

IMMUNISATION, STANDARD AND PRECAUTIONARY ADVISORY BOOKLET

For Health Professional Students

2019

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INTRODUCTION

This booklet is important for all health professional students who will have contact with patients/clients. Students should ensure that their personal immunisation records are kept up to date.

There are two general concerns about infectious diseases in practicing health care:

- 1. That you do not inadvertently acquire infections from patients/clients.
- 2. That you do not transmit infections to your patients/clients.

The following infection control policies indicate the evidence based recommend procedures to minimise inadvertent infection. You have a responsibility for your own health and for the health of others to adhere to the recommended guidelines. We specifically draw your attention to the risks of blood-borne viruses (Hepatitis B & C and HIV) and keeping yourself fully informed about infection risks if you travel overseas on elective placement.

When working in any clinical environment, you will be at increased risk of exposure to some infectious agents against which you should be vaccinated. You may also transmit infectious agents from yourself to patients during the incubation period that can be very serious in specific patient groups (e.g. Chickenpox and Rubella in immunosuppressed or non-immune pregnant patients, Influenza to elderly at risk patients). Refer to the Immunisation and Blood-Borne Viruses Policy and Questions and Answers in this booklet to ensure you comply with the requirements of your relevant College.

Before enrolment, you should seek medical advice to determine your immunity to common infections. You are required to obtain the appropriate immunisations where effective programs are available, along with documented records.

Should you have any queries on these policy matters please seek advice from your WIL Placement Coordinator in the first instance.

CONTACT INFORMATION

Flinders University Health & Counselling Service	Phone 8201 2118
Flinders Infectious Diseases Clinic (Referral required for Infectious Diseases Consultant) Occupational Health Service and Injury Management Service (FMC)	Phone 8204 8953
Royal Darwin Hospital, NT	Phone 8922 8888
Department of Health, Centre for Disease Control	Phone 8922 8044

STUDENT ACTION LIST

- SA Health and most non-government venues require all students undertaking a clinical/professional experience placement to have documented evidence of their immune status to the selected vaccine preventable diseases. You are required to ensure that you are compliant with the Immunisation and Blood-Borne Viruses Policy.
- Read, understand and adopt the recommended practices concerning infection control outlined in this booklet.
- Ensure that your immunisation status is up-to-date. Make an appointment with the <u>University's Health Service</u> or your general practitioner to complete the Health Care Provider Form (<u>Form A & B</u>). Take records of previous immunisations or blood tests for the relevant vaccine preventable diseases with you. Refer to the <u>Immunisation and Blood-Borne Viruses Questions & Answers</u> at the end of this booklet for advice. You, your parents or general practitioner may have the relevant information on file. Alternatively, local government immunisation clinics may have it, however, you need to know where you were vaccinated in order to get this information.
- Students on placement in South Australia: All Student Health Care Workers must complete the TB Screening Survey at www.pages.on.net/questionnaire.php. After completion of the questionnaire, you will receive an email from South Australian Tuberculosis Services (SATBS) within seven (7) days advising you of further instructions to complete your tuberculosis screening. You must provide your College with this email confirmation or screening clearance as directed, and also keep this confirmation for future reference. You must be given clearance from the SA Tuberculosis Service prior to your first clinical placement in any SA Health facility.

If you were screened at SATBS last year you do not need to complete the online questionnaire again unless, you have been on an overseas placement, travelled/worked abroad in a high risk country or been exposed to someone with TB.

Queries can be directed to SA TB Services, on (08) 8222 4867

- Tuberculosis FAQ (PDF 126KB) Students on placement in the Northern Territory: A tuberculin skin test (Mantoux test) is used for baseline screening for tuberculosis and is mandatory in the NT for health staff (including cleaning, domestic and laboratory staff, and students) working for the Northern Territory Public Service who have physical contact with patients and exposure to bodily fluids. You may obtain a screening in SA before taking up a placement in the NT; please contact your GP or the University's Health, Disability and Counselling Service, for further details on obtaining the appropriate test (see below for further details).
- When you attend your clinical/professional experience placement you will need to provide the health care venue with your certified completed copy of the **Compliance with Immunisation and Blood-Borne Viruses Policy (Form A & B)**.
- If you are exposed to infections against which you are not immune or plan to work amongst patients who might be particularly susceptible to infection, you should seek advice from the Infectious Disease Consultants.

NATIONAL IMMUNISATION PROGRAM SCHEDULE

The immunisation requirements have been determined by:

- National Health and Medical Research Council <u>The Australian Immunisation Handbook 10th</u>
 <u>Edition (updated June 2015)</u> which outlines the currently available vaccines and recommended vaccination schedules.
- SA Health provides details on the requirements for Health Care Workers, which is relevant to all students. To read more on the requirements please go to the <u>SA Health website</u>. The minimum standards for immunisations can be located in the <u>Immunisation for Health Care Workers in South Australia Policy Directive</u>.
- Northern Territory Department of Health <u>Immunisation Recommendations for Health Care</u>
 <u>Workers</u> specifies requirements for students attending placements in the NT.

The immunisations required in SA will generally cover placements in other areas of Australia, however, students need to be aware that some states require annual Influenza (Flu) vaccinations while these are only strongly recommended in SA. Please refer to the other state's requirements:

ACT NSW Vic & Tas QLD WA

Please note: Live attenuated vaccines are generally not recommended for those students who are immunosuppressed or pregnant. Should you have a relevant medical condition it is recommended you discuss this with your Doctor or seek confidential advice from an Infectious Diseases Specialist.

HEPATITIS A

Prior to undertaking clinical placements in high risk areas (Northern Territory, Indigenous communities), students must have had at least the first dose of Hepatitis A vaccine. A second dose is recommended 6-12 months later to provide longer term immunity. Alternatively, provide evidence of serological immunity.

NOTE: This vaccine is only required when completing placements in the high risk areas identified above.

