Licensing Standards and Review Unit

Private hospital guidelines

Guidelines for the construction, establishment and Maintenance of private hospitals 20 July 1999

Architectural, Engineering and Fire Building Guidelines

Day Hospitals - Class B

August 2006

Government of Western Australia Department of Health

Delivering a **Healthy WA**

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G12 DAY HOSPITALS – CLASS B

The following are the minimum building standards for Day Hospitals licensed under the *Hospitals and Health Services Act 1927* (the Act) as a Day Hospital Facility where any elective surgical or medical procedure is performed under sedation, plexus blockade or Bier's Block and/or any procedure where there is an invasion of a sterile body cavity. These facilities are known as Day Hospitals - Class B.

The *Hospital and Health Services Act 1927* empowers the Chief Executive Officer, Director General of Health to license private hospitals and issue guidelines with respect to their construction, establishment and maintenance.

A "Day Hospital Facility" is defined in the *Hospitals and Health Services Act 1927* as *"premises that are not attached to, or, that are set apart from, a hospital being premises at which persons are received for professional attention or professional medical attention in a class of professional attention determined by the Minister under subsection (3) to be professional attention but not being premises at which overnight accommodation is provided".*

On 7 October 2005, the Government Gazette published the following Determination under section 2(3) of the Act.

Citation
This determination is the Hospitals and Health Services (Day Hospital Facility) Determination 2005.

Services that are "professional attention"

(1) The following professional medical services are determined to be professional attention for the purposes of the definition of "day hospital facility" in section 2 (1) of the Act -
   (a) any procedure that involves the administration of a general, spinal or epidural anaesthetic;
   (b) any procedure performed under sedation, plexus blockade or Biers Block;
   (c) any procedure that involves the invasion of a sterile body cavity;
   (d) peritoneal dialysis and haemodialysis for the treatment of end stage renal failure.

(2) In this clause –
"procedure" means an elective surgical or medical procedure.

Determinations revoked

The following determinations are revoked –

(a) Determination published in the Gazette on 31 December 1993, p. 6887;
(b) Hospitals and Health Services (Day Hospital Facility) Determination 2002 published in the gazette on 26 April 2002, p. 2167.

GLOSSARY OF TERMS

"Bier's Block" – an intravenous injection of a high dose of local anaesthetic under tourniquet, to produce regional anaesthesia/analgesia to a limb.

"Plexus Blockade" – anaesthesia produced by the injection of a high dose of local anaesthetic around a major nerve or nerve plexus.

"*Sedation*" - sedation for diagnostic, interventional medical and surgical procedures (with or without local anaesthesia) include the administration by any route or technique of all forms of drugs, which result in depression of the central nervous system. The objective of these techniques is to produce a degree of sedation of the patient, without loss of consciousness, so that uncomfortable diagnostic and surgical procedures may be facilitated. The drugs and techniques used should provide a margin of safety, which is wide enough to render loss of consciousness unlikely. Loss of consciousness due to sedation has the same risks as general anaesthesia.
Reference - ANZCA Document PS9 (2001) Guidelines on Conscious Sedation for Diagnostic, Interventional Medical and Surgical Procedures

"*Conscious sedation*" - a medically controlled state of depressed consciousness that accomplishes the following:

- retains the patient's ability to maintain a patent airway independently and continuously;
- permits appropriate response by the patient to physical stimulation or verbal command; and
- maintains protective reflexes.

Reference - Joan Burg MD, Director, Assistant Professor, Department of Emergency Medicine, Division of Paediatric Emergency Services, Stanford University Medical Centre

"*Deep sedation*" - a medically controlled state of depressed consciousness or unconsciousness with the following characteristics:

- the patient is not easily aroused. Sedation may be accompanied by partial or complete loss of protective reflexes, including the ability to maintain a patent airway independently; and
- the patient responds purposefully to physical stimulation or verbal command.

Reference - Joan Burg MD, Director, Assistant Professor, Department of Emergency Medicine, Division of Paediatric Emergency Services, Stanford University Medical Centre

"*Anxiolysis*" - refers to the administration of oral benzodiazepines in accordance with manufacturer's guidelines for the purpose of alleviating anxiety associated with interventional or diagnostic procedures. Anxiolysis alone does not constitute sedation for the purposes of this document.
Reference - Dr Steve Watts, FANZCA

"*Specified Sterile Body Cavity*" - cranial cavity; spinal cavity; thoracic cavity; abdominal cavity; pelvic cavity.

APPLICATION

The Private Hospital Guidelines (PHG) apply to new, existing and remodelled facilities. The guidelines specify the facility standards to be observed. This Section G12 was included in the Revised Edition January 2006 to accommodate the Day Hospitals – Class B.

