

**Beth Israel Deaconess Medical Center
BIDMC Manual**

Title: Electrical Appliance Safety

Policy #: EOC - 17

Purpose:

- A. To ensure:
 - 1. All electrical appliances utilized within the Beth Israel Deaconess Medical Center are used for their intended purpose, are in safe working condition, and are located in appropriate spaces.
 - 2. The identification of user risks and/or operational hazards with electrical appliances that may compromise the safety of Patients, Visitors, and/or Staff.
 - 3. Only approved appliances are being used.

Scope:

The scope of this policy applies to all electrical appliances utilized by staff, patients/visitors within Beth Israel Deaconess Medical Center, 99 Brookline Ave./Research North and our Lexington, Chelsea and Bowdoin Street offsite locations.

Policy Statement:

- A. Electrical appliances utilized within the Beth Israel Deaconess Medical Center must meet the permitted criteria listed on the following page. Maintenance Operations reserves the right to inspect and/or test any appliance at any time.
- B. Appliances that are determined by Maintenance Operations or Environmental Health and Safety to not be used for their intended/appropriate purpose or appliances that are found not in safe working condition will be required to be limited to their intended use or removed.
- C. Inspections shall include, but not be limited to, a visual inspection of cords, connectors, and controls for obvious defects, as well as, Electrical Safety (leakage) tests.
- D. Factors determining an unsafe condition will be fully explained to the Department Head or Manager as appropriate.
- E. Appliances identified as unsafe for use within the facility will be removed from service until such time as repairs can be made and tests verify the safe operation, or, the appliance is replaced.
- F. Extension cords are prohibited from permanent use anywhere within the medical center or off-sites. This includes prohibited use of power strips in place of an extension cord. (See H below for proper use of power strips.)

- G. Due to the inherent dangers of cord placement, special care should be taken when determining cord path and equipment position.
- H. There are only (2) types of power strips approved for use in any area within the medical center and off-sites.
1. Medical grade power strip - These power strips shall only be used in patient rooms and other patient care treatment areas. These are designated with the following UL numbers:
 - UL 1363A or
 - UL 60601-1Only patient care equipment shall be plugged into medical grade power strips. Clinical Engineering and Information Systems (IS) are responsible for issuing and maintaining all medical grade power strips.
 2. Hospital grade power strip – These power strips are only permitted for use with computer related equipment (e.g. monitors, printers, etc.). These are designated with the following UL numbers:
 - UL 1363 or
 - UL 1449These shall be used in all areas where medical grade power strips are not required. IS is responsible for issuing hospital grade power strips.
- I. In the event that additional electrical wall outlets are required, the department should contact the Service Response Center at 5-9700.
- J. It is the responsibility of each department's management to ensure that all electrical appliances meet the permitted criteria. It is recommended that all appliances receive a safety inspection prior to use at the Medical Center. To schedule an appliance safety inspection, please contact the Service Response Center at 5-9700.

Approved and non-approved appliances:

1. Electrical appliances that are **NOT APPROVED** for use:
 - A. Appliances that create a flame or use flammable liquid or gas
 - B. Portable hairdryers
 - C. Portable heating units of any kind are NOT permitted in patient sleeping areas
 - D. Clothing irons
 - E. Hot plates, warming plates, and electric water kettles
 - F. Toaster ovens

- G. Non-commercial grade toasters
- H. Non-commercial grade coffee makers
- I. Popcorn makers
- J. Halogen or heating lamps

2. Electrical appliances not listed above and that meet ALL of the criteria (A through E) below are **APPROVED** for use:

- A. U/L Approved
- B. Casing is intact/ No modifications
- C. Patient care areas require double insulated or 3-wire/3-pin cord/plug. Cell phones and laptop computers are the only exceptions (every effort should be made to minimize use of cell phones and laptop computers while plugged in and to remove AC adapters/plugs from outlets when not charging device).
- D. Appliances that have polarized plugs are permitted to be used in non-patient care areas
- E. No frayed or damaged cord/plug

Examples of approved office-type appliances (provided that they meet A-E above) include: TV's, VCR's, radios, calculators, fans, pencil sharpeners, task lamps, computer equipment, printer/copier equipment, and chargers for wireless devices.

Examples of approved cooking-type appliances (provided that they meet A-E above and are located in appropriate spaces such as kitchens, breakrooms, nutrition alcoves, or dining areas) include: microwave ovens, commercial grade coffee makers, commercial grade toasters, refrigerators, and water coolers.

- 3. Only commercial grade portable heating units approved and supplied by Maintenance Operations are permitted for use within the Medical Center.
- 4. Any electrical appliance purchased or brought in by anyone or any department must meet the criteria of this policy. If anyone or any department wishes to bring non-clinical electrical equipment into the medical center that is NOT identified in this policy they should request approval from Maintenance Operations. The Maintenance Operations reserves the right for permitting or not permitting electrical appliance use within BIDMC.
- 5. Refer to "Basics of Plug Safety" attachment for additional information.

Attachment A: Basics of Plug Safety

Vice President Sponsor: Walter Armstrong, Sr. VP Capital Facilities and Engineering

Approved By:

Ops Council: 9/11/2017

**Peter Healy
President**

EOC Committee: 6/14/2017

**K. Murray & W. Armstrong
Co-Chairs**

Requestor Name: Rick Marini, Director, Maintenance Operations

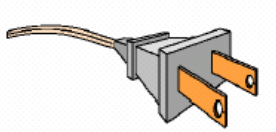
Original Date Approved: 10/01

Next Review Date: 6/2020

Revised: 10/04, 10/07, 6/09, 5/10, 7/13, 6/17

Eliminated:

References: EOC-17 Attachment A: Basics of Plug Safety



Basics of Plug Safety

Ground Fault Interrupters (GFI's)



- Detect "leaks" (but not over-current)
- Can be permanently mounted or portable
- Must be used on all 120 volt, single-phase, 15- and 20-ampere receptacle outlets on construction sites, which are not part of permanent wiring
- Must be tested to ensure working properly
- Must be marked with manufacturer's name and applicable rating

Plugs

- Do not use adapters that will allow an equipment to be plugged into an ungrounded (two-prong) outlet.
- Never attempt to operate an electrical equipment that has had the grounding prong removed.
- Never modify the polarized blade of 2 prong electrical plugs



Polarized



Non-Polarized

Grounding



- It is important that the grounding conductor is firmly attached

- Ensures there is a path of low resistance to ground if there is an electrical equipment failure