



Immunisation Guidelines for Health Care Workers in South Australia 2010

Immunisation Section
Communicable Disease Control Branch



Government
of South Australia

SA Health

Immunisation Guidelines
for Health Care Workers
in South Australia

Prepared by:

Immunisation Section
Communicable Disease Control Branch
Department of Health
PO Box 6
Rundle Mall
ADELAIDE SA 5000

Telephone: (08) 8226 7177

Fax: (08) 8226 7197

Email: cdcb@health.sa.gov.au

Disclaimer

Information contained in these guidelines may be subject to change. These guidelines are also available on the Public Health SA website and regularly updated

<http://www.health.sa.gov.au/pehs/immunisation-index.htm>

Acknowledgements:

Immunisation Section, Communicable Disease Control Branch
Infection Control Service, Communicable Disease Control Branch
SA Tuberculosis Services

Contents

Introduction	1
1. Responsibilities	2
1.1 Employers of Health Care Workers should:	2
1.2 Health Care Workers should:	2
1.3 Institutions educating Health Care Workers should:	3
2. Screening and Immunisation Program	3
2.1 Data collection	3
2.2 Immunisation Process	3
2.3 Immunisation Screening	4
2.4 Consent	4
2.5 Health Care Worker Personal Immunisation Record	4
3. Risk Categories for Health Care Workers	5
3.1 Clinical contact	5
3.2 Non -clinical contact	5
3.3 Laboratory and mortuary personnel	5
4. Vaccination Recommendations	6
4.1 Immunisation for those at risk of occupationally-acquired vaccine preventable diseases	6
5. Additional Information	8
5.1 Polio	8
5.2 Diphtheria/Tetanus	8
5.3 Pertussis	8
5.4 Measles/Mumps/Rubella	8
5.5 Varicella Zoster Virus (chicken-pox)	8
5.6 Hepatitis B	9
5.7 Hepatitis A	9
5.8 Influenza	10
5.9 Tuberculosis	10
References	11

Introduction

Certain occupations, particularly health care workers are associated with an increased risk of some vaccine preventable diseases. Furthermore, health care workers may transmit infections to susceptible patients. *The Australian Immunisation Handbook* (current edition).

In order to protect South Australian Health Care Workers (HCWs) from vaccine-preventable diseases (VPD) they should be provided with access to appropriate vaccination programs.

In this document when reference is made to HCWs, this includes all people delivering health care services, student HCWs, trainees, mortuary attendants and volunteers. The likelihood of contact with patients and / or blood or body substances determines vaccination recommendations.

These guidelines aim to support the recommendations contained within *The Australian Immunisation Handbook* (current edition) www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home and the *Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting* (2004), <http://www.health.gov.au/internet/main/publishing.nsf/Content/icg-guidelines-index.htm> for the occupational screening, education and immunisation of HCWs against Vaccine Preventable Diseases (VPD).

The Communicable Disease Control Branch, of the South Australian Department of Health recommends health care settings and institutions educating HCW students develop immunisation policies and programs in line with these guidelines.

These guidelines should be read in conjunction with:

- Code of Fair Information Practice 2002 (SA)
<http://www.health.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>
- Occupational Health, Safety and Welfare Act 1986
<http://www.austlii.edu.au>
- Public and Environment Health Act 1987
<http://www.legislation.sa.gov.au/>
- SA Controlled Substances Act 1984
<http://www.legislation.sa.gov.au>
- South Australian Immunisation Program: Model Standing Drug Orders
<http://www.dh.sa.gov.au/pehs>
- Immunisation Section Policy: Access to Influenza vaccines for Department of Health employees <http://www.dh.sa.gov.au/pehs>

