

# Medical device donation guidelines for Ebola outbreak

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# Requirements

# A. Appropriate, robust, durable/disposable medical equipment

1) High quality device or equipment:

- Regulatory clearance
- Capable of operating with limited-resource for electricity, water and compressed gas
- Minimum six-month shelf life

2) User manuals, service (maintenance) manuals, disposal instructions and software are in health worker's language:

- in French for Guinea, Democratic Republic of Congo
- in English for Liberia, Nigeria and Sierra Leone

3) Availability of supplies for a minimum one year of operation:

- Accessories,
- Consumables,
- Reagents (operation and cleaning),
- Maintenance materials (spare parts and tools),
- Test and calibration equipment and reagents, 5 per country, if possible.

# B. Concerning unstable or lacking running water supply, of varying quality may require:

- Device be disposable,
- Surfaces can be cleaned/disinfected/sterilized with appropriate disinfectant,
- Barriers can be added between patient and device, depending on the device,
- Cleaning/disinfection/sterilization procedure and consumables are shipped with device.

# C. Concerning limited or unstable power supply:

1) Medical devices or equipment may require:

- Battery-operated devices,
- Extra batteries or re-chargeable batteries,
- Backup generators,
- Current stabilizer.

2) Sources of energy may require in countries:

- Uninterruptable power supply to protect from blackouts and unstable power supply,
- Multiple extension connections with fuse spike detection,
- Correct plug adaptor,
- Transformer, etc.

Voltage	Frequency	Plug types
220 V	50 Hz	C or D or E
220 V	50 Hz	C or F or K
120 V, 220V	50 or 60 Hz	A or B or C or E or F
230 V	50 Hz	D or G
230 V	50 Hz	D or G
	220 V 220 V 120 V, 220V 230 V	220 V 50 Hz   220 V 50 Hz   120 V, 220V 50 or 60 Hz   230 V 50 Hz



Sources: http://www.iec.ch/worldplugs/list\_bylocation.htm and http://www.iec.ch/worldplugs/

3) Used with atmospheric or compressed gas supply, or accessory equipment is included to compress gas 4) Good ease of use and ease of maintenance