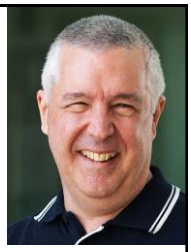
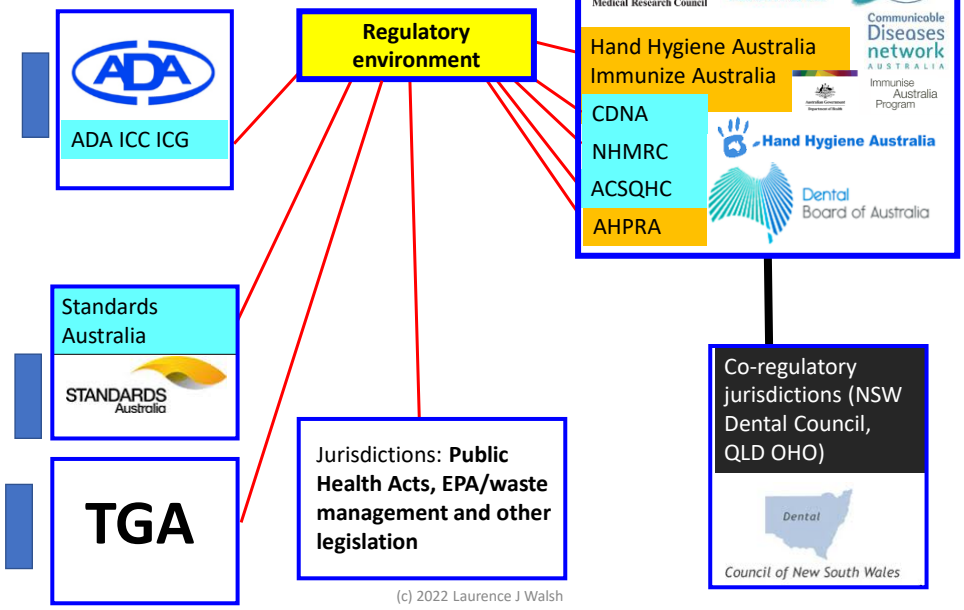
Contemporary Infection Control

2022



Emeritus Professor Laurence J. Walsh AO

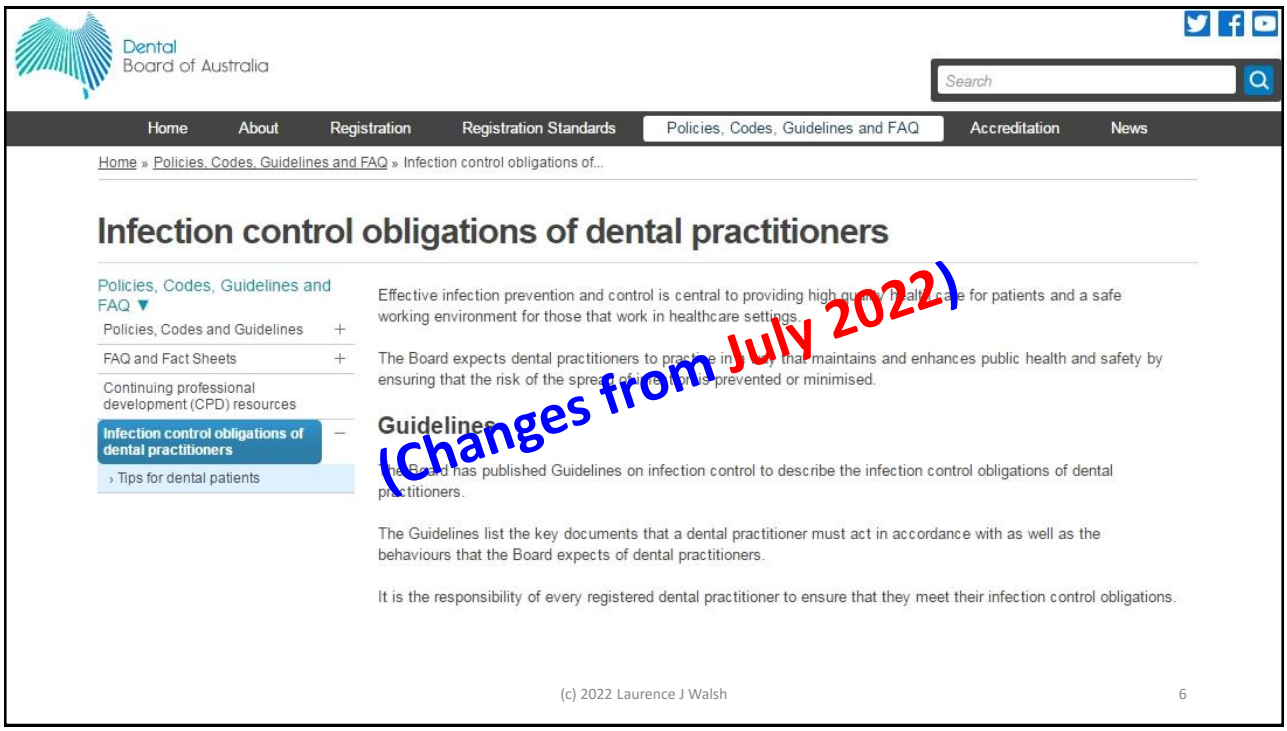
BDSc(Hons), PhD, DDSc, GCEd, FRACDS, FFOP(RCPA), FFDT RCS Edin



