Being safe while active – GPS (Global Positioning System) and location devices



If you are worried about someone who is at risk of when out the community and is at risk of becoming lost or disorientated whilst out walking, then devices that use GPS (Global Positioning System) could be of benefit.

GPS location devices are designed to help family members and caregivers locate a person they care for when they have gone "missing" and are particularly useful in helping those with dementia stay safe outside.

The devices are designed so that they can easily move around with the person and help keep them safer when walking outside by providing real-time location information. They provide reassurance to those supporting the person (e.g., family, friends, or carers), as if the person, becomes lost, or distressed, they can easily be located via a smartphone app or dashboard on your tablet or computer. To be effective, the GPS device must be switched on and kept with the person, although some devices store the last known location should the device turn off due to low battery, etc.

GPS location devices include a range of smartphones, watches, key rings, and pendants, although sometimes the location function may need to be switched-on first. Many allow you to set a geofence or boundary, so that alarms are only raised if you leave the 'safe' area or zone and others include fall detector sensors, a panic or SOS button and/or two-way communication capability, all of which help provide greater reassurance to you and your loved ones. You also have the option to connect some to a Telecare service so that even if you have no-one to call in an emergency, help can still get to you quickly and easily, pinpointing your location via the GPS signal.

Some of the more common types of GPS location device are listed below. However, when choosing whether to use them it is important to balance the needs of the person with those supporting them. Any GPS or tracking device designed to help a person stay safe should also ensure their privacy is respected, are not too restrictive, and continue to support the person's independence.

Locator devices



Locator devices are simple to use and can help you find things you often misplace, such as keys, a wallet or even the remote control for the television. Small electronic tags are attached (sometimes magnetically) to each item and come with either a dedicated locator device, which you press to locate the missing item or can be linked to a smartphone using an app.

If the system comes with a dedicated locator device, then pressing the button on the device will activate the electronic tag attached to the missing item. The electronic tag will then either emit a beeping noise, a flashing light, or a combination of both. As locator devices can get lost, it is best to only use them at home and keep them in a safe place, for example on a hook on the wall or a shelf.

If the system does not come with a dedicated locator device, then you will need to link each electronic tag to a smartphone using an app. The location of the lost item will then be shown on the phone's map app. Some apps will also store the last place where the phone 'saw' the tile. As this system does not require you to have a dedicated locator device, this may be beneficial for you if you tend to leave items at places you visit when you are away from home.

Smartphone apps



Find My iPhone Smartphones come with GPS as standard and provide one of the easiest ways of keeping safe and letting people know where you are; you may just need to turn-on the phone's location to enable the feature. Many come with a 'find my phone' app or similar, which will show the location of your phone. You can give family members or caregivers permission to use the app so they can see where you are, for example, if they cannot contact you or are concerned for your safety.

Personal mobile alarm with GPS locator



Personal mobile alarms are typically worn as a pendant around your neck, used as a key fob, or kept in a pocket. They work in a comparable way to a standard Telecare pendant alarm (see Telecare) but also have a GPS locator. They do not need a base unit or landline to work. If you are concerned about falling outside, becoming disorientated, or lost, they can provide reassurance and peace of mind for you when not at home.

GPS personal alarms are small pendants that uses GPS tracking so you can get help from anywhere in any emergency. They have built-in microphones and speakers and an SOS button. If you fall, feel unwell or be in distress, you can speak with the monitoring centre's emergency contact team by pressing the pendant's SOS button. Even if you are unable to speak, the team will know who you are and will be able to tell where you are based on the location of the GPS signal. They can then arrange to get help to you by calling friends, family, or the emergency services.

Other GPS personal alarms, such as the Careium 450, also have built-in fall detector sensors, which provide the added reassurance that if you fall and are unable to press the SOS button, an alert will be automatically sent to the monitoring centre who will be able to respond accordingly. Working alongside the standard GPS, SOS, and two-way call functions this can help provide additional reassurance for people who are at risk of falls, wandering, becoming disorientated, or getting lost.

GPS location watches



GPS enabled watches can provide real-time location information via dedicated smartphone apps or dashboards viewable on your computer or laptop. Many GPS enabled watches use simplistic high-definition displays providing clear visibility for the user and easy access features, making them particularly suitable for people with poor dexterity and/or learning and cognition issues. Some also feature an SOS call button, the ability to programme medication and event reminders, 2-way calling, SMS text messaging, fall detector sensors and/or geofencing capability.

A GPS watch is typically worn in place of your normal watch and alongside the time, can also display the date and day of the week. They provide GPS locations both inside and outside of the home and those with fall detectors or geofencing enabled can be set-up to send automatic alerts should the watch detect a fall, or you wander outside of a 'safe' area.

With your permission, caregivers or family members can access the app to monitor your location and provide a response should an alert be raised of if your loved ones have been unable to contact you and are concerned for your safety.

Geofencing systems



GPS geofencing systems can provide reassurance and help keep you safe whilst active. They act as an invisible boundary within which you remain "safe," but outside of this, an alert can be raised to notify caregivers, family members or friends that you may need help. Your location will be pinpointed by your GPS location device (e.g., smartphone) and be visible to others via a smartphone app, laptop, or computer, meaning you can get when you need it.

Geofencing allows you to create a "safe" zone or geofence and family members or caregivers can receive real-time updates to let them know when you have wandered outside of the "safe" zone. For example, you might enjoy walking to the local shops or going to visit friends but know you may start to feel anxious and become lost or disorientated if you wander any further. Geofencing can help to provide that additional peace of mind to loved ones whilst helping you remain independent.