1. Responsibilities

1.1 Employers of Health Care Workers should:

- 1.1.1. Have a documented policy for the immunisation requirements for its health care workers
- 1.1.2. Be responsible for the implementation and maintenance of an effective infectious disease education, screening and vaccination program as outlined in this document under “Screening and Vaccination Program”
- 1.1.3. Ensure that employees are given adequate information, education and pre and post-serology 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
- 1.1.4. Make the screening and vaccination process available to existing staff as well as all new staff on commencing employment; and ensure there is a review process for each HCW within a month of employment
- 1.1.5. Be aware of their duty of care relating to the placement of HCWs who remain non-immune through failure to seroconvert, have medical contraindications to vaccination or conscientiously object
- 1.1.6. Periodically review the screening and vaccination status of existing staff
- 1.1.7. Maintain security and confidentiality of information about the infectious disease and vaccination status of HCWs
- 1.1.8. Inform HCWs of the vaccines that will be funded and provided by the employer, as well as informing them of other non-funded vaccines recommended by these guidelines
- 1.1.9. Ensure that nursing, medical locum and other relevant employment agencies only provide contract staff who have a documented screening and vaccination history consistent with these guidelines
- 1.1.10. Include in contracts with universities, academic institutions and HCW education providers a condition that students or trainees, prior to undertaking clinical placement as part of their course must provide a written statement/evidence to the Chief Executive Officer/Executive Officer of the institution where the clinical placement is made, or delegate, confirming that the student has a documented screening and vaccination history consistent with the provision of these guidelines
- 1.1.11. Ensure that certified copies of the HCWs vaccination and screening records are available on termination of employment or, on the HCWs written request within a reasonable period of time.

1.2 Health Care Workers should:

- 1.2.1. Take reasonable steps to be aware of their own infectious disease and vaccination status to minimise the risk of transmitting infectious diseases to patients or other staff
- 1.2.2. Comply with the employer / training institutions’ screening, education and vaccination program; where this is refused the HCW must document their understanding of possible risks involved in non-participation in the vaccination program as outlined in ‘Part 2. Screening and Vaccination Program – Section: 2.4 Consent’
- 1.2.3. If non-immune be aware and understand their duty of care and obligation to their placement within the health care setting
- 1.2.4. Maintain their own personal records of all screening and vaccinations
- 1.2.5. Provide screening and vaccination records when requested by the employer
- 1.2.6. Report Adverse Events Following Immunisation (AEFI) to their vaccination provider
- 1.2.7. Comply with the employer / training institutions’ occupational health, safety and welfare policies and procedures

1.3 Institutions educating Health Care Workers should:

(i.e. universities, academic institutions, training providers):

- 1.3.1. Ensure student HCWs are 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. (Refer to the education institution and clinical placement facility policy documents on immunisation)
- 1.3.2. Prior to the commencement of a clinical placement, provide a written statement/evidence to the Chief Executive Officer / Executive Officer, or delegate of the health care setting, confirming that the student HCW has a documented screening and vaccination history consistent with the provision of these guidelines
- 1.3.3. Inform student HCWs they may be refused clinical placement by the health care setting, if their screening and vaccination information is not provided.

2. Screening and Immunisation Program

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* www.health.gov.au

Particular attention is to be made with regard to indications, adverse events following immunisation (AEFI), contraindications, pre-immunisation checks, post-immunisation susceptibility periods, counseling for HCWs who have a change in their immunisation status or post exposure incident and for HCWs with special conditions or needs (ie those who are pregnant or immunocompromised).

2.1 Data collection

Each health care facility will have a data collection system that:

- 2.1.1. Contains details of screening and vaccinations provided, including staff vaccine preventable disease history, date and results of serology, record of vaccines consented or refused, date given, site, batch number and brand name of vaccine
- 2.1.2. Is secure and accessible only by authorised personnel responsible for the clinical management of the HCW immunisation program, or, intervention after exposure or injury
- 2.1.3. Is updated when new events (vaccination, test, disease) occur
- 2.1.4. Reports adverse events following immunisation (AEFI) to the Communicable Disease Control Branch by completing an 'Vaccine Safety Reporting Form' and faxing to: (08) 8226 7197. Verbal or written consent to release information must be obtained from the vaccine recipient and documented on the form. A copy of the Vaccine Safety Reporting Form can be obtained from www.health.sa.gov.au/pehs
- 2.1.5. 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.health.sa.gov.au> by a designated staff member.

