Policy

Guideline

Personal Protective Equipment (PPE) Selection

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Summary

The Personal Protective Equipment (PPE) Selection Policy Guideline provides guidance in the identification of personal protective equipment and examples of personal protective equipment that may be available, selected and used.

The *Work Health and Safety Act (SA)* 2012, its regulation and associated codes of practice place a duty of care on all workers to take reasonable care to protect their own health and safety while at work. A Person Conducting a Business or Undertaking (PCBU), responsible agency or persons in control of a workplace must also ensure that reasonable steps are taken to provide workers with safe working conditions. This may include the need for using personal protective equipment (PPE) and clothing when undertaking a hazardous task.

Keywords Personal Protective Equipment (PPE) Selection Policy Guideline, information, training, instruction, workplace, Work Health and Safety Regulations, protective, equipment, PPE

Policy history

Is this a new policy? *N*
Does this policy amend or update an existing policy? *N*
Does this policy replace an existing policy? *N*
If so, which policies?

Applies to *All Health Networks*

Staff impact The policy guideline applies to all SA Health workers including occupiers, contractors, volunteers, labour hire personnel and students who may be in control of a workplace and/or use PPE.

EPAS Compatible *NA*

Registered with Divisional Policy Contact Officer *Yes*

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Government of South Australia
SA Health

Personal Protective Equipment (PPE) Selection Policy Guideline

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October 2013	V1.1	Senior Policy Officer, Workforce, Workforce Health	Update SLS Information
March 2013	V1	Senior Policy Officer, Workforce, Workforce Health	Approved Version

Endorsements

Date	Endorsed by
26/8/2015	Group Director, Workforce, System performance and Service Delivery

Approvals

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1/10/2015	Portfolio Executive

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PPE Selection Policy Guideline

1. Objective

This Policy Guideline provides guidance in the identification of personal protective equipment and examples of personal protective equipment that may be available, selected and used.

The *Work Health and Safety Act (SA)* 2012, its regulation and associated codes of practice place a duty of care on all workers to take reasonable care to protect their own health and safety while at work. A Person Conducting a Business or Undertaking (PCBU), responsible agency or persons in control of a workplace must also ensure that reasonable steps are taken to provide workers with safe working conditions. This may include the need for using personal protective equipment (PPE) and clothing when undertaking a hazardous task.

This policy guideline is to be read in conjunction with the SA Health Policy Directive - Hazard Identification and Risk Management.

2. Scope

The policy guideline applies to all SA Health workers including occupiers, contractors, volunteers, labour hire personnel and students who may be in control of a workplace and/or use PPE.

3. Principles

Personal Protective Equipment is any device or clothing worn by a worker to control the level of risk that can not be controlled or eliminated by providing protection / shield between the hazard and the worker when exposed to :

- dangerous goods, hazardous chemicals, infectious substances including blood and bodily fluids(BBF)
- dust, fumes or particles
- radiation (ionizing and non-ionizing), ultraviolet or solar radiation
- noise
- moving objects such as vehicles, trolleys and forklifts
- flying objects when using machinery with moving parts
- Environmental factors , for example, high and low temperature

PPE must be used for additional protection when other risk control measures do not provide sufficient exposure control.

PPE is one of the least effective methods of controlling risk to work health and safety , as per the hierachy of control, and must be used :

- When there are no other practical risk control measures available or when identified through a dynamic risk assessment, for example:
    - Gloves - for all contact with blood and or body fluids.
    - Double glove - application in operating theatres and procedural areas.
    - Eye protection- use of a face shield when undertaking any procedure where a splash of fluid may occur

- Gowns - use when undertaking any procedure where a splash of blood or body fluid may occur
- Respiratory Masks: A correctly fitted P2 (N95) respiratory mask must be used for all known or suspected 'airborne' resiratory diseases such as Tuberculosis, Measles, Chicken Pox and during aerosol generating procedures such as bronchoscopy and pulmonary funcion testing.
- Surgical Masks must be worn for all patients exhibiting signs and symtoms of confirmed or suspected respiratory disease (droplet) suh as: Influenza, Pertussis, Meningococccal infection and Respiratory Syncutial virus (RSV).

- As an interim measure until a more effective way of controlling the risk can be used or
- To support higher level risk control measures as per the hierarchy of risk control.

Section 4 may be used to assist assessing the applicablility of types of PPE for particular circumstances, using the general information and in reference to legislative, Australian or Industry Standard requirements found in the references provided.

The use of PPE and Infection Prevention

The use of PPE must be routine practice for all workers when there is a risk of exposure to blood (including dried blood), all other body substances, secretions and excretion's (excluding sweat), regardless of whether they contain visible blood i.e. standard precautions (see below).

The *Work Health and Safety Regulations, 2012* (SA) states that it is the responsibility of each healthcare worker (HCW) to be familiar with and comply with these protective measures at all times when there is an identified risk of exposure to BBF.

PPE in this context refers to a variety of barriers, used alone or in combination, to reduce the risk of acquiring and transmitting potentially infectious microorganisms by:

- protecting skin, eyes, mouth, respiratory system and clothing of staff from potentially infectious excretions and secretions
- preventing contamination of skin and clothing by microorganisms present in the environment.

Selection of PPE should be based on the risk of transmission of potentially infectious microorganisms to the healthcare worker from:

- exposure to blood and body substances during an activity (*standard precautions*)
- contamination from infectious microorganisms via the contact, droplet or airborne route. (*transmission-based precautions*)

When a disease agent is unknown, a symptom-based approach will reduce the risk of transmission to the HCW and to other patients. For example, if a patient presents with vomiting or diarrhoea or respiratory symptoms (coughing, sneezing and fever) then the appropriate precautions should be implemented immediately, rather than waiting for a definitive diagnosis.

- Routine use of PPE, especially gloves, should not be encouraged in a patient care environment if there is no risk of a BBF exposure.
- Follow SA Health hand hygiene recommendations regarding the ability to adequately perform hand and wrist hygiene during clinical practice, i.e. no wrist jewellery or long sleeve clothing to be worn during patient care activities.

PPE items used as part of standard and transmission-based precautions include: aprons, gowns gloves, respiratory, face and eye protection.

Further information regarding the use of standard and transmission based precautions can be

found on the SA Health website: www.sahealth.sa.gov.au/infectionprevention. For specific PPE items required for transmission-based precautions refer to the relevant disease in the *SA Health Infection Control Management of Infectious Diseases Summary Table* available on the website.

Work Health and Safety Implications

All SA Health workers must comply with the requirements of the *Work Health and Safety Act 2012* (SA), Section 28, which describes the responsibilities of workers to ensure their own health and safety.