HEPATITIS B

Hepatitis B vaccination was added to the routine childhood schedule in 2000 and therefore not all students will have received immunisation. Health Care Workers (HCW) who have not been vaccinated or who do not have laboratory evidence of resolved hepatitis B infection (hepatitis B core antibody positive and hepatitis surface antigen negative) should complete the course (vaccine at 0, 1, 6 months) and have confirmation of protection via serology (positive HBsAb, >10mIU/mL).

VARICELLA ZOSTER VIRUS (CHICKENPOX)

Students with a reliable past history of Chickenpox can be considered immune. However, if there is no history of Chickenpox, vaccination *or* serological status is required. If seronegative, vaccination is required (2 doses 1-2 months apart). Please note, students who undertake clinical placement at private hospitals in Adelaide are required to have evidence of either vaccination or serological immunity.

DIPHTHERIA & TETANUS

The recommended schedule comprises immunisation at 2, 4 and 6 months of age (given with pertussis vaccine as DTPa), and boosters at 4 and 15 years. Thereafter, boosting is no longer routinely

recommended unless a high-risk injury occurs, or age of 50 years, when a further booster is given (reduced dose diphtheria given with pertussis vaccine as dTpa). See Pertussis (whooping cough) below where a dTpa vaccine is recommended every 10 years for health care workers.

POLIOMYELITIS

Calvary and Acha Health require either documented evidence of a completed course of polio vaccination OR a Statutory Declaration signed by the student stating that they have received a complete course of polio vaccine in the past. Most students will have received the recommended schedule comprising immunisation with inactivated Polio vaccine (IPV) at 2, 4 and 6 months of age with a booster at 4 years. If not, a 3- dose primary vaccination course is required. A booster dose may be required if undertaking an elective placement in affected countries.

MEASLES, MUMPS & RUBELLA

Measles, Mumps and Rubella (MMR) vaccination is strongly recommended for adults born after 1966 who have not received 2 doses of vaccine in the past. The recommended schedule for MMR comprises immunisation at 12 months and 18 months of age. Adults born before 1966 can be considered immune.

TUBERCULOSIS

Students must complete the **South Australian Tuberculosis Services (SATBS)** questionnaire. Following questionnaire completion an email will be sent to you within 7 days advising of further instructions to complete your tuberculosis screening.

A tuberculin skin test (Mantoux test) is used for baseline screening for tuberculosis (alternatively a Quantiferon Gold blood test may be substituted). Students who are requested by SATBS to have a tuberculin skin test or Quantiferon Gold blood test should have these tests BEFORE receiving any required live vaccines (such as measles, mumps, rubella or varicella vaccine). If a live vaccine has already been given, the TB test cannot be done until at least 4 weeks later.

Students who are completing a placement in the Northern Territory can obtain the required test through the SATBS prior to leaving on their placement or through one of the TB Clinics NT Department of Health

INFLUENZA

Yearly vaccination is strongly recommended for all students involved in patient contact. Please note that some other Australian states require Influenza vaccination; please check the state requirements (see above).

PERTUSSIS (WHOOPING COUGH)

A single booster dose (given as dTpa, provided dTpa has not been given previously) is recommended for all health care workers if >10 years have elapsed since last dose. If no previous vaccination a primary course is required.

In addition to the above immunisations, some health care providers may require other vaccinations. Please use the Questions and Answers section at the end of this Booklet to guide you on which vaccines you will require.

IMMUNISATION AND BLOOD-BORNE VIRUSES POLICY

The aim of this policy is to minimise the risk of health professional students contracting or spreading an infectious or blood-borne disease.

STANDARD

The Policy has been devised in accordance with the Guidelines established by the former Committee of Deans of Australian Medical Schools (now Medical Deans Australia and New Zealand).

IMMUNISATION

Immunisation of health professional students should be in accordance with the standard recommendations of the National Health and Medical Research Council as documented in <u>The Australian Immunisation Handbook - 1Öth Edition (updated June 2015)</u>In SA the requirements for placement are specified in the <u>Immunisation for Health Care Workers in South Australia Policy Directive</u>

Students completing placements in the NT are required to adhere to the NT Department of Health.

A <u>Questions and Answers section</u> at the end of this Booklet will guide students on any tests or vaccines they may require.

In cases where students are completing their placement in another state it is necessary to verify if they meet the necessary immunisations required by that state's health services

ACT NSW Vic & Tas QLD WA

PROCESS

Students are expected to attend a health care provider who is well trained and experienced in providing immunisations, for example a general practioner or authorised immunisation nurse prior to the commencement of clinical placement for assessment, counselling and immunisation as necessary. Appointments can be made with the <u>University's Health Service</u> or your general practitioner. At this appointment, previous infection with or immunity to a number of infections will be assessed. It is recommended you review the <u>Questions and Answers</u> prior to your appointment and take any records of blood tests or immunisations with you when you attend. You may require additional vaccinations beyond this if other specific medical conditions are present e.g. past splenectomy.

CONFIDENTIALITY

All students will be assessed by the immunisation service with absolute confidentiality. The College may be notified of a student's compliance with this Policy but will not be advised of individual results.

COMPLIANCE

Students are required to sign a statement (<u>Form A</u>) and provide documentation of compliance with this Policy signed by their health care provider (<u>Form B</u>). Both forms are included at the end of this booklet. Completed forms should be provided to their college WIL unit via InPlace or as directed. Students who do not feel that they can comply with the Policy are required to discuss their objections with the WIL unit in the first instance. The WIL unit will progress the matter through to the Head of Teaching Section and/or the Dean as appropriate.

ELECTIVES

Students are required to seek pre-travel advice well in advance before undertaking overseas

electives/placements where special precautions may be necessary, and provide proof that they have done so. This is not required for electives/placements confined to New Zealand/USA/Canada/United Kingdom and European countries, with comparable health facilities to Australia.

DISCRIMINATION

No student will be discriminated against as a result of non-compliance with this Policy. However, students may not be able to meet their course requirements if they are unable to undertake clinical placements.

INFECTION CONTROL

Students are expected to understand and practice appropriate infection control measures during all clinical/professional experience placements. Infection control information and policies are covered in this booklet.