2.2 Immunisation Process

Each employer will have a process that includes the following:

- 2.2.1. Vaccines are to be administered by doctors or by registered nurses who are authorised to immunise under the relevant Standing Drug Orders (SDOs) in accordance with the Authorisation to Supply Restricted Substances provisions of the SA Controlled Substances Act 1984 <http://www.legislation.sa.gov.au> . SDO's are available from www.health.sa.gov.au/pehs
- 2.2.2. Where employers are unable to provide their own occupational vaccination service, they can arrange to have the service provided by a qualified external provider.
- 2.2.3. HCWs will receive the vaccines they require before or within the first month of employment, or, in the case of student HCWs, before clinical placement. The influenza

vaccine would be one exception to this, as this is administered annually prior to the influenza season.

- 2.2.4 Tuberculin Skin Testing (TST) procedure and Bacille Calmette-Guerin (BCG) vaccine (when required) should only be administered by a healthcare professional trained in the administration procedures. For more information contact SA Tuberculosis Services on phone (08) 8222 5483 or (08) 8222 4867.

2.3 Immunisation Screening

Each employer will have a screening process that includes the following:

- 2.3.1 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
- 2.3.2 Documented evidence includes a written record of a vaccination, serological result or a statutory declaration
- 2.3.3 HCWs working in specialised settings, such as microbiological 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 and individuals who are immunocompromised due to disease or treatment.

2.4 Consent

Valid consent, as outlined in *The Australian Immunisation Handbook* (current edition), must be obtained from the HCW prior to screening and vaccination, preferably in writing.

- 2.4.1. If recommended vaccines are refused, obtain signed documentation of refusal from the HCW concerned, including written evidence that the HCW understands the possible risks involved in refusal.
- 2.4.2. Documentation of the consent process and its outcome must be maintained as part of the data collection process.
- 2.4.3 To assist with obtaining valid consent, a resource tool, 'Immunisation – what you need to know before consent' resource, is available to inform HCWs of the current NHMRC recommendations, pre vaccination information, effects of disease, risks and benefits of immunisation and what to do about possible side effects. Contact the Immunisation Section, Department of Health for a copy of this resource - phone (08) 8226 7177.

2.5 Health Care Worker Personal Immunisation Record

Each employer will ensure a written record of the HCWs screening and vaccination is provided:

- 2.5.1 Issue each HCW with a personal vaccination record that includes all screening results and vaccinations administered
- 2.5.2 Provide copies of these records on request by the HCW.

'Personal Vaccination Record' cards can be obtained from: Immunisation Section – Department of Health - phone (08) 8226 7177

3. Risk Categories for Health Care Workers

Health care workers can be placed in 3 major categories in relation to infectious hazards. The categories are useful for targeting immunisation programs and establishing immunisation protocols. However, they are not comprehensive and do not necessarily represent the category that should be assigned to HCWs in similar positions in all health care establishments.

3.1 Clinical contact

This category includes all HCW's who have clinical contact with patients. HCW's within this category may have physical contact with, or potential exposure to, blood or body substances. This group includes:

- dentists, medical practitioners, nurses, allied health practitioners, student health care workers
- emergency HCWs (fire, ambulance and volunteer first aid workers)
- maintenance personnel who service equipment
- sterilisation services personnel
- mortuary technicians; and
- cleaning staff and waste management personnel

The clinical contact category also includes HCWs who have less direct contact with patients or with blood and body substances. These HCWs may be exposed to droplet-borne infections, such as influenza but unlikely to be at risk from bloodborne diseases. This group includes:

- catering staff
- primary care reception staff and ward clerks
- maintenance personnel
- volunteers

3.2 Non-clinical contact

Clerical staff, gardening staff and many other occupational groups 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 where there is public health benefit in facilitating population recommendations against vaccine preventable diseases, it is best practice to ensure all staff are appropriately immunised e.g. diphtheria / tetanus (dT), influenza, measles, mumps and rubella (MMR) vaccination.

