

SAFETY

Introduction

790 .1.00 Safety and security issues are of prime importance as their neglect can generate considerable yet avoidable costs to Health Care Facilities if patients, staff or visitors are injured, or property is damaged or stolen. This section provides advice on the design of facilities to facilitate safety and security and minimise capital and recurrent costs. It also provides references for where specific information, such as on the selection of duress alarms, can be found.

790 .2.00 OHS ACT 2000

Section 8 of the Occupational Health and Safety (OHS) Act 2000 requires employers to ensure the health, safety and welfare of employees and others in the workplace. In complying with this requirement, the legislation demands that employers provide safe premises, work environment and plant. Note that the definition of 'plant' in OHS legislation includes any machinery, equipment or appliance and could be regarded to include furniture, fittings and equipment.

Employers are also required by the OHS Act 2000 to consult with employees on OHS and welfare matters. This includes consulting with employees when changes that may affect the health, safety or welfare of employees are proposed to premises or plant. Consultation must also occur during risk assessment and when decisions are being made on how to eliminate/control risks.

In effect this means that consultation with employees must occur prior to and during the course of planning and designing new premises or refurbishments, and prior to the purchase of FF&E.

Detailed information on how to consult can be found in the WorkCover Code of Practice 'OHS Consultation'.

790 .3.00 OHS REGULATION 2001

The OHS Regulation 2001 requires employers to identify hazards, assess risks arising from those hazards, and eliminate or control those risks. The Project Team, in consultation with employees, must therefore aim to identify, assess and eliminate/control any risks associated with the design of a facility and proposed FF&E prior to finalisation of the plans. This is consistent with the OHS Act requirements (as outlined above) to provide safe premises and plant.

790 .4.00 DESIGN ASPECTS

Design aspects of a project that may impact on health safety and welfare of employees and the health and safety of others in the workplace (eg patients and visitors) include:

+ Design of spaces so that manual handling risks are minimised giving particular attention to things such as:

- Slope (gradient) of ramps;
- Turning circles for equipment;
- Size of bathrooms;
- Placement of fittings (eg toilets so that nurse access to the patient is possible);
- Size of rooms;
- Location of services and fittings;
- Height and widths of doorways;

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- Floor coverings;
 - Changes in floor levels;
 - Location, size and design of storage spaces;
 - Fitting of door closers and door holders.
- + Ergonomics, ie matching of workplace design and layout to the human form and physical and cognitive capabilities. Examples are:
- Height, depth and width of workbenches;
 - Taking into account any equipment that may be used on the bench;
 - Positioning of pan and glove racks;
 - Positioning of viewing panels in doors;
 - Positioning of light switches and door handles;
 - Height of monitors;
 - Push/pull forces;
 - Ability to accommodate very obese (bariatric) patients who may need oversized equipment;
 - Design of reception counters;
 - Design of geriatric units for people with dementia;
 - Clarity of signage and directional cues.
- + Selection of FF&E to reduce risks to employees and others including compatibility of different types of FF&E with each other. Examples of these are:
- Drop down grab rails in Ensuite Bathrooms to allow staff access to patient;
 - Infill grab rails in Mental Health Units;
 - Compatibility of hoists with beds;
 - Emergency access to bedrooms and bathrooms/toilets/ensuites;
 - Tamper proof air conditioning outlets and light fittings in Mental Health Units.
- + Security issues such as:
- Access control;
 - Ability to observe Waiting Areas;
 - Application of CPTED (crime prevention through environmental design) principles;
 - Location of car parks and staff entries (including provision of parking for afternoon and night staff);
 - Lighting;
 - Organisation of HPU so that staff are not working in isolation especially when 8-hour operational areas close down for the day;
 - Design of reception counters;
 - Choice of glazing;
 - Location of security office;

- Location and installation of duress alarms in high risk areas and where staff may work alone in isolation;

- Location and installation of CCTV;

- Location and installation of intercoms;

- Design of waiting rooms;

- Provision of escape routes;

- Location of service panels;

- Resistance of building materials to assault.

+ Patient and visitor safety including designing the facility to minimise risks for patients who may be confused, disoriented or have cognitive or sensory impairment and patients who may be behaviourally disturbed or at risk of attempting self harm. Examples include:

- Design of stairwells to reduce risk of falls (either accidental or deliberate);

- Design of rooms to accommodate very obese patients and the over-sized equipment needed to provide them with health care;

- Design of doors (hinges) in mental health unit and dementia/aged care unit patient rooms;

- Choice of glazing.

- Choice of light fittings.

+ Infection control.

These design issues are discussed in more detail in each Unit Specific Guideline.

References and Further Reading

790 .5.00 Resources available include:

- + Design Guideline for Security;

- + Designing Workplaces for Safer Handling of Patients/Residents, WorkCover Vic, 1999;

- + Hoist selection checklist (under review);

- + Bed selection checklist (under review);

- + Better Practice Guide: Occupational health and safety;

- + Policy and Best Practice Guidelines for the Prevention of Manual Handling Incidents in NSW Public Health Services, Circular 2001/111, NSW Health, 2001;

- + Protecting People and Property: NSW Health Policy and Guidelines for Security Risk Management in Health Facilities, Circular 2003/92, NSW Health, 2003; (available from www.health.nsw.gov.au/audst/manuals/protecting-people-property.pdf);

- + Zero Tolerance Response to Violence in the NSW Health Workplace, Circular 2003/48, NSW Health, 2003;

- + Occupational Health and Safety Act 2000;

- + Occupational Health and Safety Regulation 2001;

- + DS36 NSW Health Guidelines Safety and Security, Circular 2003/13, NSW Health,

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2003;

- + OHS Consultation: Code of Practice 2001, WorkCover Vic, 2001;
- + Australian Standard AS4485.1 - 1997 Security for Health Care Facilities (Part 1 - General Requirements);
- + Australian Standard AS4485.2 - 1997 Security for Health Care Facilities (Part 2 - Procedures Guide).

