Canterbury
District Health Board
Te Poari Hauora ō Waitaha

Community Dental Service

18 December, 2015

Marie Warner
Chief Executive
Dental Council of NZ
consultations@dcnz.org.nz

Dear Marie

Please find attached a response to the consultation on the proposed Infection Prevention and Control Standard.

This response has been prepared with input from:

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Please contact me if you have any questions or require further clarification.

Kind regards

Martin

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cc. Megan Gibbs

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Q1. Do you agree/disagree with the proposed Infection Prevention and Control Practice Standard? If you disagree, please detail why.

1. The proposed IPC Practice Standard contains a number of standards which fall outside the primary purpose of the DCNZ – which is to protect the health and safety of the public. These standards generally cover IPC issues related to staff which are already covered by health and safety in employment (HSE) or other legislation. It is our view that it is not necessary to double-up by creating legally enforceable DCNZ standards where others exist – however practitioners should be advised that other legislation is relevant to IP&C. For example:
    a. Standard 2 – PPE: beyond the need to replace/clean PPE between patients, the use of PPE is generally for the protection of the person wearing it. While it is possible wearing open-toed shoes could lead to exposure which could lead to seroconversion and a subsequent risk to the public this is a long bow to draw.
    b. Standard 3 – Sharps: while improper disposal presents a risk to the public, safe handing is an HSE issue, transport of medical waste is covered by Land Transport.
    c. Standard 4 – wearing of PPE when disposing of waste is a HSE issue
    d. Standard 22 – BBFE exposure: largely a HSE issue

2. Standard 1: Hand hygiene
    a. Although the WHO is referenced for correct hand hygiene practice, there should be some mention of The 5 Moments for Hand Hygiene also as there is now specific guidance for dental practice: http://www.who.int/gpsc/5may/dental-care.pdf
    b. We have attached a copy of the “WHO Hand Hygiene in Outpatient and Home-based Care and Long-term Care Facilities Guide”.
    c. Another reference and resource to use is Hand Hygiene NZ. Hand Hygiene NZ shares the programme with Hand Hygiene Australia who currently include and are also updating Hand hygiene specifically for dental practice. www.handhygiene.org.nz
    d. Note that the WHO say hand washing to be performed 40-60 seconds and ABHR 20-30 secs. Please also refer to other resources such as the CDC where 20 secs hand washing is recommended. The most common practice we are familiar with is 20-30 secs hand washing and ABHR- rub until dry.
    e. Effective coverage is required whether using soap and water or ABHR, and also the importance of properly drying hands (to prevent residual bacteria multiplying in a warm wet environment)
    f. Hand care is important and should be included in hand washing guidelines- need to include the moisturising of hands. Also needs to mention guidelines on condition of hands, what to do if there is skin irritation or break down. See Hand Hygiene NZ info: The management of hand care requires early recognition and a systematic approach to ensure success of an alcohol hand hygiene programme. Strategies for minimising occupational hand dermatitis include:

i. use of a hand hygiene product that contains skin emollient to minimise the risk of skin irritation and drying
ii. educating staff on caring for their hands, including the regular use of skin moisturisers both at work and at home.
iii. Using moisturising skin-care products that are compatible with an alcohol product
iv. providing a supportive attitude towards staff with skin problems

g. Please also note from Hand Hygiene NZ the recommendation for ABHR: The concentration for maximum efficacy is different for isopropanol than ethanol – e.g. Alcohol hand products containing 60% isopropanol are associated with similar cutaneous bactericidal activity s an alcohol hand product that contains 77% ethanol.

3. Standard 2: PPE
    a. Note our previous comments regarding much of this being already covered by HSE legislation
    b. Include a bullet point about performing hand hygiene prior to putting on gloves as there is one about after gloves are removed (it is mentioned in the HH section but could be re-enforced here)
    c. In the masks section there is no reference to N95 or P2 particulate respirators which are required for those organisms transmitted via the airborne route or others where the droplets are aerosolised small enough that they become airborne.
    d. Regarding outer protective clothing:
        i. Uniforms are not usually made of materials that are impermeable to body fluids and are therefore not considered PPE
        ii. All PPE must be changed or cleaned between patients as part of standard precautions
        iii. Outer protective clothing falls into two group: aprons and gowns
        iv. The choice of wearing a plastic apron or gown is based on the risk.
        v. Wear a single use plastic apron if there is a risk that clothing may be exposed to blood or saliva such as during aerosol generating procedures, or scaling & root planning when there is likely to be excessive bleeding. Wearing a plastic apron is advised when performing instrument decontamination.
        vi. Remove the apron by breaking the neck straps and folding the apron in on itself. Be careful to only touch the inner surface as the outer surface is likely to be heavily contaminated. Store stocks of aprons away from potential contamination.
        vii. Wear a single use, long-sleeved, fluid-repellent gown if there is a risk of extensive splashing of blood and body fluids onto skin or clothing such as during MOS, periodontal or implant surgery.
        viii. Gloves are worn over the cuff of the gown sleeve to reduce contamination and wetting. To ensure compliance with the guidance that hand hygiene is carried out “bare below the elbow”, this should be carried out before donning the gown.