3.3 Laboratory and mortuary personnel

Laboratories contain special risk factors because of the equipment used (e.g. centrifuges) and the possibility of exposure to high concentrations of infectious agents generated by culture procedures. The major risk to laboratory personnel occurs in the handling of blood and blood products.

Reference: Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting (2004).

<http://www.health.gov.au>

4. Vaccination Recommendations

4.1 Immunisation for those at risk of occupationally-acquired vaccine preventable diseases

* Work activities, rather than job title, should be considered on an individual basis to ensure an appropriate level of protection is afforded to each HCW

Vaccine/Disease	Health-care workers (HCWs)*	Other occupations
Polio	All HCWs providing a primary course was not received as part of the childhood vaccination program	Laboratory personnel routinely working with other infectious agents
Diphtheria/Tetanus	All HCWs providing a primary course was not received as part of the childhood vaccination program	All
Hepatitis B	All HCWs and students involved in patient care, or the handling of human blood and tissues	<ul style="list-style-type: none"> • Police, members of armed forces and emergency services • Embalmers • Carers of the intellectually disabled • Staff of correctional services facilities • Sex industry workers • Workers who perform skin penetration procedures eg. tattooists, body piercers • Funeral workers and other workers who have regular contact with human tissue, blood or body fluids and/or used needles or syringes
Hepatitis A	HCWs who live with or make frequent visits to remote Indigenous communities in NT, QLD, SA and WA	<ul style="list-style-type: none"> • Plumbers or other workers in regular contact with untreated sewerage • Sex industry workers • Child-care and pre-school staff • Carers of the intellectually disabled • Medical, dental and nursing undergraduate students (in some jurisdictions)
Influenza	All HCWs and students includes staff of nursing homes and other long term care facilities	<ul style="list-style-type: none"> • Poultry workers and others handling poultry, including those who may be involved in culling during an outbreak of avian influenza • Police, emergency personnel, armed forces and correctional facility staff, essential services personnel. • Providers of home care to persons at high risk of high influenza mortality
Measles-Mumps-Rubella (MMR)	All non-immune HCWs and students directly involved in patient care or the handling of human tissue	<p>All those working with children including:</p> <ul style="list-style-type: none"> • Childcare and pre-school staff (including child care students) • Correctional staff working where infants/children cohabit with mothers • School teachers (including student teachers) • Outside school hours carers • Child counselling services workers • Youth services workers
Varicella	All seronegative HCWs and students involved in patient care or the handling of human tissue	<p>All staff members who are seronegative and working with children including:</p> <ul style="list-style-type: none"> • Childcare and pre-school staff (including child care

