

# HANDS UP FOR HANDS-ON!

## Infection Prevention & Control Newsletter

The purpose of bringing this newsletter to you is to provide you with information and updates on contemporary infection prevention and control issues that may be relevant to your workplace. We hope you find the information informative and useful.

Hands Up for Hands-On  
Spring/Summer 2011

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Saliva is natural cleanser of mouth. It acts as a lubricant, protecting teeth and gum tissue by cleansing mouth of plaque and debris. A dry mouth leads to irritated, cracked mucosa and dental decay.



**Risk factors:** Inadequate oral care + changes in salivary properties + alteration in oral flora = increased risk for colonisation of dental plaque, oral dysfunction and infection.

### *Highest risk groups - individuals with poor gag reflex and nursing home residents*

Periodontal disease caused by plaque can contribute to:

- Diabetes
- GI problems
- Cardiovascular disease
- Stroke
- Respiratory infections

**Dental plaque is directly linked to care** but there is a lack of standardised oral care and oral cleansing practices.

### Aims of Oral Care:

- To maintain moisture and saliva to reduce and prevent colonisation of dental

plaque;

- To remove food debris and prevent build up of tartar and plaque on teeth; and
- To frequently and thoroughly mechanically/chemically debride the oral mucosa and teeth, together with standardised oral assessments.

### Obsolete Care Practices

- lemon-glycerin swabs: they are harmful to oral mucosa, exhaust salivary glands and decalcify teeth.
- oversized cotton swabs: they provide no mechanical debridement, leave behind fibres which can be inhaled or swallowed, and can allow bacterial seeding.
- wrapping sponges around forceps, tongue depressors and fingers: this can cause injury to mouth, teeth and digit.
- vaseline and other petroleum based lip preparations: these are flammable around oxygen, and can cause chemical pneumonitis if aspirated.

*There is no scientific documentation of improved outcomes and little support for the above practices.*

### Evidence Based Oral Hygiene

Mechanical/chemical debridement:

- Non-shredding deeply ridged foam tipped oral swabs
- Sodium bicarbonate: breaks down “ropy” secretions
- Hydrogen peroxide 1.5%: mimics cleansing peroxidase action of saliva
- Mucoadhesive mouth moisturiser

*Results in decreases in stomatitis and improved appetites*

### Conclusion

- Be proactive in developing evidence-based infection prevention and control practices
- Give away tradition to new technology and advancements
- Prevention is the key to reducing healthcare associated infections



## Vaccination Update Tuberculosis (TB)

Are you up-to-date with the current guidelines?

Due to the low incidence of TB in Australia and the variable efficiency of the vaccine in adults, the current guidelines recommends vaccination only for at risk individuals. These include;

- Aboriginal and Torres Strait Island neonates living in regions of high TB incidence;
- Neonates born to parents with leprosy or a family history of leprosy;
- Children <5 years of age who will be travelling to live in countries of high TB prevalence for longer than 3 months;
- Embalmers; and
- Healthcare workers (HCW) involved in autopsies.

Individual advice should be sought for the following individuals:

- HCWs who may be at high risk exposure to drug-resistant cases;
- Neonates weighing <2.5kg; and
- Children  $\geq 5$  years and <16 years who will be travelling or living for extended periods in countries with a high prevalence of TB.

BCG (Bacille-Calmette-Guerin) vaccine is used worldwide. It is administered as a single dose by intradermal injection. It should only be given by specially trained staff to the above at risk individuals. BCG is available from State/Territory TB services.

The Health Department of WA recently released an operational directive: **OD 0342/11: Tuberculosis and Health Care Workers** outlining requirements for Western Australia .

For further information see:  
[www.immunise.health.gov.au](http://www.immunise.health.gov.au)

### What am I ?

I live in soil and infect people by penetration of the skin by my larvae.



Three routes of transmission have been documented: direct in temperate climates, indirect in tropical conditions and autoinfection.

Diagnosis of me is by detection in stool specimens. Prevention is by hygienic disposal of faeces.

## Hand Hygiene

Operational Directive OD 1263/10 *Hand Hygiene in Western Australian Hospitals* describes the minimum hand hygiene (HH) improvement strategies and the key components of the National Hand Hygiene Initiative (NHHI) that public and licensed private hospitals funded to provide care for public patients in Western Australia (WA) are required to implement.