Floor Finishes

- 790 .6.00 Safety Issues to be considered in the selection of floor finishes are covered under 'Floor Finishes - Floor Safety'.

Glazing

- 790 .7.00 Glazing shall be in accordance with Australian Standard 1288 as applicable to public buildings except that:
- + All glazing in balustrades shall comply with Part 1 Section 4.3.9 of the above standard, irrespective of the area or support of the glazing;
 - + Fully framed glazing to windows, doors partitions and screens, designed so that any part of the glass is less than 750 mm above the finished floor level, shall have such part glazed with safety glazing materials as defined under Clause 1.3.3 and in accordance with the size requirements of table 4.1 of the above standard.
- 790 .8.00 Doors, sidelights, borrowed lights and windows in which the glazing extends to within or below 450 mm above the floor, and are subject to possible breakage, shall be glazed with safety glass that will not create dangerous cutting edges when broken. Refer to AS 2208 - Safety Glazing Materials for Use in Buildings (Human Impact Considerations).
- Notwithstanding this, all entrance areas shall be glazed with safety glazing as these spaces can be the site for aggressive incidents.
- Glazing in Emergency Departments, Drug and Alcohol Units, Mental Health Units and Community Mental Health Facilities should be safety glazing - refer to specific Health Facility Guidelines for each of these Units.
- 790 .9.00 Safety glass shall also be used for wall openings in activity areas such as recreation and exercise rooms and for shower screens, internal doors and full height windows, including those in Paediatric, Acute Mental Health and Emergency Units.

Glutaraldehyde Use

- 790 .10.00 For detailed design and ventilation requirements for the use of glutaraldehyde in health care settings, refer to:
- + Australian Standards for Laboratory Fume Cabinets;
 - + AS/NZS 2243.8:2001 : Safety in Laboratories - Fume cupboards;
 - + AS/NZS 2243.9:2003 : Safety in Laboratories - Recirculating fume cabinets;
 - + NSW Health Circular 97/61 'Policy and Guidelines for the Safe Use of Glutaraldehyde in NSW Public Health Care Facilities' (currently under review).

Noise Reduction

- 790 .11.00 The design and construction should address Hearing Conservation aspects of the work environment. The major design issues to be considered include:
- + Workplaces should be designed to minimise the occupant's exposure to noise; noisy machines and activities should be remote or isolated from other work areas;

- + Noisy equipment should be acoustically enclosed where practicable;
- + Noisy work areas such as workshops should have acoustically absorbent ceilings to reduce the amount of noise other staff working nearby are exposed to;
- + Noise levels of equipment should be an integral part of equipment selection/purchasing procedures;
- + Consideration should be given to the impact of ultrasonic noise generation. (Refer to AS 2243 - Part 5).

790 .12.00 Note: Acoustic separation for privacy reasons is a different subject covered separately in these Guidelines.

Note: 'Nuisance' noise is also an issue as it can degrade patient comfort and impair staff function, even though it may not be of a sufficient level to cause hearing loss.

Noisy patient environments may also exacerbate the risk of aggression.

Insect Control

790 .13.00 External doors that open directly into food preparation areas and are used for service deliveries or regular access shall be fitted with air curtains, flexible doors or an equal control system to restrict the ingress of insects. Flyscreen doors, which can be propped open, and electronic insect traps within the kitchen, are not suitable as the only means of insect control.

For flyscreen requirements to door and window openings refer to 'Building Elements - Doors, and Windows' in these Guidelines. Flyscreens are generally required to all openable windows.

Patient Handling and Lifting

790 .14.00 Poor workplace and FF&E design are major contributing factors to staff and patient injuries, especially in patient rooms, toilets, bathing areas and corridors. These injuries are costly and preventable. Poor design may also increase patient dependency and negatively impact on productivity.

Restricted space may lead to constrained and awkward postures during handling tasks, and poor workplace design may lead to unnecessary or double handling of patients/residents. The design of FF&E including beds is also an issue.

The BCA addresses questions of access for independent disabled people, but it does not consider the extra needs of access for disabled people who require assistance or for the carers of disabled people.

790 .15.00 Given the requirements of OHS legislation to provide safe premises and plant, and to identify, assess and eliminate/control risks, the design of facilities should:

- + Facilitate the implementation of operational and other policies that aim to eliminate or reduce the need for patient handling and double handling, eg door and corridor widths should allow for a patient's bed to travel with them rather than force repeated transfers from bed to trolley;

- + Accommodate the storage and safe use of manual handling aids including patient hoists, commodes, wheelchairs, walking belts, slide sheets and patient scales. The quantity and size of equipment, functional space for use of equipment and storage close to proximity of use must be considered.

790 .16.00 To be consistent with OHS legislative requirements, these decisions should be taken in consultation with employees, eg direct care staff and business unit managers, in order to achieve the best solutions and a unity of commitment.

Patient Handling and Lifting

- 790 .17.00 For more details regarding functional requirements and operational issues in regard to patient handling, refer to the VIC WorkCover 'Designing Workplaces for Safer Handling of Patient/Residents' and to the section of these Guidelines that deals with FF&E.

Also refer to NSW Health Circular 2001/111 'Policy and Best Practice Guidelines for the Prevention of Manual Handling Incidents in NSW Public Health Services'.

Soft Furnishings

- 790 .18.00 Certain plastics and materials, in quantities, are known to produce large amounts of toxic gases. The use of these plastics and materials in mattresses, upholstery, floor coverings, curtains and other items, shall be avoided as far as practical.

- 790 .19.00 Cubicle screens, bed screens and curtains/window treatments shall be non-combustible or rendered flame retardant and shall comply with the Building Code of Australia, Section C1.10.

The fabric should be capable of withstanding Hospital standard laundry treatment without losing its fundamental properties.

SECURITY

Definition

- 790 .20.00 INTRODUCTION

Security risks can arise from two main sources:

- + Internal security risks - eg client and visitor related violence;
- + External risks - eg those who enter the premises/grounds with criminal intent such as thieves, vandals and those who plan to commit violent acts.