Consideration should be given to the following when selecting PPE:

- Workers that have allergies to latex should have latex free PPE provided
- Workers who have asthma, or other respiratory conditions, that is exacerbated by the use of a P2/N95 respirator should not be involved in care where these are required

Note: Consultation with a Clinical Workforce Health/Infection Control practitioner (or similar) is recommended in these situations (Reference may be made to the LHN/HS/BU WHSIM Business Unit for assistance)

- Correctly fitted and appropriate PPE should not affect or restrict tasks or the adoption of safe postures and actions
- Ongoing training and education is required to ensure that PPE is used correctly
- If workers are required to wear PPE for long periods scheduled and/or regular breaks are required to maintain comfort

Workers using PPE must:

- Use or wear the PPE in accordance with information, training and instructions
- Consult with their manager/supervisor to ensure that the correct PPE is made available by providing a range of gown or glove sizes

Reference may be made to the SafeWork Australia webpage for further guidance. http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/faqs/pages/faq-ppe)

4. Detail

4.1 Identifying the need for PPE

The identification of the need for Personal Protective Equipment (PPE) is determined through the following process:

- Identification of the hazard / task /activity
- Risk Assessment of hazard / task /activity
- Development of risk control measures through the Hierarchy of Risk Control (Elimination, Substitution, Engineering Controls, Administrative Controls, PPE)
- Identification of PPE required to minimise / reduce risk
- Selection, purchase and accessibility of PPE
- Training in the use of PPE
- Inspection, Cleaning and Maintenance of PPE.

SA Health WHSIM FOR228 Flowchart – Assessing the Need for Personal Protective Equipment (PPE).

Risk assessments undertaken of workplace hazards, task or activity may identify that a risk could be minimised through the use of PPE after other reasonably practicable measure have been taken to control the risk. For example:

- Trial, purchase or use of plant or equipment, using FOR205 Form - Plant and Equipment Risk Assessment (or similar)
- Trial or use of a chemical/ substance, or a drug where there is a risk of spillage using FOR206 Chemical Safety -Risk Assessment or FOR321 Chemical Safety - Task Risk Assessment (or similar)
- When undertaking an exposure prone procedure
- Investigation of a reported hazard or work related incident through the Work Health Safety: Safety Learning System.

4.2 Selection, Purchase and Accessibility of PPE

Selection of PPE

PPE used at a workplace must be:

- Selected to minimise risk to health and safety
- Approved and appropriate for the task / activity
- Suitable and appropriate for the nature of the work and any hazard associated with the work
- A suitable size, fit and reasonably comfortable for the person wearing it.

  PPE must be appropriate to the task by providing adequate protection from the identified hazard and it must meet the requirements of relevant standards and codes of practice
- If the sharing of equipment or clothing could represent a hygiene risk the PPE should be provided for individual use, or decontaminated between uses
- The wearer must take appropriate measures to ensure that the wearing of PPE does not create a further risk to health and safety

Purchase of PPE

Once it has been determineed that a particular type of PPE is required, advice prior to purchase may be sourced from:

- Purchasing Officers
- Clinical Worker Health Nurses
- Tender Panels/Suppliers/External Consultants
- WHSIM Professionals
- Infection, Prevention and Control Services

Follow the One Procurement Solution (OPS) purchasing / procurement procedures for ordering PPE.

Accessibility of PPE

When a task and/or area has been identified as requiring mandatory use of PPE it must be identified with signs that alert workers and comply with WHS legislation, for example, hearing protection in high noise areas such as workshops,infection control and patient care area.

PPE to be used by workers in the workplace must be:

- Readily accessible
- Readily Available
- Maintained, repaired or replaced to ensure it continues to provide effective protection to workers
- Visible
- Stored appropriately to ensure it is clean and ready for use
- Used and worn by workers, so far as reasonably practicable

4.3 Incorporation of PPE into Safe Work Procedures

When a safe work procedure is developed ensure that the requirements for PPE are incorporated. Refer to CPR021 Procedure – Development and Maintenance of Safe Work Procedures for further guidance.

PPE requirements to be considered for inclusion into safe work procedures are:

- How to fit and wear PPE, including donning and doffing
- How to clean, decontaminate and maintain PPE
- Recommendations for approved and appropriate use i.e. manufacturers advice, Australian Standards (AS)

4.4 Education and Training for PPE use

Where PPE is required to minimise the risk of exposure to hazard, worker induction and training in the following must be provided:

- Fitting
- Cleaning / decontamination
- Maintenance
- Disposal
- Use, including donning and doffing
- Inspection for faults / integrity
- Storage

Reference may be made to the SA Health digital media e-learning module entitled *Use of Personal Protective Equipment training module.*

Records of all training must be kept and retained by the line manager in the business unit.Worker PPE induction training must also be included in your business units Induction checklist.

4.5 Inspection, cleaning and maintenance of PPE

Where PPE is in use , routine inspection, cleaning and maintenance is required.

- The wearer is required to inspect PPE prior to use, for signs of penetration or other damage due to impact, rough treatment or unauthorised alterations which may reduce the degree of safety originally provided.
- Regularly check respiratory devices (every time before and after use), to ensure that filters / cartridges or air supply are in place and replaced as necessary. This is to ensure that the equipment is ready for use at all times.

- Clean/decontaminate all re-useable PPE in accordance with the manufactures instructions. However, in the absence of such instruction the item can be washed thoroughly in detergent and warm water using a soft cloth, then rinsed and dried.
- Avoid using any cleaning agents that are likely to scratch surfaces, particularly the lenses of eye protection equipment
- Store PPE in clean, sealed containers, such as plastic tubs with lids. This prevents continual exposure to air or other particulates or other environmental factors, for example, prolonged exposure to direct sunlight , that may compromise the effectiveness of the equipment (including filter / cartridges)
- Ensure that the PPE is kept clean in between usage.
- Remove damaged PPE from use, and take to the supervisor to arrange for replacement equipment

Follow the One Procurement Solution (OPS) purchasing / procurement procedure for replacing PPE.

4.6 Details of Types of Personal Protective Equipment

This guideline provides information on the following types of PPE:

- Hand Protection (gloves - refer to 4.6.1)
- Eye Protection (goggles, safety glasses, face shields - refer to 4.6.2)
- Face Protection and infection prevention (eye wear, face shield, surgical masks – refer to 4.6.3)
- Hearing Protection (ear plugs, ear muffs - refer to 4.6.4)
- Respiratory Protection (respirators, face masks, cartridge filters - refer to 4.6.5)
- Surgical Masks (Refer to 4.6.6)
- Particulate Filters (Refer to 4.6.7)
- Disposal N95 or P2 Masks (Refer to 4.6.8)
- Respiratory Protection with Powered Air Purified Respirator (PAPR) (Refer to 4.6.9)
- Laser Safety (Refer to 4.6.10)
- Skin Integrity and Protection (sunscreen, alcohol gel - refer to 4.6.11)
- Protective Clothing (high visibility garments, thermal wear, overalls, aprons, lead aprons, reflective vests, impervious long-sleeve gowns - refer to 4.6.12)
- Footwear (enclosed shoes, safety boots - refer to 4.6.13)
- Head Protection (hard hats, helmets, sun hats, bike helmet - refer to 4.6.14)
- Falls Protection (safety harness - refer to 4.6.15).

Please note that the images of Personal Protective Equipment provided in this document are examples and do not represent SA Health endorsement of that product. Where PPE is identified as required please follow the One Procurement Solution (OPS) purchasing / procurement procedures.

Refer to the relevant Australian Standards for each type of PPE in Section 14 entitled References, Resources and Related Documents. Further guidance is also available from manufacturers and suppliers.

