

Policy Guideline

Immunisation Guidelines for Health Care Workers in South Australia 2014 Policy Guideline

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Summary The Immunisation Guidelines for Health Care Workers in South Australia 2014 Policy Guideline details the immunisation standards for employers of Health Care Workers in SA Health services, to implement in their workplace to protect employees, patients, and visitors from the risk of exposure to vaccine-preventable infections.

Keywords Health Care Worker Immunisation Policy Guideline, SA Health, screening assessment, HCW, vaccine preventable disease, vaccination, screening, Immunisation Guidelines for Health Care Workers in South Australia 2014 Policy Guideline

Policy history Is this a new policy? **N**
Does this policy amend or update an existing policy? **Y**
Does this policy replace an existing policy? **Y**
If so, which policies? Immunisation Guidelines for Health Care Workers in South Australia 2010.

Applies to All SA Health health services including hospitals, community health centres, SA Ambulance and SA Dental
CALHN, SALHN, NALHN, CHSALHN, WCHN, SAAS

Staff impact All Clinical, Medical, Nursing, Allied Health, Emergency, Dental, Mental Health, Pathology
Other

PDS reference G0138

Version control and change history

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1.0	12/08/2014	Current	Original version



Immunisation for Health Care Workers in South Australia 2014 Policy Guideline

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SA Health

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Date	Endorsed by
11/3/14	Executive Director, Public Health and Clinical Systems

Approvals

Date	Endorsed by
12/8/14	Portfolio Executive

Immunisation for Health Care Workers in South Australia 2014 Policy Guideline

1. Objective

Health care workers (HCWs) have an increased risk of most vaccine preventable diseases and may transmit infections to susceptible patients.

In order to protect South Australian HCWs from vaccine-preventable diseases (VPDs), HCWs should have documented evidence of their immune status to selected vaccine preventable diseases and access to appropriate vaccination programs.

2. Scope

This Policy Guideline applies to all health care workers, as defined in this document, who are working in SA Health services, along with SA Health Managers, and Education Providers who train health care workers.

3. Principles

This Policy Guideline aligns with a number of the Principles of the South Australian Public Health Act, 2011 (Part 2, Sections 6 – 14):

- Principle of prevention: to minimise the impact of vaccine preventable diseases in the workplace
- Population focus principle: to increase the coverage of effective vaccines, especially among the SA Health workforce
- Participation principle: to outline the responsibilities of individuals, employers and education providers
- Partnership principle: to collaborate with health care workers, employers, education providers and immunisation providers in implementing this Policy Guideline
- Equity principle: to minimise the risk of transmission of vaccine preventable diseases to vulnerable populations in SA Health services.

This Policy Guideline is also aligned with the principles of the Australian Commission on Safety and Quality in Health Care's National Safety and Quality Health Service Standards, in particular Standard 3, addressing effective governance and management systems for healthcare associated infections, with specific reference to a workforce immunisation program that complies with current national guidelines (Standard 3.6.1).

4. Detail

N/A

5. Roles and Responsibilities

5.1 Responsibility of the Employer

Employers of Health Care Workers should:

- 5.1.1 Have a documented policy for the immunisation requirements for their health care workers.
- 5.1.2 Be responsible for the implementation and maintenance of an effective vaccine-preventable disease education, screening, and vaccination program as outlined here.

5.1.2.1 Administration of vaccines will be in accordance with recommendations in the current National Health and Medical Research Council (NHMRC) edition of *The Australian Immunisation Handbook*. Particular attention is to be made with regard to indications, adverse events following immunisation, contraindications, pre-immunisation checks, post-immunisation susceptibility periods, counselling for HCWs who have an exposure incident, and for HCWs with special conditions or needs (e.g. those who are pregnant or immunocompromised).

Vaccines are to be administered by a doctor or registered nurse who is authorised to administer an S4 drug under Regulation 18(3) of the *Controlled Substances (Poisons) Regulations 2011* in accordance with the Vaccine Administration Code published by the South Australian Department for Health and Ageing. The registered nurse must meet all specified requirements about training, vaccines, immunisation schedules and organisations listed in the Code. A copy of the Vaccine Administration Code is available at <http://www.sahealth.sa.gov.au/wps/wcm/connect/public/content/sa+health+internet/about+us/legislation/controlled+substances+legislation> .

5.1.2.2 Where employers are unable to provide their own occupational vaccination service, they can arrange to have the service provided by any qualified external provider. Education providers may refer student HCWs to university medical services or general practitioners for immunisation.