Infections resulting from the provision of healthcare are one of the most common causes of unintended harm suffered by health consumers and are associated with increased morbidity and mortality. It is increasingly recognised that healthcare associated infections (HAIs) are preventable adverse events rather than an inevitable outcome of medical care.

The association between poor HH practices by healthcare workers (HCWs), the transmission of infection and the spread of antibiotic resistant microorganisms is well established. Despite this, it has been consistently demonstrated that compliance by HCWs performing appropriate HH has been sub-optimal. Recent studies have demonstrated reductions in HAIs following improved HH practices by HCWs.

In December 2008, following a submission by the Australian Commission on Safety and Quality in Healthcare (ACSQHC), Australian Health Ministers endorsed a nationally coordinated approach to the monitoring of HH. The ACSQHC contracted Hand Hygiene Australia (HHA) to develop and implement the NHHI. The initiative was officially launched in WA by the Minister for Health in April 2009.

Participation in the NHHI is mandatory for WA public and private hospitals contracted to provide care for public patients from February 2010. This decision was endorsed by the WA Director General of Health in the Operational Directive OD: 0197/09 Healthcare Associated Infection Surveillance in WA.

### The National Hand Hygiene Initiative (NHHI)

The NHHI builds on existing HH education and auditing programs including the Safety and Quality Investment for Reform (SQuIRe) program established in 2006 by the Office of Safety and Quality in Healthcare (OSQH). The NHHI is based on the World Health Organization's (WHO) Global Patient Safety Challenge 'Save Lives: Clean Your Hands' and adopts the '5 Moments for Hand Hygiene' framework. The five key elements of the program are: System Change; Training and Education; Evaluation and Feedback; Workplace Reminders and Institutional Safety Climate.

The primary aim of the NHHI is to improve HH compliance among HCWs, and to reduce the transmission of infection in hospitals throughout Australia.

For details contact [www.hha.org.au](http://www.hha.org.au)

Reference OD 1263/10 Hand Hygiene in Western Australian Hospitals available at: [www.health.wa.gov.au/circulars](http://www.health.wa.gov.au/circulars)

# Newsletter Survey

# Poliomyelitis

**Your feedback on the newsletter would be appreciated**

Area of work: (please tick)

- Aged Care                       Acute Care  
 Day Surgery                       Office Base

**Please rate following criteria on a scale of 1-5:**

Negative Positive

Criteria	1	2	3	4	5
Relevance of topics to your work setting					
Accuracy of information					
Adequacy of information					
Up to date					
Easy to read and understand					
Frequency of newsletter					

**Comments/suggestions:**

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**Topics you would like covering:**

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Please email to us on [info@handsoninfectioncontrol.com.au](mailto:info@handsoninfectioncontrol.com.au) or fax on (08) 9227 1134

**Thankyou**

There are 3 poliovirus serotypes; PV1, PV2 and PV3. The virus enters through the mouth, multiplies in the pharynx and the gastrointestinal tract (GIT) and is excreted in the stools for several weeks. The virus invades local lymphoid tissue, enters the bloodstream and may then infect and replicate in cells of the central nervous system.

**Epidemiology:** the incidence has been dramatically reduced worldwide due to the World Health Organisation (WHO) global eradication of poliomyelitis program. However, at present cases still occur in developing countries in the Indian subcontinent, the eastern Mediterranean and Africa. Australia was certified poliomyelitis free in 2000, but travellers to affected areas are still at risk.

**Clinical Features:** the infection may be clinically inapparent. If symptoms occur they may include:

- Headache
- Gastrointestinal disturbances
- Malaise
- Stiffness of the neck and back, with or without paralysis. Paralysis is classically asymmetrical.

Paralytic polio is a complication of poliovirus aseptic meningitis, and may be spinal (79%), bulbar (2%), or bulbospinal (19%). The case fatality rate in paralytic polio is 2-5% in children, 15-30% in adults and up to 75% in bulbar polio.

**Incubation Period:** ranges from 3-21 days. Infected individuals are most infectious from 7-10 days before to 7-10 days after the onset of symptoms.