4.6.1 Hand Protection

Workers must be educated in the correct manner to clean hands and preserve hand skin integrity. Gloves must be worn for protection from hazards such as:

- Infectious agents
- Abrasion
- Chemicals
- Sharp Objects
- Radiation
- Hot or Cold Materials

The type of glove will vary, dependant on the nature of the task and a range should be available to accommodate individual worker needs. There are some conditions where gloves are not permitted (e.g. some machinery operation)

- For gloves to be used with chemicals consult the relevant chemical's Safety Data Sheet (SDS) for advice on the type of glove to use
- Hands must be cleaned with soap and water or alcohol gel before and after glove use
- Moisturising lotion should be made available and should be applied as required
- Consideration should be given to the need for a glove lining or inner glove or moisture / barrier cream where prolonged use of waterproof gloves is envisaged.

Note: Some workers may develop an allergic reaction to latex gloves. Recommendations to avoid reactions include:

- The provision of reduced protein and powder free gloves
- Ensure good housekeeping to reduce latex build up
- Advise workers to wash hands thoroughly after removing latex gloves.

Examples of hand protection:




Examples are provided for illustration purposes only.

Gloves and laboratory work

Laboratory procedures may expose workers hands to both chemicals and biohazards. In these circumstances consideration must be given to the type of work undertaken when selecting the glove for use; for example nitrile gloves are generally recommended for handling cytotoxic drugs and may be appropriate for use in laboratory settings when handling patient specimens.

Reference may be made to the SA Health *Safe handling – Cytotoxic drugs and related waste – A risk management guide for South Australian Health Services*.

Disposable latex, nitrile or vinyl surgical-type gloves must be used during general laboratory work, particularly when blood and body fluids and other biohazards are being handled or when exposure includes chemicals.

Reference may also be made to Standards Australia AS/NZ 2243.3.2010 Safety in laboratories-Microbiological safety and Containment for further guidance.

Gloves and infection prevention

Gloves can protect both patients and HCW from exposure to potentially infectious microorganisms that may be carried on the hands. As part of standard precautions they are used to prevent contamination of HCW hands when:

- anticipating direct contact with blood or body substances, mucous membranes, non-intact skin and other potentially infectious material
- handling or touching visibly soiled or potentially contaminated patient-care equipment
- there is potential exposure to toxic drugs during administration
- there is exposure to chemicals during the cleaning process

Key considerations in glove selection will include potential exposure to BBF and the potential contact with non-intact skin, mucous membranes or sterile sites.

Types of materials:

Non-sterile single use medical gloves are available in a variety of materials and consist of the following:

- natural rubber latex (NRL)
- NRL alternative - synthetic alternative to latex e.g. nitrile
- Vinyl gloves - do not provide optimal protection against BBF and are not recommended for patient care.
- Polythene gloves - are not suitable for clinical use and are generally used for food handling, preparation and serving.

Single use disposable sterile gloves are worn when there is contact with sterile instruments or normally sterile parts of the body.

Reusable utility gloves are indicated for non-patient care activities such as cleaning of contaminated equipment or surfaces, general cleaning duties and instrument cleaning in sterilising services departments.

Recommendations:

Gloves must be worn as a single-use item for each invasive procedure, contact with non-intact skin, mucous membranes or sterile site and if the activity has been assessed as being an exposure risk to blood, body substances, secretions and excretions. Gloves must be removed and hand hygiene performed before leaving a patient's room or area.

Single use disposable gloves must be changed:

- between episodes of care for different patients
- between each episode of clinical care on the same patient to prevent cross-contamination of body sites e.g. mouth care followed by wound care
- when the integrity of the glove has been compromised i.e. ripped , torn

Single use disposable sterile gloves must be worn during:

- contact with sterile sites
- procedures requiring aseptic technique where key parts and / or sites are touched directly (i.e. when a non-touch technique cannot be achieved)

For further information refer to SA Health WHSIM Flowchart Assessing the Need for PPE Table 2 Glove risk assessment.

Removing and disposing of gloves

When removing gloves, care should be taken not to contaminate the hands. After gloves have been removed hand hygiene is to be performed as per the SA Health Hand Hygiene Guideline.

Single use gloves must not be washed or alcohol-based hand rub applied for subsequent reuse. Gloves should be disposed of and then discarded into a designated container for waste to contain the contamination.

Specific guidance can be found in section B1.2.5 of the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010)

4.6.2 Eye Protection

Goggles and safety glasses prevent injury to eyes. Face shields and visors prevent injury to eyes, nose and mouth from dust, flying particles, chemicals/substances, radiation (visible and invisible) and potentially infectious blood or body fluids

Workers must wear protective eyewear for any procedure where they may be exposed to these situations, or where stated in the safe work procedure

Eye protection must comply with relevant standards, and provide the level of protection required e.g. arc welding / cutting, infection control procedures

Normal prescription glasses DO NOT provide adequate protection. Workers requiring reading glasses should seek additional eye protection equipment which does not interfere with the worker's vision, yet provides an appropriate barrier to hazards.

Personnel who wear contact lenses, and work with chemical substances, should be aware of the following potential hazards:

- Contact lenses may adhere to the eye
- Contact lenses may absorb chemicals and concentrate them on the surface of the eye
- Contact lenses may interfere with emergency flushing procedures by trapping fumes or solids
- If a worker is unconscious following an injury, rescue personnel may be unaware the contact lenses are in place.

Refer to the Chemical SDS for safety information regarding wearing of contact lenses.

<u>Examples of eye protection:</u>



Examples are provided for illustration purposes only.

4.6.3 Face Protection and Infection Prevention

The mucous membranes of the nose, mouth and eyes and non-intact skin are portals of entry for infectious microorganisms. Face and eye protection reduces the risk of exposure of healthcare workers to splashes or sprays of blood, body substances, secretions or excretions. Equipment includes:

- **protective eyewear** – are generally fog resistant goggles that can be single use or

reusable and provide protection from splashes, sprays from multiple angles. These are required in addition to personal glasses and contact lenses as personal eyewear are not considered adequate eye protection

- **face shield** – single use or reusable face shields may be used in addition to surgical masks, as an alternative to protective eyewear. A face shield can provide protection to other parts of the face as well as the eyes. Face shields extending from chin to crown provide better face and eye protection from splashes and sprays
- **surgical masks** – are loose fitting, single use items that cover the nose and mouth. They are used to keep splashes or sprays from reaching the mouth and nose of the person wearing them. They also provide some protection from exposure to respiratory secretions. Surgical masks should be of a fluid resistant material when used for patient care. Considerations when using a surgical mask must include:
    - changing the mask when it becomes soiled or wet
    - never reapplying when it has been removed
    - not left dangling around the neck
    - avoid touching the front of the mask while wearing it
    - safe removal i.e. using ear loops or ties to remove, avoiding touching the front of the mask
    - hand hygiene before and after removal
- **P2 / N95 respirators** (masks) - are medical devices designed to protect the wearer from infectious microorganisms transmitted via the airborne route or during aerosol generating procedures. For further information on specific application to infection prevention, refer to the SA Health *Guideline for respiratory protection against airborne diseases*, 2013.

For further information refer to SA Health WHSIM Flowchart Assessing the Need for PPE Table 3 Face and eye protection risk assessment.

Removal and safe disposal of face and eye protection

The front of a mask, protective eyewear or face shield is considered to be contaminated. Removal of a face shield, protective eyewear and surgical mask can be safely performed after gloves have been removed and hand hygiene has been performed.

