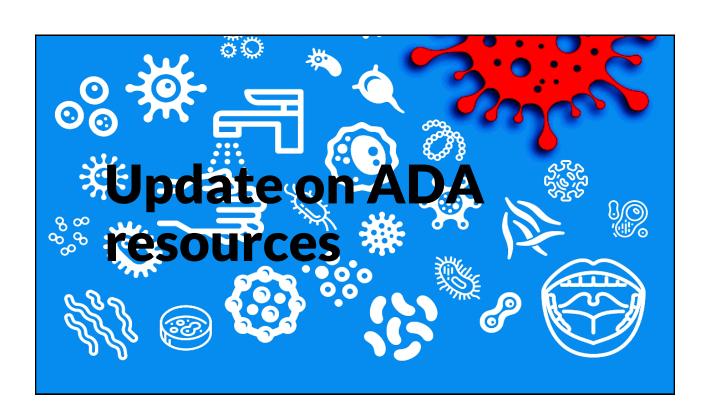
Contemporary Infection Control



2022

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BDSc(Hons), PhD, DDSc, GCEd, FRACDS, FFOP(RCPA), FFDT RCS Edin
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ADA role: "Guide dog, not guard dog"





- ADA is <u>not</u> a regulator or enforcer
- ADA ICC as an <u>expert group</u> advises and informs regulators and government at multiple levels
- Produces resources for the dental profession and gives advice to members and supports ADA State branches

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ADA ICC committee member expertise

| Background | Affiliations | Training | Connections | Activities |
|---|-------------------------------|--------------------------------------|------------------------------------|-------------------------------------|
| General dentists (5) | Private practice (4) | ACIPC courses (3) | AHPRA ctees (2) | IC Auditing (3) |
| Dental specialists (2) | Corporate (1) | Grad Cert IC (1) | NHMRC (1) | IC practice advising (2) |
| Microbiologist (1) | Public sector practice (1) | PhD (2) | CDNA (1) | IC CPD presenter (3) |
| Registered nurse (1) | Dental hospital (3) | IC research publications (3) | ACSQHC (2) | Industry R&D (2) |
| Based in city (7) | University (3) | Educational qualifications (2) | HE-023 (3) | DA RTO training (1) |
| Based in country (2) | NSW (4) | Other postgrad qualifications (3) | Other IC standards ctees (1) | Examiner for ADC or RACDS (2) |
| Practice owners (3) | Qld (2) | | Local PHN (1) | |
| Past ADA state branch president (3) | Sth Aust (2) | | Public health units (1) | |
| Past ADA federal or state councillor (5) | WA (1) | | NSW Dental Council (1) | |

ADA resources

- COVID-19
 - · Microsite within ada.org.au
 - Risk Mx Management principles October 2021
- IPC guidelines 4th edition- August 2021
 - Self assessment tool 2022
 - IC Practical Guide 2022
 - IC manual 2022
 - ADA News Bulletin articles