Disclosures

- ADA Inf Control Ctee
  - member since 1998
  - 2022 chair; former chair 2009-2014, 2021
- Stds Aust:
  - SF-006-12 (visors)
  - HE-013 (PPE, masks, gloves)
  - HE-023 (reprocessing)
- ACSQHC
  - Dentistry advisor to ACSQHC Stds version 2 (Jan 2019)
  - National Clinical Taskforce 2020-2021
- IC auditor
  - Metro North and Metro South Public Health Units (ad hoc)
- Formerly
  - Dentistry advisor to CDNA for BBV 2016-2018
  - AHPRA Professional standards panel 2015-2021

Dental Board Ahpra



(Changes from July 2022)

Self-audit tool

August 2015

	Yes	No	Action needed
1. Documentation and education			
1.1 Do you have a manual setting out the infection control protocols and procedures at your place of work?			
1.2 Is there hardcopy or electronic access to the "Australian Guidelines for the Prevention and Control of Infection Control in Healthcare" published by the National Health and Medical Research Council NH&MRC) at your place of work?			
1.3 Is there hardcopy or electronic access to the Australian Dental Association's "Guidelines for Infection Control" at your place of work?			
1.4 Is there hardcopy or electronic access to the current version of AS/NZS 4815, "Office-based health care facilities – Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment" (or AS/NZS 4815 OR 4187 if applicable) at your place of work?			
1.5 Are you familiar with the content of these documents?			
1.6 Does your place of work have a recording protocol and procedure for workplace injuries including sharps injury?			
1.7 Have you attended recent continuing professional development on infection control in the current CPD cycle and do you have evidence of such?			
1.8 Has you place of work undertaken staff training in infection control recently?			

Will be replaced by a structured comprehensive self reflection tool:

Done properly will take around 1.5-2 hours to complete properly

Dental Board of Australia

For registered health practitioners

CODE OF CONDUCT

June 2022

Ahpra & National Boards

Code of conduct

June 2022

Advance copy

Code of conduct

What is a National Board code of conduct?

A National Board code of conduct or code of ethics describes the professional behaviour and conduct expectations for registered health practitioners.

Each of the 15 National Boards have an approved code of conduct or code of ethics that applies to the registered health practitioners they regulate. These codes are an important part of the National Boards' regulatory framework and help to keep the public safe by outlining the National Boards' expectations of professional behaviour and conduct for registered health practitioners.