Single-use face and eye protection should be disposed of by discarding into a designated container for waste to contain the contamination. Re-usable eyewear or face shields require cleaning with detergent and water and / or disinfectant immediately after use.

Specific guidance can be found in section B1.2.4 of the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010)

Reference may be made to the SA Health digital media e-learning module entitled *Use of Personal Protective Equipment training module.*

4.6.4 Hearing Protection

In areas of identified high noise hazard (e.g. workshops) ensure that 'hearing protection must be worn' signs are in place and are complied with

Types of hearing protection include: a variety of disposal and re-useable ear plugs, ear muffs or ear canal caps. The selection made will be based on the outcome of a risk assessment in relation

to the level of noise, and frequency of exposure.

Refer to current LHN/HS/BU procedures.

Examples of hearing protection:




Examples are provided for illustration purposes only.

4.6.5 Respiratory Protection

A dust mask is usually a single use, disposable item that should be worn for protection against nuisance dusts such as saw dust, chalk and potting soil. These masks are generally not suitable for use with toxic or infectious substances.

Example of a dust mask:

Examples are provided for illustration purposes only.

4.6.6 Surgical Masks

A surgical mask must be worn, whenever there is a possibility of splashing of blood or other bodily substances, in line with Standard Precautions and as recommended in LHN / HS / BU procedures.

Examples of surgical masks:


Examples are provided for illustration purposes only.

4.6.7 Particulate Filters

Particulate filters are used to remove fine solid or liquid particles from inhaled air and have a prefix ‘P’ and a number indicating a class corresponding to its filtration efficiency e.g.

- P1 – use against silica, asbestos (or P2 for asbestos)
- P2 – use against metal fumes, airborne disease transmission
- P3 – use against highly toxic materials (full face mask).

Examples of particulate filters:

Examples are provided for illustration purposes only.

4.6.8 Disposable N95 or P2 Respirator

- A correctly fitted N95 or P2 disposable respirator (mask) must be used when attending to all patients with confirmed or suspected serious diseases transmitted by the airborne route such as measles, chickenpox or active pulmonary tuberculosis, and when performing high risk aerosol generating procedures such as bronchoscopy on patients with a confirmed airborne disease or whose infectious status is unknown or unconfirmed.
- All workers who are required to wear a N95 or P2 respirator must be fit tested for the individual and only use the type and size of mask recommended as fitting their face, and providing adequate protection.
- Repeat fit testing should also be considered if a mask type or style is a discontinued or if there have been changes to an individual's facial structure e.g. facial surgery, weight fluctuations etc.
- All respirators must be self 'fit checked' each time they are donned prior to entry to environment.

Example of disposable N95 or P2 respirators (masks):

Examples are provided for illustration purposes only.

4.6.9 Respiratory Protection with Powered Air Purified Respirator (PAPR)

PAPRs are used where workers have glasses or beards or when higher levels of protection are required and that half face respirators do not provide. They are not to be used in oxygen deficient environments

The PAPR when fitted with GP2 filters is available for use in Emergency Departments for protection from organic vapours

When fitted with a P2 filter it could be used for respiratory protection from airborne disease, but is not recommended for general use.

Examples of powered air purity respirators:




Examples are provided for illustration purposes only.

4.6.10 Laser Safety

Laser safety glasses must be worn by laser users as identified in current LHN / HS / Site BU / WP procedures.

Reference may be made to the relevant Australian Standard in Section 14 of this guideline. Further guidance is also available from manufacturers and suppliers.

4.6.11 Skin Integrity and Protection

Healthcare workers must be educated in the correct manner to preserve skin integrity

Should worker skin integrity be comprised, for example with cuts, abrasions or wounds the workers must seek advice from Departmental Managers / Infection Control Nurses/Clinical Worker Health Nurses/ or similar to cover / dress the area prior to work commencement

Skin protection is required when outdoor work is being performed and includes the provision and use of sun protective work clothing, sun protective hats, sunglasses, sunscreen and insect repellent

It is recommended that a risk assessment of the type of work and length of potential exposure is completed to identify PPE required and to ensure that it doesn't create a secondary hazard.

<u>Examples of skin protection:</u>


Examples are provided for illustration purposes only.

4.6.12 Protective Clothing

Protective clothing is either re-usable or disposable. It is used to protect or replace the workers street clothes or uniform when undertaking specific tasks.

Where protective clothing is used it should be removed before leaving the work area, and should not be used in areas where food is consumed

Aprons and gowns are to be worn as required to prevent disease transmission (refer laboratory and infection control procedures)

Lead aprons or shielding must be use for protection when undertaking radiation exposure prone procedures. All other persons should withdraw behind protective screens

Operating theatre attire is to be used in line with Safe Work Procedure and /or clinical standards

which will state:

- PPE type to be worn;
- areas in which to be worn; and
- advice on when to be removed

High visibility vests / clothing are to be worn as per SA Health Corporate Framework

Signage must be displayed as required.

Examples of protective clothing:




Examples are provided for illustration purposes only.

Aprons and gowns for infection prevention:

Protective clothing (apron or gown) is recommended to be worn by all HCWs when:

- there is a risk of exposure to blood, body substances, secretions or excretions (excluding sweat).
- there is anticipated close contact with the patient, materials or equipment which may lead to contamination of the skin, uniforms or other clothing with infectious microorganisms.

Gowns are used to protect the healthcare worker's exposed body areas and prevent contamination of clothing with BBFs. The type of apron or gown required depends on the degree of risk of exposure to BBF capable of penetrating through to clothes or skin.

Choice of sleeve length depends of the procedure being undertaken and the extent of risk of exposure to the HCW's arms.

All workers must wear protective clothing (apron or gown) as determined by the risk assessment process.

Apron is a single use, disposable item with no sleeves that protects the front of a healthcare workers clothing. It protects clothes when splash is anticipated but extensive contact with the patient or BBF is **not** expected.

Fluid resistant long sleeved gown is used when minimal exposure to BBF is anticipated and / or extensive contact with the patient or their environment during contact precautions.

Impervious long sleeved gown is used when there is a high risk of exposure to extensive amounts of BBF e.g. Operating Room, Emergency Department, Intensive Care Unit.

Sterile gown is worn for procedures requiring a sterile field e.g.in the operating room, for insertion of central venous catheters.

For further information refer to SA Health WHSIM Flowchart Assessing the Need for PPE Table 1 gown or apron risk assessment

Removal and safe disposal of aprons and gowns

Removal of aprons and gowns before leaving the patient-care area (e.g. in the room or anteroom) prevents possible contamination of the environment outside of the patient's room. They should be removed in a manner that prevents contamination of clothing or skin. The outer

"contaminated" side of the gown is turned inward and rolled into a bundle and then discarded into a designated container for waste to contain the contamination.

Specific guidance can be found in section B1.2.3 of the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010).

4.6.13 Footwear

Inappropriate foot wear can lead to an increase likelihood of slipping or tripping that could lead to falls, and painful foot, leg and back conditions, especially if work involves sustained standing or walking

Footwear to prevent slips, trips and falls and prevent foot disorders and other injuries, should have a dense rubber non slip sole, have a low broad heel (a suggested maximum height is 5cm) and adequately support the heel to prevent the feet slipping out when walking, for example, laboratory workers must wear non – slip, flat, fully covered shoes which cover the dorsum of the foot.