		<p>students)</p> <ul style="list-style-type: none"> • Correctional staff working where infants/children cohabit with mothers • School teachers (including student teachers) • Outside school hours carers • Child counselling services workers • Youth services workers
Pertussis	All HCWs (provided a pertussis containing (dTpa) has not been previously given)	<p>All those working with children including:</p> <ul style="list-style-type: none"> • Childcare and pre-school staff (including child care students) • Correctional staff working where infants/children cohabit with mothers • School teachers (including student teachers) • Outside school hours carers • Child counselling services workers • Youth services workers
Tuberculosis	HCWs involved in conducting autopsies and who may be at high risk of exposure to drug-resistant cases	<ul style="list-style-type: none"> • Embalmers
Q Fever	Laboratory personnel handling veterinary specimens or working with the Q Fever organism (<i>Coxiella burnetii</i>)	<ul style="list-style-type: none"> • Abattoir workers and contract workers in abattoirs (excluding pig abattoirs) • Livestock transporters • Veterinarians, veterinary students, veterinary nurses • Sheep shearers and sheep, cattle and dairy farmers • Persons culling/processing kangaroos or camels • Tanning and hide workers • Agricultural college staff and students exposed to high risk animals • Goat farmers • Livestock saleyard workers • Those handling animal products of conception
Australian Bat Lyssavirus (ABL) and Rabies	Laboratory personnel handling either bat tissues or ABL or rabies virus	<ul style="list-style-type: none"> • Veterinarians, veterinary students, veterinary nurses • Those who come into regular contact with bats (both flying foxes and micro bats), including bat – handlers, wildlife officers, and zoo curators
Anthrax, Poliomyelitis, Vaccinia, Poxviruses, Typhoid, Yellow fever, Meningococcal disease		<ul style="list-style-type: none"> • Laboratory personnel working with these infectious agents
Japanese Encephalitis		<ul style="list-style-type: none"> • Laboratory personnel working with this infectious agents • HCWs and other workers assigned to the outer Torres Strait Islands for a month or more during the wet season

Reference: *Australian Immunisation Handbook* (current edition)

www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home

5. Additional Information

5.1 Polio

- 5.1.1. Most HCWs will have received a primary course of polio containing vaccine in childhood, however, if any doubt, a course of 3 doses of polio vaccine at intervals of 1 to 2 months is recommended for primary vaccination of adults. No adult should remain unvaccinated against polio.

5.2 Diphtheria/Tetanus

- 5.2.1. Most HCWs will have received a primary course of diphtheria/tetanus containing vaccine in childhood. If a primary course of 3 doses is required, the preferred option is that dTpa replace the first dose of dT to provide Pertussis booster with subsequent doses as dT. Booster doses are recommended 10 and 20 years after the primary course.
- 5.2.2. All adults who reach the age of 50 without receiving a booster dose in the previous 10 years, a further dose of diphtheria/tetanus (dT) containing vaccine is recommended or preferably dTpa, if this has not been given previously, to also provide protection against pertussis.

5.3 Pertussis

- 5.3.1 Most HCW's will have received a primary course of Pertussis containing vaccine in childhood. A single booster dose (given as dTpa) is currently recommended for all HCWs including all workers and students directly involved in patient care or the handling of human tissues provided they have not previously received a dose.

5.4 Measles/Mumps/Rubella

- 5.4.1 HCWs should be considered immune to measles if; they were born before 1966; or can show documented evidence of having received two doses of the measles-containing vaccine; or can show documented serological evidence of immunity to measles.
- 5.4.2 MMR vaccine is recommended for adults born during or since 1966 (unless serological evidence indicates otherwise) who do not have evidence of receiving 2 doses of measles containing vaccine.
- 5.4.3 HCWs should be immune to rubella if they can show documented evidence of rubella vaccination or serological evidence of immunity. All HCWs, both male and female, need to be assessed and those not considered immune should be vaccinated with MMR vaccine both for their own protection and to avoid the risk of transmitting rubella to pregnant patients and fellow HCWs. When necessary, those vaccinated can be tested for seroconversion 2 months post vaccination and revaccinated if seronegative.

5.5 Varicella Zoster Virus (chicken-pox)

- 5.5.1. HCWs who have a reliable history of having had varicella disease should be considered immune.
- 5.5.2. A HCW with a negative or uncertain history of varicella should be serotested. If found to be negative, vaccination should be offered. HCW's in this group require a 2 dose schedule of varicella vaccine, 1 to 2 months apart
- 5.5.3. A small percentage of healthy vaccinees (3-5%) will develop a rash after the vaccine. Vaccinees who develop the rash should be reassigned to duties that require no patient contact or placed on sick leave for the duration of the rash (likely to last approximately 1 week).
- 5.5.4. Testing to check for seroconversion after Varicella vaccination is not recommended. Commercially available laboratory tests are not always sufficiently sensitive to detect low

antibody levels following vaccination and in addition, the presence of detectable antibody shortly after vaccination does not necessarily indicate complete immunity to varicella.