Registered health practitioners have a responsibility to be familiar with and apply their relevant code.

The Medical Board of Australia, Nursing and Midwifery Board of Australia and the Psychology Board of Australia have profession specific codes of conduct or code of ethics in place. The link to these is set out below.

A shared Code of conduct has been developed for the following 12 National Boards and comes into effect on **29 June 2022**. An advance copy of the shared Code of conduct is available here.

- Aboriginal and Torres Strait Islander Health Practice
- Chinese medicine
- Chiropractic
- Dental
- Medical radiation practice
- Occupational therapy
- Optometry
- Osteopathy
- Paramedicine
- Pharmacy
- Physiotherapy
- Podiatry

7. Minimising risk to patients

Principle 7: Good practice involves putting patient safety, which includes cultural safety, first. Practitioners should minimise risk by maintaining their professional capability through ongoing professional development and self-reflection and understanding and applying the principles of clinical governance, risk minimisation and management in practice.

7.1 Risk management

Good practice in relation to risk management includes that you:

a. practise cultural safety as detailed in *Sections 2* and *3*
b. understand the importance of clinical governance[29] and your obligations, where relevant
c. participate in quality assurance and improvement systems where available
d. develop and implement risk management processes that identify and minimise risk to reduce harm to patients[30] and/or to respond to adverse events, if you practise in a setting where local systems are not in place
e. participate in systems for surveillance and monitoring of adverse events and 'near misses', including reporting such events to the relevant authority where applicable
f. ensure systems are in place for raising concerns about risks to patients, if you have clinical leadership/ management responsibilities
g. work to reduce error and improve patient safety, including within available systems
h. support colleagues who raise concerns about the safety of patients, and
i. take all reasonable steps to address the issue if there is reason to think that the safety of patients may be compromised.

8. Professional behaviour

Principle 8: Practitioners must display a standard of professional behaviour that warrants the trust and respect of the community. This includes practising ethically and honestly.

8.1 Reporting obligations

Practitioners have statutory responsibility under the National Law to report certain matters to the National Boards/Ahpra: please refer to the Board's guidelines on mandatory notifications and Sections 130 and 141 of the National Law. Practitioners also have professional obligations to report to the National Boards/Ahpra and their employer/s if they have had any limitations placed on their practice.

Good practice includes that you:

a. are aware of these reporting obligations
b. comply with any reporting obligations that apply to your practice, and
c. seek advice from your National Board, professional indemnity insurer or other relevant bodies if you are unsure about your obligations.

For additional information see Making a mandatory notification on Ahpra's Concerns about practitioners webpage.

8.2 Vexatious notifications (complaints/concerns)

A vexatious notification[32] (complaint/concern) is one without substance, made with an intent to cause distress, detriment or harassment to a practitioner named in the notification. Legitimate notifications (complaints/concerns) are motivated by genuine concerns about patient safety.

Good practice includes that you:

a. raise genuine concerns about risks to patient safety to the appropriate authority (locally and/or the relevant National Board) and comply with mandatory notifications requirements, and
b. do not raise notifications (complaints/concerns) that are vexatious or not in good faith about other health practitioners. These claims may be viewed as unprofessional conduct or professional misconduct and the Board may take regulatory action.