- 790 .21.00 OHS legislation demands that all risks of violence be identified, assessed and eliminated/controlled. It also makes good financial sense to address security risks.

The impact of security incidents can be considerable in human and financial terms and include:

- + Workers compensation claims;
- + Public liability claims;
- + Adverse publicity and reputation;
- + Personal costs to staff and visitors from theft and vandalism;
- + Recruitment and retention costs;
- + High maintenance costs, eg from vandalism of security lighting, CCTV and graffiti;
- + High insurance costs and cost of replacing stolen facility property.

- 790 .22.00 Effective planning and design is required to minimise and, where possible, eliminate foreseeable risks associated with the facility design.

This Guideline expands the principles for a safe and secure workplace as outlined in 'Protecting People and Property: NSW Health Policy and Guidelines for Security Risk Management in Health Facilities (2003/92)', 'Effective Incident Response: A Framework for Prevention and Management in the Health Workplace (2002/19)' and the 'NSW Health Zero Tolerance Response to Violence in the NSW Health Workplace (2003/48)'. This Guideline is complementary to these three documents.

PURPOSE AND SCOPE

These Guidelines are intended to assist in the identification of potential areas of risk and options for risk control that must be addressed during the planning, design and construction phases of a Health Facility Project.

They are directed towards the achievement of a safe, functional and affordable solution to the planning and design of Health Care Facilities.

The planning and design standards outlined in the section that follows should be regarded as the recommended standard to be achieved.

It is however recognised that in a number of circumstances, departure from the Guideline requirements will be necessary to meet operational requirements or to manage any unusual risks that might be specific to a particular circumstance or location. As for other departures from these Guidelines, these will normally be subject to documented justification and the subsequent Departmental approval process.

It should be noted that the Department cannot exempt facility capital developments from legislative requirements such as planning, environmental protection, OHS and discrimination laws.

Recurrent Costs

- 790 .23.00 The issue of 'recurrent costs' should be considered in the context of the provision of an appropriately designed and constructed safe working environment in a Health Care Facility. That is, the safety and security issues should be addressed during the planning process and incorporated into the 'structure' of the facility. If the planning and design process follows the requirements of this Guideline and undertakes an appropriate level of consideration of safety and security issues, there should be no significant increase in recurrent costs. In fact, addressing and minimising security risks may be expected to reduce costs.

Designers and managers need to recognise that recurrent costs also include injuries to staff, patients or other persons, or damage to property that may arise from poor design. In the case of safety and security issues, this includes the direct and indirect costs associated with crime and violence.

Crime Prevention Through Environmental Design

- 790 .24.00 Crime Prevention through Environmental Design (CPTED) is a situational crime prevention strategy that focuses on the design, planning and structure of cities and neighbourhoods. It aims to reduce opportunities for crime by employing design and place management principles that minimise the likelihood of essential crime ingredients from intersecting in time and space.
- 790 .25.00 NSW Health has developed the document DS36 'Health Facility Guideline - Safety and Security' (C2003/13) as part of its health building design and technical guideline series. Its purpose is to assist health facility planners and designers minimise security and safety risks by providing appropriately designed and built facilities, work spaces, building services and systems based on CPTED principles. The information it contains may also assist members of user groups during the construction and consultation process.
- 790 .26.00 CPTED is primarily accomplished through the work of architects, engineers, builders, landscape gardeners and those who develop purchasing procedures.

The four main CPTED principles are:

+ 'Territorial reinforcement' which stimulates community ownership and policing. It includes maintaining the space so that it has a clean and well cared for appearance, using actual and symbolic territorial markers such as signage and site maps and the location of activities to avoid conflict;

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- + 'Surveillance' through supervision by those who overlook or pass through spaces. It includes effective sightlines between public and private space, effective use of lighting and paths to group people, landscaping, strategic positioning of buildings and activities, and use of CCTV;
- + 'Access control' through physical and symbolic barriers that attract, channel or restrict pedestrian and vehicle movement, eg paths, roads, fences, lines of lighting, signs, gardens, gates, locks and doors. Making it clear where people can and can't go makes it more difficult for criminals to reach potential victims and targets;
- + 'Space management' which is linked to territorial reinforcement. It ensures that space is well used and maintained, eg by coordination of activity and rapidly repairing vandalism or graffiti.

790 .27.00 The Crime Prevention Officer in the Police Local Area Command where a new/refurbished facility is located should be consulted on the CPTED implications of the proposed design. This would initially occur in the early stages of planning, ie at the concept stage.

Internal Security Risks

790 .28.00 CLIENT RELATED VIOLENCE

Design is also an issue for the prevention and management of client related violence. It is particularly important for high risk areas such as:

- + Mental Health Inpatient Units;
- + Community Mental Health Centres;
- + Emergency Departments;
- + Drug and Alcohol Units/Methadone Clinics;
- + Aged Care Units;
- + Brain Injury and Rehabilitation Units;
- + Any location where staff may work alone in isolation;
- + Any area where child protection may be an issue, eg Paediatric Wards, Maternity Wards and Birthing Units.

790 .29.00 The prevention and management of client related security risks has implications for the design of Units, and the selection of FF&E, such as:

- + Perimeter security (doors and windows, entrances, property perimeter including fences and access control);
- + Control of access to the buildings, individual HPU and rooms;
- + Cash handling and transit routes;
- + Location of shops and banking facilities;
- + Avoidance of areas where staff work alone or in isolation;
- + Location and design of Car Parks;
- + Location, design and lighting of access routes to Car Parks, bus stops, and between entrances and the street;
- + Provision of duress alarms, intruder alarms, proximity alarms and CCTV;
- + Design of Reception Areas;

- + Design of Consultation Rooms, Treatment Rooms, Triage Areas and Staff Stations to avoid entrapment points;
- + Design and location of Staff Stations;
- + Glazing;
- + Visibility and lines of sight;
- + Cultural issues such as the size of personal space, privacy of groups such as Muslim women and the need for a patient to have an escort, eg the use of a facility by Muslim women may have implications for the size and design of Waiting Rooms, Consultation Rooms and the like.