The facility building development process must adhere with the Licensing Standards and Review Unit (LSRU) Building Policies and Procedures. The procedures associated with the facility building development process are clearly identified in the LSRU Approval of the Premises – Building Approval Flow Chart Health Care Facility (as determined by the Hospitals and Health Services Act).

The PHG present a set of minimum requirements. All building services shall be to the relevant requirements of Australian Standards and the Building Code of Australia. The Department of Health approval does not negate the need to comply with the requirements of other statutory authorities, e.g. Water Corporation, Western Power, Local Authority, Alinta Gas, DCEP, EPA, FESA etc.

G12.1 GENERAL

To assist with the design of Day Hospitals - Class B, a Patient Flow Diagram and a Design checklist are included in the PHG - Sections G11.10 and G 11.11.

G12.1.1 The construction standards, finishes, minimum corridor widths, ceiling heights, door sizes, hardware requirements and window details, shall comply with PHG - Sections B2 and B3 'construction and design standards' and 'finishes' respectively.

G12.1.2 The number, size and function of all rooms available in the facility shall be consistent with the statement of function (e.g. services to be provided, "maximum number of patients to be treated at any one time" and number of staff), delivery of safe patient care and emergency access and egress.

G12.1.3 All treatment, recovery areas and toilets shall be adequate in size and function to:

- ensure patient safety;
- enable staff to carry out their duties; and
- to provide privacy and confidentiality for patients.

G12.1.4 The corridors shall be wide enough to allow access for a trolley/wheel chair. (PHG - Section B2.3).

G12.1.5 The finishes of walls, floors, ceilings and soft furnishings in the facility shall comply with the PHG –Section B3.

G12.1.6 Acoustic issues need to be addressed throughout the design process to ensure that patient privacy and confidentiality are provided. Refer to PHG – Section B5.2.

G12.1.7 Appropriate and comprehensive sign posting is provided to clearly identify staff, patient and visitor areas to comply with PHG - Section B13.

G12.1.8 A safe and secure environment shall be provided for patients and staff to comply with PHG – Section B14.

G12.2 FUNCTIONS

The facility shall provide for the following functions:

- reception/waiting;
- patient change area where necessary;
- medical/surgical treatment;
- clinical nursing care;
- recovery;
- nurse call system for patients;
- patient privacy and confidentiality;
- pantry facilities for staff/patients;
- patient & staff toilets/showers, including disabled facilities;
- sterilising facilities;
- discrete clean and dirty areas;
- storage for general consumables;
- stock delivery; and
- control of waste.

G12.3 INFECTION CONTROL

G12.3.1 All areas of the facility shall be designed, constructed, furnished and equipped in keeping with the principles of infection control. Refer to PHG – Section G1.4.

G12.3.2 Hand washing facilities shall be provided in all clinical and patient care areas where hygiene is essential. Clinical hand washing facilities shall be equipped with lever action taps, soap dispensers and a method for drying hands. There shall be access to hand washing for the clean and dirty utility areas.

G12.3.3 Configuration/layout and workflows meet the requirements of all facility operations and ensure delineation of "clean and dirty" areas.

G12.3.4 All construction and fit-out shall be in accordance with Infection Control Guidelines. This will include ventilation, air-conditioning, soft furnishings, floor coverings, waste management, cleaning and the provision for cleaning and sterilising of equipment.

G12.4 GENERAL REQUIREMENTS

These requirements depend on the specific functions of the facility as outlined in the Statement of Function.

G12.4.1 **Configuration/Layout**
Movement of patients, staff and materials/equipment shall be demonstrated and show clear lines of delineation between them.

Configuration/layout and workflows meet the requirements of all facility operations and ensure separation of "clean" and "dirty" areas.

G12.4.2 **Endoscopy Units**

The design and planning of the Endoscopy Units shall be as for an Endoscopy Unit (PHG - Section G11.8).

G12.4.3 **Waiting Room**

- There shall be a waiting area.
- There shall be access to public toilet facilities.
- There shall be facilities for wheel chair access.
- There shall be a reception desk.
- Dependant on functionality of the facility an interview room/cubicle area for privacy for patients may be required.

G12.4.4 **General Office**

- There shall be an office, which may be multi functional, which is separate from patient areas.
- There shall be a secure and fire proof storage for medical records. (PHG - Section G6.2).
- There shall be storage for stationery and administrative equipment and supplies.

G12.4.5 **Change Facilities**

- There shall be adequate facilities for patient and staff to change where there is a need.
- Secure storage shall be provided for patient and staff belongings.

G12.4.6 **Patient Holding Area**

- A pre-procedure patient holding area shall be provided to accommodate patient waiting for procedure or treatment. This may be the waiting area if no change of clothing is required.

