Emergency Call Systems: telephone-based

Telephone-based emergency call systems allow the user to contact someone in an emergency.

Most of the systems are activated by a transmitter that is worn by the user or, in some cases, can be mounted onto surfaces around the home. A button is pressed, which sends a signal to the receiver unit. The receiver unit dials out to raise assistance. These units are usually connected into home telephone sockets and operate off the existing landline, but some new systems operate via the mobile phone network.

The following are some of the differences and key features to look for when considering telephone-based emergency call systems.

Monitored or Non-monitored

- A monitored system is one that will dial a monitoring base-station that is staffed 24 hours a day. The operator is then able to contact a list of people (provided at the time the system is set-up) or, an ambulance, if required. There are additional ongoing costs involved with monitored systems that provide this service.

- Non-monitored systems operate by dialling programmed numbers and playing a pre-recorded message, usually with the user’s name, address and request for assistance. Depending on the particular system, three to eight telephone numbers of friends, family members or neighbours can be programmed into the unit. If the call from the system is not answered by the first programmed number then the second programmed number is dialled. The system continues to call the programmed numbers until the call is answered. In most systems there is a feature called call acknowledging. This requires the person answering the emergency call to press a particular button on their telephone to let the system know that it has been answered by a person rather than by an answering machine or voicemail.

- It should be noted that, in most cases, an ambulance service will not respond to pre-recorded messages from non-monitored emergency call systems unless previously agreed.

Both types of systems require that the person responding to the emergency call has access to the house in order to reach the person needing assistance.

Transmitters

Transmitters need to be within reach at all times. For this reason most are water-resistant and can be worn in the shower or bath.
It is recommended that transmitters not be left outside the shower alcove or hung up high when the user is taking a shower in case they fall and are unable to reach the transmitter to activate it.

All transmitters are activated by pressing a button for a set period of time, usually 2–5 seconds. To help avoid accidental activation, some transmitters require two buttons be pressed and some transmitters also have a cancel button, although this is only found on a few.

Transmitters are usually worn around the user’s neck or wrist, however, this may depend on the type of system being used. Some systems allow multiple transmitters to be linked to the receiver unit, which allows more than one person in the house to be monitored. This can also allow for extra transmitters to be conveniently placed around the home for greater accessibility.

The range in which the transmitter will operate varies from system to system and depends on the environment it is used in. Generally, the operating range is greatly reduced when solid obstacles such as walls, sheds and fences are between the transmitter and the receiver. This is important to consider if the user spends a lot of time outdoors in the case of a large property. A special signal booster may be required to ensure adequate cover.

**Receivers**

The receiver unit of the system is the part that actually dials the number. On some systems, particularly the monitored systems, the existing telephone is plugged into the receiver unit and the receiver unit is then plugged into the telephone wall socket. Other systems’ receiver units just plug straight into a telephone wall socket without the existing telephone being connected to them (this may require two telephone sockets). Some of the non-monitored systems consist of a special telephone with the receiver unit built into them, thereby replacing the existing telephone. All receivers require mains power to operate and most have a built in battery backup that allows the system to operate even in the event of a power cut.

In most monitored and non-monitored systems, when the emergency call has been answered, a talkback facility can be activated. In monitored systems this is often operator-activated and in non-monitored systems a particular button on the keypad is required to be pressed by the person answering the call. This facility allows for conversation between the user and the person answering the call. However, the microphone located in the receiver must pick up the user’s voice; therefore, the talk back facility does not generally work when the user is outdoors.

Most receivers can be connected to *Mode 3 sockets* that allow the emergency call system receiver unit to dominate the phone line and place emergency calls even if the telephone is off the hook or in use. However, additional wiring within the walls of the house is often required for the *Mode 3 socket* to operate.

There is currently one system on the market that, instead of placing calls, sends out a pre-programmed SMS to mobile phones.
Additional Features and Accessories

The different systems available on the market may have various additional features and accessories that can be added to the basic call system, including:

- additional transmitters;
- booster units that increase the operating distance of the transmitter;
- secure key boxes that provide a safe place to store keys and allow access to the house for people responding to the emergency call;
- additional triggers including smoke detectors, motion detectors, convulsion detectors, which activate the system when they are triggered;
- welfare monitoring that requires the wearer to press the button to let the system know that they are OK when the transmitter beeps after a set period of time. If the wearer does not respond, the system will place the emergency call;
- out of range monitoring, which places an emergency call if the transmitter moves out of range of the receiver the system.

Questions to Ask when Selecting a System

- What are the installation/establishment costs, weekly/monthly monitoring fees, battery replacement and telephone charges for system checks?
- Would rental or purchase be the best option?
- Which is the most suitable transmitter with regard to weight, pendant or wristband style, method of activation and water-resistance?
- Will the transmitter operation cover the distance needed in the chosen environment (eg in garden areas)?
- Can you test the system before purchase?
- Is a two-way talk back facility offered that allows the monitoring base staff to speak with the user and, will it work throughout the house where required?
- Does it have a cancel facility if the system is accidentally activated?
- Is a reputable monitoring company operating the base station, with 24 hour staffing and appropriate security measures in place to ensure confidentiality?
- Does the system have the ability to dominate the telephone line over other calls in case of emergency?
- What maintenance service is offered for battery replacement, testing procedures and back-up in case of power failure?
- Are features able to be customised to meet individual needs?
- Are there any other options (eg ability to link in to an existing security system?)
- Can the user physically activate the transmitter and will they remember to wear the pendant/transmitter at all times and operate it as needed?
- Will contact people be available in the event of an emergency and can they access the home if required?
Contacting the Independent Living Centre

For further information or to make an appointment to visit the display please contact the Independent Living Centre. The Independent Living Centre offers free advice on equipment and techniques to help you with everyday tasks.

Independent Living Centre
11 Blacks Road
Gilles Plains SA 5086

Phone: 1300 885 886 (SA & NT callers only) or 8266 5260
Email: ilcsa@dcsi.sa.gov.au
Website: www.sa.gov.au/disability/ilc

Accessible off street parking is available.
Bus services run nearby. Call 8210 1000 for timetable information.