- **Dec 2018: CDNA BBV v2**

https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-cdna-bloodborne.htm

Communicable Diseases network AUSTRALIA

AUSTRALIAN NATIONAL GUIDELINES FOR THE MANAGEMENT OF HEALTHCARE WORKERS LIVING WITH BLOOD BORNE VIRUSES AND HEALTHCARE WORKERS WHO PERFORM EXPOSURE PRONE PROCEDURES AT RISK OF EXPOSURE TO BLOOD BORNE VIRUSES

Transmission of BBV

- *Risk of BBV transmission per exposure episode from untreated infected HCW to patient, and untreated infected patient to HCW (in the absence of additional risk management)*

Blood Borne Virus	Risk of infected HCW to patient transmission	Risk of infected patient to HCW transmission
Hepatitis B virus	0.2% - 13.19%	1% - 62%*
Hepatitis C virus	0.04% - 4.35%	0% - 7%
Human immunodeficiency virus	0.0000024% - 0.000024%	0.3%

* There is a wide variability in infectiousness of people with hepatitis B reported in the literature and this depends on their hepatitis B e-antigen status.

In general, HCW are at greater risk for acquiring infections than are dental patients.

Revised definition from CDNA 2018: *Exposure prone procedures*

- Procedures where the fingertips are **out of sight** for a significant part of the procedure, or during certain critical stages, **and** in which there is a distinct risk of injury to the operator's gloved hands from **sharp** instruments, needle tips and/or sharp tissues including spicules of bone or teeth.
  - In such circumstances it is possible that exposure of the patient's open tissues to the operator's blood may go **unnoticed** or would not be noticed immediately.
- Such procedures **include:**
  - oral surgical procedures, including the extraction of teeth (but excluding extraction of highly mobile or exfoliating teeth),
  - periodontal surgical procedures,
  - endodontic surgical procedures,
  - implant surgical procedures
  - implant surgical procedures.
  - maxillofacial surgery
  - jaw fracture reductions, extensive soft tissue trauma, bony reconstruction

Non-EPPs

- Procedures where the hands and fingers of the HCW **are visible and outside of the body at all times**
- Procedures or internal examinations that do not involve possible injury to the HCW's hands by sharp instruments and/or tissues, provided routine infection prevention and control procedures are adhered to at all times.
- Includes **routine oral examination** (gloved with mirror and/or tongue depressor)

Guidance on classification of exposure prone and non-exposure prone procedures in Australia 2017

Communicable Diseases network AUSTRALIA

Procedure	Exposure Prone	Not Exposure Prone
General		
		Routine non trauma related vaginal or rectal examination, in absence of a sharp
Dentistry		
	All maxillofacial surgery	Extraction of highly mobile or exfoliating teeth
	All oral surgical procedures,	Assessment and management of removable dentures and mouthguards
	the extraction of teeth (with some exceptions)	Taking impressions of teeth
	Periodontal surgical procedures	Apply decay preventive agents
	Endodontic surgical procedures	Removing dental plaque, calculus and stains
	Implant surgical procedures	

Key compliance points for blood-borne virus disease status

- Staff in your practice are aware of the new CDNA guidelines.
- **Dentists doing EPPs** undergo testing for antibodies to hepatitis B, hepatitis C and HIV at least once every 3 years.
- When a contaminated sharps injury occurs to a staff member, it is followed up correctly with baseline tests of the injured staff member.

BBV testing frequency

- **HCWs who undertake EPPs must declare annually to AHPRA that they are complying with, and have been tested in accordance with the CDNA Guidelines**
  - The results of this testing will not be declared to, or recorded by AHPRA

AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE

National Safety and Quality Health Service Standards

Second edition – 2021

Revision of this Standard – rationale and overview

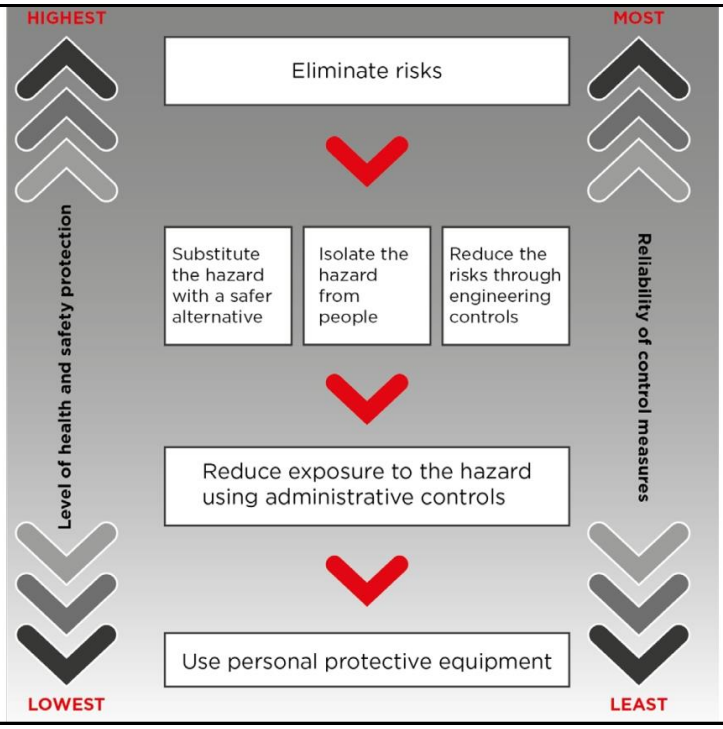
This Standard supersedes the NSQHS Preventing and Controlling Healthcare-Associated Infection Standard (second edition). It was revised to accommodate lessons learned from the response to SARS-CoV-2 (COVID-19), and to better support health service organisations to prevent, control and respond to infections that cause outbreaks, epidemics or pandemics, including novel and emerging infections.

The amendments provide clarification of the scope of the standard, and additional information about actions, to better support implementation of policies, processes and systems that ensure a safe environment for patients, consumers and members of the workforce.

The revision extends the scope of the standard to prevention and control of any infection that may be transmitted within a health service organisation, regardless of where the infection was acquired. The revisions relate primarily to standard and transmission-based precautions; screening and management of healthcare workers with transmissible infections; environmental cleaning; environmental and engineering controls; and other controls to protect patients, consumers and members of the workforce from infection.

The 'hierarchy of controls' is a model used in work health and safety risk management. It is a step-by-step approach to controlling hazards that ranks controls from most to least reliable (see diagram below). The hierarchy of controls, used in conjunction with infection prevention and control systems, supports design of health service organisation infection prevention and control programs. If it is not reasonably practical to eliminate risks, then risks must be minimised as far as is reasonably practicable by using one or a combination of substitution, isolation or engineering controls. Administrative controls and personal protective equipment (PPE) should then be considered.

Hierarchy of controls



3

Preventing and Controlling Infections Standard

Reprocessing reusable equipment and devices

Reprocessing of reusable equipment and devices meets current best practice and is consistent with current national standards.

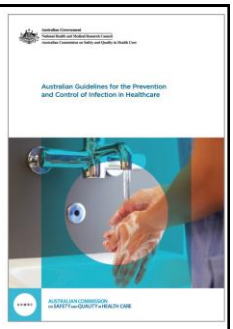
Item	Action
Reprocessing of reusable equipment and devices	3.17 When reusable equipment and devices are used, the health service organisation has: a. Processes for reprocessing that are consistent with relevant national and international standards, in conjunction with manufacturers' guidelines b. A traceability process for critical and semi-critical equipment, instruments and devices that is capable of identifying • the patient • the procedure • the reusable equipment, instruments and devices that were used for the procedure c. Processes to plan and manage reprocessing requirements, and additional controls for novel and emerging infections