Safety foot wear may be required dependant on the nature of work conducted, for example workers who work with machinery, or any other worker, in accordance with award provisions.

When supplied with safety footwear, workers must wear them at all times

Enclosed shoes must be worn where there is a risk of foot injury from objects that may fall during the work operations in the area or if trolleys are used, for example:

- laboratory environments
- kitchens
- hospital wards
- warehouses
- medical records.

Note: A risk assessments conducted by your business unit will be able to define the type of closed footwear that is suitable for your work environment.

Footwear worn in hospital theatre areas must comply with ACORN Standards (2006) in that they:

- provide full protection (e.g. closed top)
- no holes or vents
- are easily cleaned
- slip resistant
- antistatic.

Footwear worn in patient areas other than theatre should have a non-penetrating sole, an enclosed upper and sufficient height of the upper to protect the foot from needle stick injuries and exposure to blood and body fluids

It is recommended that work areas, where there may be a risk of injury to feet, establish LHN / HS / BU Safe Work Procedure regarding the type of footwear required based on a risk assessment of the type of work conducted.

<u>Examples of footwear:</u>

Examples are provided for illustration purposes only.

4.6.14 Head Protection

Head protection, such as a safety helmet, must be worn where there is a possibility a person may:

- be hit on the head by a falling object
- strike their head against a fixed object or other material capable of causing injury
- make contact with electrical hazards.

Examples of head protection:

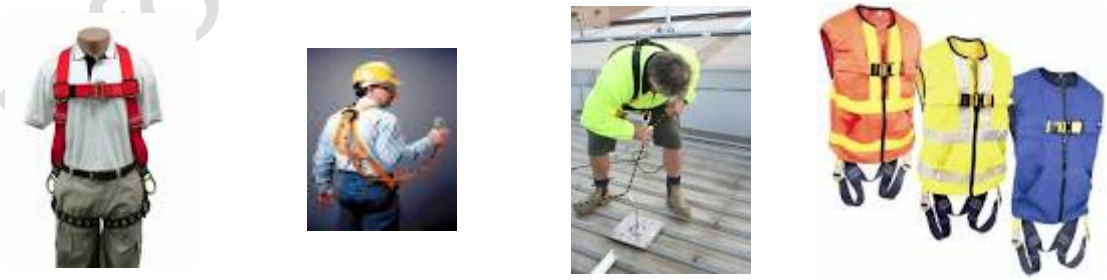
Examples are provided for illustration purposes only.

4.6.15 Falls Protection

Where persons are required to work at heights, a risk assessment, safe work procedure and appropriate training i.e. Work Safely at Heights unit of competency, must be provided to minimise the hazard and associated risk.

Reference should also be made to SA Health Policy Guideline – Working from Heights Safety (WHS).

Example of Falls Protection Equipment:



Examples are provided for illustration purposes only.

5. Roles and Responsibilities

The following Roles and Responsibilities are specific to this policy guideline and should be read in conjunction with SA Health Policy Directive - Roles, Responsibilities and Governance (WHS):

5.1 Chief Executive / Deputy Chief Executives

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with the intent of this policy guideline;
- Establish awareness of and accountability for the implementation of this policy guideline.

5.2 Chief Executive Officers / Chief Operating Officers (LHN / HS / BU)

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with the intent of this policy guideline;
- Establish awareness of and accountability for the implementation of this policy guideline;
- Provide financial and physical resources needed for the implementation and support of this policy guideline;
- Ensure that so far as reasonably practicable, that workers and other are not exposed to health and safety risks arising from the business or undertaking.
- Ensure that the business or undertaking has and uses appropriate resources and processes to identify the requirements for PPE.

5.3 Executive Directors / General Managers / Directors (LHN / HS / BU)

Will take reasonably practicable steps to:

- Exercise due diligence to ensure compliance with the intent of this policy guideline;
- Ensure use of appropriate resources and processes to identify the requirements for PPE
- Ensure that so far as reasonably practicable, that workers and other are not exposed to health and safety risks arising from the business or undertaking;
- Ensure that managers and supervisors have the knowledge and the skills to determine the training needs of workers to ensure correct use of PPE
- Monitor the effectiveness of PPE as a risk control measure.

5.4 Site Managers / Line Managers / Supervisors / Team Leaders

Will take reasonable practicable steps to:

- Where relevant, exercise due diligence to ensure compliance with the intent of this policy guideline;
- Ensure that so far as reasonably practicable, that workers and others are not exposed to health and safety risks arising from the business or undertaking;
- Ensure all incidents, hazards and unsafe working practices are reported on the SA Health Safety Learning System (SLS) before the end of the shift / working day, including incident of PPE failure
- Provide workers with adequate direction, support and training to fulfil their responsibilities regarding the use of PPE;
- Ensure that mechanisms are in place to identify PPE requirements and use; i.e. when safe work procedures state that PPE must be worn by workers
- Consult with workers and workplace Health and Safety Representatives during the identification of PPE and related uses
- Consult with Health and Safety Representatives (HSR), Infection Control Coordinators and workers in the evaluation of what PPE is required
- Provide adequate PPE with appropriate instruction in use and care where other risk control measures are not feasible or achievable in the short term
- Coordinate the fit testing of respiratory protection for workers

- Monitor the effectiveness of PPE and its use to ensure appropriate levels of protection are provided and maintained.
- Monitor compliance with use of PPE in accordance with safe work procedures
- Ensure contractors working on site in their work areas follow safety instructions and procedures
- Keep records i.e. of PPE in use, training and procurement documentation, as per LHN / HS/ BU record management requirements.

5.5 Workers

All workers, volunteers, contractors, labour hire staff, students and occupiers must take reasonable care to:

- Not adversely affect the health and safety of themselves and other persons;
- Comply with any reasonable instruction and with all relevant SA Health policies, LHN/HS/BU procedures and information relating to health and safety at the workplace
- Protect their safety while at work by wearing and maintaining PPE provided to prevent the transmission of infection via blood and body fluids and while undertaking exposure prone procedures
- Use PPE in accordance with the information, instruction and training provided on its use;
- Report all PPE related incidents, hazards and unsafe working practices to line manager / supervisors and on the SA Health Safety Learning System (SLS) before the end of the shift / working day
- Report identified hazards including unsafe working practices to their line manager i.e. non-compliance with PPE requirements
- Assist line supervisor with the risk assessment and hazard control process for the identification of PPE that may be required
- Consult with line supervisor if PPE is not a suitable fit i.e. uncomfortable, does not fit correctly
- Use or wear the PPE in accordance with any information, training or reasonable instruction provided by the LHN / HS /BU Safe Work Procedures so far as they are reasonably able
- Not intentionally misuse or damage the PPE
- Report any faults, difficulties, damage, defect or need to clean or decontaminate associated with the PPE
- Attend training as required
- If the PPE in uncomfortable or does not fit properly the worker should consult their line manager.
- Familiarising themselves with this policy guideline
- Implement risk control measures for any immediate hazard if practicable and safe to do so
- Take an active role in the hazard management process, including risk assessments
- Follow safe work procedures in the use of PPE

5.6 Workforce Health Professionals (including Clinical Worker Health Nurses)

Must take reasonable care to:

- Provide specialist advice, guidance and recommendations with respect to legislative requirements including interpretation of the *WHS Regulations 2012 Act*(SA), its

regulations and relevant Codes of Practice

- Facilitate the implementation of this policy guideline throughout their respective LHN / HS / BU
- Monitor compliance with this policy guideline and report on implementation outcomes
- Provide advice, information and support to Managers, Supervisors and workers with regards to hazard identification, risk management, and any incident involving personal protective equipment throughout their delegated LHN/HS/BU
- Liaise with Infection Control Coordinators in the appropriate PPE to be used for the prevention of transmission of infectious diseases
- Provide advice about the purchase of the types of PPE including: P2 face masks, gloves and gowns as necessary.
- Undertake fit testing of workers to ensure correct fit and wear of P2 masks where Clinical Worker Health Nurses provide this service.
- Ensure an investigation is conducted and the appropriate corrective actions have been taken for all incidents related to PPE
- Ensure SafeWork SA has been notified for all notifiable incidents
- Consult with LHN/HS/BU Health and Safety Representatives with respect to the identification and use of PPE.