5.6 Hepatitis B

- 5.6.1 Evidence of either Hepatitis B virus (HBV) or hepatitis B vaccination and post vaccination serological screening should be sought. HCWs should be considered immune if they have documented evidence of a post-vaccination serological screening result showing adequate anti-HBs (Hepatitis B) antibodies (>10mIU/ml) or serological evidence of previous infection.
- 5.6.2 When commencing hepatitis B vaccination in a previously unvaccinated HCW, post vaccination serology is recommended 4 weeks after the 3rd dose to confirm immunity following vaccination
- 5.6.3 If there is a documented history of a primary course of hepatitis B vaccine but seroconversion status is unknown, a single booster dose of the vaccine should be given and the recipient tested for anti-HBs levels 4 weeks later. If antibody level >10mIU/ml is not reached after the booster dose, the possibility of HBsAg carriage should be investigated.
- 5.6.4 Those who are HBsAg negative and are seronegative for hepatitis B antibodies (<10IU/ml) should be offered further doses. These can be given as either a fourth double dose (2 doses, one in each arm) with serologic testing 4 weeks later or a further 3 doses at monthly intervals with further testing at least 4 weeks after the last dose. Those who do not respond/persistent non-responders should be informed about the need for hepatitis B Immunoglobulin (HBIG) within 72 hours of parental exposure to HBV and must be advised of post-exposure precautions.
- 5.6.5 There is limited evidence from several trials that HBsAg negative HCW's who are non-responders to a primary course of vaccination and subsequent intramuscular booster doses may respond to 5ug of Engerix-B (0.25 ml of the adult formulation) administered intradermally at fortnightly intervals (up to 4 doses) with anti-HBs levels measured before each dose to assess for seroconversion.
- 5.6.6 Booster doses are not necessary following achievement of serologically confirmed immunity and antibody levels do not require monitoring. However, booster doses are recommended for individuals with impaired immunity, in particular those with HIV infection or renal failure
- 5.6.7 Those who are infectious (HBsAg and / or HBV DNA positive) must not perform Exposure Prone Procedures (EPP). Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting (2004)
<http://www.health.gov.au/internet/main/publishing.nsf/Content/icg-guidelines-index.htm>

5.7 Hepatitis A

Vaccination should be considered for:

- 5.7.1. Nursing and medical staff who work in paediatric wards, intensive care units and emergency departments that provide care for substantial populations of Indigenous children and carers of people with intellectual disabilities
 - 5.7.2. Nursing and medical staff who work or live in rural and remote indigenous communities
- To avoid unnecessary vaccination, it is recommended the following groups be screened serologically for pre-existing immunity to hepatitis A:
- 5.7.3. Those born before 1950
 - 5.7.4. Those who spend their early childhood in endemic areas including in Indigenous Australian communities
 - 5.7.5. Those with an unexplained previous episode of hepatitis or jaundice

If screening indicates total hepatitis A antibodies or anti-HAV IgG there may have been a previous HAV infection and they can be assumed to be immune

- 5.7.6. If serological screening shows the HCW is not immune, or if the HCW cannot show documented evidence of a previously completed course of vaccination, offer a complete course of the vaccine. The vaccination can be given as a 2 dose monovalent hepatitis A vaccine at least 6 months between doses, or if hepatitis B is also required a 3 dose combination hepatitis A/B vaccine at 0, 1 and 6 months can be given. Refer to Table:3:5:1 Recommended dosages and schedules for the use of inactivated hepatitis A vaccines. *pg. 143 The Australian Immunisation Handbook* (current edition)

5.8 Influenza

Influenza vaccination in HCWs 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 HCW's duty of care to reduce the likelihood of transmitting influenza to those in their care by receiving an annual influenza vaccination.

