

PERSONAL PROTECTIVE EQUIPMENT FOR INFECTION CONTROL PRECAUTIONS - SCHN PRACTICE GUIDELINE®

DOCUMENT SUMMARY/KEY POINTS

- Local Induction to Personal Protective Equipment (PPE) – Statewide Mandatory One off Training requirement.
- All staff required to use or wear PPE for:
 1. Blood or body substance protection/or for care of patients, or in environments, with infections;
 2. Hazardous environments;
 3. Food Safety
- Use to minimise the risk of infection to staff and reduces the risk of cross infection to patients and others
- Where there is a “likelihood” of splash from bodily fluid associated with a patient care or intervention, relevant PPE must be donned
- The health care worker (HCW) should exercise judgement and don the appropriate PPE based upon their assessment of the level of risk.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 August 2016	Review Period: 3 years
Team Leader:	Clinical Nurse Consultant	Area/Dept: Infection Control

CHANGE SUMMARY

- Document due for mandatory review.
- Replaces SCH document i.P.1 **Personal Protective Equipment**
- Changes relate to the Introduction to Personal Protective Equipment – Statewide mandatory one off training requirement as per HETI
- Changes include definition of each type of PPE.

READ ACKNOWLEDGEMENT

All staff required to use or wear PPE for:

1. Blood or body substance protection/or for care of patients, or in environments, with infections;
 2. Hazardous environments;
 3. Food Safety
- Training/Assessment Required –Local Induction to Personal Protective Equipment (PPE) – Statewide Mandatory One off Training requirement. Attendance at the face to face program is mandatory and will be entered into HETI. This includes theoretical information, a practical demonstration and ward based orientation to include information specific to the clinical area.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

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Policy Statement

Observing “Standard precautions” include safe work practices and the use of relevant PPE. These minimise the risk of infection to staff and reduces the risk of cross infection to patients and others. Where there is a “likelihood” of splash from bodily fluid associated with a patient care or intervention, relevant PPE must be donned (Section 2, PD2007-036). The health care worker should exercise judgement and don the appropriate PPE based upon their assessment of the level of risk.

Personal protective equipment (PPE): equipment designed to prevent contamination of the health care worker and/or their clothing, for example gloves, goggles, face shields, gowns

PPE refers to a variety of barriers, used alone or in combination, to protect mucous membranes, airways, skin and clothing from contact with infectious agents.

In determining the type of PPE to be used, the following must be taken into consideration: risk of exposure to blood and/or body substance the amount of the substance to be encountered probable route of transmission type of substance

Examples of Situations Associated with a Significant Risk of Bodily Fluid Exposure (“High Risk Procedures”)

This list is indicative and not exhaustive, and is relevant regardless of whether the patient is infected with an infectious agent or not:

- Intubation
- Suctioning (nasopharynx, endotracheal or tracheostomy – regardless of whether patient is paralysed or not)
- Insertion of nasogastric tube
- Laryngobronchoesophagoscopy (LBO) or assisting with LBO
- Nasopharyngeal swabs or aspirates or throat swabs
- Tending to a vomiting or coughing patient.

Personal Protective Equipment:

Clothing/uniforms

Clothing contaminated with blood or body substances should be removed as soon as possible and before HCWs attend to other patients. If skin is contaminated with blood or body substances, shower or wash the affected area.

Aprons/Gowns

A single use fluid-resistant gown or apron made of impervious material must be worn during any procedure where there is a likelihood of splashes or contamination with blood or other body substance.

Cloth (cotton/polyester-cotton) gowns do not provide protection to the HCW or their clothing and should not be used.

Gloves

Gloves are worn as a barrier to protect the wearer's hands from contamination or to prevent the transfer of organisms already on the hands. The use of gloves does not eliminate the need for hand hygiene. Hand hygiene must be performed before and after glove use. Gloves must be used in situations where the HCW is potentially exposed to blood and/or body substances, for example:

- during any procedure where direct contact is anticipated with a patient's blood or body substance, mucous membranes or non-intact skin
- while suctioning a patient
- while handling items or surfaces that have come into contact with blood or body substances
- while performing an invasive procedure, venepuncture or a finger or heel stick

Disposable gloves must never be re-used.