5.7 Contractors

Will take reasonably practicable steps to:

- Exercise due diligence (where relevant) to ensure compliance with the intent of this Policy Guideline;
- Ensure accountability and awareness of this policy guideline and the use of PPE
- Abide by the terms of the contract / service level agreement, including compliance with work health and safety responsibilities for induction and orientation prior to commencement of any contracted work;
- Ensure that they and any subcontractors that may be engaged by them possess all the competence, accreditations, licences and permits that may be required for work to be performed for SA Health;
- Ensure that a risk management approach is undertaken to identify any hazards and risks associated with the task(s) commissioned from them, taking into account physical location of the works and heeding workplace alerts and cautions that are present at that location;
- Report any incident in accordance with SA Health Policy Directive – Work Health and Safety Reporting and Investigation (WHS);
- Comply with SA Health / LHN / HS / BU / policy, policy guidelines, safe work procedures and instructions by SA Health authorised personnel (as relevant).

5.8 Other Persons, Consumers, Visitors, Members of the Public

Will take reasonable care to:

- Abide by SA Health Directives related to the use of PPE as instructed by authorised SA Health personnel.
- For further information refer to SA Health booklet-Your Rights and Responsibilities

6. Reporting

All worker and consumer incidents must be reported via the Safety Learning System (SLS), or similar, prior to the completion of the working day.

Reference may be made to the SA Health Safety Learning System (WHS SLS) Hazard and Incident Reporting Guide

7. EPAS

Not applicable

8. National Safety and Quality Health Service Standards

This policy guideline provides guidance and information on the use and selection of PPE inclusive of the general principles of hand hygiene for health care workers which are formally aligned with the National Safety and Quality Health Service Standards:

National Standard 1:

Governance for Safety and Quality in Health Service Organisations.

Criterion 1.1 implementing a governance system that sets out the policies, procedures
and/or protocols

Criterion 1.4: Implementing training in the assigned safety and quality roles and responsibilities

1.14 Implementing an incident management and investigation system that includes reporting, investigating and analysing incidents (including near misses), which all result in corrective actions

National Standard 3:

Preventing and Controlling Healthcare Associated Infections:

Criterion 3.7: Promoting collaboration with Work Health and Safety programs to decrease the risk of infection or injury to healthcare workers.

Criterion 3.11: Implementing systems for using standard precautions and transmission-based precautions.

Criterion 3.19: Ensuring consumer-specific information on the management and reduction of healthcare associated infections is available at the point of care.

National Standard 1 Governance for Safety and Quality in Health Care	National Standard 2 Partnering with Consumers	National Standard 3 Preventing & Controlling Healthcare associated infections	National Standard 4 Medication Safety	National Standard 5 Patient Identification & Procedure Matching	National Standard 6 Clinical Handover	National Standard 7 Blood and Blood Products	National Standard 8 Preventing & Managing Pressure Injuries	National Standard 9 Recognising & Responding to Clinical Deterioration	National Standard 10 Preventing Falls & Harm from Falls
☒	☐	☒	☐	☐	☐	☐	☐	☐	☐

9. Other

SA Health WHSIM Flowchart Assessing the Need for Personal Protective Equipment (PPE).

10. Risk Management

Work Health and Safety risk management guidance and considerations defined in this policy guideline align in principle with the SA Health Risk Management Framework 2014 and ISO 31000 Risk Management- Principles and guidelines.

11. Evaluation

In accordance with SA Health Policy Directive - Performance Review and Continuous Improvement, implementation of this Policy Guideline will be monitored via the SA Health WHS Internal Audit Program against the following criteria:

- PPE as a risk control strategy is selected as part of a broader risk control strategy which takes into account the 'hierarchy of risk control' (PPE is not relied upon as the only source of protection against WHS risks).
- PPE is selected on the basis of risk assessment and in consultation with workers requiring it.
- PPE complies with relevant Australian/New Zealand Standards and any other relevant publications.
- PPE is readily accessible and visible to workers requiring it.
- Areas where mandatory use of PPE is required are signposted accordingly.
- Individual characteristics or conditions of workers are taken into account when requiring use of PPE (e.g. non latex gloves supplied to staff who have allergies to latex).
- Safe work procedures include required PPE for task and any other relevant information relating to PPE inspection, use, cleaning, maintenance, storage and disposal.
- Induction and training programs include information regarding inspection, use, cleaning, maintenance, storage and disposal of PPE.
- Use and effectiveness of PPE is monitored.
- Documentation relating to inspection, use, cleaning, maintenance and disposal of PPE is retained for requisite time periods.

12. Definitions

Reference may be made to the following resources for further definitions and clarification of any terms used throughout this policy guideline.

- SA Health WHSIM System - Glossary of Definitions

In the context of this document:

Health services
Are defined as inclusive of all Local Health Networks, hospitals, health care facilities, health care services, allied health services, SA Ambulance Services, Community care settings and supporting business services.

Blood and body fluid (BBF):

Blood (including dried blood), all other body substances, secretions and excretions (excluding sweat) regardless of whether they contain visible blood; non-intact skin; and mucous membranes.

Close contact:

Close physical contact can include (but not limited to); transferring the patient from bed/barouche, complicated wound care, assistance with toileting or enterostomies.

Face protection:

Includes several pieces of equipment, listed below:

- *eyewear* - required in addition to personal glasses and contact lenses
- *face shield* – stand-alone shield or may be part of a surgical mask
- *masks* –
  - *surgical* – surgical masks are loose fitting, single-use items that cover the nose and mouth. There are multiple types of surgical masks available.
- *Respirators (P2/N95)* - Respirators are medical devices designed to protect the wearer from infectious aerosols generated directly from the patient or created during aerosol-generating procedures e.g. bronchoscopy. The respirators generally used in healthcare settings are able to filter out approximately 94% of particles <5 microns in size and are known in Australia as P2 (approximately equivalent to N95 in USA or FFP2 in the UK).

  Refer to the SA Health Respiratory Protection against Airborne Infectious Diseases guideline.

Fluid resistant:

A textile or garment that is resistant to fluid for a certain time frame, specified pressure and particle size according to recognised national and international standards. Fluid will eventually penetrate fluid resistant material.