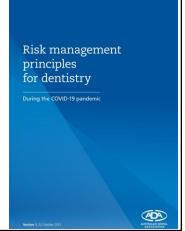


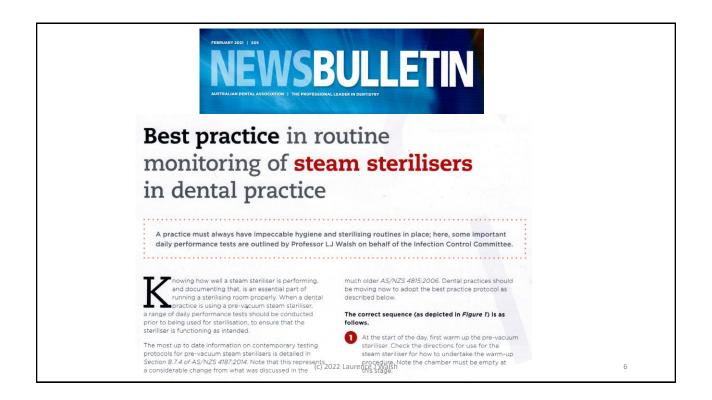












Bowie-Dick tests

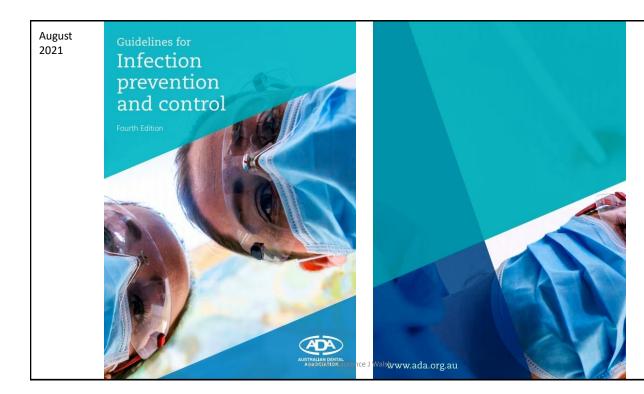






Tests air removal from a porous load, using a special card. A leaky door seal is the most common reason for a fail result with this test.

ADA IC Manual March 2019 **Australian Dental Association** Infection Control Manual Published by the Australian Dental Association PO Box 520 St Leonards NSW 1590 Australia Phone: 02 8815 3333 Email: contact@ada.org.au Web: www.ada.org.au © Australian Dental Association 2019 Acknowledgments The Australian Dental Association has developed this Infection Control Manual template with the kind contributions of a number of people. These include ADA branch staff and volunteers, our infection Control Committee members, and in particular Professor LJ (Laurie) Walsh AO who, in addition to reviewing all drafts, provided final review and edits. [Insert Practice Name] **Infection Control Manual** [Insert date created or date of last review] The routine work practices outlined in this manual are designed to reduce the number of infectious agents in the dental practice environment. Professional judgment is essential in determining the necessary application in the particular circumstances of each individual dental practice. (c) 2022 Laurence J Walsh 8



ADA 4th edition ICG:

- Includes content from:
- CDNA December 2018.
- NHMRC Australian Guidelines for the Prevention and Control of Infection in Healthcare - May 2019
- Updates to the national Hand Hygiene Initiative – 2021
- AS 2773:2019 Ultrasonic cleaners

- What is the difference between alcohol based hand gel for regular hand hygiene versus surgical hand hygiene?
- 2. How do I know if a device needs to have a barrier placed on it?
- Is it mandatory to use an instrument washer to reprocess dental instruments (rather than ultrasonic cleaner)?
- 4. Is checking the steriliser printout enough evidence for the process of sterilisation being
- . What records do I have to keep from a steam sterilizer cycle?
- 6. Do I have to store chemical indicator strips as part of record keeping?
- 7. When do I use a spore test?
 - FAQ section at the end
 - Checklists after each major section
 - 38,301 words
 - 18% longer than the 2015 version.
 - 57% of the text is new

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Major points of note

- Level 1 and 3 surgical masks and where they are appropriate
- Corrective eyewear in regular frames insufficient eye protection
- Dirty gloves holding transfer tweezers not acceptable for item retrieval during procedures
- Testing DUWL water periodically

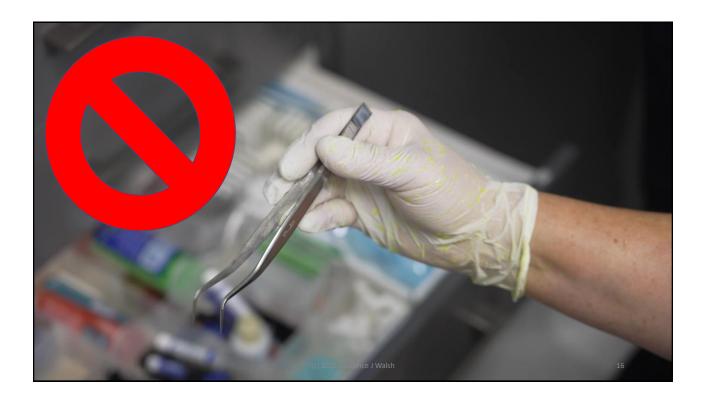
- More explanatory text e.g.
 - Contaminated zone
 - Barriers
 - Transmission-based precautions
 - Checking loads upon removal from the steam steriliser
 - Steam steriliser quality assurance processes
 - Dental laboratory work

