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Using Apple Computers in Hospital Environments (10/94)

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Security: Everyone

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TOPIC -----

Do you have any information on electrical or environmental considerations when using Apple equipment in hospital environments?

DISCUSSION -----

To dispense with any electricity that may stray from the circuits in the unit, computers are electrically grounded, which lets this excess electricity pass from the system through the case of the computer itself. This flow to the grounded case is called current leakage.

While current leakage in Apple computers is usually low, this flow of electricity to the grounded case may be high enough to disturb equipment that is important to a patient's stability or to generate a spark that could ignite an explosion in an oxygen-rich environment, like an oxygen tent.

Computers used in a hospital environment have different current leakage acceptable levels under different circumstances, such as non-patient use, patient monitoring, and patient connection.

Current leakage is measured in microamps (μ a) and occurs between the hot or positive AC line and the green wire (ground).

Situation -----	Current Leakage Acceptable Levels (μ a) -----
Non-patient office work	less than 500
Patient monitoring	less than 100
Connected directly to the patient	less than 10

These requirements are for the safety of both hospital personnel and patients.

The maximum current leakage allowed by the UL specification is 0.5 milliamps

(ma). Apple Computer monitors meet this UL specification.

Note: Apple Computer does not test Apple equipment for hospital AAMI/ANSI compliance certifications. However, depending on an individual institution's certification requirements, Apple equipment may be able to be used in certain work areas. Before installing equipment, Apple customers need to check the hospital's certification requirements for the work area where the equipment is to be installed.

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Support Information Services

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