WORK HEALTH AND SAFETY

All health professional students should have access to medical advice, either in the teaching hospital /clinical placement to which they are assigned, or the University Health and Counselling unit, or your medical practitioner. Students should understand the type of work they are required to undertake, and the associated risks, and the appropriate control measures (e.g. personal protective equipment) and practices that need to be implemented in addition to immunisation. This should be explained during induction and during training. If students are not sure of what is required, or have safety concerns, they should raise these directly with their venue supervisor or if not satisfied they should raise these concerns with their Flinders University contact. Students who have particular allergies (for example to latex) or who are immunosuppressed, should discuss their situation with a Worker Health Nurse (or equivalent) during the on-site orientation to their clinical placement.

Any student that suspects they have had blood/bodily fluids exposure should report this immediately to the venue supervisor and their University contact so any appropriate testing, treatment and support can be implemented. For more information, check the PROCEDURE FOR FOLLOW-UP OF BLOOD OR BODY

BLOOD-BORNE VIRUSES

Refer to the guiding principles of the Australian National Guidelines for the Management of Health Care Workers known to be infected with Blood-Borne Viruses:

http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdna-bloodborne.htm

As a student health care worker, you have a responsibility to be aware of your status in relation to blood-borne viruses including HIV, Hepatitis B and Hepatitis C prior to commencing your enrolled course. Students who engage in at-risk behaviour or suspect that they may have been infected with a blood-borne virus at any time during their program, have a duty to seek testing and counselling.

Students who are infected with HIV, Hepatitis B or Hepatitis C are not required to disclose their status to the university or clinical venue. However, infected students must not undertake exposure-prone procedures and are strongly encouraged to inform the Dean of their status and seek confidential counselling in relation to personal health measures, training and vocational issues.

EXPOSURE PRONE PROCEDURES (EPPS)

These are procedures with potential for contact between the skin of the health care worker and sharp objects (including surgical instruments and splinters or pieces of bone) in body cavities or in poorly visualised or confined body sites (including the mouth).

Provided they are not conducted in poorly visualised or confined body sites, the following procedures **are not** considered to be exposure prone:

- · Phlebotomy,
- administering injections,
- placing intravenous (IV) or central venous (CVC) lines,
- performing needle biopsies or aspirations, lumbar punctures, venous cut-downs or angiographic procedures,
- excision of epidermal or dermal lesions,
- suturing of superficial skin lacerations,
- any other procedure where the use of sharps is superficial, well visualised and very unlikely that a health care worker's skin injury would result in exposure of a patient to the health care worker's blood or bodily fluids.

Oral, vaginal or rectal examinations, endoscopy, insertion/removal of nasogastric tubes or urinary catheters or other procedures that do not involve sharps are also excluded from the definition of EPPs.

WORK-RELATED INCIDENTS

(e.g. needle stick injury)

If you are injured or involved in an accident or incident while on placement (such as a needle stick injury, eye splash, fall or a personal attack by a patient) you should;

Steps to take:

- Exposed person to be relieved from work activity as soon as practicable to seek immediate first aid
- Immediately report the accident/incident to the most appropriate person at the venue, as well as your placement supervisor and WIL Coordinator.
- Complete the venue's 'Accident/Incident report' form. This form is submitted to the venue and you are advised to retain a scanned copy for inclusion with the FlinSafe Report.
- Log onto the University's <u>FlinSafe</u> online incident reporting system and complete the necessary details. Make sure that you:
 - select the FlinSafe button for students
 - enter your Topic Coordinator's name in the "SUPERVISOR" field. This will ensure that they are advised of the incident.
 - under the documents section upload related paperwork (i.e., evidence of medical treatment if received) including the scanned copy of your completed venue 'Accident/Incident report' form.
 - depending on the nature of the incident a University Work Health & Safety representative may contact you for follow up.
- If necessary, seek follow-up medical treatment from a service of your choice.

A procedure for blood or bodily fluid exposure is included in this manual as a general guide.

If there is a cost for medical treatment that is not covered by Medicare, you will need to contact the University Risk and Insurance Office on (08) 8201 5726 to discuss claims and reimbursement arrangements. This is not handled by the Colleges.

STUDENT INSURANCE

The University provides personal accident insurance to cover students who sustain accidental injuries while on placement. The benefits may include cover for loss of income and ancillary medical expenses. No payments can be made for Medicare-related expenses and gaps.

As students are not employees of the placement venue, workers compensation does not apply. Student insurance does not cover expenses/cost associated with becoming ill while at a placement venue. It is recommended that you keep copies of all documentation relating to a claim, for your ownrecords.

Please see the <u>University's Student Insurances</u> for more information regarding:

- Professional Indemnity
- Medical Malpractice
- Student personal accident

- Overseas travel insurance
- Private travel insurance

UNIVERSITY WORK HEALTH & SAFETY UNIT

For any other enquiries regarding work health and safety contact the <u>University Work Health & Safety Unit</u> on (08) 8201 3024; or by email to <u>whs@flinders.edu.au.</u>

STANDARD AND ADDITIONAL PRECAUTIONS

Standard Precautions are work practices required for the minimum level of infection control and are recommended for the treatment and care of all patients. Standard Precautions are designed to reduce the risk of transmission of micro-organisms from both recognised and unrecognised sources of infection to a susceptible host.

Standard Precautions include:

- hand hygiene,
- use of personal protective equipment (PPE),
- aseptic practices,
- appropriate reprocessing of instruments and equipment following use,
- safe handling and disposal of potentially infectious material, and
- environmental controls.

Additional Precautions are recommended for specified patients known, or suspected, to be infected or colonised with epidemiologically important or highly transmissible pathogens that can cause infection. **Additional Precautions** are implemented when Standard Precautions may be insufficient to prevent transmission of infection. Additional Precautions when required are always in addition to Standard Precautions.