Gloves:

Gloves can be defined as coverings for the hands and are worn to protect health care personnel from exposure to BBFs or chemicals. They can be sterile or non-sterile and consist of the following:

- Sterile gloves* are worn when there is contact with sterile instruments and devices or normally sterile parts of the body
- Non-sterile gloves* are used for all other anticipated contact with BBFs
- Utility gloves are reusable items usually made of a more robust material and used during cleaning activities.

*Sterile and non-sterile gloves are single use and are disposed of after each episode of care.

Gowns:

Gowns are used to protect the healthcare worker's exposed body areas and prevent contamination of clothing with BBFs and consist of the following:

- Apron - a single use, disposable item with no sleeves that protects the front of a healthcare workers clothing. It is usually made of an impervious material and protects clothes when splash is anticipated but extensive contact with the patient or BBF is **not** expected
- Fluid resistant long sleeved gown – is used when **minimal** exposure to BBF is anticipated and / or **extensive** contact with the patient or their environment during contact precautions
- Impervious long sleeved gown – is used when there is a **high** risk of exposure to **extensive** amounts of BBFs e.g. Operating Room, Emergency Department, Intensive Care Unit

Impervious:

Fluid will not penetrate a textile or garment and is tested to a specified pressure and particle size according to recognised national and international standards.

Personal Protective Equipment (PPE):
General term used for pieces of equipment or clothing used to protect the healthcare worker from BBF and the transmission of infectious microorganisms.

Risk assessment:
A risk assessment is used to determine the level of threat to the healthcare worker prior to commencing an activity and estimates the:

- probability of the threat occurring
  And
- impact if the threat were to occur.

13. Associated Policy Directives / Policy Guidelines

SA Health Policy Directive – Roles, Responsibilities and Governance (WHS)
SA Health Policy Directive - Hazard Identification and Risk Management (WHS)
SA Health Policy Directive - Hand Hygiene

14. References, Resources and Related Documents

The following tools support the implementation of this Policy Guideline.

- SA Health WHSIM Procedure – Development and Maintenance of Safe Work Procedures (WHS)
- SA Health WHSIM Procedure – Mechanisms for Hazard Identification and Risk Management (WHS)
- SA Health Policy Directive – Control of Tuberculosis in South Australian Health Services
- SA Health Safe Handling - Cytotoxic Drugs and Related Wastes – A risk management guide for South Australian Health Services 2015
- SA Health Guidelines for the Prevention and Control of Infection in Health Care
- SA Health Clinical Guideline for Respiratory Protection against Airborne Infectious Diseases
- Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010)
- SafeWork Australia – Personal Protective Equipment (PPE) Frequently Asked Questions.

14.1 Hand Protection

- Standards Australia AS/NZ 1715:2009: Selection, use and maintenance of respiratory protective equipment
- Standards Australia AS/NZS 2161.1:2000 Occupational protective gloves - Part 1: Selection, use and maintenance.
- Standards Australia AS/NZS 2161.2:2005 Occupational protective gloves - Part 2: General requirements
- Standards Australia AS/NZS 2161.3:2005 Occupational protective gloves - Part 3: Protection against mechanical risks
- Standards Australia AS/NZS 2161.4:1999 Occupational protective gloves - Part 4: Protection against thermal risks (heat and fire)
- Standards Australia AS/NZS 2161.5:1998 Occupational protective gloves - Part 5:

Protection against cold

- Standards Australia AS/NZS 2161.7.1:1998 Occupational protective gloves - Part 7.1: Protection against cuts and stabs by hand knives – chainmail gloves and arm guards.
- Standards Australia AS/NZS 2161.8: 2002: Occupational protective gloves-Protection against ionizing radiation and radioactive contamination
- Standards Australia AS/NZS 2161.10.2 2005: Occupational protective gloves-Protective gloves against chemicals and micro-organisms-Determination of resistance to penetration
- Standards Australia AS/NZS 2161.10.3 2005: Occupational protective gloves - Protective gloves against chemicals and micro-organisms - Determination of resistance to permeation by chemicals

14.2 Eye Protection

- Standards Australia AS/NZS 1067: 2003 Sunglasses and fashion spectacles
- Standards Australia AS/NZS 1336:2014 Eye and Face protection
- Standards Australia AS/NZS 1337.4:2011 Eye and face protection-Filters and eye protection against laser radiation (laser eye –protectors)
- Standards Australia AS/NZS 1337.: 2010 Personal eye protection- Eye and face protection for occupational applications
- Standards Australia AS/NZS 1337.6: 2012 Personal eye protection- Prescription eye protection against low and medium impact
- Standards Australia AS/NZS 1338.2:2012 Filters for eye protection against ultraviolet radiation

14.3 Hearing Protection (9.3)

- Standards Australia AS/NZS 1269.0: 2005 Occupational noise management- overview
- Standards Australia AS/NZS 1269.1:2005 Occupational noise management – Measurement and assessment of noise emission and exposure
- Standards Australia AS/NZS 1269.2: 2005 Occupational noise management-Noise control management
- Standards Australia AS/NZS 1269.3: 2005 Occupational noise management- Hearing protector program
- Standards Australia AS/NZS 1269.4: 2005 Occupational noise management- Auditory assessment

14.4 Surgical Masks

- Standards Australia AS 4381-2002: Single-use face masks for use in health care

14.5 Particulate Filters

- www.worksafe.vic.gov.au- Respiratory protective devices
- www.worksafe.vic.gov.au- Respirator and Filter Integrity

14.6 Disposal N95 or P2 Masks

- Standards Australia AS 1716:2012 Respiratory protective devices
- SA Health Policy Directive- Control of Tuberculosis in South Australia Health Services
- SA Health Clinical Guideline- Guideline for Respiratory Protection against Airborne Infectious Diseases
- Respirator Protection with Powered Air Purified Respirator (PAPR)
- www.osha.gov – Respiratory protection (US WHS website)

14.7 Laser Safety

- Standards Australia AS/NZS 4173:2004 Guide to the safe use of lasers in health care

- Standards Australia AS/NZS IEC 60825.1:2014 Safety of laser products- Equipment classification and requirements
- Standards Australia AS/NZS IEC 60825.14: 2011 Safety of laser products- A users guide

14.8 Skin Integrity and Protection

- SA Health WHSIM FOR199 Checklist - Worksite Safety Checklist - Grounds and Gardens
- www.workcover.nsw.gov.au -Skin cancer and outdoor workers
- Standards Australia AS/NZS 1067:2003/Amdt 1 : 2009 Sunglasses and fashion spectacles
- Standards Australia AS/NZS 1337.4:2011/Amdt 2014 Eye and face protection-Filters and eye protection against laser radiation (laser eye –protectors)
- Standards Australia AS/NZS 4399: 1996/Amdt 1: 1998 Sun protective clothing-Evaluation and classification
- SA Health : Snakebite and Spider bite: Management Guidelines South Australia

14.9 Protective Clothing

- SA Health WHSIM FOR199 Checklist - Worksite Safety - Grounds and Gardens
- www.workcover.nsw.gov.au -Skin cancer and outdoor workers
- Standards Australia AS/NZS 4399: 1996 Sun protective clothing-Evaluation and classification
- Standards Australia AS/NZS 4501.1:2008 Occupational protective clothing—Guidelines on the selection, use, care and maintenance of protective clothing
- Standards Australia AS/NZS 4501.2:2006 Occupational protective clothing—General requirements
- Standards Australia AS/NZS 4543.3:2000: Protective devices against medical x-radiation-Protective clothing and protective devices for gonads
- Standards Australia AS/NZS ISO 2801:2008 Clothing for protection against heat and flame-General recommendations for selection, care and use of protective clothing.