- 5.1.2.3 New employees and HCW students should receive the vaccines they require before commencing employment or clinical placement (but, once employed or commencing clinical placement, may complete a course of vaccination commenced prior to employment or clinical placement, according to the recommended immunisation schedule). The influenza vaccine would be an exception to this, as this is administered annually prior to the influenza season.
- 5.1.2.4 Tuberculin Skin Testing (TST) procedure and Bacille Calmette-Guerin (BCG) vaccine (when required) should only be administered by a healthcare professional trained in its administration. For more details see the SA Health Policy Directive: Control of Tuberculosis in South Australian Health Services Directive. The most recent version can be found on the SA Health website.
- 5.1.3 Ensure that employees are given adequate information, education and pre- and post- test counselling to make valid decisions about screening and vaccination. This includes the consequences of screening results and the importance of reporting adverse events following immunisation. Each employer should have a screening process that includes the following:
- 5.1.3.1 Appropriate staff screening, which includes history taking, examination of documented evidence and/or serological tests to determine previous infection and/or vaccination status before vaccination occurs.
- 5.1.3.2 Documented evidence, which includes a written record of a vaccination signed by a medical practitioner, or laboratory report of serological result.
- 5.1.3.3 HCWs working in specialised settings, such as microbiology laboratories or infectious disease wards, may need to seek additional specialist medical advice regarding their particular requirements. Specialist medical advice is to be sought for HCWs with specific conditions, such as pregnancy, or individuals who are immunocompromised due to disease or treatment.
- 5.1.4 Make the screening and vaccination process available to existing staff. The vaccination process should also be available to all new staff who have commenced, but not completed, required vaccination schedules prior to commencing employment.

- 5.1.5 Be aware of their duty of care relating to the placement of HCWs who remain non-immune through failure to seroconvert, medical contraindications to vaccination, or refusal of recommended vaccinations (see 11.1).
- 5.1.6 Review periodically (at least annually) the screening and vaccination status of existing staff who work in higher risk areas.
- 5.1.7 Maintain a data collection system for current staff that:
- 5.1.7.1 Contains details of screening and vaccinations provided, including staff vaccine-preventable disease history, dates and results of serological testing, record of vaccines consented or refused, date given, and if possible, site, batch number and brand name of vaccine.
 - 5.1.7.2 Is secure and accessible only by authorised personnel responsible for the clinical management of the HCW immunisation program, or intervention after exposure or injury.
 - 5.1.7.3 Is updated when new events (vaccination, test, disease) occur.
 - 5.1.7.4 Reports adverse events following immunisation (AEFI) to the Communicable Disease Control Branch by faxing a completed 'Vaccine Safety Reporting Form' to (08) 8226 7197. Verbal or written consent must be obtained from the vaccine recipient and documented on the form for follow-up to occur. A copy of the Vaccine Safety Reporting Form is available at <http://www.sahealth.sa.gov.au/immunisationprovider>
 - 5.1.7.5 Is maintained in accordance with the confidentiality and security provisions of the Federal *Privacy Act 1988* www.privacy.gov.au and the *Code of Fair Information Practice 2002* (SA) <http://www.sahealth.sa.gov.au> by a designated staff member and is accessible to authorised personnel, when needed, 24 hours a day, 7 days a week, to respond to confirmed VPD cases in staff or patients.
- 5.1.8 Include details of recommended funded and non-funded HCW vaccines in the information provided to HCWs.
- 5.1.9 Ensure that nursing, medical locum and other relevant employment agencies only provide contract staff with a documented screening and vaccination history consistent with these Guidelines.

- 5.1.10 Include in Agreements with universities, academic institutions and other HCW education providers conditions that:
- the Education Provider must inform students or trainees, prior to undertaking clinical placement as part of their course
 - the student is required to be compliant with these Guidelines
 - the Education Provider provide statements confirming that the students are compliant (see also 5.3.4, 5.3.5, 5.3.6, 6.2.1 and 6.2.2)
 - the student must provide evidence of compliance, if requested by the Manager or authorized delegate of a SA Health facility where the clinical placement is to occur (see also 5.2.7 and 6.3.1).
- 5.1.11 Ensure a written record of the HCW's screening and vaccination is provided.
- 5.1.11.1 Where staff have undergone screening and vaccination while student HCWs, or during the pre-employment process, the employer should retain a copy of the documentation presented by the staff to demonstrate compliance with the Immunisation Guidelines prior to employment.
- 5.1.11.2 The employer should issue each HCW with a personal vaccination card, signed letter or computer generated vaccination/ screening report that includes all screening results and vaccinations administered where these have been done in the employer's health facility.
- 5.1.11.3 The employer should provide copies of these records to the HCW on request from the HCW. 'Personal Vaccination Record' cards can be obtained from the Immunisation Section, Department for Health and Ageing, by phone 1300 232 272 or by submitting a completed resource order form available at <http://www.sahealth.sa.gov.au/immunisationprovider>