790 .30.00 Advice on risk control strategies is included in each specific unit section - this has been drawn from the NSW Health Safety and Security Guideline.

Security Risk Management

790 .31.00 Areas of potential risk should be identified from consultation with employees, managers, the OHS committee, security personnel and the Police Local Area Command Crime Prevention Officer. This coordination must occur during the preparation of the Project Feasibility Plan and the Project Definition Plan to ensure all issues are adequately addressed and funded. Known high risk areas have been listed above though there is potential for security risks and violence in any part of a facility including indoor and outdoor environments.

790 .32.00 Having identified and documented the relevant risks the planning process must then eliminate or minimise those risks through suitable planning and design solutions.

It is not intended that these Guidelines will identify all risks in all facilities. Planners, designers and managers are expected to undertake a detailed risk analysis of their facility, taking into account the location, all of the circumstances that are appropriate to that facility, and should include consultation with a wide range of stakeholders.

790 .33.00 In undertaking the risk analysis and the risk management process, facility managers and planners should take into account the differences between remote/rural facilities and metropolitan facilities. Issues such as response times to violent events must be addressed not only by the facility design but also by Operational Policies.

Design for Security

790 .34.00 The issue of security is raised throughout the Guidelines in areas such as hardware and external lighting. However, consideration shall also be given to the overall solution with good initial planning and detail design to overcome the principal problems of concealment of, and ease of access by the undesirable element, and containment of certain categories of patients.

Facility design should ensure that the space allocation for safe and secure circulation within and between Units is efficient and appropriate for the functional activities of the space, having regard to the allowance provisions defined in the relevant schedule of accommodation.

790 .35.00 A Health Care Facility, even without an Emergency Department, is often functioning for 24 hours per day. Visitors and staff enter and leave the building at all times, often on an informal and unscheduled basis. At these times, there is greater potential for unauthorised entry into the building and attacks on visitors and staff when walking to and from car parks and bus stops, especially at night.

790 .36.00 The work environment may increase or decrease the risks associated with

occupational violence and aggression depending on a range of issues, which are set out in the following section.

790 .37.00 The following issues with respect to security should be addressed in every Health Care Facility:

ENTRY/EXIT ISSUES

- + Management of access to various areas and departments;
- + Managing access of relatives/visitors;
- + Managing access of clients;
- + Managing entry of personnel visiting or working within the hospital;
- + Managing entry to facility grounds, eg 'no through' access for pedestrians and vehicles to minimise unauthorised entry and vandalism.

PATIENT SAFETY AND SECURITY

- + Reduction of triggers for conflict with patients and relatives eg through design of Waiting Rooms, Reception Areas, signage;
- + Minimise the risk of illegal removal of babies and children from maternity and paediatric units;
- + Management of patient 'wandering' from Rehabilitation, Aged Care Units and Emergency Departments;
- + Manage and supervise hydrotherapy pools;
- + Mental health and other behaviourally disturbed patients - safe areas for containment and observation, personal space, means of preventing absconding (eg proximity alarms);
- + Manage risks associated with the security of police and Corrections Officer weapons and equipment.

STAFF SAFETY AND SECURITY

- + Admitting patients (close contact with public being admitted and relatives);
- + Management of conflict with patients and relatives;
- + Risk of violence from non-custodial, alcohol or drug affected parents/visitors;
- + Working after hours;
- + Working in isolation;
- + Staff movement around hospital sites, eg to and from public transport, Car Parks, staff accommodation etc;
- + Clinical state of patient;
- + Access to assistance and support from colleagues;
- + Ability to observe patients and others, and provide early intervention;
- + Access to alarms.

SECURITY OF PROPERTY

- + Location of public telephones in retail areas;

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- + Cash handling;
- + Furniture, fittings and equipment ;
- + Waiting Area furniture;
- + Computer, high tech, AV equipment etc;
- + Personal effects - staff;
- + Personal effects - patients;
- + Access control;
- + Intruder alarms;
- + Car Park security.

SECURITY AND CONFIDENTIALITY OF RECORDS AND FILES

- + Medical records;
- + Financial records;
- + Employee files;
- + Medico-legal files.

SECURITY OF DRUGS AND OTHER SUPPLIES

- + Dangerous drugs and drugs of addiction;
- + Other supplies/stores.

These issues are addressed on a Unit specific basis within the relevant sections of these Guidelines. A checklist is also provided for each Unit to assess the response of the building brief to each issue listed.

- 790 .38.00 In determining specific requirements and design, the impact of new technology and clinical work practices should be reviewed in relation to safety and security prior to adoption.
- 790 .39.00 Consideration shall be given to any additional facility requirements that result in a secure and safe environment for staff, patients and visitors.

Building Elements

790 .40.00 ACCESS CONTROL

All Health Services must ensure, in consultation with staff and key stakeholders, that all reasonably foreseeable security risks associated with access to workplaces are identified, assessed and eliminated where reasonably practicably or effectively controlled.

790 .41.00 Effective access control involves:

- + Securing perimeters, including doors and windows;
- + Controlling access to the land on which the facility is situated (eg fences, roads, traffic and pedestrian access and flow);
- + Providing safe access and exit especially after hours and during emergencies;

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- + Controlling access to vulnerable areas;
- + Clear signage;
- + Instituting staff identification systems that allow members of the organisation to be identified.

For details of an effective access control system refer to 'Protecting People and Property: NSW Health Policy and Guidelines for Security Risk Management in Health Facilities' and to DS36 'NSW Health Guideline Safety and Security' (C2003/13).