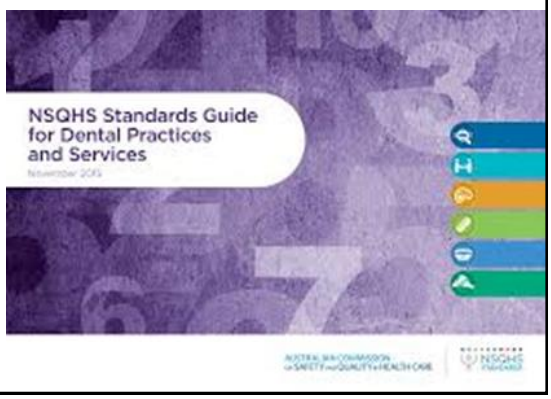
eTG Oral and dental guidelines

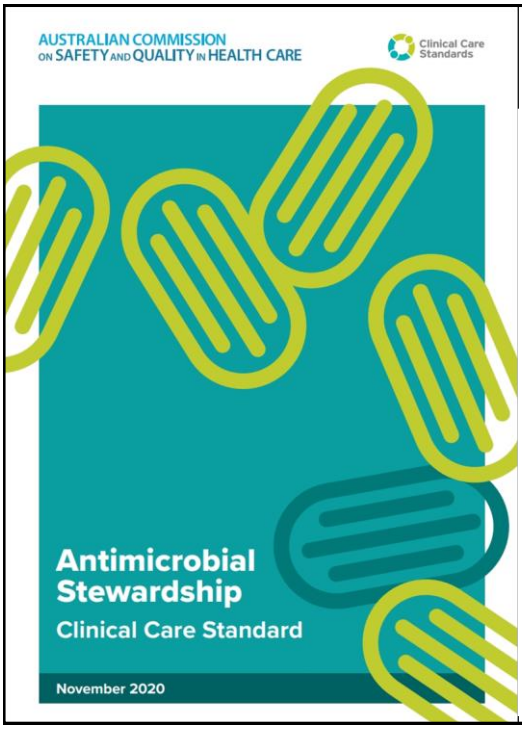
Version 3

eTG complete by Therapeutic Guidelines

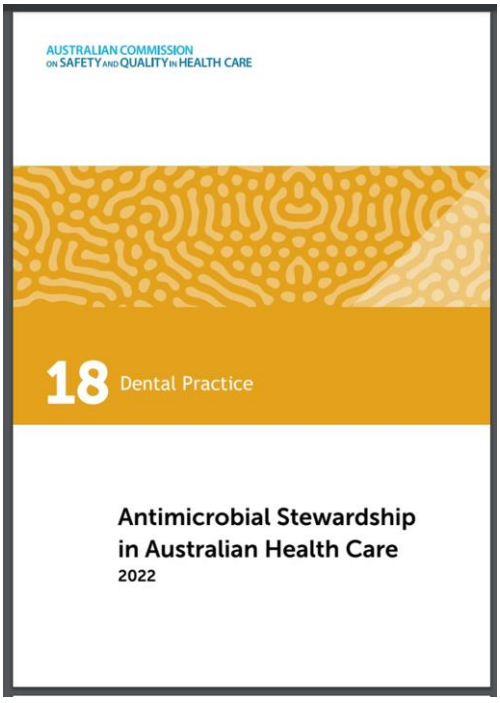
Antimicrobial stewardship







13 April 2022
Chapter 18 published



Acknowledgements

- Dr Penelope Bryant - Paediatric Infectious Diseases Physician and General Paediatrician, the Royal Children's Hospital (particularly Chapter 14)
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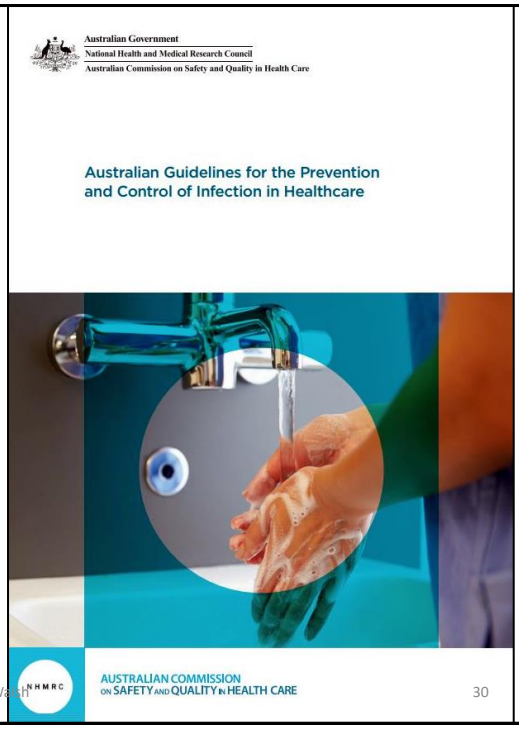
- Dr Celia Cooper – SA Pathology, SA Health (particularly Chapters 5, 8 and 14)
- Dr Jonathan Dartnell – NPS MedicineWise (particularly Chapters 7, 10 and 13)
- Ms Margaret Duguid – Australian Commission on Safety and Quality in Health Care (contribution to Chapters 1-12)
- Conjoint Associate Professor John Ferguson – Hunter New England Local Health District (particularly Chapter 9)
- Ms Fiona Gotterson – Australian Commission on Safety and Quality in Health Care (particularly Chapters 3, 5 and 12)
- Dr Rod James, Director of Clinical Services, National Centre for Antimicrobial Stewardship (particularly Chapter 17)
- Dr Kate Raymond – Principal Dental Advisor, Oral Health Services NT (particularly Chapter 18)
- Professor Debra Rowett – NPS MedicineWise (particularly Chapters 7, 10 and 13)
- Dr Thomas R Schulz, Infectious Diseases and General Physician (Royal Melbourne Hospital) (particularly Chapter 17)