5.2 Responsibility of the Health Care Worker

Health Care Workers should:

- 5.2.1 Comply with the employer's / education provider's screening, education and vaccination program; where this is refused the HCW should document their understanding of possible risks involved in non-participation in the vaccination program (see 11.1).
- 5.2.2 Be aware, if non-immune (through failure to seroconvert, medical contraindications to vaccination or refusal of recommended vaccinations), of:

- their duty of care and obligation to patients and other HCWs
 - possible restrictions on placement within the health care setting and
 - protective measures that should be utilized (e.g. personal protective equipment).
- 5.2.3 Maintain their own personal records of all screening and vaccinations and inform their employer or education provider when new events (vaccination, test for or infection with vaccine-preventable disease) occur.
- 5.2.4 Provide screening and vaccination records when requested by the employer.
- 5.2.5 Report any medical contraindications to vaccines and any adverse events following immunisation (AEFI) to their vaccination provider.
- 5.2.6 Comply with the employer's / education provider's Work Health and Safety, policies and procedures.
- 5.2.7 Confirm, if a student HCW, to their Education Provider prior to clinical placement in any SA Health facility that they have completed the documented screening or vaccination process consistent with the Guidelines and that they are compliant with the Guidelines.

5.3 Responsibility of Institutions educating Health Care Workers

Education providers (i.e. universities, other academic institutions, training providers) **should**:

- 5.3.1 Develop organisational documents to support these Guidelines for all HCW students who undertake clinical placement in SA Health services.
- 5.3.2 Ensure student HCWs are aware of the requirement to be adequately protected against vaccine preventable diseases at the commencement of their course and prior to clinical placement, so that students are not placed in risk-exposure situations prior to confirmation of immune status.
- 5.3.3 Make available for student HCWs documents that will facilitate screening and testing for immunity to vaccine preventable diseases, and documentation of the student HCW's immunisation status by a medical practitioner.
- 5.3.4 Maintain a data collection system for student health care workers that:

- 5.3.4.1 Records, for each student HCW, whether the student HCW is compliant or not compliant with these Guidelines prior to any clinical placement in SA Health services.
- 5.3.4.2 Is updated by the student HCW informing the education provider when new events (vaccination, test or disease) occur.
- 5.3.4.3 Is secure and accessible only by authorized personnel in accordance with the education provider's policies and practices.
- 5.3.5 Provide, prior to the commencement of a clinical placement, a written statement to the Chief Executive Officer / Executive Officer, or delegate of the health facility, confirming that the student HCW has completed the documented screening or vaccination process consistent with the Guidelines and that the student health care worker is compliant with the Guidelines.
- 5.3.6 Advise the Chief Executive Officer / Executive Officer, or delegate of the health facility if a student HCW is not compliant with the Guidelines, so that a risk assessment can be made prior to the clinical placement, to determine any safe and appropriate placement options.
- 5.3.7 Inform student HCWs they may be refused clinical placement by the health care setting if they do not comply with these Guidelines, or if their compliance is not adequately documented (see 11.1).

6. Reporting

6.1 Reporting requirements for Employers

- 6.1.1 Employers who provide an immunisation service are required to report Adverse Events Following Immunisation (see 5.1.7.4).

6.2 Reporting requirements for Education Providers

- 6.2.1 Education Providers are required to report to the Chief Executive Officer / Executive Officer, or delegate of the health facility, confirming that a student HCW has completed the documented screening or vaccination process consistent with the Guidelines and that the student health care worker is compliant with the Guidelines (see 5.3.4 and 5.3.5)
- 6.2.2 Education Providers are required to report to the Chief Executive Officer / Executive Officer, or delegate of the health facility, any student HCW who is not compliant with the Guidelines, so that a risk assessment can be made prior to the

clinical placement, to determine any safe and appropriate placement options (see 5.3.6).

6.3 Reporting requirements for Health Care Workers

6.3.1 Student HCWs are required to report to their Education Provider prior to clinical placement that they have completed the documented screening or vaccination process consistent with the Guidelines and that they are compliant with the Guidelines (see 5.2.7).