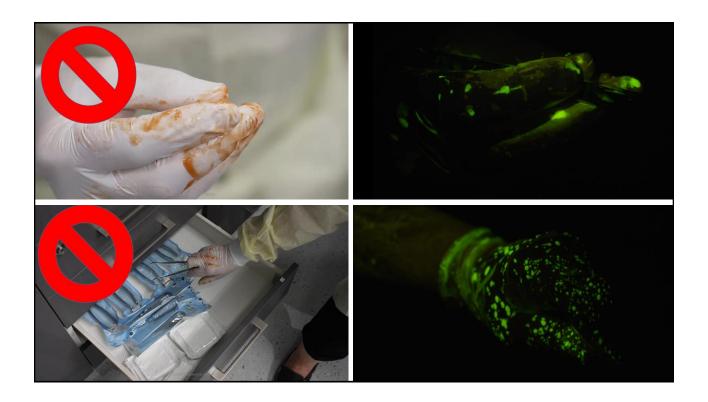












Retrieval of items during appointment

- Remove gloves, perform hand hygiene with ABHR, then retrieve and dispense the additional materials using clean hands, or clean transfer tweezers held by clean hands.
- Then perform hand hygiene, and place on fresh gloves.
- The same "clean hands" approach can be used when moving from the contaminated zone to a clean zone when the intention is to touch non-clinical items without a barrier, such as the operating controls of an intra-oral X-ray unit.

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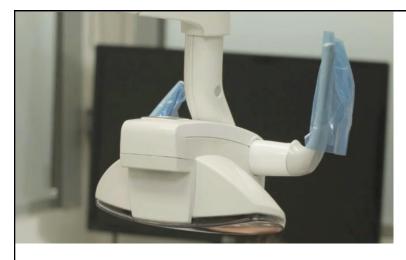
Better planning for instrument sets to reduce retrieval needs

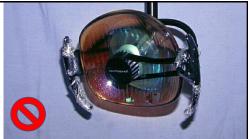


Barriers

- Apply the principles articulated in the ADA ICG for any situation not covered by instructions from the manufacturer. This will be an uncommon situation. Professional judgement will be needed.
- Consider the situation at hand with the device, and whether the suggested barrier will be adequate, and will not introduce additional risks.
- When a staff member improvises a barrier using cling (polyethylene) film, aluminium foil or a sandwich bag, then depending on the device this may work, or its integrity may be compromised because of poor fit or limited adaptation in other words, it depends on whether or not the barrier can do and has done its job.

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What is the surface management protocol? Can the handles be processed through a thermal disinfector? How do you set up the handles for oral surgery? (c) 2022 Laurence J Walsh

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How is the curing light handle dealt with?

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Barriers on curing lights

- Curing light tips are semi-critical items.
- Steam sterilization of the tips causes the optical performance to degrade.
- Barrier protection is an appropriate level of infection control for all curing light tips, as the equipment is **not intended** to contact mucosa.
- This barrier will also prevent adhesive materials from contaminating the end of the curing light tip.
- The handle of the curing light and the tips must always be cleaned prior to having new barriers placed.
- A new barrier must be used for each patient.

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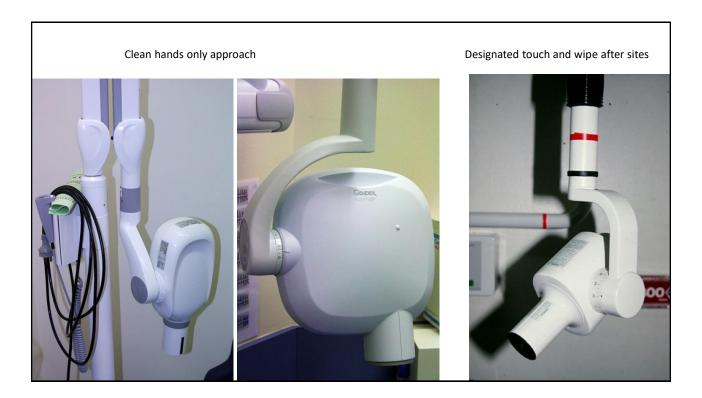
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Intra-oral radiography: options

- Digital radiography sensors come into contact with mucous membranes and are considered semi-critical devices. They must be cleaned and then covered with a barrier before use on subsequent patients. Follow the manufacturer's instructions in terms of appropriate products and methods to be used for this cleaning, so that the sensor is not damaged.
- There are several ways to handle intra-oral radiography to avoid cross contamination.
- A. Remove gloves and perform hand hygiene so that clean hands are used to position the tube and operate the X-ray controls.
- B. Use gloved hands to position the tube and operate the controls, and then clean all the contaminated surfaces of radiography equipment (e.g. X-ray tube head and control panel) at the end of the appointment.
- C. Use gloved hands, but operate the X-ray controls through a barrier that is changed at the end of the appointment.