790 .42.00 DOORS

All openable external building perimeter doors shall be lockable. Perimeter doors should meet the following building design standards:

- + Be fitted with a quality single cylinder lockset that complies with fire regulations (refer to Australian Standard AS4145.2-1993/Amat 1-1996 Locksets - Mechanical locksets for doors in buildings);
- + Have a metal frame or have a strip of metal securely mounted to the frame from the top to the bottom of the lock-side, with allowance for the lock tongue to be inserted;
- + Have protected hinge pins in order to resist removal by either replacing the existing hinges with fixed pin, security butt hinges or having dog bolts installed to prevent pins being removed;
- + Have entry alarms or warning buzzers fitted to doors that need to remain unlocked or open or to indicate that someone has entered the area;
- + Have alarms fitted to doors that are normally externally locked to signal when the doors are chocked open or fail to close properly.

Fire isolated exit doors should meet the requirements of the Building Code of Australia.

After hours public entry points should be access controlled and fitted with video/CCTV intercoms to allow screening of members of the public presenting at the door.

Glazing in doors and panels beside doors must be resistant to breakage and not shatter on impact.

790 .43.00 WINDOWS

Opening windows create security problems. These include glazing, locks, ability for people outside to look in and the potential to facilitate break-ins. All openable external building perimeter windows and doors shall be lockable.

Entry through perimeter windows should be minimised by the use of options such as:

- + Reinforcing windows to resist unauthorised entry;
- + Using heavy gauge glass bricks or laminated glass panels (in areas which require natural light but no ventilation) that are securely mounted in the frame;
- + Permanently closing unused windows by fixing with bolts or screws;
- + Fitting key operated locks to all other windows;
- + Applying film to glass to resist breakage or fit safety glass as per design guidelines.

790 .44.00 SCREENS AND GRILLES

Generally, openable external windows, vents and doors shall be fitted with flyscreens. Doorways that are used on a regular basis such as service and main entries, need

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not be flyscreened but shall be fitted with a self-closing device. Other exceptions to the above are windows, in multi-storey or fully airconditioned buildings, that are used for service access, or pivot/swing/tilt for cleaning purposes.

- 790 .45.00 Security grilles, and appropriate impact resistant glass or an electronic security system should be installed wherever high security areas have external windows, such as Pharmacy Stores and Workrooms; and Medical Records Stores.
- 790 .46.00 Security flyscreened doors, where installed, shall not compromise emergency exit.

Key Areas for Security Provision

- 790 .47.00 The following notes are supplemented by a detailed risk analysis and response in the unit specific sections of these Guidelines.

790 .48.00 ENTRY/EXIT

The workplace design should minimise public access to all areas of the workplace.

Ideally, visitors should have access to one main entrance and security should be placed at this entrance if necessary.

However, support services such as emergency response teams should have maximum access to all areas of the workplace to facilitate their intervention in emergencies.

Staff should also have ready access to exits as escape routes if an aggressive incident occurs.

All staff, including sessional specialists and casual staff, should be provided with training on aggression minimisation and emergency response procedures.

790 .49.00 EMERGENCY DEPARTMENT

In hospitals, security should also be provided adjacent to the Emergency Department. Emergency Departments should be designed to allow secure separation of Treatment Areas from Public Areas.

Security barriers may include glass fronted counters and access doors with card or keypad access.

In Emergency Units the provision of video security is highly recommended.

Any ambulance entrance should have the same level of security protection as the main entrance.

Duress alarms should be provided - fixed alarms for counter staff, and mobile location finding alarms for staff who do not work in a fixed location, eg clinicians.

790 .50.00 RECEPTION/WAITING AREAS

Reception and Waiting Areas should be easily identifiable and accessible to patients and visitors. The design and layout should provide reception staff with a clear view of all persons in the Waiting Area. The activities of clinical staff should not be visible from the Waiting Room or Reception Area.

- 790 .51.00 Personal space is especially important in Waiting Areas particularly in Emergency Departments where clients are more stressed. Cultural differences are also an issue for consideration - consider local demographics.

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There is some evidence which indicates that persons experiencing high tension need greater interpersonal distance than others. Reception Areas should be spacious and quiet with comfortable seating. Seating should be either individual or bench type. To reduce boredom, activities such as television, toys, books and games should be provided. Public telephones should be provided to enable ready communication with friends, relatives and employers.

- 790 .52.00 Furniture should be attractive and comfortable, but should be selected with regard to its safeness and the possibility that it may be used as a weapon. Colour is an important factor and should be selected for its calming rather than stimulating qualities. Climate control will help maintain a comfortable and calming environment. Easy access to amenities such as phones, water and snack dispensers, and public toilets is important to enhance comfort and reduce stress levels.

Seating should be spaced to allow room for baby strollers, wheelchairs and mobility aids. It should also be selected and spaced to allow for bariatric people to sit comfortably.

To reduce the incidence of vandalism or client frustration, Waiting Areas should be clean and well-maintained with all fittings in working order.

- 790 .53.00 In Emergency Departments, unless a glass barrier is provided, counters should be high enough to discourage an adult climbing over them. They should also be wide enough to make it difficult for a client to strike a staff member.

The design should also be ergonomically sound so desks or counters do not introduce new risks. For example, while inquiry desks can be designed to be wide enough to make it difficult for a client to strike a staff member or high enough to make it difficult to climb over, this will not protect a staff member from a thrown object, and may introduce manual handling risks from constantly having to lean forward.

It should be noted that high counters can also increase client frustration as it can make communication more difficult, especially where a client is of short stature or in a wheelchair.

Risk analysis should be used to determine the most appropriate design strategies to control security risks.

Vertical partitions should be provided to the extent required, to allow for some privacy when people are discussing private matters with staff. Each counter should be provided with a duress alarm system.

A well designed screen that does not impede communication should be installed in high risk areas such as Emergency Departments, Drug and Alcohol Units and Mental Health Areas. Appropriately placed openings or slits should be provided for communication or passage of documents.

- 790 .54.00 The ends of the Reception counter should be closed to prevent clients walking into Staff Areas. Entry doors should be full height and fitted with security access. A one-way viewing panel will enhance security of these doors.

- 790 .55.00 TREATMENT/INTERVIEW AREAS

Separate sound insulated rooms should be provided to isolate distraught or emotionally disturbed patients, families or friends; people with acute behavioural disturbance; and intoxicated or very noisy people.