6.3.2 All HCWs are encouraged to report Adverse Events Following Immunisation (see 5.2.5).

7. EPAS

Since it is not anticipated that staff records will be maintained on EPAS, this Policy Guideline is not expected to have any impact on the clinical and related business practices within the public health system.

8. Associated Policy Directives / Policy Guidelines

Control of Tuberculosis in South Australian Health Services Policy Directive 2013. Available from: <http://www.sahealth.sa.gov.au>

9. References, Resources and Related Documents

This Policy Guideline details the immunisation standards for SA Health employers to implement in their workplace to protect employees, patients and visitors from the risk of exposure to vaccine-preventable infections. The Policy Guideline is supported by the recommendations contained within:

- *The Australian Immunisation Handbook*. 10th Edition 2013. National Health and Medical Research Council. Canberra: Australian Government Publishing Services. Available from: <http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home>
- *Australian Guidelines for the Prevention and Control of Infection in Health Care* 2010 Available from <http://www.nhmrc.gov.au/node/30290>
- *Australian National Guidelines for the Management of Health Care Workers known to be infected with Blood-Borne Viruses* 2012 Available from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdna-bloodborne.htm>

This Policy Guideline should be read in conjunction with:

- *Code of Fair Information Practice 2002* (SA)
<http://www.sahealth.sa.gov.au>
- *Consent to Medical Treatment and Palliative Care Act 1995* <http://www.legislation.sa.gov.au>
- *Federal Privacy Act 1988* <http://www.privacy.gov.au>
- *Work Health and Safety Act 2012* (SA)
<http://www.legislation.sa.gov.au>
- *South Australian Public Health Act 2011* <http://www.legislation.sa.gov.au/>
- *SA Controlled Substances (Poisons) Regulations 2011* <http://www.legislation.sa.gov.au>
- South Australian Immunisation Program: Model Standing Drug Orders <http://www.sahealth.sa.gov.au/immunisationprovider>
- Immunisation Section Policy: Access to Influenza vaccines for Department of Health employees
<http://www.sahealth.sa.gov.au/immunisationprovider>
- Australian Commission on Safety and Quality in Health Care's *National Safety and Quality Health Service Standards*
<http://www.safetyandquality.gov.au/publications/national-safety-and-quality-health-service-standards/>

Model Documents available from SA Health











SA Health has prepared a collection of Model Documents, to support Health Services and Education Providers in implementing these Immunisation Guidelines. These documents can be downloaded from the SA Health website: <http://www.sahealth.sa.gov.au/immunisationprovider>

The documents are:

- Model Cover letter from Education Provider to student Health Care Worker.
- Model Screening Questionnaire to assess immunisation status of Health Care Workers.
- Model Medical Practitioner Form documenting immune status.
- Model Refusal Process form for HCWs who refuse recommended screening and/or vaccination.
- Model document for SA Health services providing vaccination services.

10. National Safety and Quality Health Service Standards

A HCW vaccination program consistent with these recommendations is required under the Australian Commission on Safety and Quality in Health Care's *National Safety and Quality Health Service Standards*. The South Australian Department for Health and Ageing recommends that all health care settings and institutions which educate HCW students develop immunisation policies and programs in line with this Policy Guideline.

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

Additional information

11.1 Consent and Refusal

Valid consent, as outlined in *The Australian Immunisation Handbook*, must be obtained from the HCW prior to screening and vaccination.

11.1.1 To assist with obtaining valid consent, the consent resource tool '*Immunisation – what you need to know before consent*', is available to provide HCWs vaccination information, effects of disease, risks and benefits of immunisation, and what to do about possible side effects. Contact the Immunisation Section, Department for Health and Ageing, for a copy of this resource – phone 1300 232 272, or download from <http://www.sahealth.sa.gov.au/immunisationprovider>

11.1.2 Employers should advise HCWs of the potential consequences if they refuse reasonable requests for recommended immunisation. If recommended vaccines are refused, obtain signed documentation of refusal from the HCW concerned, including written evidence that the HCW understands the possible risks and consequences involved in refusal.

11.1.3 Each HCW who is non-immune (due to failure to seroconvert, medical contraindications to vaccination or refusal of recommended vaccinations) should have a risk assessment of their work activities, the area in which they work and the

population cared for in that area. Management options include ensuring appropriate work placements, work adjustments and/or work restrictions. Where the Employer and HCW are unable to reach a mutually satisfactory decision an Expert Panel may be convened to review the situation and recommend a course of action (see Refusal Process Model Document).

- 11.1.4 Documentation of the consent process and its outcome should be maintained as part of the data collection process.