Gloves must be changed and discarded:

- as soon as they are torn or punctured, hand hygiene performed as soon as practicable, and new gloves. The sharp or instrument involved in the incident must also be removed.
- when performing separate procedures on the same patient and there is a risk of transferring infection from one part of the body to another
- after procedure is complete

Glove selection

Patient care

- Nitrile/latex non-sterile - contact with contaminated items, blood/body substances and mucous membranes and non-intact skin of all patients.
- Sterile gloves - contact with tissue that would be sterile under normal circumstances. Sterile gloves are not required for most dental procedures except where invasive procedures are anticipated.
- High risk latex gloves (4 times thicker than standard exam gloves) – may be used in high risk areas such as psychiatric services, Emergency Department and security to provide a higher level protection.
- Latex free (nitrile, sterile or unsterile) - latex allergy of staff or patient.

Other

- - Vinyl - catering services only
- - Heavy duty such as leather – collection of clinical or general waste, soiled linen
- - General purpose utility/rubber household – housekeeping tasks including:
 - instrument cleaning,
 - general cleaning tasks,

- decontamination procedures,
- potential for gross contamination or blood contact exists,
- general purpose utility/rubber household gloves should be labelled and allocated to individuals where possible; washed in detergent after use and hung to dry.

They are to be discarded if peeled, cracked, discoloured, torn, punctured or deteriorated.

Face shields/protective eye wear:

Protective eye wear/facial protection must be worn while performing any procedure where there is a likelihood of splashing or splattering of blood and/or other body substances.

Must be worn and fitted in compliance with the manufacturer's instructions.

Goggles/face shields must be discarded once worn if single use

Reusable goggles/face shields must be cleaned in accordance with the manufacturer's instructions.

Masks

Use of masks is intended to prevent transmission of infectious agents through the air and:

- are required when attending patients with droplet or airborne precautions in place.
- must be worn and fitted following the manufacturer's instructions,
- should not be touched by hand while being worn,
- All masks are single use items
- should be removed as soon as practicable after becoming moist,
- must be removed by touching the strings/loops only,
- must be discarded once it has been worn and it must not be worn again,
- hand hygiene should be performed after donning and doffing the mask,

Particulate masks should be worn by:

- attending suspect/probable/confirmed emerging infectious respiratory disease patients.
- HCWs attending a smear positive pulmonary Tuberculosis patient,
- all visitors in direct contact with a smear positive pulmonary Tuberculosis patient HCW,

Surgical masks should be worn by:

- HCWs performing aseptic/invasive procedures as per individual policies
- HCWs attending to patients nursed in droplet precautions,
- patients leaving their room who may be suspect/probable/confirmed respiratory disease spread by droplet or airborne,
- all visitors to suspect/probable/confirmed respiratory disease spread by droplets,
- patients who are susceptible to infection who leave their protective isolation room temporarily.