The precautions implemented are based on disease transmission and are specific to the situation:

- airborne transmission (Tuberculosis, Measles, Chickenpox),
- droplet transmission (Mumps, Rubella, Influenza, Pertussis),
- contact transmission (MRSA, Clostridium difficile),

- any combination of the above routes,
- immunocompromised patients,
- patients with altered mental state and/or poor hygiene, or
- patients with large areas of infected skin or large open purulent wounds.

Additional Precautions may include one or any combination of the following:

- allocation of a single room with ensuite facilities,
- cohorting (room sharing by persons with the same infectious agent),
- special ventilation requirements (a negative pressure room),
- a 'STOP' sign on the door directing all persons to consult staff prior to entering,
- antiseptic hand cleansers for routine hand hygiene,
- extended sterilisation time of used instruments/equipment when reprocessing (currently only required for Creutzfeldt-Jakob Disease – low risk patients),
- additional use of protective barriers (e.g. gowns, gloves, masks, dressings),
- immune staff to care for infectious patients (e.g. only staff who have had Chickenpox or VZV vaccination should care for a patient with Chickenpox),
- additional room cleaning, special scheduling of the patient on a procedure list, or dedicated patient equipment.

HAND HYGIENE

Hand hygiene is **the most important basic measure** to prevent the spread of infection. Alcohol gels or rubs are available in all clinical environments and should be used for hand hygiene before and between all patient contacts. Hands carry two different types of flora: resident and transient.

Hand hygiene should be performed before significant contact with any patient. Significant contact activities include: examination of a patient or similar prolonged contact, inspection of a wound or intravascular cannula site, emptying a catheter or drainage reservoir, undertaking a venepuncture or a dressing, changing an IV flask or manipulating any similar 'closed' sterile system, delivery of IM or IV injections.

Hand hygiene should be performed after activities likely to cause significant contamination. Activities known to cause significant contamination include handling objects or materials soiled with body secretions or excretions, direct contact with body secretions or excretions, direct contact with mucous membranes, wounds, tracheostomy, and personal hygiene after toileting. Gloves should be used as an adjunct to hand washing when contamination of hands with blood or bodily fluids is anticipated. Gloves should be changed and hand hygiene performed between patients.

There are two main methods for hand hygiene:

- 1. Hand washing with soap or other detergents and water.
- 2. Hand antisepsis with alcohol hand gels or alcohol liquid hand rub.

Alcohol-based hand antisepsis reduces micro-organisms on hands. However, hand washing with soap is indicated when hands are visibly soiled.

https://www.hha.org.au/online-learning/learning-module-information

RESIDENT FLORA

These organisms live and multiply on the skin (mainly on superficial layers, but 10-20% inhabit deep layers) and can be repeatedly cultured, even after routine hand washing. Although these organisms are generally harmless, they are of special concern when performing invasive procedures. In these circumstances they need to be reduced and inhibited using an antimicrobial preparation, to prevent cross-infection.

TRANSIENT FLORA

These organisms are present in the hospital/clinical microenvironment and contaminate the hands of staff during normal work activities. They can be readily passed on to another person during contact and will survive on the hands for up to 24 hours, if not removed by hand hygiene (Occasionally, despite routine hand washing, a transient organism may take up "temporary residence" for a period of several weeks.). Contamination with transient flora may occur in the absence of visible soiling. Routine hand hygiene is performed to remove transient microbial flora derived from touching one's skin, another person's skin, or some object in the environment.

PROCEDURE FOR HAND ANTISEPSIS

Ensure all skin surfaces are accessible. Ensure nails are clean, short and unvarnished. Dispense 2-3 squirts of alcohol gel or alcohol liquid rub from the dispenser onto the hands. Rub hands with alcohol to cover all hand and finger surfaces, including fingertips **and** the dorsal sides of thumbs. Make sure that the hands are **not wet** (i.e. water) before alcohol hand antisepsis. Rub hands together until alcohol has dried by evaporation - this takes 15-30 seconds.

The World Health Organization has identified <u>5 Moments of Hand Hygiene</u> for health care workers. This approach recommends hands are cleaned

- 1. before touching a patient;
- 2. before clean/aseptic procedures;
- 3. after bodily fluid exposure/risk;
- 4. after touching a patient, and
- 5. after touching patient surroundings.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) provides a barrier between the source and the operator. Its use does not negate the need for safe work practices or hand hygiene. In many situations the risk of exposure to blood and bodily fluids can be determined in advance, so the appropriate PPE should be worn prior to performing the procedure or task. PPE may include: gloves, gowns, aprons, eye and/or facial protection (glasses, goggles, and face shields), masks and adequate footwear.

Gloves must be worn whenever there is a risk of direct contact with blood, bodily fluids, mucous membranes, non-intact skin or contaminated equipment or surfaces. Types of gloves worn should be appropriate to the task: sterile gloves for procedures involving normally sterile areas of the body, non-sterile examination gloves are recommended for all other contacts, general-purpose utility gloves to be used for cleaning and during manual decontamination of used instruments and equipment. Allergy or sensitivity may develop to glove powder or contact with latex proteins. Powder-free latex gloves or alternatives to latex are available and should be used by those who develop sensitivity.

Gowns are worn to protect the wearer's clothing and skin from contamination with blood and bodily fluids. Fluid resistant gowns/plastic aprons are indicated in situations where contamination with large amounts of blood or bodily fluid is anticipated. A plastic apron can be worn beneath a sterile gown to give added protection if strike-through is a possibility during surgical procedures. Gowns/aprons are also worn by personnel during the care of patients infected or colonised with epidemiologically important micro-organisms to reduce the opportunity for transmission of pathogens from patients or items in their environment to other susceptible patients/staff.

Protective Eyewear (goggles, glasses or face shields) must be worn during procedures likely to cause splattering, splashing or spraying of blood or bodily fluids. Eyewear should be shielded at the side and close fitting, and should be cleaned after use according to the manufacturer's instructions, generally with detergent solution and completely dry before being stored.

Masks are worn to protect the mucous membranes of the mouth and nose during procedures likely to cause splattering, splashing or spraying of blood or bodily fluids. High efficiency masks with filtration to 1 micron must be used for care of patients known or suspected to be infected with pathogens spread by the airborne route. To provide protection against airborne pathogens, masks must fit snuggly and be changed when they become moist or visibly soiled during use.