G12.4.7 **Scrub-up Facility**

- A scrub-up facility shall be provided where there is a procedure room.

G12.4.8 **Set-up Area**

- An area where set-up will occur shall be delineated, if set-up does not occur in the procedure/treatment room.

G12.4.9 Procedure Room

- Procedure room/s, unless specified otherwise, shall have a preferred clear floor area of a minimum of 25 square meters, exclusive of any built in items, shelves etc.
- Minimum ceiling height of the procedure room/s shall be 2.7 meters, however where ceiling pendants are installed the minimum ceiling height shall be 3 metres.
- The procedure room/s shall be suitable for the procedures being performed and be of adequate size for the equipment, staff and patient.
- The procedure room/s shall be of a suitable size to allow for the resuscitation of a patient.
- Adequate lighting to all procedure rooms shall be provided to allow procedures to be performed safely (Refer to Section G12.6).
- There shall be patient monitoring equipment, e.g. pulse oximetry.
- There shall be oxygen and suction available, reticulated gases are preferred (Refer to Section G12.5).
- There shall be general power outlets with Residual Current Detection for all equipment used in the procedure room (Refer to Section G12.6).
- A call system (e.g. patient, staff assist, emergency, duress) shall be provided to all patient and staff areas (Refer to Section G12.6).
- The lighting shall be connected to the uninterrupted power supply (Refer to Section G12.6).
- The floor shall be non-slip and not carpeted (PHG – Section B3.4 & B3.5).
- The walls shall be of a finish, which facilitates ease of cleaning (PHG – Section B3.1).

G12.4.10 Treatment Room

- Treatment room/s, unless specified otherwise, shall have a preferred clear floor area of a minimum of 14 square meters, exclusive of any chairs, desks and built in items, shelves etc.
- Minimum ceiling height of the treatment room/s shall be 2.7 meters.
- The treatment room/s shall be suitable for the procedures being performed and be of adequate size for the equipment, staff and patient.
- The treatment room/s shall be of a suitable size to allow for the resuscitation of a patient.
- There shall be ready access to a clinical hand washing facility.
- Adequate lighting to all treatment rooms shall be provided to allow treatments to be performed safely (Refer to Section G12.6).
- There shall be patient monitoring equipment, e.g. pulse oximetry.
- There shall be oxygen and suction available, reticulated gases are preferred (Refer to Section G12.5).
- There shall be general power outlets with Residual Current Detection for all equipment used in treatment room (Refer to Section G12.6).

- A call system (e.g. patient, staff assist, emergency, duress) shall be provided to all patient and staff areas (Refer to Section G12.6).
- The lighting shall be connected to the uninterrupted power supply (Refer to Section G12.6).
- The floor shall be non-slip and not carpeted (PHG – Section B3.4 & B3.5).
- The walls shall be of a finish, which facilitates ease of cleaning (PHG – Section B3.1).

G12.4.11 Recovery Area

- There shall be a designated recovery area with three spaces per procedure room, if the facility has more than one patient undergoing a procedure consecutively [PHG – Section G 11.7(g)].
- The minimum width of a cubical shall be 1800 mm [PHG – Section G4.4.4 & G11.7 (f)].
- There shall be privacy curtains between each space.
- There shall be resuscitation equipment readily available.
- There shall be easy access to a toilet.
- There shall be access to a shower as appropriate.
- There shall be access to oxygen and suction for the patients, reticulated gases are preferred (Refer to Section G12.5).
- There shall be a nurse call system available (Refer to Section G12.6).
- There may be a discharge lounge (3rd stage recovery area) if considered necessary for the type of procedures being carried out.
- There shall be an adequate write up area.
- There shall be easy access to clean and dirty utility areas.
- There shall be access to hand washing facilities.
- The lighting shall be connected to the uninterrupted power supply (Refer to Section G12.6).

G12.4.12 Patient toilet/s

- A unisex toilet complying with AS 1428.1 shall be provided for patient use. This shall be located in close proximity to the treatment/recovery area.
- There shall be an appropriate number of toilets for patients and staff use.

G12.4.13 Sterilising facilities

- Sterile supply either onsite or contracted out must comply with current standards AS 4815, AS 4187, AS3789.2 and NCCTG.
- If sterilising equipment is undertaken on site refer to PHG – Section G7.5.
- There shall be a discrete area for sterilising instruments and equipment (PHG – Section G7.5).
- Adequate storage for sterile stock must be on hand for the maximum demand of the services provided at the facility.