Type of Transmission and Precautions Needed				
Some scenarios or conditions in each transmission category				
INFECTION CONTROL MEASURES	AIRBORNE PRECAUTIONS¹	DROPLET PRECAUTIONS²	CONTACT PRECAUTIONS	STANDARD PRECAUTIONS
	Tuberculosis (TB) - suspected or confirmed Primary varicella Disseminated zoster Measles	<i>Neisseria meningitidis</i> (NM) invasive disease or NM conjunctivitis ³ Pertussis Respiratory syncytial virus infection (RSV) and other respiratory viruses Influenza ('epidemic' and "non-epidemic" strains) Rubella <i>Norovirus</i> ⁴ (vomiting)	Multi Resistant Organisms (MRO's e.g. MRSA, VRE , ESBL) Herpes simplex (neonatal or mucocutaneous) Highly contagious skin infections (e.g. impetigo) Infants in nappies with enteroviral infection, infective gastroenteritis Localised herpes zoster	All patients
HAND HYGIENE	ALWAYS	ALWAYS	ALWAYS	ALWAYS
PPE RECOMMENDATIONS				
GLOVES	Use when there is a potential for exposure to blood or bodily fluids	Use when there is a potential for exposure to blood or bodily fluids Always use if tending to a patient with suspected or proven <i>Norovirus</i> Always when tending to <i>Neisseria meningitidis</i> (NM) infection when handling secretions if therapy for NM is < 24 hours ^{3&5}	Use if patient has a MRO and there is going to be patient contact Use if there is substantial contact with the patient, surfaces or items in the patient's room Always use if tending to patient with non-intact skin or with mucous membrane contact Use when there is a potential for exposure to blood or bodily fluids	Use when there is a potential for exposure to blood or bodily fluids
FLUID RESISTANT GOWN	Use when soiling is likely	Use when soiling is likely Always use if tending to a patient with suspected or proven <i>Norovirus</i> Always use when tending to <i>Neisseria meningitidis</i> infection and soiling is likely, when therapy for NM is < 24 hours ^{3&5}	Use if soiling is likely Use if there is substantial contact with the patient, surfaces or items in the patient's room	Use when soiling is likely

MASK	Use to protect face if splash or aerosolisation of secretions/bodily fluids is likely Always use P2 (N95) particulate mask) for TB	Use to protect face if splash or droplet is likely Always use if tending to a patient with suspected or proven <i>Norovirus</i> who is vomiting (surgical mask) Always use when tending to <i>Neisseria meningitidis</i> infection or if within 1 metre of patient when therapy for NM is <24 hours ^{3&5}	Use to protect face if splash likely	Use to protect face if splash likely
PROTECTIVE EYEWEAR (goggles or visors)	Use to protect face if splash or aerosolisation of secretions/bodily fluids is likely	Use to protect face if splash or aerosolisation likely Always use if tending to NM infection and splash is likely when therapy for NM is < 24 hours ^{3&5}	Use to protect face if splash likely	Use to protect face if splash likely

1. Staff in attendance must be immune to varicella and measles and have had TB status determined
2. 'Droplet precautions' required to within a radius of 1 metre from patient
3. 'Droplet precautions' for *Neisseria meningitidis* (meningococcal) infections can cease after 24 hours of appropriate antibiotic therapy that clears nasopharyngeal carriage (Ceftriaxone or Cefotaxime)
4. Acute gastro-like illness (predominantly vomiting) with high infectivity rate
5. If appropriate therapy for *Neisseria meningitidis* (meningococcal) infections (see 2) has been given for ≥ 24 hours, then PPE may be used when splash with bodily fluids is deemed likely.

Related Documents

- NSW Health PD2007_036 “Infection Control Policy”
- SESLHDPR/357 “Standard and Transmission Based (Additional) Precautions with Infectious Diseases” July 2014
- Health Practitioner National Law – Sect 247A NSW Regulations (NSW)
- National Safety and Quality Health Service Standard No. 3 ‘Preventing and Controlling Healthcare Associated Infections’(Criteria 3.1, 3.2, 3.3.2, 3.5, 3.7, 3.10, 3.11 and 3.19)

References

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- Australian Guidelines for the Prevention and Control in Health Care (2010)
- Heymann, D.L MD, Editor. Control of Communicable Diseases Manual. 18th Edition. American Public Health Association 2004
- Jawetz, Melnick, & Adelberg's Medical Microbiology, 26e, Geo F. Brooks, Karen C. Carroll, Janet S. Butel, Stephen A. Morse, Timothy A. Mietzner
- National Health and Medical Research Council. Staying Healthy in Childcare – Preventing infectious diseases in child care - Fourth edition. Commonwealth of Australia. 2006
- National Health and Medical Research Council. The Australian Immunisation Handbook. 10th Edition. Commonwealth of Australia. 2013

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