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Removing barriers

- When replacing barriers, remove the contaminated barrier while gloves are still on, then check the surface for any visible contamination.
- If there is any saliva or blood contamination the surface needs to be cleaned by wiping with a neutral detergent before the next barrier is put in place.
- At the end of the day, surfaces that were covered with barriers during patient treatment should be cleaned by wiping.

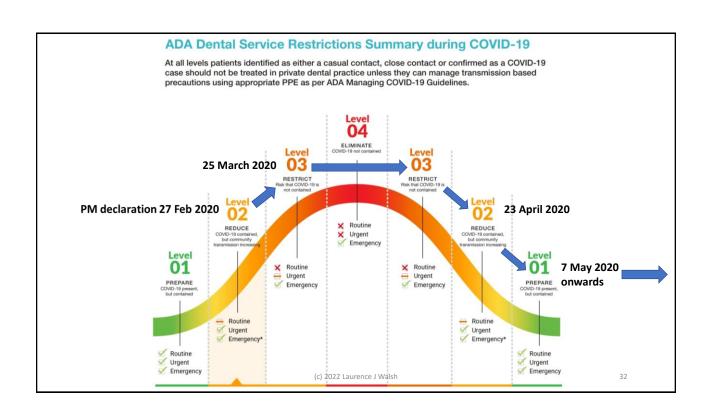
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Key principles: Protect community, staff and patients



- Ethical and moral obligations to other people in the community (the interests of others)
 - Consider the welfare of the entire population.
 - Reducing the volume and extent of dental practice will limit the spread of infection (to flatten the curve, and reduce the surge demand on acute health facilities). This translates into fewer lives lost.
- · Avoiding occupational transmission of infection to dental staff
 - This is a particularly serious issue for older dental staff (60 years and above), especially males, so these individuals should not be at work during the time when the pandemic is spreading by community transmission.
- Preventing nosocomial transmission to <u>other patients</u>, particularly those most at risk of serious adverse outcomes.

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Dentists and COVID-19: Have your say!

Page 1

DENTISTS' KNOWLEDGE, PREPAREDNESS AND EXPERIENCES OF MANAGING SARS-COV-2 and COVID-19 IN AUSTRALIAN HEALTHCARE SETTINGS: A MULTIDISCIPLINARY STUDY

Participant Information Statement (HREC 2020/200)

(1) What is this study about?

We would like to invite you to take part in an ADA supported research study about Dentists' knowledge, preparedness, and experiences of managing SARS-CoV-2 and COVID-19 in the Australian healthcare settings. You have been invited to participate in this study because you are a member of the ADA; The ADA has approved this study of its members, Dentists, who are front-line healthcare workers with a fundamental role in managing the health and wellbeing of the Australian community.

This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this statement carefully and ask questions about anything that you don't understand or want to know more about. Participation in this research study is voluntary. By giving your consent to take part in this study you are telling us that you understand what you have read, agree to take part in the research study as outlined below, and agree to the use of your personal information as described.

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COVID-19 had significant impact in oral healthcare in Australia. Dentistry has adapted to the varied challenges raised by the pandemic. Our results provide clear insight into what Australian dentists experienced during the COVID-19 pandemic and will be of use in future emerging outbreak management.

journal homepage: http://www.journals.elsevier.com/infectiondisease-and-health/



Research paper

Australian dentists' knowledge, preparedness, and experiences during the COVID-19 pandemic

C. Sotomayor-Castillo, C. Li, K. Kaufman-Francis et al.

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Results

Of the 368 responses, all but one dentist (99.7%) reported residing in Australia, with the majority currently working in the states of New South Wales, Victoria and Queensland. Respondents reported an average of 25.10 (SD 12.91) years of professional experience (Table 1).