11.2 Information for specific vaccine preventable diseases

11.2.1 Diphtheria/Tetanus

- 11.2.1.1 Most HCWs will have received a primary course of a diphtheria/tetanus-containing vaccine in childhood. If a primary course of 3 doses is required, the preferred option is that diphtheria/tetanus/pertussis (dTpa) replaces the first dose of diphtheria/Tetanus (dT) to provide a pertussis booster, with subsequent doses as dT. If dT vaccine is not available, dTpa can be used for all primary doses. Booster doses are then recommended 10 and 20 years after the primary course.
- 11.2.1.2 For all adults who reach the age of 50 without receiving a booster dose in the previous 10 years, a further dose of dT-containing vaccine is recommended. This should be a dTpa, if this has not been given previously, to also provide protection against pertussis.

11.2.2 Hepatitis A

Vaccination should be considered for:

- 11.2.2.1 HCWs who work in paediatric wards, intensive care units, and emergency departments that provide care for substantial populations of Aboriginal children, and carers of people with intellectual disabilities.
- 11.2.2.2 HCWs who work or live in rural and remote Aboriginal communities
- 11.2.2.3 To avoid unnecessary vaccination, it is recommended the following groups be screened serologically for total hepatitis A antibodies or anti-HAV IgG.

These include:

- HCWs born before 1950
- HCWs who spent their early childhood in hepatitis A endemic areas, including in Aboriginal communities in the

Northern Territory, Queensland, Western Australia and South Australia

- HCWs with an unexplained previous episode of hepatitis or jaundice.

If screening indicates total hepatitis A antibodies or anti-HAV IgG there has been a previous HAV infection or vaccination and the HCW can be considered to be immune.

- 11.2.2.4 A complete course of hepatitis A vaccine is recommended if serological screening indicates the HCW is not immune, or if the HCW cannot provide documented evidence of a previously completed course of hepatitis A vaccination. The vaccination can be given as a 2 dose monovalent hepatitis A vaccine with a minimum of 6 months between doses, or, if hepatitis B vaccine is also recommended, as a 3 dose hepatitis A/B combination vaccine at 0, 1 and 6 months.

11.2.3 Hepatitis B

- 11.2.3.1 Evidence of either resolved hepatitis B virus (HBV) infection, or hepatitis B vaccination and post vaccination serological screening, should be requested.

HCWs should be considered immune if they:

- have documented evidence of a post-vaccination serological screening result showing adequate anti-HBs antibodies (>10mIU/mL); or
- serological evidence of a previous resolved infection.

- 11.2.3.2 When commencing hepatitis B vaccination in a previously unvaccinated HCW, post vaccination serology is recommended 4 to 8 weeks after the 3rd dose to confirm immunity.

- 11.2.3.3 If there is a documented history of a primary course of hepatitis B vaccine (either a 3 dose adult schedule or a 2 dose adolescent schedule) but seroconversion status is unknown, testing for anti-HBs should be arranged. If, on testing, they have an anti-HBs level of <10 mIU/mL, a single booster dose of vaccine should be given and the HCW tested for anti-HBs levels 4 weeks later. If the antibody level remains <10mIU/mL after the booster dose, give two further doses of the hepatitis B vaccine at monthly intervals followed by serology 4 weeks after the last dose.

- 11.2.3.4 Those HCWs who have a documented history of an age-appropriate primary course of the hepatitis B vaccine and are HBsAg negative and seronegative for anti-HBs should be offered a single booster dose and then tested for anti-HBs levels 4 - 8 weeks later. If the antibody level remains

<10mIU/mL after the booster, give two further doses of the hepatitis B vaccine at monthly intervals followed by serology at least 4 weeks after the last dose. If the anti-HBs remains ≤ 10 mIU/mL they are considered non-responders

- 11.2.3.5 If the antibody level remains <10mIU/mL after the additional vaccines, the HCW should seek specialist advice regarding possible alternative vaccination approaches as described in the *Australian Immunisation Handbook*. In all cases the HCW must be informed about the need for Hepatitis B Immunoglobulin (HBIG) within 72 hours of parenteral exposure to HBV and advised of post-exposure precautions.
- 11.2.3.6 Booster doses are recommended at 6-12 monthly intervals, depending on the anti-HBs levels, for individuals with impaired immunity only, in particular those with HIV infection or renal failure.
- 11.2.3.7 Those individuals who are considered infectious (HBsAg and / or HBV DNA positive) must not perform Exposure Prone Procedures (EPP). Refer to the *Australian National Guidelines for the Management of Health Care Workers known to be infected with Blood-Borne Viruses*.