- 790 .56.00 Treatment, Interview, Meeting and Consultation Rooms that are likely to be used by Mental Health or disturbed patients should be fitted with two doors on different walls to allow easy escape by staff. One door should lead in from the public area and the other from a corridor, staff or public area.

Doors should open outwards where possible to facilitate quick exit of staff.

790 .57.00 Treatment and Interview Rooms that may be used by Mental Health or other potentially behaviourally disturbed patients should be connected to a location finding mobile duress alarm system. Fixed duress alarms are not recommended as they may be out of reach when an incident occurs and they can be interfered with by patients or others. Glass viewing panels should be on at least one door to allow observation by colleagues.

790 .58.00 PHARMACY

As part of the risk management process for the Pharmacy Area, the following risk control strategies should be considered:

- + Constructing walls, floor and ceilings of the pharmacy out of solid material, with as few windows as possible;
- + Extending walls, where practicable, to the underside of the floor slab above to prevent any intrusion over the wall;
- + Reinforcing windows on the perimeter walls to prevent entry; existing windows may be reinforced with shatter resistant film or by replacing the glass with laminated glass;
- + Incorporating laminated glass windows into the design of the front of the pharmacy to enable staff to carry out transfer operations with safety, while maintaining communication with staff and patients;
- + Designing a two door entry approach (ie one door for the public and hospital staff to access glass transaction windows and a separate door for the entry of pharmacy staff to the pharmacy);
- + Incorporating provision for closing off open areas at the front of the pharmacy when closed, (eg by a locked door from the corridor or locked shutter doors);
- + Fitting doors to the pharmacy with quality single cylinder dead locks to comply with fire regulations and where practicable locks are to be key code or card operated externally and fitted with either a turn snib or handle internally to enable occupants to escape in emergencies;
- + Ensuring doors are kept closed and locked to restrict entry;
- + Installing an intruder alarm system that meets Australian Standard AS2201 and incorporates a duress alarm/s to enable staff to activate the alarm in the event of an emergency;
- + Restricting access to the pharmacy to authorised staff only and controlling this by:
 - Fitting single cylinder key, code or card operated dead locks to perimeter doors;
 - Having a restricted keying system fitted to the locks in order to prevent duplication of keys;
 - Strictly regulating the issue of keys, codes or cards at all times, including provision for after hours access;
 - Keeping doors closed and locked to restrict entry;
 - Installing closed circuit television monitors at access doors to screen entry of personnel and record any access to the pharmacy after hours.

790 .59.00 PARKING

Staff parking should be provided under or within close range of the workplace. The area should be well lit and protected from the elements. In high risk areas the Car Park may need to be monitored by security personnel or cameras.

Key Areas for Security Provision

790 .60.00 Risk control strategies to be considered include:

- + Provide, where practicable, afternoon and night shift staff with designated, controlled parking spaces as close as possible to the facility in a well lit, easily observed area connected to the facility by well lit paths;
- + Ensure entry to designated staff parking areas in dual purpose car parks is controlled by gates in the afternoon and night (eg boom gate could be left up in the morning and put down about 1-2 hours before afternoon shift commences so they are operated by staff pass cards). Exit boom gates should operate automatically (i.e. after a certain time a card is needed to enter but exit can occur any time);
- + Ensure vehicle entry to car parks is by automated gates or doors, via camera and intercom, or by passing through an entry/exit gate staffed by security personnel;
- + Display signs in car parks reinforcing theft awareness (eg park smarter, lock it or lose it);
- + Display signs that advise that regular patrols are undertaken and CCTV monitoring is in place;
- + Ensure landscaping is done in a way to provide minimal protection for intruders eg dark spots or hiding places;
- + Ensure single and multi-storey car parks have:
 - Good lighting (refer to AS 1158.3.1 and the NSW Guidelines for Security Risk Management in Health Facilities);
 - Emergency telephone or intercoms direct to security staff or switchboard;
 - Landscaping which leaves the area open and does not intrude on line of sight;
 - As few dark corners and support columns in the design as possible;
 - Flexibility to close some entrances and exits during low traffic periods;
 - Approved locks on exits intended for emergency exit only;
 - Frequent patrols by security staff;
- + Restrict the parking of delivery vehicles to designated spaces;
- + Ensure facility vehicles are parked in a secure overnight car park with good lighting and regular security patrols. A fenced compound or lock-up garage is preferable;
- + Provide security for bicycles and motorcycles (ie lockers or storage areas, a stationary rack that secures the frame and both wheels without a chain, or a stationary object the user can lock the frame and wheels to with their own cable chain and lock).

790 .61.00 LOADING DOCKS

Goods delivery, loading and unloading areas should be well lit, protected from the weather and their security ensured. In particular entry to the facility by unauthorised personnel in these areas should be prevented.

Building Services

790 .62.00 LIGHTING

As part of the facility security risk management process, Health Care Services must ensure, in consultation with staff and key stakeholders, that internal and external lighting is sufficient to eliminate, where reasonably practicable, or control security related risks and meet the relevant Australian Standards.

Building Services

- 790 .63.00 Security lighting is both internal and external lighting that is used to improve security in the vicinity of the light. The external lighting system recommended for Health Care Facilities uses luminaries of the High-Pressure Sodium (HPS) type.
- 790 .65.00 External security lighting should be installed in vandal resistant containers and mounted to restrict tampering (eg too high up to be readily broken)
- 790 .66.00 Posts for security lights should be designed in such a way that they do not provide a 'ladder' or foothold to allow access to the light fitting
- 790 .67.00 Ensure security lights are connected to an electrical circuit separate to that of the main facility
- 790 .68.00 Locate lights to gain the maximum benefit and coverage
- 790 .69.00 Provide lights bright enough to ensure a safe entry to and safe exit from the workplace (including footpaths/accessways), and provide acceptable levels of light in car parks.
- Lighting should avoid creating dark spots, be sufficiently bright to deter crime and provide sufficient light to allow facial recognition and prevent slips, trips and falls. Where the facility does not have dedicated on-site parking, consultation on street lighting should occur with local councils.
- 790 .70.00 Ensure lighting used meets Australian standards AS1680 series, AS1158 series (including 1158.3.1), AS4485.1 and AS2890 where applicable.
- 790 .71.00 Determine the needs of areas requiring special lighting treatment (eg Entrance Foyers, Emergency Departments, Staff Entry and Exit points, Pharmacies and Car Parks).
- 790 .72.00 Ensure a back up generator is available, where practicable, to ensure continuity of electrical supply for security lighting.