G12.4.14 Clean Utility

- There shall be a room/area for the storage and preparation of medical consumables which shall be readily accessible to staff working in the patient area.
- The fit out of this area may vary depending on the function of the facility.
- There shall be a discrete room/area for the storage of medical equipment.
- Medication storage shall comply with the relevant legislation, i.e. Schedule 8 drugs in a locked medicine cupboard, and drug refrigerator is locked or in a secure area (PHG – Section G2.1.3 (c)).
- Hand washing facilities shall be provided.

G12.4.15 Dirty Utility Room

- There shall be discrete room/area for decanting, and for washing and drying instruments and equipment.
- The fit out of this area may vary depending on the function of the facility.
- Movement of staff and equipment shall show clear lines of delineation between clean and dirty areas.
- There shall be an area for the storage of rubbish and sharps disposal. Regular pickup and disposal routines are to be assured.
- There shall be adequate storage for cleaning equipment.
- Hand washing facilities shall be provided.

G12.4.16 Food and Beverage Preparation

- There shall be an area provided for the preparation and serving of drinks and this shall include the facility for washing crockery.
- If food is to be prepared for patients a special designated pantry area shall be provided for this purpose, which shall include refrigerator, sink, tea/coffee making equipment, storage and access to hand washing facility.

G12.4.17 Storage

- Storage shall be provided for facility equipment, linen and other clinical and medical consumables.

G12.4.18 Specimen Storage

- There shall be designated space for the storage of specimens.

G12.4.19 Cleaner's Room

- A dedicated cleaner's area shall be provided with sufficient space for the storage of cleaning machines, cleaning equipment and cleaning trolley.
- The fit out of this area may vary depending on the function of the facility.
- A method for the disposal of fluids and used cleaning materials shall be available.
- Hand washing facility shall be available.

G12.4.20 Waste Bin Storage Area

- External waste bin storage area shall be provided. The arrangements for washing bins shall be detailed in an operational policy.
- Clinical/medical waste shall be kept in a secure area.

G12.4.21 Service Delivery Area

- An area with discreet access to the facility or operational policy shall be provided for the delivery and decanting of medical supplies, equipment and general consumables, or an operational policy shall be provided for the management of this service.
- The fit out of this area may vary depending on the function of the facility.

G12.4.22 Ambulance Access

- There shall be ambulance access to enable patient pickup. This access shall be easily accessible to the exit door. The arrangements for ambulance access shall be detailed in an operational policy.

G12.4.23 Parking Provision

- Parking for patients and staff including disabled parking shall be provided for the facility. The arrangements for patient "drop off/pick up" shall be detailed in an operational policy.

G12.5 MECHANICAL SERVICES REQUIREMENTS

G12.5.1 Scope

This section of the Day Hospital – Class B Building Guidelines details the requirements for the building's mechanical services. Mechanical Services include the following:

- air conditioning systems and associated air handling, filtration and heating/cooling plant;
- other forced air ventilation systems either supplying outside air into a space or exhausting air from a room;
- reticulated medical gases including oxygen, medical suction, breathing air, tool air, nitrous oxide or mixtures of these.

G12.5.2 Air Conditioning Design

G12.5.2.1 In order to assure the comfort of patients and staff, air conditioning must be provided to all occupied areas of the facility. The air conditioning systems must be designed to maintain temperatures in the range 19 to 24 °C.

G12.5.2.2 The design of the system must take into account the following parameters. If the premises are leased then the "base building" systems provided by the landlord must be modified to take account of these parameters:

- heat gain and loss from windows, wall, roof and any suspended floor taking into account final window treatments and floor coverings based on external temperatures for the geographical location as published by the Australian Institute of Refrigeration, Air Conditioning and Heating (A.I.R.A.H) for comfort applications;
- the heat output from all lighting installed in the facility;
- the heat output from all equipment likely to be used at one time on the facility including all medical and office equipment;
- the quantity of outside air required to be introduced to maintain adequate indoor air quality and pressure differentials;
- the quantity of outside air likely to infiltrate into the occupied space (may be negligible if sufficient outside air is introduced through the air conditioning system).

G12.5.2.3 Compliance of the installed system with these parameters must be confirmed in writing by the designer of the air conditioning systems making particular reference to any modification that may have been made to "base building" systems.

G12.5.3 Air Filtration

G12.5.3.1 All air supplied into occupied areas by air conditioning or forced air ventilation systems must be filtered to remove particulate matter to ensure adequate indoor air quality. The quality of filtration required is defined below in terms of filter type, class and rating in accordance with AS 1324.1

G12.5.3.2 Air delivered to treatment, procedure, recovery rooms and any area where sterile packs may be opened shall be filtered to at least Type 1 Class F6. This level of filtration cannot be provided through wall or ceiling mounted

split type units and fully ducted systems with panel filters to the class above are required to minimise particulate matter in the air and the associated risk of infection during procedures and recovery.

