

SAFETY AROUND MEDICAL DEVICES

**(IN ACCORDANCE WITH
AS/NZS3551:2012)**

What is Biomedical Servicing

- ⦿ Annual Testing Program for Medical Equipment onsite
- ⦿ WOF
- ⦿ Medical Equipment Validation
- ⦿ Maintenance, Calibration & Servicing
- ⦿ AS/NZS 3551 Technical Standard for Maintaining Medical Equipment

Biomedical Services??

- ⦿ Annual Biomedical Testing
 - Electrical Safety
 - Performance Verification
- ⦿ Calibration
- ⦿ Preventative Maintenance Servicing (PM)
- ⦿ Acceptance Testing
- ⦿ Repairs

Why is this necessary

- Keep Patients Safe!
- Keep Clinicians Safe!
- Prolong the life of you Medical Devices!
- Optimise outputs from Medical Devices!
- Accreditation!

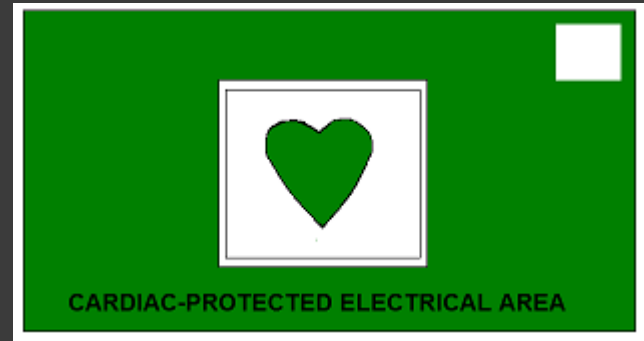
Electric Shock

- ⦿ Macro shock
- ⦿ Micro shock
- ⦿ Static shock

Other Hazards

- ⦿ Thermal
- ⦿ Radiant
- ⦿ EMI
- ⦿ Loss of Power

Area of Classification



Body Protected

Cardiac Protected

What to look out for?

- Valid Service Stickers (WOF)
- New equipment has been Acceptance Tested (WOF)
- Extension Cords, Tap-on Plugs – No!
No!
- Clear Plugs or Moulded Plugs
- Decommissioning damaged equipment

Repairs & Acceptance Testing

- ⦿ Dangers of NOT carrying out Acceptance Tests
- ⦿ Repairs Logging – Faults Tags
 - biomedical@outlook.co.nz (free tags)
- ⦿ Feasibility of repairs – quote before repair

TAG NO. XXXXX

**OUT OF
SERVICE**

DO NOT USE

REASON _____

SIGNED _____ DATE _____

TAG NO. XXXXX

LOCATION _____

PROBLEM _____

SIGNED _____ DATE _____

Testing Rates & Charges

- Feasibility of Annual Testing
- Some equipment do not need to be annually tested e.g. Ophthalmoscopes, Otoscopes, Stethoscopes
- ECG, Defib, Diathermy, Vital Signs Monitors tend to be more expensive items to have tested

Innovative Medical Device Hazards

- USB ECGs, Spirometers, Diagnostic Devices. Electrical Leakage Hazards
- USB Devices should have dedicated Computers/Laptops
- Qualified Service Personnel
- Tested to Manufacturers Spec

Vetting your Biomedical Service Provider

- Ask Biomedical Technician to produce EAS License
- Check WOF stickers have AS/NZS3551 on it
- Ensure on the report you have some parameters stated
 - Tested @ 300mmHg Test = 298mmHg



Vetting your Biomedical Service Provider

- In theory Biomedical Companies should remain independent i.e. they should only be involved with testing equipment and not really involved with selling devices or else it becomes a conflict of interest
- Check all Test Gear has current “Calibration Stickers”



Summary

- ⦿ In Service Training
- ⦿ Beware of Fluids and Wet Hands
- ⦿ Repair Fault Tags
- ⦿ Check for Faulty Cords & Plugs
- ⦿ New Equipment – Acceptance Tested before use
- ⦿ Check your Biomedical Service Providers Credentials

Contact Details

Nick Sharma

E: biomedical@outlook.co.nz

M: 021 02307076



Questions???