## Health and personal safety – Fall detectors and epilepsy

Technology Enabled Care (TEC) can be used to raise an alert should you have a fall and are unable to get up, have a seizure, or become confused and disoriented whilst away from home. The following devices provide some simple solutions to help you and your loved ones get that extra peace of mind by knowing that should there be a problem, help can be provided quickly and easily. Please also see the sections on Telecare and GPS (Global Positioning System) Devices, for more information about other options available.

### **Fall detectors**

Like personal/community alarms (see <u>Telecare</u>), falls detectors can be worn as a pendant or on the wrist. When connected to a Telecare monitoring system or pager, they have the added benefit of automatically raising an alert should you fall and be unable to raise the alert yourself. This makes them the ideal option if you are prone to fainting or having seizures, may not remember to press the button after a fall, or if you have limited dexterity.

These devices can be worn instead of or alongside a community alarm pendant (see Telecare) and provide reassurance to you and your loved ones, by knowing that you can get help when you need it.

#### Falling at night

If you are concerned about falling at night, products such as bed and floor sensor mats or motion-activated sensors (see <a href="Smart Technology">Smart Technology</a>) can provide additional support and reassurance. They can be set-up to automatically raise an alert, for example, if you do not go to bed, get out of bed during the night, or are out of bed for an unusual length of time, all of which might indicate a problem. They can be used alongside or instead of pendant and wrist-worn falls detectors and will normally be connected to a pager system so that someone living in your home can provide immediate assistance. Motion-based sensors can also help to reduce the risk of falling when getting up from bed at night by automatically turning on the lights for you or alerting a Carer of your actions.

# Falling outside

If you are concerned about falling whilst outside, then TEC may be able to help. Mobile enabled pendant alarms and watches use mobile and GPS technologies to ensure you receive the same quick response as you would if you had a fall at home. Products such as the Careium 450 can be worn as a pendant or attached to a keyring and provide reassurance from having an SOS call function, built-in falls detector, GPS and 2-way communication channels. Certain wrist watches also use similar technologies to raise an alert from wherever you are.

### **Epilepsy**

Technology enabled care (TEC) can be used to monitor individuals living with epilepsy while they sleep. Seizure activity is often complex, but epilepsy sensors can be used to help detect Tonic-Clonic seizures. They are normally placed under the mattress of the bed and used overnight. They work by detecting when combinations of continuous movements and noise differ to normal patterns and behaviours.

When the sensor detects a seizure, an alert is raised via a pager or Telecare device, so that appropriate care and intervention can be provided as quickly and efficiently as possible.