Specimens should be collected with gloved hands, placed in a correctly labelled leak proof container, enclosed in a sealed bag for transport with the request form in the outer sleeve pocket of the plastic bag to prevent contamination.

ASEPSIS, REPROCESSING AND ENVIRONMENTAL CONTROLS

Aseptic practices refer to precautions designed to prevent undue contamination of a person, object or area by micro-organisms. Aseptic practices are required when performing any invasive procedure, for example surgical procedures, dressing open wounds or insertion of indwelling cannula. Measures employed to achieve asepsis include:

- performance of appropriate hand hygiene,
- preoperative skin and body cavity preparation,
- processing,
- supply and storage of sterile equipment,
- antiseptic and disinfectant use,
- management of indwelling devices,
- environmental controls such as air filtration.

REPROCESSING EQUIPMENT

Cleaning is the essential first step for any form of reprocessing. If an item cannot be thoroughly cleaned, it cannot be reprocessed. Thorough cleaning should commence as soon as practicable after use. Inadequate cleaning may result in ineffective disinfection or failure to sterilize instruments or equipment. Hospital crockery and cutlery require no special precautions. The combination of hot water and detergents used in hospital dishwashers is sufficient to render the items safe for reuse.

ENVIRONMENTAL CONTROLS

A neutral detergent is the cleaning solution of choice for environmental surfaces. Extra cleaning may be necessary in the presence of some micro-organisms. Blood and bodily fluid spills must be dealt

with by wiping the area immediately with a paper towel and then cleaning the area with detergent and water if the spill is small. Large spills should be contained and in addition to cleaning with detergent and water, chlorine-generating disinfectants may be used.

Linen: Soiled linen is discarded into linen bags which when $_2/_3$ —¾ full must be securely tied off for transport. Any linen bags likely to leak blood or bodily fluid must be contained by a clear plastic bag and secured prior to transport. Alternatively waterproof linen bags should be used. All used linen is considered contaminated therefore minimal handling is recommended.

WASTE DISPOSAL

Standard Precautions must be employed when handling all waste. Waste is segregated at the point of generation into general, medical, cytotoxic, radioactive and hazardous streams. There is a legal obligation to classify waste appropriately.

SHARPS

The person generating the sharp is responsible for its safe disposal. Sharps should never be passed by hand between health care workers. Disposal should occur immediately following its use and at the point of use into designated puncture resistant containers that conform to Australian Standard AS4031. Remove sharps containers when 2/3 full, seal appropriately and place in the medical waste stream. Never recap used needles unless an approved recapping device is used.

NOSOCOMIAL INFECTION

Nosocomial infections are infections acquired directly or indirectly in a medical setting. The probability of a micro-organism causing infection in a host is dependent upon the dose (number of micro-organisms), a receptive host site of contact with the organism, time of contact (sufficient for multiplication or not) and the virulence of the organism.

The source(s) of the infecting agents may be patients, staff or visitors and may include:

- persons with acute diseases,
- persons in the incubating or window period of a disease,
- persons who are colonised or chronic carriers of the infecting agent,
- the person's own endogenous flora, or
- inanimate objects including equipment and medications.

SUSCEPTIBLE HOST

Resistance to infection varies depending upon underlying medical conditions and other factors that may compromise a person's immune status. Trauma, surgical procedures, anaesthesia, invasive indwelling devices, and therapeutic and diagnostic procedures render a person more susceptible to infection. Immunocompromised patients are at increased risk of infection from both their own flora (endogenous) as well as other sources (exogenous). Susceptibility to infection depends on the severity and duration of immunosuppression. They may be particularly susceptible to environmental contaminants such as Legionella or Aspergillus.

Where invasive medical procedures are involved, consideration should be given to placing patients at the start of the operating schedule. If considerable immunosuppression or neutropenia is present the additional precaution of single room accommodation is desirable.

ROUTES OF TRANSMISSION

Direct contact transmission involves direct physical transfer of micro-organisms from an infected or colonised person to a susceptible host. Indirect contact transmission involves the contact of a susceptible host with a contaminated inanimate object, such as contaminated instruments or equipment.

Droplets are generated during coughing, sneezing, talking, and during certain procedures such as suctioning and bronchoscopy. Transmission occurs when droplets containing micro-organisms come in contact with the conjunctiva, nasal mucosa or mouth of a susceptible person. Droplet distribution involves close association, usually 1 metre or less.

Airborne transmission occurs by dissemination in the air of either droplet nuclei or dust particles containing the infectious agent. Micro-organisms carried in this manner can be widely dispersed via air currents and can remain airborne for long periods before being inhaled by the susceptible host.

Vehicle transmission applies to micro-organisms transmitted by contaminated food, water, drugs, blood or bodily fluids.

Vector-borne transmission occurs when mosquitoes, flies, rats or other vermin transmit microorganisms.

PROCEDURE FOR FOLLOW-UP OF BLOOD OR BODILY FLUID EXPOSURE

Wash the affected area with soap and water. If cuts and abrasions are involved they should be included in the washing. For eye splashes rinse gently but thoroughly with water or normal saline, while the eyes are open. If blood gets in the mouth, spit it out and rinse the mouth with water several times. Record the incident including your name, contact number, ward, and the source name and medical record number if available. Follow the steps for work-related incidents listed on page 10.

The affected person should have blood taken (10 ml white top) by an authorised medical officer as soon as possible. Blood is tested for Hepatitis B, C and HIV antibodies if not previously tested, and serum is held for 7 years.

The source individual should have blood taken for HIV Antibody, Hepatitis B surface antigen, Hepatitis C antibody (NB: informed consent is required to undertake these tests, usually obtained by the doctor responsible for the patient). If blood is already available in serology (from previous tests) then more blood may not be required. If the source individual does not consent to have tests taken, the affected person is to be followed up as if the source was unknown.