ix. PPE should be removed in the following order to prevent contaminating oneself and the surrounding surgery environment:
    1. Gloves.
    2. Plastic apron or gown (if worn).
    3. Mask (or respirator mask) or a visor if worn and then the mask.
    4. Protective eyewear
    5. Followed by hand hygiene.

4. Standard 3: safe handling of sharps
    a. NIOSH Guidelines need to be included in this document to provide guidelines on the safe management of sharps

5. Standard 4: Waste management
    a. Compliance measures should refer to local healthcare waste polices as the waste Standard is interpreted and operationalized differently across the country depending on local council requirements, facilities and organisational policies (eg DHBs) etc.

6. Standard 6: Clean environment
    a. There should be some reference to blood and body fluid spills here as the cleaning up following a significant blood or body fluid spill does incorporate a disinfectant. There is no information on blood or body fluid spills which is a core component of Standard precautions.
    b. The use of the word “household cleaning procedure” is vague. The Victorian cleaning guidelines need to be included in the document. These guidelines provide guidance on the cleaning categories, standards and auditing.
    c. Waterline and quality: 4th bullet point “assure yourself that the water … How is this measured and undertaken?
7. Standard 7: Transmission-based Precautions
    a. There is no reference to the appropriate types of PPE to be used and the types of transmission based precautions.
        i. Contact precautions; gloves and gown/apron
        ii. Droplet: surgical mask
        iii. Airborne: N95 respirator mask
    b. Apply two cycles. This is the same as a 2 step cleaning and disinfection method?
    c. There is no mention of using disinfection for the environment for transmission based precautions.

8. Standard 13: Cleaning
    a. Ultrasonic cleaners – instruments must not be added during a cycle.
    b. For the cleaning process to be verifiable an ultrasonic cleaner would be required to have an interlocking lid that prevents interaction with the

load once the cycle has started, and preferably a display indicator integral to the unit clearly displaying:

i. unique cycle number.
ii. time and date,
iii. elapsed cycle time,
iv. maximum/minimum temperatures,
v. ultrasonic activity,
vi. cycle failure indication,

c. It is not made clear that if all instruments processed through as washer disinfector are subsequently sterilised that the disinfection compliance measures do not need to be carried out.
d. Manual cleaning is not automatic and it is not possible to fully validate the process. More detail is required regarding acceptable practice – the following is from HTM-01-05 (2013) [1]
    i. Cleaning procedure for dental instruments
        1. Measure the volume of water and detergent to achieve the concentration specified by the detergent manufacturer. A line painted on the sink is useful to indicate the required volume of water. The detergent should be designed for the manual cleaning of dental instruments.
        2. Using a mercury-free thermometer, monitor the temperature of the water throughout the cleaning procedure to ensure the temperature of the water is 45oC or lower (a higher temperature will coagulate protein and inhibit its removal). The temperature of the fluid should be as recommended by the detergent manufacturer.
        3. Where manufacturers' instructions permit, fully submerge items to be cleaned in the detergent solution.
        4. Scrub instruments using long-handled brushes with soft plastic bristles. To minimise aerosol risk, fully immerse the instruments in the solution and keep under water during the cleaning process.
        5. Following cleaning, drain the water, avoiding splashing. If the water is heavily soiled, repeat the cleaning procedure.
        6. Brushes should be single use. Where they are reusable, after each use, the brushes should be washed in hot water using the manufacturer's recommended detergent, in order to remove visible soil, and be stored dry and head up. Or dispose of brushes if they are single-use. Reusable brushes should be replaced at the manufacturer's recommended interval or more frequently if the brush is seen to have significantly deteriorated.

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/170689/HTM_01-05_2013.pdf

7. Carry out a final rinse in the clean sink using satisfactory potable water (see paragraphs 3.14, and 17.8–17.10), or RO water or distilled water only.
8. After rinsing, drain and dry if instruments are to be wrapped.

