



Medtronic Emergency Response Systems

Security Information for the LIFEPAK CR[®] Plus Automated External Defibrillator (AED)

This information about security features of the Medtronic LIFEPAK CR Plus automated external defibrillator (AED) is provided to help our customers comply with the HIPAA Security Standards by their compliance date.

Medtronic ERS has performed an assessment of the LIFEPAK CR Plus AED with respect to the standards and implementation specifications of the Security Rule. The following information describes the security features and potential risks we have identified as a result of our assessment. In addition, it identifies possible administrative, physical and technical safeguards to help you, as a Covered Entity, establish processes and procedures for the use of Medtronic products that are reasonable and appropriate for your institution.

Understanding the device capabilities, using its security features and implementing the recommended procedures can assist you in safeguarding electronic patient data as you use the LIFEPAK CR Plus AED to respond to cardiac emergencies and transmit data for post-event review. *This information is not intended as an exhaustive list of recommendations. Your organization's particular needs and security requirements may call for additional actions and controls.*

Product Use/Technical Features

The LIFEPAK CR Plus AED is designed for use by first responders to cardiac emergencies in settings that include businesses, schools and homes. It also is used by hospitals, EMS teams and municipalities.

The operating system that supports the device is an embedded real-time OS .

Patient Data

Data recording

When used to analyze and/or defibrillate a patient, the LIFEPAK CR Plus AED creates an electronic Patient Record, which includes: event log data (such as the time the device is powered on, results of heart rhythm analysis and number of shocks administered); CODE SUMMARY[™] critical event record (which also includes waveforms); and continuous ECG data.

Data storage

The LIFEPAK CR Plus AED stores information for two patients. Each time the AED is used, the incoming data automatically deletes the oldest Patient Record and compresses the other case into a Summary Record.

Data transmission

The LIFEPAK CR Plus AED features an IrDA port for short-range infrared transmission of Patient Records into a personal computer equipped with a Medtronic LIFENET[®] compatible medical informatics system, which archives records for subsequent viewing.

Potential Security Exposures

Examples of possible risks to patient data include:

- Unintentional overwriting of patient data before transfer
- Inadvertent disclosure of patient data during servicing of the device
- Improper disclosure due to unauthorized employee access to patient data
- Improper disclosure or loss of patient data resulting from theft of the device

1. Health Insurance Portability and Accountability Act of 1996, 45 CFR Part 164.

Security Features of the LIFEPAK CR Plus AED

The following description of security features and recommended procedures for proper use of the device are provided to facilitate your HIPAA compliance efforts.

Administrative Safeguards

HIPAA Standard	Security Issue and Feature	Recommended Action
Information Access Management (to implement policies and procedures authorizing access to electronic patient data)	<p>The device maintains a Patient Record for the two last device uses. New incoming data automatically deletes the oldest case and compresses the other case into a summary record.</p> <p>Each Patient Record includes the unit's serial number and the date and time of device use.</p>	<p>To help prevent loss of electronic patient data, implement procedures to download the Patient Record after each use.</p> <p>To avoid improper access to Patient Records, implement procedures to protect the AED from unauthorized physical access—such as storing the device in an unlocked cabinet that alerts others when it is removed.</p> <p>To help prevent improper disclosure of electronic patient data, servicing should be performed only by personnel trained in handling protected health information.</p>
Contingency Plan (to respond to an occurrence that damages systems containing electronic patient data)	Medtronic LIFENET medical informatics products can be used to support backup and recovery of Patient Records stored in the LIFEPAK CR Plus AED archives.	If long-term data retention is desired, promptly transfer those records after each device use to CODE-STAT Suite medical informatics system.

Physical Safeguards

HIPAA Standard	Security Issue and Feature	Recommended Action
Device and Media Controls (to govern receipt, movement and removal of hardware and electronic media)	To support timely care in cardiac emergencies, the AED is designed to provide caregivers with quick access to its capabilities. Policies and procedures must strike a balance between physically safeguarding the device and keeping it readily available.	Implement procedures to protect the defibrillator from unauthorized physical access while providing ready access for authorized operators. Consider storing the device in an accessible location that will alert others when it is removed (such as an unlocked storage cabinet that emits a distinct tone or triggers a flashing light when opened).

Technical Safeguards

HIPAA Standard	Security Issue and Feature	Recommended Action
Transmission Security (to protect electronic patient data transmitted over an electronic communications network)	<p>To facilitate patient care or to archive data, the device can transmit Patient Records by connecting via infrared (IrDA) port to a computer running LIFENET medical informatics software.</p> <p>Patient records are not encrypted, but do include features to ensure the integrity of the patient data. The point-to-point nature and short range of the infrared transmission provides adequate safeguards against inadvertent disclosure of patient information.</p>	Customers who regularly transmit electronic patient data may contact Medtronic Emergency Response Systems, Inc. at 1.800.442.1142 for more information on transmission security.

IMPORTANT NOTE

This document provides a description of certain security features of this product. In addition, it provides recommended actions and suggested controls that may help you mitigate or otherwise address the information security risks that are associated with the product's use. However, these security features, recommended actions, and suggested controls may not ensure that all security incidents can be avoided, such as those related to the inadvertent or the unauthorized disclosure, deletion, or modification of health information. In addition, this document is not intended to provide, and should not be relied upon as, a comprehensive description or an exhaustive list of recommended actions and controls. As a result, depending upon the particular security requirements and needs of your organization, additional actions and controls may need to be implemented by your organization.