- Professor Karin Thursky – National Centre for Antimicrobial Stewardship (particularly Chapter 4)
- Professor John Turnidge AO – Australian Commission on Safety and Quality in Health Care (particularly Chapters 1, 3, and 18)
- Dr Helen Van Gessel – Albany Hospital (particularly Chapter 2)
- Emeritus Professor Laurence Walsh – Professor of Dental Science, The University of Queensland School of Dentistry, UQ Oral Health Centre (particularly Chapter 18)
- Dr Morgyn Warner – SA Pathology, SA Health (particularly Chapter 1)
- Dr Jeanie Yoo – NPS MedicineWise (particularly Chapters 10 and 13).

The Commission also wishes to extend its thanks to the following individuals who have provided their considered advice in the review of the content of this book:

NHMRC

- May 2019: NHMRC ICG 4th edition
- Minor update in 2021

https://www.nhmrc.gov.au/about-us/publications/australian-guidelines-prevention-and-control-infection-healthcare-2019

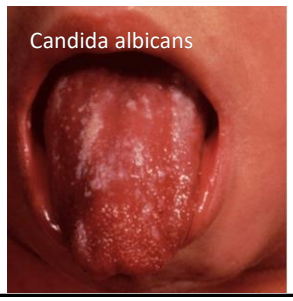


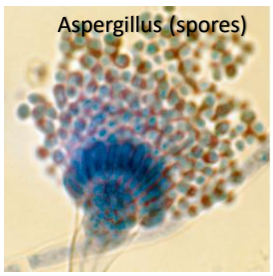
Translating from acute care settings to office-based dental practice

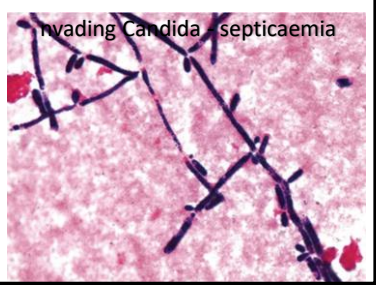
Dental clinic	Community setting	Hospital


Mixed bacterial infection

RESISTANT ORGANISM	HIGHEST-YIELD SITES
Methicillin-resistant *Staphylococcus aureus*	Anterior nares
Vancomycin-resistant *Enterococcus faecium/faecalis*	Rectal/perirectal
Multidrug-resistant *Acinetobacter baumannii*	Groin and throat
Multidrug-resistant Enterobacteriaceae	Rectal/perirectal
Candida auris	Groin and axillae