G12.5.3.3 Details of the filter manufacture and associated efficiencies and technical data may be requested to demonstrate compliance.

G12.5.3.4 Where the procedure being carried out involves the exposure of sterile body cavities directly to the air into the room then a higher level of filtration will be required to minimise the risk of infection.

G12.5.3.5 All other occupied areas shall be provided with filtration to at least Type 1 Class G4.

G12.5.3.6 Provision must be made in system design and installation to allow filters to be maintained on a regular basis.

G12.5.4 Outside Air Introduction

G12.5.4.1 Outside air must be positively introduced upstream of filters into all air conditioning systems serving patient areas to maintain adequate indoor air quality. The rate of introduction must be in accordance with AS 1668.2, which generally requires air to be introduced at a rate of 10 l/s/person. Rates lower than this figure are acceptable if a higher level of filtration is provided (refer to AS 1668.2).

Higher levels of outside air introduction may be necessary to provide make up air to match or exceed exhaust rates where areas adjacent air conditioned spaces are exhausted (e.g. toilet or change areas).

G12.5.4.2 An evaluation of the balance of outside air supplied to the amount exhausted must be carried out, as well as verification the airflow is from "clean" areas to "dirty". The designer of the air conditioning and ventilation systems shall certify this evaluation.

G12.5.4.3 The location of outside air intakes shall be in accordance with AS 1668.2 and accordingly must be remote from exhaust points or any other potential source of contamination.

G12.5.5 Exhaust Provision

G12.5.5.1 The following areas must be provided with exhaust air to prevent air borne contaminants being recirculated back into the air conditioned spaces. The exhaust rates shall be in accordance with that required by AS 1668.2:

- toilet/showers areas;
- change rooms;
- procedure, treatment or recovery areas that have any form of anaesthetic gases being utilised;

- local exhaust via fume arm to any procedure releasing harmful or odorous contaminants such as laser treatment;
- local exhaust to any area where containers of hazardous chemicals such as those used for treating, preserving or sterilising samples or equipment;
- dirty utility area;
- food preparation areas;
- areas occupied by heat or odour producing equipment.

G12.5.5.2 Allowance must be made for make up air to all exhaust systems to come from either air conditioning systems or separate supply air system. Relief air grilles or transfer ducts must be provided for this purpose.

G12.5.5.3 Where the exhaust is removing contaminants that are considered harmful or offensive the exhaust shall be extracted from a specially designed hood or enclosure that minimises the risk of either patients or staff being exposed to the contaminant. The discharge of these exhausts shall be vertical and located at least one metre above the roof top or as required by the relevant codes. In some instances it may be necessary to treat the discharge to remove the offending contaminant.

G12.5.5.4 Exhaust from low level (i.e. within 150 mm of the floor) must be provided in any room where anaesthetic or sterilising gases are used.

G12.5.6 Noise Levels

G12.5.6.1 Attention must be paid to minimising the noise produced by mechanical services equipment so that it does not cause discomfort or annoyance to staff or patients.

G12.5.6.2 Equipment located in ceiling spaces or within the occupied space will potentially introduce unacceptable noise levels into the occupied spaces. As a consequence the equipment must be selected or treated so that noise levels in the occupied spaces are kept below 45 dbA and below 40 dBA in treatment rooms and recovery areas. Equipment located outside must also be located and selected to ensure these noise levels are not exceeded in the occupied areas.

G12.5.7 Medical Gases

G12.5.7.1 Where medical gases are regularly used in procedures or recovery they must be installed by an authorised installer in accordance with AS 2896.

G12.5.7.2 Exhaust from low level (i.e. within 150 mm of the floor) must be provided in any room where anaesthetic or sterilising gases are used.

G12.6 ELECTRICAL SERVICES REQUIREMENTS

G12.6.1 Scope

This section of the Day Hospital Facility – Class B Building Guidelines details the requirements for the building's electrical services. Electrical Services include the following:

- supply and reticulation of electrical power to lighting and equipment;
- artificial lighting both internal and external;
- assistance call systems;
- telephone, intercom and paging systems; and
- access control and security monitoring.

G12.6.2 Power Supplies

G12.6.2.1 Provision shall be made in all facilities for some equipment and lighting to be supplied from Uninterruptible Power Supplies (UPS). The items required to be connected are detailed below:

- surgical lights in treatment/procedure rooms;
- at least two designated outlets in treatment/procedure rooms for computers/medical equipment essential to the procedures being undertaken; and
- any computer equipment considered to be essential for the operation of the business.