If the source is known or suspected to be HIV positive, the clinical venue's on-call Infection Control Officer must be contacted urgently for advice.

SOURCE HIV POSITIVE

Post-exposure prophylaxis with antiretroviral therapy may be offered when the risk of transmission is considered to be significant. Commence as soon as possible after the exposure (preferably within 2 hours). Counselling will be provided on the risk of transmission, the importance of strict compliance with the treatment regimen and the potential side effects and appropriate course of action if these are experienced.

Follow-up: Report any febrile illness that occurs within 3 months after exposure. Repeat testing for HIV antibodies are performed at 3 and 6 months after exposure. During the first 3 months you should not

donate plasma or blood, body tissue, milk or sperm. Sexual partners should be protected from contact with blood, semen or vaginal fluids by using condoms. Pregnancy should be avoided until HIV status is known and you must avoid performing exposure prone procedures.

Source HBV positive (HBsAg positive)

If you have previously had Hepatitis B infection or you have been vaccinated against Hepatitis B and have confirmation of seroconversion, no further action is required. If there is no record of seroconversion to confirm that vaccine immunity has been achieved or if you have not been previously vaccinated for Hepatitis B, blood is taken for Hepatitis B surface antibodies. If negative, Hepatitis B immunoglobulin (HBIg) will be offered and a Hepatitis B vaccination course should commence at the same time. Three vaccinations at 0, 1 and 6 months are required.

SOURCE ANTI-HCV POSITIVE

At present, apart from thorough washing (as for HIV and HBV) at the time of injury there is no known treatment that can alter the likelihood of transmission. If HCV infection does occur, early treatment with interferon may be offered. Repeat testing for HCV antibody will be done 3 months after exposure.

SOURCE UNKNOWN

Reasonable efforts should be made to identify source persons or syringes. If the source remains unknown, appropriate follow-up should be determined on an individual basis depending on type of exposure and likelihood of source being positive for a blood pathogen.

Source negative for HIV, HBV, HCV:

No further action is required.

FOLLOW-UP AND APPROPRIATE CARE IS NOT REQUIRED FOR:

- Non-Parenteral Exposure: Intact skin visibly contaminated with blood or bodily fluid.
- **Doubtful Parenteral Exposure:** Intradermal (superficial) injury with a needle considered not to be contaminated with blood or bodily fluid, e.g. drawing up medication. A superficial wound not associated with visible bleeding produced by an instrument not contaminated with blood or bodily fluid. Prior wound or skin lesion contaminated with a bodily fluid other than blood and with no trace of blood e.g. urine.

FOLLOW-UP AND APPROPRIATE CARE IS REQUIRED FOR:

- Possible Parenteral Exposure: Intradermal injury with a needle contaminated with blood or bodily fluid. A wound not associated with visible bleeding produced by an instrument contaminated with blood or bodily fluid. Old wound or skin lesion contaminated with blood or bodily fluid containing any trace of blood. Mucous membrane or conjunctival contact with blood.
- **Definite Parenteral Exposure:** Laceration or similar wound which causes bleeding, and is produced by an instrument that is visibly contaminated with blood or bodily fluid. Any direct inoculation with human immunodeficiency virus (HIV) tissue or material likely to contain HIV, Hepatitis B virus (HBV) or Hepatitis C virus (HCV) not included above this refers to incidents in laboratory settings.
- Massive Exposure: Transfusion of blood. Injection of large volume of blood/bodily fluids (>1ml). Parenteral exposure to laboratory specimens containing high titre viral levels.

ADDITIONAL INFORMATION

ELECTIVES IN DEVELOPING COUNTRIES

Students undertaking electives/placements in developing countries are strongly encouraged to seek advice well in advance of travel, on illnesses and personal health and safety issues which may be encountered in those countries. Students planning electives/placements in countries with high rates of HIV positivity (e.g. most of Africa, India and South East Asia) must consult with a General Practitioner, the Flinders Health and Counselling Service or The Travel Doctor several months prior to undertaking the elective/placement. Students may require specific preventative treatment medications for Malaria and traveler's diarrhoea and may be advised to carry emergency HIV drugs to take immediately should a high risk blood/bodily fluid exposure take place. HIV medications for post-exposure use may be available at cost price through some pharmacies by prescription from Infectious Diseases medical staff.

Vaccination status needs to be reviewed for students undertaking electives/placements in developing countries and additional vaccines such as Typhoid, Meningococcal and Yellow Fever vaccinations may be required.

Further information can be obtained from the Centre for Disease Control and Prevention:

http://www.cdc.gov/ and the Australian Immunisation Handbook 10th Edition , Part 3.2

Vaccination for International Travel: www.immunise.health.gov.au/internet/immunise/

publishing.nsf/Content/Handbook10-home~handbook10part3~handbook10-3-2

EXPOSURE TO PERSONS WITH PULMONARY TUBERCULOSIS

Contact/tracing of patients with pulmonary tuberculosis may identify students who require follow up TB testing because of potential airborne exposure to *M. tuberculosis*. Follow up TB testing is completed through the Department of Health (SA & NT) in such cases. Students must participate if requested to do so.

IMMUNISATION AND BLOOD-BORNE VIRUSES QUESTIONS AND ANSWERS

Q1: WHAT IF I AM UNABLE TO HAVE MY VACCINATIONS FINALISED BEFORE PLACEMENT?

You should be in the process of completing all your vaccinations prior to placement, and have had the first dose of the required vaccine before being allowed on placements. It is the student's responsibility to ensure that immunisations are completed in an appropriate period before going on placements. Failure to meet compliance with immunisations will result in your placement being rescheduled, however, it is not guaranteed that rescheduling a placement will not delay completing that topic.

Q2: WHAT IF I AM UNWELL - SHOULD I STILL HAVE MY VACCINATIONS?

This depends on which vaccines you are having and how unwell you are. Please seek advice from your General Practitioner or the Flinders Health and Counselling Service.

Q3: WHAT IF I HAVE ALLERGIES SHOULD I STILL BE VACCINATED?

