes missing be located as quickly as possible. Ways of achieving this need to be discussed early on with the person with dementia so they can make decisions about how they want to be identified.

You can:

- Ensure that there are recent photographs (full length and head shots) of the person with dementia to aid identification.
- Discretely label personal effects, including wallets and purses and shoes, with the owner's name, your name and contact details.
- Enrol the person with dementia in a Safe Return program sponsored by Alzheimer's Australia in your State.
- If there is no program of this type purchase a MedicAlert bracelet, or a bracelet that is difficult to remove and have it engraved with identification details.

### 3. Promote discrete family and community awareness

When other people beyond the person's immediate family know the person may get lost, they will be more vigilant in assisting if necessary.

You can:

- Discuss the circumstances with people you and the person with dementia know and trust. Ask if they will be willing to help if necessary.
- Consider talking with local authorities so that they are familiar to them.
- Avoid leaving the person with dementia alone. Twenty-four hour supervision or a reliable means of keeping in touch if the person lives alone are necessary.
- Avoid triggering going out alone by keeping bags, keys, coats, umbrellas etc out of sight.

### 4. Know the familiar routes and destinations usually chosen by the person

Most of us tend to have favourite routes and destinations we like to walk and things we enjoy along the way.

You can:

- Encourage walking during daylight hours when other people are about.
- Identify recent well-walked and enjoyable routes on a local map.
- Walk these routes with the person regularly if possible.
- Know how long it usually takes to walk a given route.
- Know the stamina of the person with dementia and the average length and time of the walks they take alone.
- Suggest routes that are safer than others in terms of the complexity of the environment to be traversed e.g. off main roads, in residential areas or parks, on defined pathways, fewer road crossings, level ground, well lit after dark.
- Be aware of other more distant routes that may hold particular memories and attraction for the person with dementia but are out of reasonable walking distance. For example, a walk back to a previous home or a relative or friend's home, a favourite park, fishing or swimming spot, shopping centre or holiday destination, or a place with a favourite view.

#### **5. Be prepared to alert the authorities quickly if necessary**

If the person with dementia does not return as expected and cannot be quickly located, they may need help.

If this occurs, seek help quickly. The earlier a search is started the more likely it is the person will be located quickly and unharmed. Call the police immediately after you have checked with family and community connections that the person is not with them. Do not wait longer than an hour to make the call.

#### **6. Consider using locator technology to help monitor and find a person with dementia who wants to continue to walk alone**

Advances in technology mean that there are a number of devices on the market designed to rapidly 'locate' a person who is in a different place to you. These new devices are sophisticated in their capacity to monitor people and locate people quickly.

Common types of locator devices include Radio Frequency Identification (RFID), and Cellular and Global Positioning System (GPS) devices. The devices most suitable for home use are those that generally use the GPS and cellular telephone networks together. A transmitter is worn by the person who is being tracked. The transmitter can be a watch-like device worn on the wrist or a multi-function mobile phone unit carried in a pouch, pocket or around the waist or neck.

#### **What type of GPS-based locator do I need?**

The features of a device for locating a person with dementia are:

- small, light and easy to wear
- difficult to remove
- simple for the carer to operate
- reliable, with good battery life
- robust and not easily damaged
- inconspicuous
- backed by a company that provides efficient and sensitive service when you need it.

There are so many products on the market that it is difficult to discriminate amongst them. *Table 1: Selected examples of locator devices* (on page 5) show features which are likely to be of interest to consumers. It is to be noted that Alzheimer's Australia does not endorse specific products, and purchasers need to seek independent

advice to determine the right device for their needs

#### **Benefits of locator technology**

- The ability to walk freely with the knowledge that if a person gets lost and can be located quickly, may provide a heightened sense of security and aid independence. This may also provide other benefits such as perceived competence and autonomy, exposure to natural and social worlds and exercise.
- Devices can be pre-programmed to alert the carer when boundaries are crossed by the person with dementia. The carer is alerted if the boundary is crossed.
- Locator devices can help find people with dementia who become lost.
- Smaller, less conspicuous, more affordable and more reliable devices are becoming available all the time.
- There is a number of service providers to select from to obtain the backup you may need to use the device.

#### **Limitations of locator technology**

- Most GPS devices used for locating require a third party infrastructure (e.g. computer, software) so the purchaser has to bear the initial cost of the device plus the on-going costs of the service.
- If GPS is to be effective the person with dementia must be wearing the GPS receiver when they get lost. The ability of the person to accept and understand this condition is an important factor.
- GPS devices can become ineffective under conditions of dense cloud or tree cover, tall buildings underpasses and tunnels.
- Some devices on the market work only when the person with the device is aware they need help and

press a button to communicate with others. These devices may not be suitable for people beyond the early stage of dementia.

- Research is needed to systematically evaluate the impact of the use of these devices on the level of security, independence and quality of life of persons with dementia and their carers.
- The number of devices available changes frequently, as new additions and product discontinuations occur.
- Consumers who want to use their own GPS system without support will need to have a home computer and be comfortable using it.

#### **Caveats on use of locator devices**

- Technology is an adjunct to reliable personal oversight and rapid responses when the person with dementia needs help.
- Technologies should be viewed as only one part of a comprehensive approach to promote the least restrictive alternative for a person with dementia.
- Some low technology devices such as wrist bands and photo ID's, tend to do well where there is strong community awareness and commitment.
- It is important that consumers can trust both the product and reputation of the provider they select and feel comfortable asking questions.
- Carers, persons with dementia and professionals need to weigh the risk against the cost, usefulness and fit of the approach, and realise that devices are not foolproof.

**Table 1: Selected examples of locator devices**

Device/Service	Specifications	Website and Phone
SPOT Satellite personal tracker with GPS messaging	Size: 6.9 x 11.1 x 3.8 cms. Accurate to within an 18 metre radius. Waterproof to 1 metre for 30 minutes and floats. Operates in a broad temperature and altitude range. Uses two AA lithium batteries with a life of up to one year in 14 days in SpotCasting mode, or 7 days in emergency mode. Contract required.	www.findmespot.net.au  Available from many distributors in all States. See website for details
Safe2Walk hosted by Alzheimer's Australia WA	Size of a small mobile phone. Accurate to within 10 metres. 24 hours of battery life. Can be used as an emergency cellular phone and allows dialling of up to three numbers for two-way voice communication. Can set a pre-determined safety boundary. Requires Vodaphone mobile in rural areas. Contract required.	www.safe2walk.com.au  Phone: (08) 9388 2800 Fax: (08) 9388 2739  Email: safe2walk@alzheimers.asn.au

*This Update Sheet was written by Professor Elizabeth Beattie, School of Nursing, Queensland University of Technology, with contribution from Professor Donna Algase, School of Nursing, The University of Michigan.*

*This Update Sheet is provided for your information only, and does not represent an endorsement of any approach or product by Alzheimer's Australia*

**Further Information**

A range of books, videos, Help Sheets and Update Sheets are available through Alzheimer's Australia in your State or Territory by contacting the National Dementia Helpline on 1800 100 500.

Help Sheets and Update Sheets, including any more recent information, can also be obtained on the internet at [www.alzheimers.org.au](http://www.alzheimers.org.au)

For information on Alzheimer's Australia Safe Return programs in your State or Territory, go to the Alzheimer's Australia website at: [www.alzheimers.org.au](http://www.alzheimers.org.au)