

Proposed DoH Maintenance Standards

A brief overview

Kevin Moon



Maintenance

- | What are the minimum maintenance requirements for Vic. public hospitals?
- | Who is responsible?
- | What evidence is there that it is carried out?
- | Where is it documented, reported?
- | Where are reports tabled?
- | What reports should user departments & Infection Control receive?



Maintenance should
support clinical outcomes
with a focus on better
infection prevention and
control



VACIC

- | Maintenance of critical areas was first raised at VACIC in August 2006 when it was included as a future agenda item.
- | VACIC is auspiced by the Statewide Quality Branch
- | SQB commissioned the development of maintenance standards this year as part of an ongoing commitment for the improvement of health delivery



Statewide Quality Branch

- | The Statewide Quality Branch (formerly Quality and Safety Branch) is committed to playing a strategic role in delivering the best possible outcomes for all Victorians using healthcare services.



Statewide Quality Branch

- | The Statewide Quality Branch is the principal adviser to the Minister for Health and the Department of Human Services executive team for state wide policy development, planning, resource allocation and monitoring of performance in relation to the systematic improvement of safety and quality in healthcare.





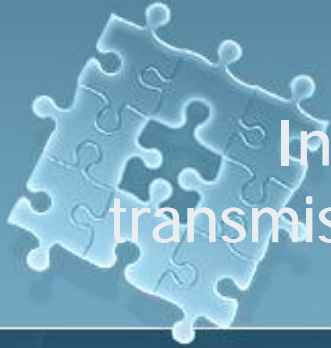
The issues

- | At present no maintenance standards or guidance exists for healthcare facilities.
- | Maintenance practices vary widely, from comprehensive planned maintenance systems to basic break down maintenance.



The issues

- | Industry consultation by DoH revealed a strong desire for a standardised approach to maintenance
- | Industry consultation by DoH deemed poor maintenance to be an infection control risk with a potential for increased hospital acquired infections.



Infection control guidelines for the prevention of transmission of infectious diseases in the health care setting

- I “The design, construction and renovation of health care establishments should take account of infection control and there should be a monitoring and maintenance program for the physical environment.
- I The importance of monitoring and maintaining the physical environment of a health care establishment should not be underestimated.



Infection control guidelines for the prevention of transmission of infectious diseases in the health care setting

- | “It is the responsibility of health care establishments to make equipment and systems (whether they are purchased, contracted, loaned or on trial) available, before they are used, to the engineering and building services department so that it may:
 - | undertake a safety and operational inspection;
 - | develop an appropriately scheduled preventive maintenance plan; and
 - | ensure that the equipment manufacturer’s instructions, where appropriate, are available to users.”



Infection control guidelines for the prevention of transmission of infectious diseases in the health care setting

- | It is the primary responsibility of the engineering and building services department to maintain the services, equipment and fabric of the establishment to a safe and usable standard.
- | Equally important is the maintenance department's role in ensuring that all facilities meet current standards, codes and regulations."





Maintenance

- I ASHRAE define maintenance as “the periodic servicing needed to preserve an asset in its original condition rather than to improve that asset”. If maintenance is deferred, the building or equipment will suffer a loss in function or will not efficiently perform the service for which it is used or may pose an increased risk to patients.



Maintenance

- | Planned preventive maintenance is the programming of maintenance tasks or schedules at specific intervals. In an air conditioning system it could include such tasks as checking the air filters, fans, coils and controls every three months.



Maintenance

- I Reactive maintenance is the principle of run to failure then repair or replace. Planned preventive maintenance mitigates the risk of a reactive approach, such as major equipment failure, but can be wasteful and does not prevent all failures.



Maintenance

- I A broad planned preventive maintenance program will increase the reliability of a health care facility's buildings and systems with less interruption to the provision of patient care.



Maintenance in the healthcare facility

- | Maintenance of a healthcare facility differs from almost all other types of buildings. The biological flora that are endemic to all health premises pose a risk to both patients and staff.



Maintenance in the healthcare facility

- | The design and maintenance of the building play a key role in controlling both the proliferation and dissemination of harmful organisms.
- | The best designed healthcare facility will cease to function to the design intent if the building is not maintained to the original specifications.





DoH maintenance standards

- | The maintenance standards closely follow the cleaning standards risk categories
- | The standards will determine minimum acceptable quality levels in the health industry
- | The standards will be a practical tool to improve infection control and clinical outcomes



Communication

- | Clear and open dialogue is essential to ensuring each client knows the full extent of services provided by the maintenance department / maintenance contract including service intervals.



Communication

- | Meaningful communication between departments can identify critical needs and expectations in both service design principles (what the client, including the patient, want and need) and governance principles (how the maintenance system should work).



Communication

- | It is vital to ensure clients understand what services can be provided to avoid confusion
- | The maintenance department is responsible for providing maintenance services within a predefined scope of works. The limits of the scope of works should be clearly articulated to each client to ensure clarity of the range and scope of services provided



Training

- | Conduct regular in-service training of maintenance staff including regular contractors
- | Incorporate infection control into contractor OHS induction
- | Build & maintain good relationships with infection control staff



Product evaluation

- | A formal product evaluation committee should evaluate all patient related plant and equipment prior to it being put into service. The evaluation should include a written risk management process that includes input from appropriate departments such as clinical units/ wards, engineering, infection control, occupational health and safety, clinical product advisor, biomedical engineering or supply





Audit & report

Maintenance audit program consists of

- | Physical audits
- | Desktop audits
- | Audit scoring system
- | Corrective action



Auditing

- | An auditing process will form part of the standard via an internal self audit system
- | Internal audits can be conducted by hospital staff



Reporting

- | Requirement for routine reporting to the client
- | Requirement for variance reporting to the client and infection control
- | Requirement for annual audit report
- | Issues have been raised relating to the format, frequency and process and report distribution (IC & client)



Functional areas included in risk category A

- | Operating Theatres: This may include procedure areas in other departments where significant invasive procedures are performed and patients are at a very high risk of infection.
- | Invasive procedure areas: Endoscopy and Catheter Laboratories
- | Intensive Care Unit (ICU)



Functional areas included in risk category A

- | Level 2 and Level 3 Nurseries
- | Special needs patient/area: areas with patients in protective isolation or who are immuno-suppressed, such as burns units and infectious disease units including negative pressure isolation
- | Central Sterilising Department (CSD)



Functional areas included in risk category B

- | Sterile stock storage
- | Emergency department
- | Pharmacy – clean areas including cytotoxic preparation suites
- | General wards: This includes Level 1 Nursery and CCU, oncology and dialysis units, delivery and birthing suites, and non-invasive treatment and procedure rooms.



Functional areas included in risk category B

- | Medical laboratories including anatomical pathology
- | Any area where a process or procedure would elevate that area to a high risk category an additional risk assessment is necessary, for example medical research involving dangerous chemicals, radiation or biological material.



Functional areas included in risk category B

- | Main food preparation kitchen
- | PC 3 laboratories
- | Dialysis units
- | Reverse osmosis filtration plants
- | Water filtration plant
- | Any area required to have a HEPA filter system, including biosafety and clean cabinets