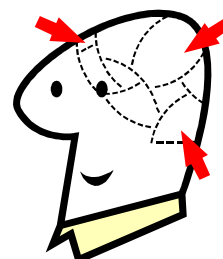
**Vaccination:** inactivated poliomyelitis vaccine is used for all doses of vaccine used within Australia. Healthcare workers should have had a primary course of polio containing vaccine in childhood. If any doubt, a course of 3 doses of polio vaccine at intervals of 1 to 2 months is recommended for primary vaccination of adults. No adult should remain unvaccinated against polio.

For further information see: [www.immunise.health.gov.au/](http://www.immunise.health.gov.au/) or [www.polioreadication.org](http://www.polioreadication.org)

## Brain Teaser—what am I?

Unscramble me using the clue:

1. tisrelai - often found in food items, linked to miscarriages
2. pbycaacletomr – causes intestinal disease
3. shviunrro – seasonal, leaves little immunity against further infection
4. steeaarupll - bacilli found in oral cavities of cats, dogs and other animals



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## Antibiotic Prescribing

### *Does your facility follow the therapeutic guidelines?*

The Western Australian Therapeutics Advisory Group (WATAG) and the WA Infectious Diseases Physicians Group have endorsed the Therapeutic Guidelines: Antibiotic Version 14 released in August 2010 as the current reference standard for antibiotic prescribing in Western Australia.

The current version of the Therapeutic Guidelines: Antibiotic will normally form the endorsed prescribing standard for WA.

The importance of each prescriber adhering to the Guidelines when prescribing antibiotics for empiric therapy is emphasised, except

- in individual cases where departure from the Guidelines is clinically supported and documented or in accordance with advice from an Infectious Diseases or other appropriate specialist, or
- where departmental, hospital or unit protocols have been formally adopted in response to special circumstances, such as renal units or in paediatrics.

Therapeutic Guidelines provide clear, concise, independent and evidence-based recommendations about patient management that have been developed by Australia's leading medical experts. These experts, with their many years of clinical experience, work with skilled medical editors to sift and sort through research data, systematic reviews, local protocols and other sources of information, to ensure that the clear and practical recommendations that are developed are based on the best available evidence.

See [www.tg.org.au](http://www.tg.org.au) for details.

Reference: OD 0310/10 Antibiotic Guidelines available at [www.health.wa.gov.au/circulars](http://www.health.wa.gov.au/circulars)



## Single Use and Single Patient Use



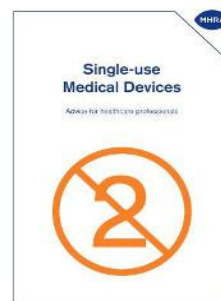
**Single Use Devices (SUDs)** are medical devices that are labelled by the original manufacturer as “single use” or “single patient use”. They are intended to be used once only, or used on a single patient only, and then discarded.

SUDs are classified according to their potential risk to a human body. TGA classification is as follows:

- Class I Low risk devices, including devices that are sterile and/or have a measuring function,
- Class IIa Low-medium risk devices,
- Class IIb Medium-high risk devices,
- Class III High risk medical devices, and
- Class AIMD Active Implantable Medical Devices. These are treated in a similar way to Class III medical devices.

Re-use of **any** medical device potentially increases the risk of cross infection or contamination. Additional risks are associated with re-use of SUDs. These include material degradation, bio-compatibility reactions, endotoxic reactions caused by residues from the cleaning and sterilisation process and device failure, because SUDs were not designed or validated for re-use.

More information on the regulation of the remanufacture of SUDs, including links to the relevant Australian Government legislation is available on the TGA website at: <http://www.tga.gov.au/> or from the TGA information line for medical devices on 1800 141 144.



Reference: OD 0024/06 Re-use of Single Use Devices (SUD's)

## Answers:

What am I?

A roundworm (*Strongyloides stercoralis*)

Brain Teasers:

1. *Listeria*
2. *Campylobacter*
3. *Rhinovirus*
4. *Pasteurella*

## Education and Training

**Hands-On Infection Control** offers a broad range of education and training programs in infection prevention and control. Programs can be tailored to suit the specific needs of individual organisations, specialities, environments and staff/volunteer groups.

These programs can be incorporated into existing induction/orientation, inservice, professional development and targeted programs for all categories of clinical, support and ancillary staff.

Education and training can be provided on or off site for your organisation using the latest technology and delivered by accredited trainers and assessors.

Hands-On Infection Control educational activities have been endorsed by APEC number 070523701 as authorised by Royal College of Nursing, Australia (RCNA) Life Long Learning Program (3LP).