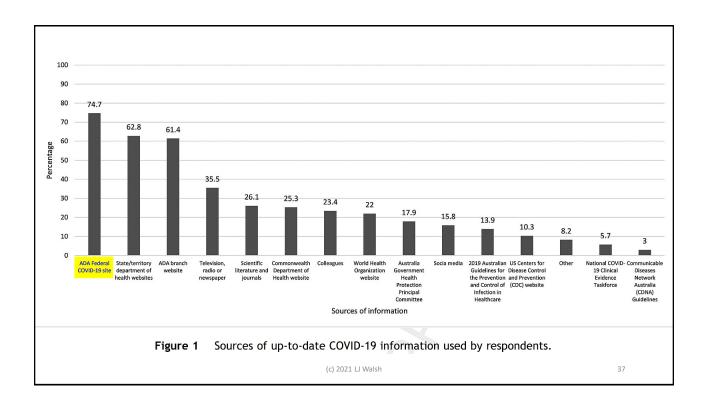
Knowledge

When asked to rate their current knowledge of COVID-19, a majority of dentists (72.3%, n=266) selected 'very good' or 'good'. Only one respondent (0.3%) rated his/her level of knowledge as 'poor'.

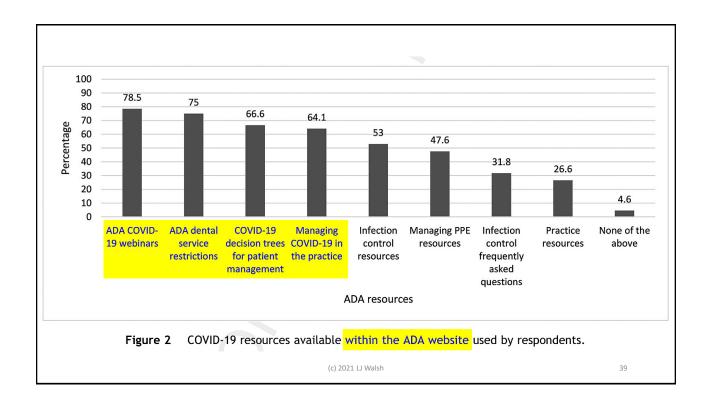
Respondents were introduced to 15 available sources of COVID-19 information to choose from and then asked where they routinely went for up-to-date information (Fig. 1). Almost three-quarters of dentists (74.7%, n = 275) visited the ADA Federal COVID-19 website, followed by: the isurence respective state/territory department of health websites

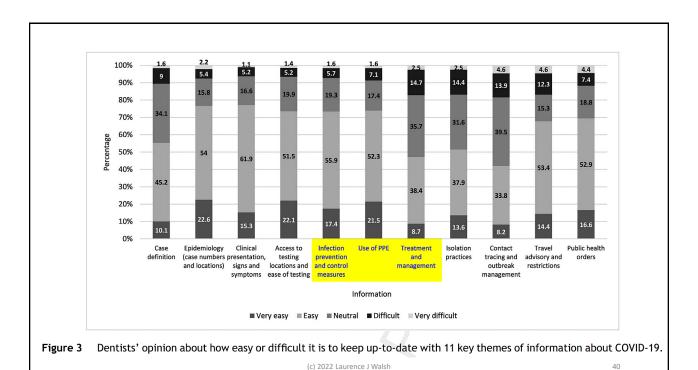
| Table 1 Dentists' demographics characteristics. | and other |
|--|-----------------|
| Characteristics | n = 368 (%) |
| Current state or territory of work: | |
| New South Wales | 104 (28.3) |
| Victoria | 97 (26.4) |
| Queensland | 72 (19.6) |
| Western Australia | 45 (12.2) |
| South Australia | 32 (8.7) |
| Northern Territory | 7 (1.9) |
| Australian Capital Territory | 7 (1.9) |
| Tasmania | 4 (1.1) |
| Country of residency: | |
| Australia | 367 (99.7) |
| Other countries | 1 (0.3) |
| Member of a COVID-19 planning and response committee: | |
| Not a member | 291 (79.1) |
| At local practice level | 53 (14.4) |
| At hospital level | 7 (1.9) |
| At health district level | 2 (0.5) |
| At multiple group practice level | 3 (0.8) |
| At state level | 2 (0.5) |
| At national level | 1 (0.3) |
| ^{J Wa} At international level | 0 (0) 35 |