G12.6.2.2 The UPS shall comprise a packaged proprietary system with battery back up, sufficient for at least 10 minute operation based upon full load or longer if no back up supply from a generator or second source of supply is provided. The period of supply greater than 10 minute shall be based on the period required for the procedure to be completed or safely terminated. The UPS shall be regularly maintained and tested and housed in a secure lockable location. The UPS shall have a bypass switch or bypass facility, such that the UPS can be switched off, and the outgoing supply from the UPS be transferred back to the main supply in the event of the UPS failure, until the UPS is replaced or rectified.

G12.6.2.3 If the treatment/procedure rooms and the recovery room areas do not have any natural light then other lighting in the treatment and procedure rooms and 50% lighting in recovery shall also be connected to the UPS unless a second power supply from an on site generator is provided. The rating of the UPS must suit and the period of operation should be greater than 10 minutes as specified in Clause 12.6.2.2. Alternatively, the lighting can be provided with emergency lighting kits, as per clause G12.8.7 for Emergency Lighting. For this situation the emergency lighting must remain on for 90 minutes minimum. Thus the rating of the UPS can remain, as before, that is 10 minutes.

G12.6.3 **Electrical Circuit Protection**

G12.6.3.1 Residual current device (RCD) protection shall be provided for general-purpose power outlets except for:

- outlets on isolated supplies;
- outlets serving non-portable devices such refrigerators, freezers and similar equipment items that are plugged in and not subject to being regularly moved. Where socket outlets are not RCD protected, they shall be engraved as such and be identified as to purpose; i.e. Refrigerator Only, Boiling Water Unit Only, etc.

G12.6.3.2 When staff who do not have electrician's licences are required to reset RCD the reset button shall be in or adjacent to the room where the trip originated and located in a logically consistent way so that staff can easily find them.

G12.6.3.3 Where treatment rooms are provided the room must be body protected in accordance with AS 3003 for electrical installation in electrical areas.

G12.6.4 **Electrical Wiring**

All electrical wiring shall be in accordance with the BCA and Wiring Regulations (AS 3000) and installed by a licensed electrical contractor.

All switchboards and submains shall be locked and not accessible to general staff or patients.

G12.6.5 **Lighting**

G12.6.5.1 General:

- Artificial lighting shall be by means of electricity and the luminance levels shall comply with AS/NZS 1680.
- Maintained luminance levels in excess of 400 lux shall be provided in all procedure or treatment rooms.
- Lighting in all procedure/treatment and recovery rooms and areas for clinical observation (for detection of cyanosis) shall comply with the recommendations of AS/NZS 1680.2.5. Standard fluorescent office lighting does not provide appropriate colour rendition for this purpose.
- Luminaries requiring special lamps shall be fitted with labels, visible to the person changing lamps, defining the type of lamp required.

G12.6.5.2 Surgical Lighting: Surgical and treatment luminaries shall comply with the requirements of AS/NZS 3100, AS 3137, AS 3200 or alternatively IEC 598-2-25.

G12.6.5.3 Kitchen Lighting: Lighting in food preparation areas shall be flush mounted behind sealed diffusers.

G12.6.5.4 Emergency Lighting: Emergency lighting in accordance with AS/NZS 2293 Part 1, shall be provided in all toilets, change rooms, procedure rooms, treatment rooms, recovery areas as well as any other areas required by the BCA and provided as part of the overall building requirements.

G12.6.5.5 External Lighting: External paths of travel from each exit, including emergency exits, to a public thoroughfare or open space shall be illuminated in accordance with AS/NZS 1158.

G12.6.6 **Assistance Call Systems**

G12.6.6.1 Provide an assistance call system with push button pendant facilities at each recovery bed, in each cubicle of the patient toilet areas and in the procedure/treatment rooms.

G12.6.6.2 The system shall differentiate between a patient call and a staff call and shall:

- raise audible and visual assistance alarms at destinations where there will always be competent assistance resources available;
- identify the source of the alarm;
- maintain the alarm until cancelled at source;
- provide reassurance indication at source that the alarm has been transmitted; and
- have a distinct alarm signal that will not be confused with other alarms.

G12.6.7 **Access Control and Security Monitoring**

G12.6.7.1 The following areas shall be provided with electronic access control and security monitoring:

- access door to drug cabinets;
- access beyond waiting/reception areas;
- all emergency access/egress doors.

G12.6.7.2 The system shall be provided with 24 hour monitoring by a monitoring service.

G12.6.8 **Commissioning and Certifications**

Provide all commissioning data and certifications to demonstrate compliance with the following:

- electro-medical power supplies comply with AS/NZS 3003;
- the low voltage installation to comply with AS/NZS 3000;
- generating plant to comply with AS/NZS 3009;
- uninterruptible power supplies to comply with AS/NZS 3009.