This depends on which allergies you have and which vaccines you are having. Please seek advice from your General Practitioner or the Flinders Health and Counselling Service.

Q4: WHAT IF I AM PREGNANT – WILL I BE ABLE TO HAVE VACCINATIONS?

Please seek advice from your General Practitioner or the Flinders Health and Counselling Service.

Q5: WILL I INCUR COSTS FOR ANY BLOOD TESTS AND CONSULTATION(S) WITH A DOCTOR?

In general, Medicare provides cover for blood tests however students should check with their healthcare provider as to the cost of the specific blood tests and consultations, and how much Medicare will cover.

The University Health Service has agreed to bulk bill for consultation and blood tests meaning that domestic students who use this service will not incur any costs.

For International students private health insurance policies may vary in their cover, so students ineligible for Medicare will need to clarify their cover with their own health insurance provider.

Q6: CAN I BE REIMBURSED FOR VACCINES PURCHASED FROM PRIVATE PHARMACIES OR GET PRIVATE SCRIPTS FILLED BY MY COLLEGE? No.

Q7: DO I NEED TO HAVE A HIV ANTIBODY TEST DONE AND WHO NEEDS TO KNOW THE RESULT?

It is recommended that students know their HIV antibody status, however, you are not obliged to inform the University or the placement provider. If your HIV test was positive, it is highly recommended that you seek confidential medical and career advice from an infectious diseases specialist. You **must not** undertake any exposure prone procedures.

Q8: DO I NEED TO PROVIDE RESULTS FROM A RECENT HEPATITIS B SURFACE ANTIGEN TEST?

You need to know your HepBsAg status. If you have documented surface antibody to Hepatitis B you don't need to do anything further as you are considered to have life-long immunity to Hepatitis B. If not, you will need 3 doses of Hepatitis B vaccine followed by a blood test 6-12 weeks after the final injection to confirm you have developed immunity to Hepatitis B. For students at risk of Hepatitis A (see below) there is an option of combined Hepatitis A and B vaccine (Twinrix).

Q9: WHAT IF MY HEPBSAG TEST WAS POSITIVE?

If your HepBsAg test was positive, it is highly recommended that you seek confidential medical and career advice from an infectious diseases specialist. You **must not** undertake any exposure prone procedures.

Q10:Do I need to have evidence that I am immune to hepatitis A?

It is recommended that you know your Hepatitis A status. In Australia, Hepatitis A screening and vaccination is necessary for student health care workers who will be living or making frequent visits to remote Indigenous communities in SA, NT, WA, QLD. It is also recommended for students in childcare and preschool settings and carers of people with intellectual disabilities.

Q11: DO I NEED TO HAVE A HEPATITIS C ANTIBODY TEST DONE?

Although you do not need to inform the College of the result you need to know your Hepatitis C antibody status. If you are Hepatitis C antibody positive it is strongly advised you seek confidential medical and career advice from an infectious diseases specialist. You **must not** undertake any exposure prone procedures unless cleared to do so by an infectious diseases specialist following HCV RNA PCR testing.

Q12: DO I NEED TO BE IMMUNISED IF I'VE PREVIOUSLY HAD CHICKENPOX (VARICELLA ZOSTER VIRUS - VZV)?

You are considered to be immune if you have previously had chickenpox but some private hospitals require either evidence of vaccination or serological evidence of immunity. If you are uncertain of you immunity you can safely go ahead with vaccination, or you could have a blood test to check for immunity, and if not immune, proceed with vaccination.

Q13: WHAT IF I'VE ALREADY RECEIVED AT LEAST 5 DIPHTHERIA/TETANUS TOXOID SHOTS, AT LEAST ONE OF WHICH WAS ADMINISTERED ABOVE THE AGE OF 10 YEARS?

You do not require any boosters unless you sustain a high risk injury. You will need to have your diphtheria/tetanus toxoid shots if you have not had at least one diphtheria/tetanus toxoid shot in the past 10 years. However, for continuing protection against pertussis (whooping cough), health care workers should have a booster dTpa vaccine every 10 years.

Q14: DID YOU HAVE A FULL COURSE (3 DOSES) OF POLIO VACCINATIONS AS A CHILD?

Polio considerations are only necessary for placements with Calvary Hospitals, AchaHealth and some international placements. Generally, polio is part of your childhood vaccination programs and you can consider that you have had this vaccination if you were born in Australia and no action is required. If not, you must get a complete set of Polio vaccinations. If considering a placement overseas in areas where polio has been reported, contact a travel doctor for advice before going on the placement.

Q15: DO YOU HAVE DOCUMENTED EVIDENCE OF VACCINATION WITH AT LEAST 2 DOSES OF MEASLES MUMPS RUBELLA (MMR) VACCINE?

If you are born after 1966 and do not have vaccination or immunity evidence you will need to complete 2 vaccinations against MMR. A history of previous infection with one or more of Measles, Mumps or Rubella is not considered reliable evidence of immunity, nor is it a contraindication for vaccination against the other components of the vaccine. It is not necessary to check serology prior to vaccinating against MMR and serology testing after vaccination is not recommended.

Q16: WILL YOU HAVE CONTACT WITH PATIENTS THIS YEAR?

All students who have direct contact with patients during their placement are highly recommended to receive an annual influenza vaccination.

Q17: DID YOU HAVE A FULL COURSE (3 DOSES) OF PERTUSSIS (WHOOPING COUGH) VACCINATIONS AS A CHILD? DID YOU RECEIVE A BOOSTER DOSE IN ADOLESCENCE (BETWEEN 15-17 YEARS) AND IS THIS LESS THAN 10 YEARS AGO?

No action is required if you had the full course as a child and also received your adolescent booster dose less than 10 years ago. A single booster dose is recommended if you did not receive the full course of vaccinations as a child or the adolescent booster dose more than 10 years ago.

Q18: WHAT DO I NEED TO DO IF I HAVE A SCAR FROM A PREVIOUS BCG VACCINE (AGAINST TB) OR HAVE LIVED IN A COUNTRY IN WHICH TB IS ENDEMIC?