SECTION 2: KNOWLEDGEIn this section we would like to ask some questions about what you know about COVID-19. □ World Health Organization website 4. Where do you routinely go for up-to-date information about COVID-19? (Please select all that ☐ US Centers for Disease Control and Prevention apply) (CDC) website ☐ Australia Government Health Protection Principal Committee ☐ 2019 Australian Guidelines for the Prevention and Control of Infection in Healthcare ☐ Communicable Diseases Network Australia (CDNA) Guidelines State/territory departments of health website Commonwealth Department of Health website ☐ Colleagues ☐ Scientific literature and journals ☐ Social media (e.g. Twitter, Facebook), ☐ Television, radio or newspaper ☐ ADA Federal COVID-19 site ☐ ADA Branch site National COVID-19 Clinical Evidence Taskforce Other (c) 2022 Laurence J Walsh 36



| 5. Which of the following ADA COVID-19 mini-site resources do you use? (Please select all that apply) | ☐ ADA COVID-19 webinars ☐ ADA dental service restrictions ☐ COVID-19 decision trees ☐ Managing PPE resources ☐ Managing COVID-19 in the practice ☐ Infection control resources ☐ Infection control FAQ ☐ Practice resources ☐ None of the above |
|--|---|
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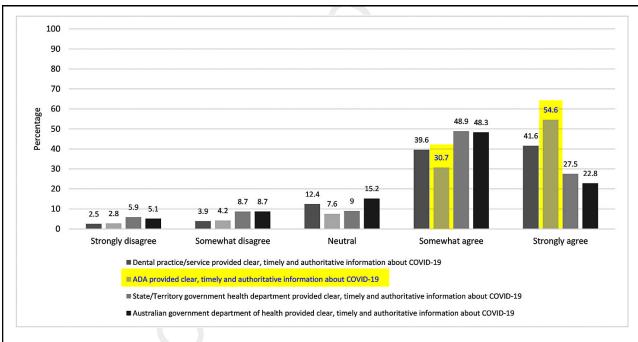
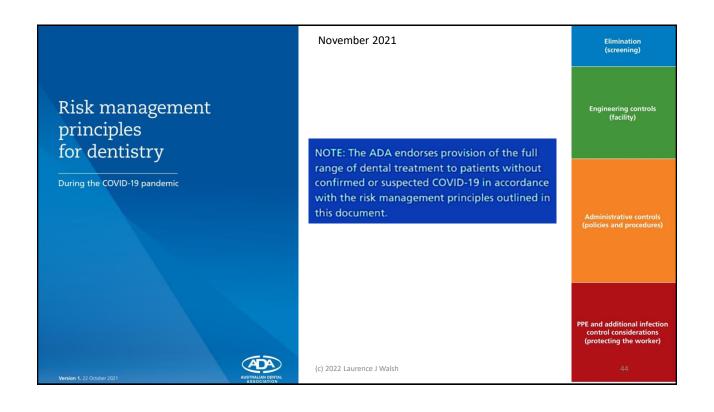


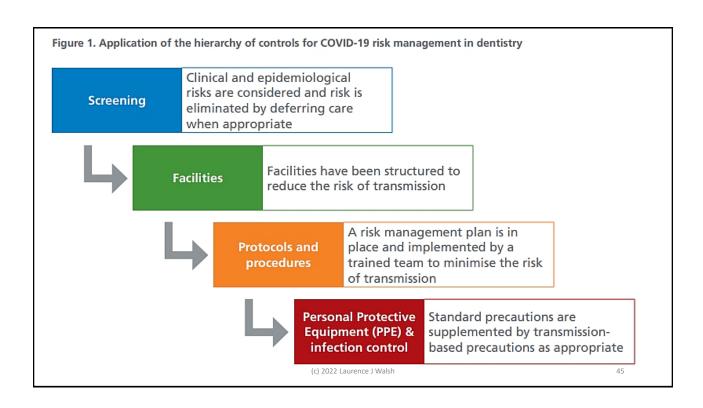
Figure 4 Dentists' opinion about the provision of clear, timely and authoritative information about COVID-19.

