

	CLINICAL PROTOCOL: Oral Hygiene: Adult – Independent, Acute Care			
	AUTHORIZATION: Royal Columbian Hospital and Surgery Network; Dental Hygienist Group	DATE APPROVED: NOVEMBER 2017	CURRENT VERSION DATE: NOVEMBER 2017	Page 1 of 7

Version	Date	Comments / Changes
1.0	November 2017	Initial Clinical Protocol Released

PURPOSE:

To reduce the risk and prevent occurrences of non-ventilator-associated hospital acquired pneumonia (NV-HAP) in independent, adult patients in acute care.

To promote oral health and provide quality oral care and optimize patient comfort.

To provide clinical guidance to optimize oral health for patients while in hospital.

1. BACKGROUND

Hospital acquired pneumonia (HAP) is a common nosocomial infection and a significant cause of morbidity and mortality, leading to increased length of stay, increased costs, and decreased quality of life. Research has linked poor oral health to cardiac disease, arthritis and preterm/low birth weight babies. Oral contaminants are linked to an increased risk of HAP. Acute in-patients are particularly susceptible to acquiring HAP. Research has led to the development of clinical guidelines, including enhanced oral care protocols, to reduce ventilator-associated pneumonia (VAP) in critical care settings yet, for patients outside these areas, oral care practices are less defined.

The Association of Medical Microbiology and Infectious Disease Canada (AMMI) and the Canadian Thoracic Society's joint document *Clinical Practice Guidelines for Hospital-Acquired Pneumonia and Ventilator-Associated Pneumonia in Adults* recommend that prevention-based oral care protocols be established for in-patients, including those not ventilated.

2. DEFINITIONS

Buccal pockets: The space between the teeth/gums and cheeks. Also known as the oral vestibule.

Candidiasis / Thrush: A fungal infection of the oral cavity caused by *Candida albicans*. It may appear as a white patch on the tongue, cheeks, hard or soft-palate. When wiped, the white curd rubs off; the underlying tissue may be acutely red, or similar to normal tissue colour. If located on the hard palate under a denture, the hard palate may be acutely red, or appear red with pebbled patches. Candidiasis/thrush is treated with nystatin or other antifungal medication.

Dental caries: a transmissible bacterial infection characterized by the acid dissolution of enamel and the eventual breakdown of the organic dental tissues.

Dysphagia: Difficulty swallowing

Gingivitis: inflammation of the gingiva. Characterized by swelling and redness of the gums, most notably at the margin with the tooth. Bleeding of gingival tissues during brushing or flossing is a sign of gingivitis. This is the most common form of periodontitis.

Hospital-acquired pneumonia (HAP): an inflammatory condition of the lung tissue caused by infectious agents not present or incubating at the time of hospital admission or within 48 hours of admission.

Non-ventilator-associated pneumonia (NV-HAP): a pneumonia which occurs within 48 hours or more after admission in patients who are not intubated, and which was not incubating at the time of admission.

Oral malodor / halitosis: offensive breath odour associated with poor oral hygiene, xerostomia, periodontitis, sinus infection or post-nasal drip, tonsillitis, and tonsiloliths (tonsil stones). Oral malodor may also be present with lung disease, diabetes, or uremia.

Oral mucositis: inflammation, edema and/or ulceration of the oral mucosa caused by pathologic microorganisms or physical or chemical injury such as chemotherapy or radiation therapy. May cause burning, pain and general discomfort that can interfere with talking, swallowing, and eating.

Ventilator-associated pneumonia (VAP): a pneumonia which arises 48-72 hours after endotracheal intubation.

Xerostomia: Dry mouth caused by a variety of conditions including salivary gland dysfunction, medications, and radiation therapy to the head and neck. Saliva is minimal and appears thick, sticky or ropery. Causes food and plaque biofilm to adhere to the teeth, tissues and dentures. May interfere with chewing, swallowing, speaking and the ability to wear dentures. Oral tissues are susceptible to trauma and ulceration

3. RELATED RESOURCES

- [Clinical Skill: Oral Hygiene](#)
- [Clinical Skill: Denture Care](#)
- For patients with a tracheostomy in acute medical/surgical areas, refer to:
 - o [Clinical Skill: Suctioning: Tracheostomy in Med-Surg](#)
- [Oral Hygiene: Adult – Care Dependent – Clinical Protocol](#)
- [Care Standard: Oral Health – Acute Care](#)

4. APPLICATION PARAMETERS

This oral care protocol applies to all non-ventilated, independent in-patients (Adult) on admission to acute hospitals in Fraser Health. Care-dependency is determined by healthcare providers.

Nursing staff will:

- 4.1.** Identify patients at risk for NV-HAP upon receiving patients into care. Major risks of HAP include:
- Poor oral hygiene or inability to perform oral hygiene
 - Advanced age
 - Co-morbidities
 - Dysphagia
 - Altered level of consciousness (for example post operative effects of anesthetic, medications, head injury/stroke, etc.)

