**Section 240.1541 Minimum Equipment Specifications for Emergency Home Response Service**

a) All EHRS equipment must be tested, approved and listed to meet Underwriters Laboratories safety standards for home health care signaling equipment, UL 1637 (available from Underwriters Laboratories, 2600 N.W. Lake Rd., Camas WA 98607-8542, 877/854-3577; October 26, 1998, no later amendments or editions included), and digital alarm communicator systems units, UL 1635 (January 31, 1996, no later amendments or editions included), if applicable.

b) All home units must be capable of signaling from both the activation device remote and the base unit.

c) Activation Device Specifications

1) The activation device must be a portable and waterproof type of wireless remote configured with:

A) a crystal or Surface Acoustic Wave (SAW) resonator controlled transmitter frequency for long-term reliability;

B) digital encoding capability for at least 10 combinations sufficient for high density situations;

C) a minimum transmission range of 300 feet;

D) an internal battery capable of operating as a power source for a minimum 5 years;

E) a low battery charge signal; and

F) components certified as appropriate by the Federal Communications Commission under 47 CFR 15 (2008).

2) The activation device must be capable of conducting automatic battery testing and transmitting the results through the base unit to the support center on a regular basis.

3) An adaptive version of the activation device must be available that can be used by hearing, mobility and visually-impaired participants.

d) Base Unit Specifications

1) The base unit must have:

A) an integrated unit that connects to either a rotary dial or touchtone telephone via a modular jack that does not interfere with the normal use of the telephone;

B) an Underwriters Laboratory (UL) approved plug as the connector to a standard residential electrical outlet for its power supply;

C) an appropriate connection for a seizure line jack so the support center can be signaled even in the event the telephone receiver is off its hook;

D) an easily identifiable "ready" light to verify whether the batteries on the activation device and base unit are charged;

E) an easily identifiable "confirmation" light that indicates when the support center has received a signal;

F) a battery that automatically charges whenever the base unit is powered and that maintains a charge for at least 12 hours when the electric power to the base unit is interrupted;

G) transmission capability to signal the support center if the base unit battery fails or has a low charge, or electric power to the base unit is interrupted;

H) a configuration that allows signaling service through 1 base unit for up to 2 participants in a home;

I) microphone and speaker to enable 2-way voice communication between the participant's home and the support center. The support center must be able to control both the microphone sensitivity and speaker volume; and

J) appropriate certification by the Federal Communications Commission under 47 CFR 15 (2008) and 47 CFR 68 (2008).

2) The base unit must give both audible and visual confirmation of the signal status using digitized voice technology and lighting cues to help the participant stay calm while waiting on his or her designated emergency responder or other appropriate response to the situation directed by the support center.

3) The base unit must reattempt signaling on a regular basis until the support center confirms its receipt.

e) Support Center Specifications

1) The EHRS support center must have back-up monitoring capacity to take over all monitoring functions and handle all incoming emergency signals. The back-up monitoring center must be at a location different from the primary center, on a different power grid system and on a different telephone trunk line. It must have a back-up battery and electrical generating capacity, as well as telephone line monitoring abilities.

2) All EHRS support center and back-up center equipment, at a minimum, must:

A) monitor the EHRS system for the receipt of incoming signals from connected base units in participants' homes, including test transmissions and fault conditions, on a continuous basis;

B) have an audible and visual alarm for the notification of all incoming signals, including test transmissions and fault conditions;

C) direct an appropriate response within a minute of the receipt of a signal as an operational average without disrupting or terminating the connection to the base unit in the participant's home, 24 hours a day, 365 days a year, including interpretation services and communication facilitated by a teletypewriter (TTY) communication device for the deaf;

D) provide technical support as required, 24 hours a day, 365 days a year;

E) identify each participant and simultaneously record all communication among the participant, support center and responder, as applicable, for all signals, including test transmissions and fault conditions;

F) display, print and archive the participant identifier, date, time, communication and response period for each incoming signal, which must be maintained for at least a 3-year period for quality control and liability purposes;

G) have an uninterruptible power supply (UPS) back-up that will automatically take over system operation in the event electric power to the support center is interrupted, other type of malfunction occurs, or repairs are needed. The back-up power supply must be sufficient to operate the entire system for a minimum of 12 hours;

H) have separate and independent primary and back-up receivers, computer servers, databases, and other components to provide an uninterruptible monitoring system in the event of equipment malfunction;

I) perform self-diagnostic testing for malfunctions in equipment in participant homes and at the support center, and for fault conditions in the primary and back-up operating systems and power supply at the support center, that could interfere with receiving and responding to signals, such as non-operational receivers and transmitters, signals received with no communications, telephone line outages, power loss, etc.; and

J) maintain appropriate certification by the Federal Communications Commission under 47 CFR 15 and 47 CFR 68.

(Source: Amended at 42 Ill. Reg. 20653, effective January 1, 2019)