- 5.8.1. Offer annual influenza vaccine to all HCWs including all workers and students directly involved in patient care or the handling of human tissues.
- 5.8.2. The 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 risk of high influenza mortality
- 5.8.3. All HCW's involved with caring for homeless persons are 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.

Vaccination of HCWs during an Influenza pandemic will be in line with the current South Australia Pandemic Influenza Operational Plan for Health Care Workers;

<http://www.pandemicinfluenza.sa.gov.au/LinkClick.aspx?fileticket=02ZjpmjzpXs%3d&tabid=61>

5.9 Tuberculosis

Tuberculosis (TB) is a low prevalence disease in South Australia and Bacille Calmette-Guerin (BCG) vaccination is not used in the general population. BCG does not prevent transmission of infection but does reduce the risk of death from tuberculosis and is no longer recommended as the primary means of HCW protection. The main issues are:

- the lack of evidence supporting a protective benefit from BCG in the adult and
- the future interpretation of the post exposure tuberculin skin test (TST) is imprecise in the previously vaccinated person

The use of BCG is carefully considered according to individual circumstances e.g. in those who may be at high risk of exposure to drug resistant cases particularly the HCW moving to an overseas country to work in an area with a drug resistance problem. Reference: *The Australian Immunisation Handbook* (current edition)

www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home

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

- 5.9.1. 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
- 5.9.2. The preferred strategy for the HCW is tuberculin skin testing (Mantoux) to screen for transmission of infection and treatment (for TB infection) when indicated. It is recommended that details of HCW TST screening be provided to the SA Tuberculosis service Ph: (08) 8222 5483/8222 4867
- 5.9.3. If there is a history of a previous, abnormal TST result then a chest X-ray is recommended

5.9.4. HCWs at high risk of exposure to TB cases or potentially infected laboratory material are recommended to have annual TST screening. This includes:

- Embalmers
- HCW involved in conducting autopsies
- HCW who may be at high risk of exposure to drug resistant cases
- HCW working in isolation areas and bronchoscopy suites

Reference: *Australian Immunisation Handbook* (current edition)

www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home

All other HCWs at low risk are recommended to undergo baseline TST screening at pre-employment and post exposure assessments only

5.9.5.

5.9.6. Further information can be obtained from SA Tuberculosis Services, 275 North Terrace, Adelaide 5000, Ph: (08) 8222 5483/8222 4867

References

'The Australian Immunisation Handbook' 9th Edition 2008. National Health and Medical Research Council. Canberra: Australian Government Publishing Services, 2008.

www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home

'Infection Control Guidelines for the prevention of transmission of infectious diseases in the health care setting'. Australian Government-Department of Health and Aging Endorsed by the Communicable Disease Network Australia, the National Public Health Partnership and the Australian Health Minister's Advisory Group January 2004.

<http://www.health.gov.au/internet/main/publishing.nsf/Content/icg-guidelines-index.htm>

'Guidelines for Infectious Diseases Policies and Programs for Medical Students'-Committee of Deans of Australian Medical Schools: Prepared by Dr Phillip Jones, UNSW and Danielle Brown, CDAMS: 2005

<http://www.medicaldeans.org.au/pdf/Infectious%20Disease%20Policy.pdf> I

Immunisation for Health Care Workers (HCWs) Fourth Edition': revised May 2004 Published by the Victorian Government Department of Human Services Melbourne, Victoria

National Tuberculosis Advisory Committee. The BCG vaccine: Information and Recommendations for use in Australia (DRAFT) October 2005.

'Control of Tuberculosis in Health care workers' procedure manual. Document number: TBPRO-HCW, August 2004. South Australia Tuberculosis Services.

'South Australia Immunisation Program-Immunisation Resource Kit-Incorporating Model Standing Drug Orders' Department of Health-SA 2004

<http://www.health.sa.gov.au/pehs/Immunisation/imm-intro.pdf>

STD Services, Royal Adelaide Hospital

<http://www.stdservices.on.net/>