14.10 Footwear

- Standards Australia AS/NZS 2210.1: 2010 Occupational Protective Footwear Part 1: Guide to selection, Care and Use
- Standards Australia AS/NZS 2210.3.2009 Occupational Protective footwear-specifications for safety
- SA Health: Spider bite and Snake bite SA guidelines.

14.11 Head Protection

- Standards Australia AS/NZS 1800:1998 Occupational Protective helmets-selection, care and use

14.12 Falls Protection

- Standards Australia AS/NZS 1891.3. 1997 Industrial fall-arrest systems and devices-Fall-arrest devices
- Standards Australia AS/NZS 1891.4. 2009 Industrial fall- arrest systems and devices – selection, use and maintenance

Assessing the Need for Personal Protective Equipment (PPE)

Assess the need for PPE

- PPE requirements may be determined from the identification of hazards associated with:
  - Trial, purchase or use of plant or equipment
  - Trial, purchase or use of a chemical substance, or a drug where the risk of spillage may affect the health and safety of workers E.g. cytotoxic drugs; anaesthetic drugs
  - Exposure prone procedures E.g. caring for patients diagnosed or suspected of having acute respiratory symptoms, active respiratory Tuberculosis, Multi – resistant organisms (MRO's)
  - Investigating reported hazards or work related incidents
  - Review of a safe work procedure that identifies a new or existing hazard which may be managed by the use of PPE
- Reference may be made to:
  - Table 1 for the gown or apron risk assessment
  - Table 2 for the glove risk assessment
  - Table 3 for the face and eye protection risk assessment

PPE required

Consider if PPE interim measures are required before more effective controls can be established:

- If other controls are impossible or not completely effective
- During maintenance or clean up
- In emergencies

Work involving chemicals

- The Safety Data Sheet (SDS) must be consulted before selecting PPE
- The SDS will indicate whether PPE is necessary and if so what is required

Use the Hierarchy of Risk Control to identify the highest level of risk control possible

- The following forms provide additional information on various risk control measures associated with the Hierarchy of Risk Control:
  - FOR205 Form - Plant / Equipment Risk Assessment
  - FOR206 Form – Chemical Safety - Risk Assessment
  - FOR321 Form – Chemical Safety – Task risk assessment (SWMS)
- Hierarchy of Risk Control Principles:

Most Effective ↑	ELIMINATION	Where practicable remove the hazardous process or substance
	SUBSTITUTION	Change to a less hazardous or non-hazardous process or substance
	ENGINEERING CONTROLS	Use barriers such as safety cages / screens / remote controls to provide a barrier to the hazard
	ADMINISTRATIVE CONTROLS	Implement safe work procedures; provide induction, instruction and training
Least Effective	PPE	Use of equipment or clothing as required to protect workers from exposure to workplace hazards

If a safe work procedure is required:

Refer to CPR021 Procedure – Development and Maintenance of Safe Work Procedures

Table 1 Gown or apron risk assessment

Key considerations are:

- Selection of gowns or aprons must be based on the risk of contamination of clothing or skin of healthcare workers by patients' blood, body fluids, secretions or excretions to penetrate through to clothes or skin

Apron / Gown type required	**Blood and body fluid exposure risk**	**Examples**
Apron (impervious)	protects clothes when: • **moderate** risk of exposure to blood and body fluids is anticipated • **minimal** contact with the patient and the environment is anticipated	• Empty drain / catheter • Connection / disconnection during haemodialysis • Leg ulcer dressing in outpatients / primary health care setting
Gown (fluid resistant)	Protects clothes or skin when: • **minimal** risk of exposure to blood and body fluids is anticipated • **moderate or extensive** contact with the patient or the environment during contact precautions	• Patient with Scabies, multi-resistant organisms, hepatitis A
Gown (impervious)	Protects clothes or skin when: • **High** risk of exposure to **large** amounts of blood and body fluids	• Operating theatres (OR) • Emergency department (ED) • Intensive care unit (ICU)

Table 2 Glove risk assessment

Key considerations are:

- Is a sterile or non-sterile glove required?
- Who is at risk (you or the patient)?
- What is the potential exposure to blood, body fluids (BBF), secretions or excretion?
- Will there be contact with non-intact skin or mucous membranes?
- Are you or the patient allergic to natural rubber latex (NRL)?

Types of materials:
Latex (NRL), NRL alternative e.g. nitrile (both provides optimal protection against BBF exposure) and vinyl. Polythene gloves are not suitable for clinical use and are generally used for food handling, preparation and serving.

Glove type required	**Blood and body fluid exposure risk**	**Examples**
Non-sterile	• risk of exposure to blood and body fluids is anticipated • contact with non-intact skin or mucous membranes is anticipated	• Venepuncture • Vaginal examination • Dental examination • Emptying a urinary catheter bag • Nasogastric aspiration
Sterile	• contact with normally sterile sites or clinical devices where sterile or aseptic conditions must be maintained	• Urinary catheter insertion • Complex dressings (when a key site or part needs to be touched) • Central venous line insertion dressing • Lumbar puncture • Dental procedures requiring a sterile field
Reusable utility glove	• Indicated for non-patient care activities	• Handling or cleaning of contaminated equipment or surfaces • General cleaning duties • Instrument cleaning in sterilisation units

Table 3 Face and eye protection risk assessment

Key considerations are:

- What is the potential exposure to blood, body fluids, secretions or excretions?
  - Will the procedure generate splashes or sprays of blood, body fluids, secretions or excretions?
  - Will the procedure generate potentially infectious aerosols?

Protection required	**Blood and body fluid exposure risk**	**Examples**
Eye protection		
None (Not required unless caring for a patient on droplet or respiratory precautions)	Risk of exposure to blood and body fluids is **NOT** anticipated i.e. routine patient care	• General examination (e.g. medical, physiotherapy, nursing) • Routine observations • Assistance with ADLs
Protective eyewear or full length face-shield	Procedures that generate **minimal to moderate** exposure to blood and body fluids	• Dental procedures • Nasopharyngeal aspiration • Emptying a wound or catheter bag • Removal of wound drain, urinary catheters or feeding tubes
Face protection (mask)		
Surgical (non-fluid resistant)	Risk of exposure to blood and body fluids is **NOT** anticipated – *for use by the patient or visitor*	Suitable to use when transporting a patient on droplet or airborne precautions (if this does NOT compromise the patient's breathing)
Surgical (fluid-resistant)	Procedures that generate **minimal to moderate** exposure to blood and body fluids – *for use by the healthcare worker*	• Procedures that generate splashes or sprays of large droplets of blood, body substances, secretions and excretions • Procedures requiring a surgical technique • Suitable to place on patient when transporting (if this does NOT compromise the patient's breathing) • Routine care of patients on **droplet** precautions
P2 / N95 respirator	Procedures that involve aerosolisation of particles that may contain specific known pathogens– *for use by the healthcare worker* ***not for use by the patient or visitors***	• where an AGP is being performed on a patient with a known or suspected high morbidity/mortality airborne or respiratory infection e.g. bronchoscopy, intubation • Routine care of patients on **airborne** precautions