11.2.4 Influenza

- 11.2.4.1 HCW seasonal influenza vaccination has been shown to protect high risk patients, reduce influenza rates in staff and patients, and reduce sick leave among staff during the influenza season. It is a duty of care of HCWs to receive the annual seasonal influenza vaccination and reduce the likelihood of transmitting influenza to those in their care.
- 11.2.4.2 Influenza vaccination is also recommended annually for staff of nursing homes and long term care facilities, as well as providers of home care to persons at high risk of influenza mortality.
- 11.2.4.3 All HCWs involved with caring for homeless persons are strongly recommended to have an annual influenza vaccination. The living conditions of this group and prevalence of underlying medical conditions can predispose this group to the complications and/or transmission of influenza.
- 11.2.4.4 The annual seasonal influenza vaccine must be offered to all HCWs directly involved in patient care or the handling of human tissues.
- 11.2.4.5 All immunocompromised HCWs, including those with HIV infection, malignancy, or chronic corticosteroid use, who

receive the seasonal influenza vaccine for the first time are recommended to receive 2 doses at least 4 weeks apart, and 1 dose annually in subsequent years.

11.2.5 Measles/Mumps/Rubella

- 11.2.5.1 HCWs should be considered immune to **measles** if they:
- were born before 1966 (unless serological evidence indicates they are not immune); or
 - can provide documented evidence of having received two doses of a measles-containing vaccine; or
 - can provide documented serological evidence of immunity to measles. MMR vaccine is recommended for all HCWs born during or since 1966 (unless serological evidence indicates immunity) who do not have evidence of receiving 2 doses of a measles-containing vaccine.

- 11.2.5.2 HCWs should be immune to **mumps** if they:
- can show documented evidence of mumps vaccination; or
 - serological evidence of immunity.

- 11.2.5.3 HCWs should be considered immune to **rubella** if they:
- can provide documented evidence of rubella vaccination; or
 - serological evidence of immunity.

Those HCWs not considered immune should be vaccinated with the MMR vaccine for their own protection and to avoid the risk of transmitting infection to patients, especially pregnant patients, and other HCWs.

11.2.6 Pertussis

- 11.2.6.1 Most HCWs will have received a primary course of a pertussis-containing vaccine in childhood. If a primary course of diphtheria-tetanus-pertussis vaccine is required the preferred option is that dTpa is given as the first dose with subsequent doses as dT. If dT vaccine is not available, dTpa can be used for all primary doses. Booster doses are then recommended 10 and 20 years after the primary course.

- 11.2.6.2 All HCWs directly involved in patient care or the handling of human tissues should receive a booster dose of dTpa vaccine if 10 years has elapsed since a previous dose, because of the significant risk of nosocomial transmission of pertussis to vulnerable patients.

11.2.6.3 All HCWs aged 50 years are recommended to have a single booster of dTpa vaccine, in place of dT vaccine, if they have not received one in the previous 10 years.

11.2.6.4 All HCWs aged ≥ 65 years are also recommended to have a single booster of dTpa vaccine if they have not received one in the previous 10 years.

11.2.7 Poliomyelitis

11.2.7.1. Most HCWs will have received a primary course of a polio-containing vaccine in childhood. If a primary course is required, 3 doses of a polio-containing vaccine at 4 week intervals are recommended for adults.

11.2.7.2 A booster dose is recommended every 10 years for all HCWs and laboratory workers who may be in possible contact with poliomyelitis cases or the poliomyelitis virus.

11.2.8 Tuberculosis

11.2.8.1 As Tuberculosis (TB) is a low prevalence disease in South Australia, Bacille Calmette-Guerin (BCG) vaccination is not used in the general population. The BCG vaccine does not prevent transmission of infection but reduces the risk of death from tuberculosis. The BCG vaccine is no longer routinely recommended as the primary means of HCW protection.

11.2.8.2 The overall risk of transmission of TB to HCWs is small, with the risk mostly now from inadequate infection control precautions when exposed to an undiagnosed patient with TB, or through procedures that have the potential to generate high concentrations of infectious particles.

11.2.8.3 It is important to ensure that HCWs are adequately informed about TB and that appropriate infection control measures are in place to minimise the risk of transmission.

11.2.8.4 BCG vaccination should be considered in those HCWs who may be at high risk of exposure to drug resistant TB cases.

11.2.8.5 Advice must be provided to immunosuppressed HCWs with certain predisposing medical conditions who are at increased risk of developing active TB disease if infected (e.g. transplant recipients, HCWs on TNF- α inhibitors, HCWs undergoing chemotherapy). The vaccine is contraindicated in all immunocompromised individuals.