- Presence of tracheostomy
- Presence of oral and/or nasal tubes (e.g. NG, entube, OG tube, etc.)
- Gastric reflux disease
- Broken, damaged teeth
- Malnutrition
- Frailty
- Tube fed
- History of pneumonia, asthma or respiratory infections

4.2. Confirm level of dependency (i.e. independent, requires assistance, total dependency for care)

- Independent patients:
 1. Managing saliva well, with or without suctioning
 2. Able to follow directions to spit rather than swallow
 3. Able to manage and direct own care or minor assistance
- Care-dependent patients:
 1. Require some level of assistance to initiate and perform oral hygiene
 2. Unable to follow directions for safe and complete oral care (e.g. clear oral secretions)
 3. Unable to manage and direct own oral care

4.3. Follow the in-patient oral hygiene procedure for performing or assisting patients with oral care

4.4. Apply the appropriate oral hygiene procedure according to any change in patient dependency or medical status

Exceptions:

Where patients have oral surgery, facial fractures, wired jaws, head or neck radiation or other special circumstances where comprehensive oral care may be contra-indicated, nursing staff will seek direction from the most responsible physician.

5. ASSESSMENT

5.1. Performing or assisting patients with oral care is within the scope and practice of nursing staff, and is an expectation of basic personal care. A physician's order is not required to initiate and maintain oral care. A Registered Nurse (RN), Registered Psychiatric Nurse (RPN) and a Licensed Practical Nurse (LPN) are responsible for identifying the type of oral care required. When appropriate, the RN, RPN and/or LPN will communicate expectations and procedure for oral care to care aides and family members. Assessments are on-going throughout the hospital stay.

5.2. Reportable Conditions:

- Open areas, bleeding, blisters, ulcers, signs of infection (e.g. thrush/candida)
- Anatomical abnormalities (e.g. growths, granulation, etc.)
- Loose or broken teeth
- Pocketing food
- Signs of aspiration or choking during oral care or on own secretions

- Common oral problems: dental caries, gingivitis, halitosis, oral mucositis, xerostomia.
- Patient resistive of oral care and procedure cannot be completed. Document on patient record

6. INTERVENTIONS

Staff will follow standard infection control precautions and hand hygiene protocol for all direct care. Staff will follow the independent oral care protocol until the level of care-dependency changes or is interrupted (e.g. post-operative period). Staff will assist/direct independent patients with oral hygiene until the patient assumes responsibility/is capable of conducting their own oral hygiene routine.

Recommendations:

6.1. Standard frequency:

- Cleansing with antiseptic oral solution: every 4-6 hours.
- Assessment and teeth brushing: every 12 hours.
- Special considerations:
 - o Patients with dysphagia
 - Standard frequency every 4 hours
 - Oral care with suction
 - Oral care in a upright position with the head of the bed at 30° minimum
 - Perform (or offer assistance) for oral care before and after each meal
 - o Head and neck surgery, treatment (e.g. radiation therapy, etc.)
 - Assess level of dependency
 - Refer to surgical, oncology or patient specific care plans

6.2. Complete oral care includes (nurse assisted/directed):

- Visualizing the mouth cavity, roof or the mouth, buccal pockets, tongue and teeth. Use a penlight to optimize visibility.
- Cleansing of the tongue, roof of the mouth, buccal pockets. Teeth brushing twice per day
- Mouth rinse following mouth and tongue cleaning and as needed

6.3. Equipment:

- Non-latex gloves
- Tooth brush or suction toothbrush if medically required
- Tooth paste, as appropriate
- Mouth swabs or suction swabs
- Oral rinse solution (e.g. chlorhexidine 0.12%)
- Basin

Procedures for oral care are stratified to the level of care dependency in the following categories:

- Independent or requires minimal assistance with oral care: patient is independent with oral care ([Clinical Skill: Oral Hygiene](#))
- Denture care: Patient is dependent on other for denture care ([Clinical Skill: Denture Care](#))
- [Oral Hygiene: Adult – Care Dependent – Clinical Protocol](#)

7. EDUCATION

Nursing staff will inform patients/family of the importance of regular oral hygiene in the prevention of pneumonia and the sustainment of good oral health.

8. DOCUMENTATION

Nursing staff performing or assisting with oral care will document the type and frequency of oral care performed. Patients who are independent with their oral care will have it recorded in their chart as independent. Documentation will take place on the patient's chart or a designated alternate care record determined by the unit, program or site.

9. CLINICAL OUTCOMES

Adult in-patients in acute care hospitals will have optimal oral health and a lowered risk and lower incidences of developing NV-HAP while admitted to hospital.

10. REFERENCES

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