If so, TB Services (SA and NT Health) will direct you to the most appropriate course of action for your individual situation.

Q19: IF YOU HAVE HAD YOUR MANTOUX TEST ALREADY.

If it was positive, you will be referred for further advice at the time of your Mantoux test. If your test was negative but are exposed to patients/clients with TB, you should consult with the TB clinic about a repeat Mantoux test. BCG vaccination may not be offered due to a lack of vaccine. If this is the case speak with your General Practitioner or the Flinders Health and Counselling Service.

Q20: DO I NEED TO DO ANYTHING EXTRA IF I'M PLANNING TO WORK IN AREAS WHERE MENINGOCOCCUS, MALARIA OR HIV ARE PREVALENT?

If you are planning to work in high risk areas, such as remote Indigenous communities in SA, NT, WA, QLD and the Torres Strait Islands, you may wish to discuss the pros and cons of vaccinations, antimalarials and/or post-exposure prophylaxis against HIV with a travel doctor, a general practitioner with experience in travel medicine or an infectious diseases physician.

Q21: SHOULD I CARRY ANTI-HIV DRUGS IN THE EVENT OF POSSIBLE EXPOSURE DURING ELECTIVES IN PARTS OF AFRICA AND ASIA?

These may be required depending on the location of your elective/placement. You should seek advice from your General Practitioner, the Flinders Health and Counselling Service or The Travel Doctor, who may arrange for you to carry an emergency supply of anti-HIV drugs. Students will be expected to cover any associated costs.

Q22: WHAT IF I DO NOT WISH TO HAVE MY VACCINATIONS? WHY DO I NEED THEM?

You can choose not to have your vaccinations, but your eligibility for placement allocation is significantly limited. It is a requirement for any student attending a placement within SA Health clinical venues, Private Hospitals or many other clinical establishments to have evidence of completed immunisations. Vaccinations are necessary to prevent you from becoming ill and to protect immuno-suppressed patients inadvertently getting diseases from their health care workers. Any concerns should be discussed with your General Practitioner or the Flinders Health Service regarding associated risks. If you have an objection to immunisation you must complete the appropriate form below and discuss with your Placement Coordinator.

Flinders University Student Health Care Worker Refusal of Recommended Vaccinations and/or Screening Tests: Procedure and Process

Introduction

This document provides guidance to Flinders University of South Australia (Flinders University) staff in managing student Health Care Workers (HCW) who refuse recommended vaccinations or screening prior to clinical placement in any Healthcare Provider services. This document outlines the principles that Flinders University staff can use to manage refusal of recommended vaccinations and/or screening tests in accordance with the *Immunisation for Health Care Workers in South Australia 2016 Policy Directive* (*Policy Directive*) and SA Health Immunisation Guideline (Immunisation Guideline).

Student HCW's who refuse recommended screening/vaccination will not be offered clinical placement in any SA Health service.

Student HCWs who have a recognised contraindication (temporary or permanent) to vaccination with a specific vaccine or vaccines, or who have been appropriately vaccinated but have not demonstrated protective levels of antibody (hepatitis B non-responders) will not be considered as having refused vaccination, and managed separately as detailed in Sections 4.6 and 4.7 of the Policy Directive.

Principles

Student HCWs have an obligation to ensure they are compliant with the Policy Directive to meet accreditation standards, to protect staff, patients/clients and visitors from vaccine preventable diseases (VPDs), and to comply with SA Health and Flinders University Work Health and Safety requirements.

Flinders University staff have an obligation to inform student HCW's of the requirements of the Policy Directive prior to clinical placement.

The aim of this refusal procedure is to provide a transparent, standardised process to manage student HCW's who refuse to undergo the recommended vaccinations and/or screening tests regardless of the reasons for refusal.

Procedure

Student HCW's who refuse to undergo the recommended vaccinations and/or screening tests and do not comply with the Policy Directive will not be offered a clinical placement in any SA Health service.

A student HCW who is not offered a clinical placement as a result of refusing recommended vaccinations and/or screening tests may appeal against the decision consistent with the Flinders University policies and procedures.

A student HCW must complete the Flinders University Student Health Care Worker Immunisation Refusal Form upon the decision to refuse the recommended vaccinations and or screening tests



Flinders University Student Health Care Worker Immunisation Refusal Form

Student Name				
Student Number		College/Discipline		
Telephone	Email			
Flinders University position statement Flinders University has a duty of care contribute to a safe environment for	to ensure that		on clinical pl	acements
Flinders University has an obligation to immunisations and that they comply to <u>Directive</u> .			•	
Flinders University acknowledges that reason for refusing or declining.	immunisatior	n is not mandatory and studer	nts may have	e a legitimate
Student HCWs who are unable to be contraindications , and who have und SA Health Immunisation Expert Advisor	ergone a furth	er medical assessment, may b	e referred t	
Please indicate the serology and/or v	accine refuse	d:		
	<u>Vaccine</u>		Serology	<u>Vaccine</u>
Diphtheria/Tetanus/Pertussis (dTpa) □ YES	Hepatitis A	☐ YES	☐ YES
		Hepatitis B	☐ YES	☐ YES
		Measles/Mumps/Rubella	☐ YES	☐ YES
		Varicella (Chickenpox vaccine)	☐ YES	☐ YES
		Other (please specify)	☐ YES	☐ YES
Student HCW declaration for refus	sing recomm	ended vaccination and/or	screening	
I have discussed the benefits and risks the information given. I have also be with the immunisation provider.		•		
I understand that by refusing a vaccin diseases and be a potential source of	_	•	ne to vaccino	e preventable
I understand that Flinders University was not compliant with the requirements	•		SA Health,	that I am
As a result of refusing a vaccine or scr within SA Health services.	eening I under	stand that I will not be offere	d a clinical p	lacement
I understand that in the event of reco Guidelines that decisions made in rela				nisation
Reason(s) for refusal				
Student HCW's signature	D	rate		
Flinders University representative nan	ne			
Position	Signatu	re	Date	