11.2.8.6 Full details of screening for Tuberculosis are given in the SA Health Policy Directive: Control of Tuberculosis in South

Australian Health Services Directive. The most recent version can be found on the SA Health website.

11.2.9 Varicella-Zoster (chickenpox)

- 11.2.9.1 HCWs who have a reliable history of having had varicella disease (chickenpox) should be considered immune.
- 11.2.9.2 A HCW with a negative or uncertain history of varicella disease should be vaccinated with 2 doses of the varicella vaccine, 4 to 6 weeks apart or alternatively, have a serological test to assess immunity, and proceed to vaccination if there is no evidence of immunity.
- 11.2.9.3 Testing to check for seroconversion following varicella vaccination is not recommended.

11.3 Acceptable evidence of immunity to specific VPD for HCWs[#].

See Table 1 on next page

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Table 1. Acceptable evidence of immunity to specific VPDs

VPD	Acceptable evidence of immunity
Chickenpox (Varicella-Zoster)	Documented evidence of varicella antibody (IgG) on serology <u>or</u> documented evidence of varicella vaccination <u>or</u> a history of prior chickenpox or shingles (no documentation required for history of infection). Confirmation of immunity post-vaccination is not required.
Diphtheria	Documented evidence of a booster dose of diphtheria-containing vaccine in the last 10 years. Confirmation of immunity post-vaccination is not required.
Hepatitis A	Documented evidence of hepatitis A antibody on serology (IgG) <u>or</u> documented evidence of completed course of hepatitis A vaccine. Confirmation of immunity post-vaccination is not required.
Hepatitis B	Documented evidence of Hepatitis B core antibody <u>or</u> documented level of hepatitis B surface antibody (>10mIU/ml) following completion of a course of hepatitis B vaccine.* Confirmation of immunity post-vaccination <u>is required</u> after completion of the vaccination course for all HCW.
Influenza	Documented evidence of influenza vaccination during the current influenza season. Confirmation of immunity post-vaccination is not required.
Measles	Documented evidence of measles antibody (IgG) on serology <u>or</u> documented evidence of 2 measles vaccinations at least one month apart <u>or</u> born before 1966. Confirmation of immunity post-vaccination is not required.
Mumps	Documented evidence of mumps antibody (IgG) on serology <u>or</u> documented evidence of 2 mumps vaccinations. Confirmation of immunity post-vaccination is not required.
Pertussis	Documented evidence of pertussis booster vaccination in the previous 10 years. Confirmation of immunity post-vaccination is not required.
Poliomyelitis	History of vaccination with a primary course of 3 vaccinations (documentation is not required). Confirmation of immunity post-vaccination is not required.
Rubella	Documented evidence of rubella antibody (IgG) on serology <u>or</u> documented evidence of 2 rubella vaccinations. Confirmation of immunity post-vaccination is not required.
Tetanus	Documented evidence of a booster dose of vaccine containing tetanus in the last 10 years. Confirmation of immunity post-vaccination is not required.

*All HCWs who have lived in a hepatitis B endemic country for at least 3 months are required to have serology that includes hepatitis B surface antigen prior to vaccination. For a list of endemic countries (intermediate and high risk) please see: <http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-2/hepatitis-b.aspx>

Note that for many vaccine preventable diseases an exact serological level of antibody which confers immunity is not known.

11.4 Acknowledgements

SA Department for Health and Ageing acknowledges the immunisation policy materials developed by New South Wales and Western Australia in preparing these updated Immunisation Policy Guidelines.

12. Risk Management

11.1 Risk Categories for Health Care Workers

Health care workers can be placed into four major categories in relation to infectious hazards (Table 2). The categories are useful for targeting immunisation programs and establishing immunisation protocols. It is important that work activities, rather than job title, should be considered on an individual basis when determining the relevant Category of Health Care Worker and recommended vaccinations, to ensure an appropriate level of protection is offered to each HCW.

Some health care facility staff such as clerical staff and many other occupational groups may have no greater exposure to infectious diseases than the general public. These employees do not need to be included in vaccination programs or other programs aimed at protecting clinical contact staff. However as there is public health benefit in facilitating population immunity against vaccine preventable diseases, it is best practice to ensure all staff are appropriately immunised e.g. diphtheria / tetanus / pertussis (dTpa), influenza, and measles, mumps and rubella (MMR) vaccines.