790 .73.00 ALARM SYSTEMS

As part of the facility security risk management process, Health Services must establish their requirements for alarm systems (eg duress and intruder alarms) to ensure that staff members, patients, and Health Service assets are secure. A regular review of all alarm systems must occur as part of the risk management process.

Refer to 'Protecting People and Property: NSW Health Policy and Guidelines for Security Risk Management in Health Facilities', Circular 2003/92, NSW Health, 2003.

- 790 .74.00 In assessing the requirement for alarms, Health Services should consider the following issues:
- + Potential for violence against staff;
 - + The type of work being carried out by staff;
 - + Staff working in isolation;

- + Cash handling;
- + Goods and equipment stored in the area;
- + Level of external security risks;
- + Level of internal security risks;
- + Exits that may be left open by staff or patients;
- + The security needs of 'at risk' patients such as wandering elderly patients in wards, mental health patients, or children at risk of unauthorised removal from the facility;
- + Potential for use of emergency exits (eg fire escapes) by thieves to remove assets;
- + Potential for break in via doors and/or windows to remove assets;
- + Potential for break into and theft of vehicles.

790 .75.00 In assessing the requirement for alarms Health Services should consult with staff working in or using relevant areas or facilities such as:

- + Mental Health Services;
- + Emergency Departments;
- + Pharmacy and other drug storage areas;
- + Women's Health and Maternity Units;
- + Youth Health units;
- + Sexual Assault Units;
- + Cash handling and storage areas;
- + Isolated facilities/units;
- + Car Parks and grounds;
- + Vehicles (eg ambulances);
- + Alcohol and other drugs services;
- + Aged Care Wards/Dementia Units/Brain Injury Units/Rehabilitation Units;
- + Community Services.

790 .76.00 INTRUDER ALARM

Intruder alarm systems are highly recommended for parts of Hospitals as well as Day Procedure Units that are closed after-hours.

Intruder alarm systems are required in the following areas:

- + Pharmacy Units where dangerous drugs (schedule 8) are kept;
- + All Satellite Pharmacy Rooms where dangerous drugs (schedule 8) are kept;
- + All drug safes where dangerous drugs (schedule 8) are kept;
- + Mortuary areas where bodies are stored;
- + External doors or windows to Baby Nurseries including NICU;

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- + Clinical Records Unit and any remote archival areas.

790 .77.00 Many different intruder alarm systems are available. The required intruder alarm systems shall be equal to or better than, in terms of coverage and functionality the following:

- + Reed Switches for doors and windows;
- + Movement detectors to cover spaces that can be used for access.

A required intruder alarm should adequately indicate the location where security has been breached. The acceptable systems may indicate the location by:

- + A local audible alarm;
- + A remote indicator panel with a readout;
- + A security signal sent to a monitoring base, 24 hour Security Room or Staff Station computers;
- + A general audible alarm and security pager signal indicating the location on pagers carried by a security officer and other staff;
- + Another system with equal or better functionality;
- + One or more of the above in combination, especially where 24hour security offices or staff stations are not available.

790 .78.00 In larger facilities with sophisticated nurse call systems it is advisable to integrate the security systems including the intruder alarm, duress alarm and video with the nurse call system.

Nurse call and pager systems should generate different noises and signals for different events.

Ideally, the system will send a security signal to a dedicated Security Office or the 24 hour Staff Stations. The signal as well as video surveillance images may be seen on standard computer monitors that also pinpoint the location of the intrusion.

It should be noted that staff should never investigate an intruder alert alone.

790 .79.00 The relevant requirements from the Australian Cabling Regulations, Australian Standards and International Electro-Technical Commission standards should be incorporated into all aspects of commissioning, installing, activating and maintaining intruder alarms:

- + Intruder alarm systems - Systems installed in client's premises (AS 2201.1 - 1998);
- + Intruder alarm systems - Monitoring centres (AS 2201.2 - 2001);
- + Intruder alarm systems - Detection devices for internal use (AS2201.3 - 1991);
- + Intruder alarms systems - Wire-free systems installed in client's premises (AS 2201.4 - 1990);
- + Intruder alarm systems - Alarm transmission systems (AS 2201.5 - 1992);
- + Alarms systems. Part 2: Requirements for intruder alarm systems. Section Two: Requirements for detectors - General (IEC 60839-2-2 Ed. 1.0b);
- + Alarm systems. Part 2: Requirements for intruder alarm systems. Section Two: Requirements for infra-red beam interruption detectors in buildings (IEC 60839-2-3 Ed 1.0b);
- + Alarm systems. Part 2: Requirements for intruder alarm systems. Section Four:

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Ultrasonic Doppler detectors for use in buildings (IEC 60839-2-4 Ed 1.0b);

+ Alarm systems. Part 2: Requirements for intruder alarm systems. Section Five: Microwave Doppler detectors for use in buildings (IEC 60839-2-5 Ed 1.0b);

+ Alarm systems. Part 2: Requirements for intruder alarm systems. Section Six: Passive infra-red detectors for use in buildings (IEC 60839-2-6 Ed 1.0b);

+ Alarm systems. Part 2: Requirements for intruder alarm systems. Section Seven: Passive glass-break detectors for use in buildings (IEC 60839-2-7 Ed 1.0b).