G12.7 HYDRAULIC SERVICES REQUIREMENTS

G12.7.1 Scope

This section of the Day Hospital Facility – Class B Building Guidelines details the requirements for the building's hydraulic services. Hydraulic (or plumbing) Services include the following:

- potable water reticulation;
- domestic hot water generation and reticulation;
- sanitary drainage; and
- water treatment.

G12.7.2 Water Supply

G12.7.2.1 All water supplies shall be supplied and installed by a licensed plumber and the plumber shall provide written certification that the installation complies with AS 3500.

G12.7.2.2 The water supplies to the slop hopper, sink or other washing equipment in any dirty utility area shall be provided with backflow prevention devices by a licensed plumber in accordance with AS/NZS 3500.1.2 *National plumbing and drainage - Water Supply – Acceptable Solutions.*

G12.7.2.3 Where water is used for dialysis it shall be treated by filtering, carbon adsorption and reverse osmosis to meet at least the standards detailed in the private hospital guidelines.

G12.7.3 Potable Hot Water

G12.7.3.1 Where hot water is used for hand washing or is used during a procedure then the hot water production plant shall have storage capacity to allow continued operation during equipment or power supply failure.

G12.7.3.2 Hot water shall be produced at 60°C (AS 3666) but hand basins/showers shall be provided with thermostatic mixing valve at hand basins/showers set to avoid temperatures at faucet exceeding 45°C.

G12.7.3.3 Where hot water serves food preparation areas and dishwashing facilities rinse water temperature shall be 70°C.

G12.7.3.4 The hot water piping shall be installed with no dead leg exceeding 8m.

G12.7.4 Tapware

G12.7.4.1 Tapware to any clinical hand basin shall be either lever arm type or utilise sensor, operated water supply so that hand basins can be used without touching the tapware by hand.

G12.7.4.2 Tapware to any scrub up basins shall use tapware operable by the elbow or use sensor operated water supply.

G12.7.5 **Sanitary Drainage**

G12.7.5.1 All sanitary drainage shall be supplied and installed by a licensed plumber and the plumber shall provide written certification that the installation complies with AS 3500.

G12.7.5.2 Floor wastes shall not be installed in recovery, procedure, treatment or consulting rooms to simplify decontamination of these areas when required.

G12.7.5.3 Provide adequate overflow relief to minimise back flow into buildings. Floor wastes, shower wastes and the like should connect to overflow relief gullies or disconnector gullies.

G12.8 FIRE SAFETY REQUIREMENTS

G12.8.1 **Scope**

This section of the Day Hospital Facility – Class B Building Guidelines details the requirements associated with the building's fire safety provisions.

Where the Day Hospital Facility is located within an existing building the fire safety provisions shall be in accordance with the fire safety strategy for the entire building and where appropriate incorporate but not be limited to the fire safety measures described herein.

The scope of the fire safety provisions include such design elements as:

- compartmentation;
- egress;
- fire fighting equipment:
    (a) fire hydrants
    (b) fire hose reels
    (c) fire suppression systems
    (d) fire detection and alarm systems
    (e) portable fire extinguishers and fire blankets
- smoke hazard management;
- lift installations;
- emergency lighting installation:
    (a) emergency lighting
    (b) exit signage
- emergency warning systems;
- emergency management procedures;
- commissioning and certification; and
- maintenance of fire safety systems.

G12.8.2 **Compartmentation**

Fire and smoke compartmentation shall be provided in accordance with the BCA and incorporate the following minimum requirements:

G12.8.2.1 Day Hospitals shall be divided into fire compartments of not more than 2000m^2. Fire-resisting walls shall be constructed in accordance with the requirements of the BCA.

G12.8.2.2 Day Hospitals shall be divided into floor areas of not more than 1000m^2 by smoke-proof walls complying with Specification 2.5 of the BCA.

G12.8.2.3 Where the Day Hospital Facility forms part of a building, other than a 9a Healthcare building, it shall be separated from the remainder of the building by smoke-proof walls complying with Specification 2.5 of the BCA.

G12.8.2.4 All openings within the fire-resisting or smoke proof compartmentation shall be appropriately sealed with a tested system in accordance with the requirements of the BCA and relevant Australian Standards.

G12.8.2.5 Where the Day Hospital Facility is located within an existing building the fire compartmentation provisions shall be in accordance with the requirements for the entire building.

G12.8.3 **Egress**

Egress provisions shall be provided to enable the safe egress of building occupants.

Egress provisions shall be in accordance with the requirements of the BCA and include the following minimum requirements:

G12.8.3.1 No point on the floor must be more than 12m from a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of the exits must not be more than 30m from the starting point.

G12.8.3.2 Clear door openings in corridors shall suit the requirements of traffic and equipment movement but shall not be less than 1200mm.

G12.8.3.3 Alternative exists shall be uniformly distributed in accordance with the requirements of the BCA and located such that the exits are not more than 45m apart.