See Table 2 next page

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Table 2. Risk Categories for Health Care Workers

Category	Risk	Examples
A	<p>Direct contact with blood or body substances.</p> <p>This category includes all persons who have physical contact with, or potential exposure to, blood or body substances.</p>	<p>Dentists, medical practitioners, nurses, midwives, allied health practitioners, ambulance, health care students, laboratory staff, mortuary workers, maintenance engineers who service equipment, sterilising service staff, cleaners, porters who transport patients around health facilities, and staff responsible for the decontamination and disposal of contaminated materials.</p>
B	<p>Indirect contact with blood and body substances.</p> <p>Rarely have direct contact with blood or body substances. These employees may be exposed to infections spread by the airborne or droplet routes, but are unlikely to be at occupational risk from blood borne diseases.</p>	<p>Catering staff and ward clerks</p>
C	<p>Minimal patient contact.</p> <p>Occupational groups that have no greater exposure to infectious diseases than do the general public. The exact nature of job responsibilities should be taken into account when deciding immunisation requirements, and all staff should be encouraged to be fully vaccinated.</p>	<p>Office clerical staff, kitchen staff</p>
Laboratory staff	<p>May have additional vaccination requirements if they are working with or may be exposed to specific agents, e.g. Q Fever, anthrax, poliomyelitis, Japanese encephalitis.</p>	

Source: *Australian Guidelines for the Prevention and Control of Infection in Healthcare, 2010* adapted from the NSW policy *Occupational Assessment, Screening and Vaccination Against Specific Infectious Diseases PD2007_006*.

11.2 Vaccination Recommendations by Risk Category

Vaccine recommendations for HCWs are based on those in the 10th edition *Australian Immunisation Handbook* (p170). Table 3 lists the vaccine preventable diseases with consideration of HCW risk category as detailed in Table 1.

Table 3. Vaccine Recommendations by HCW Risk Category

Disease	Category A [#]	Category B [#]
Diphtheria-Tetanus-Pertussis	Yes	Yes
Hepatitis B	Yes	No
Hepatitis A	Yes, if working in remote Aboriginal communities or providing care for large numbers of Aboriginal children or people with an intellectual disability	No
Influenza	Yes	Yes
Measles-Mumps-Rubella	Yes	Yes
Varicella	Yes	Yes

[#] refer to Table 2

Recommended vaccinations for laboratory and mortuary personnel if working with or potentially exposed to the following individual infectious agents (*Australian Immunisation Handbook* 10th ed):

Table 4. Vaccine recommendations for laboratory and mortuary workers

Disease	Vaccine
<i>Coxiella burnetti</i>	Q fever vaccine
Australian bat lyssavirus and rabies virus	Rabies vaccine
<i>Bacillus anthracis</i>	Anthrax vaccine
Poliomyelitis virus	Poliomyelitis vaccine (IPV)
Vaccinia poxvirus	Smallpox vaccine
<i>Salmonella</i> Typhi	Typhoid vaccine
Yellow fever virus	Yellow fever vaccine
<i>Neisseria meningitidis</i>	Meningococcal vaccine (4vMenCV)
Japanese encephalitis virus	Japanese encephalitis vaccine

HCWs working in these, and other specialised settings, such as infectious disease wards, may need to seek additional specialist medical advice regarding their particular vaccination requirements.

Specialist medical advice should be sought for HCWs with specific conditions, such as pregnancy, and individuals who are immunocompromised due to disease or treatment.

Health care services may consider a wider range of vaccines and risk groups than prescribed by these Guidelines, according to the particular health care facility risk, for example recommending hepatitis A vaccination for cleaners and plumbers.

13. Evaluation

Monitoring to assess compliance with this Policy Guideline is detailed under Part 5 Reporting.

A formal evaluation of the process, impacts and outcomes of this Policy Guideline should be conducted two years after initial implementation, unless the monitoring data suggests an earlier evaluation is required.

14. Attachments

N/A

15. Definitions

In the context of this document:

- **Health Care Workers** refers to all those who have contact with patients or contact with blood or other body substances from patients in a health-care or laboratory setting as a result of their workplace activities. These include:
 - medical, dental, nursing, allied health, emergency health care workers (ambulance and volunteer first aid workers), laboratory staff and mortuary workers, including all trainees and student health care workers in these groups
 - employees of health care institutions such as maintenance engineers who service equipment, sterilising service staff, cleaners, orderlies and staff responsible for the decontamination and disposal of contaminated materials, catering staff and ward clerks, office clerical staff, garden and kitchen staff
 - all in the groups above whether full-time, part-time, permanent, temporary, casual or agency staff, and also including contractors and volunteers.