790 .80.00 DURESS ALARM

A duress alarm system is a signal for assistance sent by a person(s) who is under attack or threatened by the situation they face. The main purpose of the alarm will be to:

- + To seek assistance for staff who may be directly exposed to a threat of violence;
- + To indicate inappropriate or aggressive behaviours by visitors or patients.

790 .81.00 A duress alarm system should be installed in all high risk areas including:

- + All Staff Stations;
- + All Reception Counters;
- + Consultation and Treatment Rooms where there is a risk of aggression from behaviourally disturbed patients;
- + Mental Health Inpatient Units and Community Health Centres;
- + Emergency Units;
- + CADE and Aged Care Units;
- + Drug and Alcohol Units;
- + Brain Injury Units;
- + Anywhere that staff work alone or in isolation;
- + Areas where child protection may be an issue;
- + Carparks and grounds.

790 .82.00 There are two generic types of duress alarms recommended for use:

FIXED

This type of duress alarm is intended to call for discreet assistance without causing local alarm to the aggressor or others who may be present. The signal is sent to a Remote Security Office or 24 hour Staff Station, and to pagers carried by response staff.

Fixed alarms may be used in well defined areas where there is no or little opportunity for an aggressor to get between a staff member and the alarm button, and the person works from a static position (eg where staff are behind a screen such as a pharmacy distribution window or behind a counter). Fixed alarms may not be appropriate for areas accessible to patients and the public (eg corridors, as mischievous tampering with alarms may occur).

MOBILE

Mobile duress alarms may be used where the staff member is mobile in the course of

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their work in areas such as Wards or Emergency Departments where there is a risk of being confronted by aggressive behaviour.

Mobile duress alarms should be worn attached to the clothing (eg clipped to a pocket or belt). They should not be worn around the neck.

Mobile duress alarms for use within a facility and the immediate area should comply with all relevant Australian and regulatory requirements including Austel approvals, AS2201 and AS3000 as an absolute minimum especially in relation to installation, servicing and wiring of all equipment and systems.

The device sends a signal to a Remote Security Office or 24 hour Staff Station and to pagers carried by at least 3 response staff. The device is automatically activated if the staff member collapses to the floor. The system must indicate the location of the staff member at the time of the signal activation.

Location finding mobile alarms shall be provided to all staff who work in medium to high risk environments and who do not work in a fixed position eg porters, nurses, medical officers.

790 .83.00 VIDEO SECURITY

Video security should be considered for all areas that may be used after-hours. Video security is required in the following areas:

- + Emergency Unit after hours patient entrance;
- + Ambulance Bay after hours entrance;
- + Any entrance used for access to a Birthing Unit after hours;
- + Any other entrance that is used for the above purposes after-hours;
- + Corridors, courtyards and Secure Rooms in an Acute Psychiatric Unit which can not be adequately observed from a Staff Station;
- + Other Units where access control is desirable eg Intensive Care Unit, Paediatric Inpatient Unit and Maternity Inpatient Unit.

790 .84.00 The video security system required at entrance points shall have the following features:

- + Show those who intend to enter with their facial features being recognisable;
- + Include an intercom system to communicate with those who intend to enter;
- + Provide a remote signal to open the door.

790 .85.00 The video security system required in Psychiatric Units shall have the following features:

- + Adequately cover hidden areas;
- + Camera protected and discrete;
- + The direction of the camera should not be obvious.

790 .86.00 The monitoring point for video security may be a dedicated Security Office or a 24 hour Staff Station. The duress response should be discussed with staff working in the vicinity of video security.

790 .87.00 The need to escort the person seeking entry to their destination should be considered in the implementation and operation of a video/intercom entry system.

790 .88.00 Note: The provision of video security at the main entrance of Hospitals is highly recommended.

790 .89.00 Specifications to be included:

+ Colour;

+ Digital;

+ CCTV used for monitoring patients eg in acute mental health units should not record.

+ Lighting and clarity of picture;

+ Requirements for video recording.

Property

790 .90.00 GENERAL

To minimise the risk to property, all attractive portable items (calculator, cameras, tape recorders, laptop computers, PDAs etc) should be stored separately in locked areas. Only designated staff should have access to these areas.

The following areas require specific attention.

790 .91.00 CATERING

Ensure that external doors can be locked at all times, with only one exit point that is visible to the Catering Officer. Fire Exit doors should only be able to be opened from the inside, and should have a buzzer alarm that activates when opened.

790 .92.00 STORES

Locate, as far as practical, Stores away from public areas and Change and Lunch Room Areas.

Restrict entry/exit to the Store to only one door. The Supply Officer needs to be able to see the door from his/her office. Fire exit doors must only be able to be opened from the inside and have an alarm that activates when opened.

Ensure that stocks held in areas are securely stored and not easily accessible to patients and unauthorised staff. Where possible, ward stores need to be locked and accessible only to the nurse or unit manager or their delegate.

790 .93.00 PATIENTS' PROPERTY

Provide a means of securing individual wardrobe lockers or closets for clothing (if lockers are provided).

790 .94.00 STAFF PROPERTY

Ensure that staff are provided with a lockable storage area (eg locker or cupboard) for safe keeping of their property.

Ensure Car Parks have good lighting to deter theft and vandalism.

Medical Gases

790 .95.00 Ensure access to any storage areas is restricted by use of doors, barriers and signs.

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Sources are to be secured against unauthorised removal, tampering, vandalism and misuse.

The requirements of the Dangerous Goods Act and Regulations may apply to the design of locked areas and provision of signage.

Radioactive Substances

- 790 .96.00 Ensure stores (including waste stores) are properly marked with approved warning signs, and regulations regarding their use are posted at access points.

Ensure access to any storage areas is restricted by use of doors, locks, barriers and signs. Sources are secured against unauthorised removal and tampering.

Mail and Other Deliveries

- 790 .97.00 Health Services should establish a screening point for all mail, that is, a central processing point for all mail for the workplace. At which point in the process mail passes through this central area, between arrival and delivery to the relevant officer, will vary according to the size and function of the workplace.