9. Standard 14: Packaging
    a. Labelling outside of pack prior to sterilisation
        i. Automatic printers that produce barcoded tracking labels only print on successful completion of the cycle.

10. Standard 15: Data recorder
    a. It should be noted that dental handpieces and other hollow items are not “solid” and cannot be sterilised under the “Proviso” exempting the use of a data recorder nor in a N type steriliser

11. Standard 17: Steriliser process integrity
    a. Note that the definition of “Hollow A” is an error copied from AS/NZS 4815. The correct definitions are found in EN 13060:2004:
        i. single ended open space where the ratio of length to diameter of the cavity is greater than or equal to 1 and less than/or equal to 750 ($1 < L/D < 750$) and where the length of the cavity is not greater than 1500mm ($L < 1500mm$) and
        ii. double ended open space where the ratio of length to diameter of the cavity is greater than/or equal to 2 and less than or equal to 1500 ($2 < L/D < 1500$) and where the length of the cavity is not greater than 3000mm ($L < 3000mm$) and which is not hollow load B.
    b. Unloading and checking load
        i. 2nd bullet point – loads can be left overnight in modern automatic sterilisers which cycle heat and vacuum to keep the load dry. This should be allowed.

12. Standard 19: Performance tests
    a. Note that EN ISO 17665-1 requires monitoring of steam penetration inside of hollow instruments with each cycle. AS/NZS 4815:2006 is out-of-date.
    b. Batch process challenge tests should be allowed (preferred) as an alternative to daily Helix/Bowie Dick tests.
        i. Daily process challenge tests require sterilisers to be cold, and therefore cannot contain instruments overnight, and mean the steriliser is not available for use in the morning for approx. 45 minutes until the test is carried out. This reduces throughput and increases costs.
    c. Type S Cycle: the air removal tests and steam penetration tests and frequencies should be specified in the same way as for Type B sterilisers

13. Standards 20 & 21: Maintenance of equipment and validation of testing
    a. The requirements for sterilisers, washer/disinfectors and ultrasonic cleaners are comprehensively described in HTM-01-05 chapters 12-15.
        i. Suggest these sections are reviewed and aligned with the UK standards.
    b. Test loads
        i. These must be defined in the standard (see BS EN 13060)
    c. Annual performance re-calibration:
        i. The rationale for allowing this testing to be carried out by practice staff, without thermocouple testing, because current compliance is poor and standards need lifting over time, is weak, and
        ii. a statement that Council may revisit this in the future provides little incentive for change.
        iii. An abridged annual PQ may be acceptable if a time frame is specified for phasing in a complete annual PQ

14. Standard 23: Documentation
    a. Monitoring for sterilisers: 5th bullet point – load contents
        i. What is the purpose of recording this? Many loads are mixed

Q2. Does any element of the proposed Infection Prevention and Control Practice Standard require clarification or further guidance? Please explain.

1. The general requirement (bullet point on page 5) which requires practitioners to ensure that standards are fully met in the practice in which they work should be further expanded on:
    a. Not all practitioners are in a position to “ensure” all aspects of the IPC standards – in particular those who work in larger institutions may have instruments reprocessed by central sterilisation facilities using equipment which is validated and maintained using different protocols to those in the draft standard

    b. Much of the language in the Standard reflects the situation in an owner-operator dental practice (eg “you must ensure you use reprocessing procedures appropriate for the intended use…”) – the document needs to reflect the working situations of all practitioners, consider their degree of control and provide guidance on how those who are not in direct control can assure themselves that the standards are being complied with.

    c. Where it is directly relevant (eg Standard 1 – hand hygiene, Standard 3 Sharps disposal, Standard 6 clinical environment) it should be clearly stated that practitioners must ensure non-registered staff (ie. dental assistants) directly assisting them to provide patient care adhere to the compliance measures.

Q3. Do you have any further comments on the proposed Infection Prevention and Control Practice Standard?

1. DCNZ needs to consider whether each dental practice/organisation providing dental services has a designated person responsible for IP&C – like the Principal Licensee for radiation protection. This would improve consistency and raise standards.

2. Audit – as mentioned in the consultation document there are concerns about compliance in some areas and some exceptions have been made to reduce costs for compliance, however IP&C is an area the public have a right to expect a very high level of compliance. Audit would strengthen the standard and provide an incentive for compliance. Note that audit already occurs in respect of radiation protection

3. The development of the standard would have been improved by including a biomedical engineer with expertise in dental equipment and an IPC practitioner (clinical nurse specialist) with expertise in dental services.