| | Dentists (N = 121) | |
|--------------------------|--------------------|------|
| | n | % |
| Adequacy of PPE training | | |
| Not at all adequate | 0 | 0 |
| Slightly adequate | 9 | 7.4 |
| Somewhat adequate | 19 | 15.7 |
| Mostly adequate | 57 | 47.1 |
| Entirely adequate | 36 | 29.8 |
| Confidence in using PPE | | |
| Not at all confident | 13 | 3.7 |
| Slightly confident | 31 | 8.7 |
| Somewhat confident | 70 | 19.7 |
| Mostly confident | 153 | 43 |
| Entirely confident | 89 | 25 |

| Table 3 Respondents' participation response activities. | n in COVID-1 | 19 outbreak |
|--|--------------------------|-------------|
| COVID-19 outbreak response activities | Yes n (%) | No n (%) |
| Reviewing and updating policies or procedures | 191 <mark>(51.9</mark>) | 177 (48.1) |
| Establishing fever clinics | 3 (0.8) | 365 (99.2) |
| Training in donning and doffing PPE | 78 (21.2) | 290 (78.8) |
| Supporting healthcare staff | 88 (23.9) | 280 (76.1) |
| Supporting other staff | 97 (26.4) | 271 (73.6) |
| Planning for surge capacity | 15 (4.1) | 353 (95.9) |
| None of the above | 118 <mark>(32.1)</mark> | 250 (67.9) |

| 19 outbreak | Table 4 COVID-19 support services provious spondents' workplace and respondents' atteaccess. | • |
|------------------------|---|-----------------------------------|
| No n (%) | Support services provided by the dental practice/facility | n (%) |
| 177 (48.1) | Yes, debriefing only Yes, staff psychological support only Yes, both | 54 (15.9) 13 (3.8) 32 (9.4) |
| 365 (99.2) | Neither | 198 (58.4) |
| 290 (78.8) | Do not know | 42 (12.4) |
| 280 (76.1) | Total | 339 (100) |
| 271 (73.6) | Attending debriefings and their usefulness | |
| 353 (95.9) | No | 236 (69.6) |
| 250 (67.9) | Yes, but it was not useful | 5 (1.5) |
| 230 (07.7) | Yes, and it was slightly useful | 36 (10.6) |
| | Yes, and it was moderately useful | 41 (12.1) |
| | Yes, and it was extremely useful Total | 21 (6.2) 339 (100) |
| | Accessing psychological services and their usefulness | 337 (100) |
| | No | 328 (96.8) |
| | Yes, but it was not useful | 0 (0) |
| | Yes, and it was slightly useful | 2 (0.6) |
| | Yes, and it was moderately useful | 4 (1.2) |
| | Yes, and it was extremely useful | 5 (1.5) |
| (c) 2022 Laurence J Wa | Total | 339 (100) |
| | | |





| CATEGORY | SOME EXAMPLE CONTROL MEASURES |
|------------------------------------|--|
| Elimination (screening) | Screen all patients, workers and visitors for clinical and epidemiological risk factors for COVID-19 |
| | Do not treat suspected or confirmed COVID-19 patients when care can be appropriately deferred |
| Engineering controls (facility) | Use signage to enhance screening protocols, implement 'check in', and delive key messages such as respiratory hygiene |
| | Remove high touch items such as toys and magazines from communal areas |
| | Provide facilities for hand hygiene (such as alcohol-based hand rub) and respiratory hygiene (such as tissues) |
| | Identification and frequent cleaning of high touch surfaces |
| | Review and optimise air flow, ventilation, and air quality (including consideration of availability of negative pressure facilities in area) |

| Administrative controls (policies and procedures) | Maintain a current risk management plan in response to COVID-19 that takes into consideration any state-based/local guidance |
|---|--|
| | Implement vaccination policies for health care workers consistent with legal requirement in each jurisdiction |
| | Implement physical distancing requirements |
| | Ensure staff training on infection prevention and control and implementation of Guidelines |
| | Adopt protocols that reduce viral load and saliva being aerosolised by use of protocols such as pre-procedural mouth rinse, dental dam, and high-volume evacuation (suction) |
| | Consider appropriate 'fallow times' if COVID-19 suspect or confirmed patients are being treated in the facility |
| PPE and additional infection control considerations (protecting the worker) | Adopt PPE protocols consistent with Guidance on the use of PPE for health care workers in the context of COVID-19 |
| | Adopt appropriate airborne precautions (including appropriate PPE) when patients with suspected or confirmed COVID-19 are being treated in the facility |
| | Have enough PPE supplies available based on the risk-based infection control precautions required for patients receiving care in the facility |
| | Ensure that PPE is appropriately used (e.g. team training on selection, donning, doffing, fit testing, fit checking) |
| | Defer or transfer care if appropriate PPE is not available |

7 page document



Risk management principles for dentistry

During the COVID-19 pandemic

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Engineering controls and Facilities, including air handling

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