G12.8.4 **Fire Fighting Equipment**

G12.8.4.1 Fire Hydrants:
Fire hydrants shall be provided (where appropriate) in accordance with the BCA and installed in accordance with AS2419 Part 1.

G12.8.4.2 Fire Hose Reels:
Fire hose reels shall be provided (where appropriate) in accordance with the BCA and installed in accordance with AS2441.

G12.8.4.3 Fire Suppression Systems:
Automatic fire sprinklers shall be provided (where appropriate) in accordance with the BCA and installed in accordance with AS2118 Part 1.

G12.8.4.4 Fire Detection and Alarm Systems:
Automatic fire detection and alarm shall be provided (where appropriate) in accordance with the BCA and installed in accordance with AS1670 Part 1.

Where an automatic fire detection and alarm system is provided, the following additional requirements shall be incorporated:

G12.8.4.4.1 photo-electric type smoke detectors shall be installed in patient care areas and alternate photo-electric and ionisation detectors must be installed in paths of travel to exits from patient care areas;

G12.8.4.4.2 manual call points must be installed in evacuation routes so that no point on the floor is more than 30m from a manual call point.

G12.8.4.5 Portable Fire Extinguishers and Fire Blankets:
Portable fire extinguishers and fire blankets shall be provided (where appropriate) in accordance with the BCA and AS2444.

G12.8.4.5.1 A Class E portable fire extinguisher shall be provided at each nurse, supervisor's station or the like.

G12.8.5 Smoke Hazard Management

A system of smoke hazard management shall be provided appropriate to the size and design of the Day Hospital Facility.

G12.8.5.1 Where the Day Hospital Facility is located within an existing building the smoke hazard management provisions shall be provided in accordance with the requirements for the entire building.

G12.8.5.2 The smoke hazard management system shall be designed to prevent the spread of smoke from other areas of the building to the Day Hospital Facility.

G12.8.5.3 Air-handling systems serving the Day Hospital Facility, which does not form part of a zone smoke control system shall automatically shutdown in accordance with the requirements of AS/NZS 1668 Part 1, with the exception of:

- individual room units with a capacity of not more than 1000 L/s;
- systems serving critical treatment areas; and

- miscellaneous exhaust air systems in accordance with Sections 5 and 11 of AS/NZS 1668 Part 1.

G12.8.6 **Lift Installation**

When required by building configuration lift services shall provide throughout the life of the facility.

G12.8.6.1 Lifts shall be installed and shall provide safe vertical transport for all conditions of patient and all goods required on each level occupied by the facility.

G12.8.6.2 Lift car size shall accommodate the length of an occupied emergency trolley as used by St. Johns Ambulance.

G12.8.6.3 Careful attention shall be given to contingencies of lift break down and mains power failure when assessing the number of lifts and the capacity of emergency power supplies needed for appropriate risk containment.

G12.8.7 **Emergency Lighting**

G12.8.7.1 Emergency lighting shall be provided in all Day Hospitals and located in accordance with the requirements of the BCA and AS2293 Part 1.

Refer to the Electrical Services Section for these Guidelines

G12.8.7.2 Exit lighting shall be provided in all Day Hospitals and located in accordance with the requirements of the BCA and AS2293 Part 1.

Refer to the Electrical Services Section for these Guidelines

G12.8.8 **Emergency Warning Systems**

Emergency warning systems shall be provided in accordance with the requirements of the BCA and AS1670 Part 4 and AS4428 Part 4.

G12.8.8.1 Where the Day Hospital Facility is located within an existing building the proposed emergency warning system shall be configured to compliment the existing evacuation strategy for the building.

G12.8.8.2 The system must be arranged to provide warning for occupants and in patient treatment areas. The alarm may be adjusted in volume and content to minimise trauma consistent with the type and condition of patients.

G12.8.8.3 Appropriate emergency evacuation procedures shall be developed for the facility and must give consideration to staffing levels, patients and the proposed occupant warning system for the facility.

G12.8.9 **Emergency Management Procedures**

All facilities shall prepare and maintain an adequate "Fire Safety and Evacuation Manual" and initiate and maintain effective evacuation procedures in relation to the manual for staff and patient safety.

G12.8.10 **Commissioning and Certification**

Provide all commissioning data and certifications to demonstrate compliance with the BCA and all relevant Australian Standards.

G12.8.11 **Maintenance of Fire Safety Systems**

All fire safety prevention and protection facilities shall be maintained in accordance with the relevant Australian Standards, where such exist. In their absence, manufacturers' recommendations shall set the standard.

Where fire suppression equipment is discharged, it/they shall be immediately serviced.

Portable extinguishing equipment shall not be returned to its mountings in a discharged condition.