Candida albicans


Aspergillus (spores)


Invading Candida - septicaemia

NHMRC 2019

Setting and context

- Addresses the highest level of risk of infection transmission
- Predominantly focussed on the **acute-care (hospital) setting**.
- The level of risk may differ in other facilities
- Measures are implemented **according to their specific setting** and circumstances.
- ADA 4th edition ICG "translates" the NHMRC and other key documents into content **relevant for office-based practice**.

- **IN**
  - **Bare below the elbow**
  - **More structured approach to environmental cleaning**
  - **Surgical hand preparation using ABHR**

- **OUT**
  - **Antimicrobial handwash as routine in non-surgical cases**
  - **Antimicrobial surfaces**

- **Alerts**
  - **Re: CHX resistance and allergy concerns**
  - **Re: Antimicrobial stewardship**

Chlorhexidine resistance

Is the use of chlorhexidine contributing to increased resistance to chlorhexidine and/or antibiotics?

Technical Report

Prepared for

National Health and Medical Research Council (NHMRC)

Submitted by

University of South Australia

Division of Health Sciences

Submission date

24th April 2017

Literature Review

Prepared for

National Health and Medical Research Council (NHMRC)

Submitted by

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Division of Health Sciences

Submission date

24th April 2017

Chlorhexidine

NHMRC 2019

- New - Practice statement
- **37. It is good practice to only use chlorhexidine in appropriate situations and when clinically indicated.**

Healthcare professionals should consider the appropriateness of using chlorhexidine in every clinical situation.

- This advice is based on limited empirical evidence, but on sound theoretical principles and supported by expert opinion. The use of chlorhexidine when clinically indicated and appropriate is justified to reduce HAI.
- Despite the paucity of clinical evidence, it is suggested that healthcare workers limit the use of chlorhexidine and consider the appropriateness of using chlorhexidine **in every clinical situation** as this can assist in preventing chlorhexidine resistance.
- The majority of studies related to chlorhexidine resistance are controlled laboratory/susceptibility studies (n=24) so the results cannot be generalised and applied to clinical settings

Chlorhexidine allergy

What is the impact of Chlorhexidine use on the incidence of anaphylaxis?

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Literature Review

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24th April 2017

Chlorhexidine

NHMRC 2019

- New - Practice statement
- **38. It is good practice to include chlorhexidine in a healthcare facility's chemical register. Any adverse reactions to chlorhexidine should be maintained in an organisational risk register and reported to the TGA.**
  - As chlorhexidine usage can result in a number of adverse reactions including anaphylaxis, there is significant benefit in including chlorhexidine in a healthcare facility's register and recording any adverse reactions.
  - A recent literature review found that chlorhexidine-related anaphylaxis appears to be a relatively rare event in healthcare. However, the evidence in this area is limited, and the studies available tend to be retrospective and focused specifically in perioperative settings. The limited nature of the evidence makes it difficult to determine the clinical significance of these findings, and it is possible that **larger acute care healthcare facilities might encounter one or more anaphylactic events each year**.

Mis/Disinformation issues in IPC

- Aspects to be alert for, ***when IPC info your hear/read seems dubious:***
  - Commercial COI (issue with some suppliers and service technicians).
  - No first hand knowledge of committee processes that generate guidelines and standards (within Stds, NHMRC, ADA etc).
  - Not registrants with AHPRA; Lack understanding of regulatory frameworks for **registrants** (from DBA, public health regulators, role of the TGA etc)
  - Gaps in the basic knowledge incl. microbiology.
  - Misinterpreting existing guidelines
  - Out of date references to documents
  - Poorly formed opinions are masquerading as facts.
  - Advice on risk Mx does not follow the hierarchy of controls.