25 June 2009

MEMORANDUM FOR: USAF Preventive Dentistry Officers

FROM: Gary C. Martin, Col, USAF, DC
Military Consultant to the USAF Surgeon General for Dental Public Health

SUBJECT: Preventive Dentistry Update #24

1. 2010 Preventive Dentistry Course.

The USAF Preventive Dentistry Course will be held at the Dunn Dental Clinic, Lackland AFB Texas from 12-16 April 2010. The 2009 Course attendees included the largest number of civilian and military hygienists ever. Their energy and professionalism enhanced the course significantly. The attendees shared the strengths and weaknesses of their preventive dentistry programs and many of their presentations can be found on the Dental Public Health (Preventive Dentistry) Knowledge Exchange (KX). The plan is to have the majority of the lectures for the 2010 course available to all USAF dental personnel via the Defense Connect Online (DCO) and where possible bases can participate live with the course at Lackland thru DCO. Topics that are covered at the course include the responsibilities of the director/chief for preventive dentistry, caries risk assessment, management of the high caries risk patients, evidence-based dentistry, nutrition, tobacco cessation, dental population health metrics, and prevention in pediatric dentistry. There are 15 funded quotas that are distributed throughout the USAF. There are a limited number of locally funded slots (5) available for this course which will be distributed on a first come first serve basis. Those individuals interested in attending the 2010 Preventive Dentistry Course using local funds should contact Col Kevin Murphy, Chief Dental Operations Division, AFMOA-SGDD by email at Kevin.Murphy.1@lackland.af.mil or phone DSN 945-5244/Com 210-925-5244.

2. Dental Population Health Metrics 2001-2008.

Our efforts to assist the USAF personnel who are at high risk for dental caries have significantly improved the oral health of this population. As documented in the article "Dental caries risk in the U.S. Air Force" published in the November 2006 Journal of the American Dental Association (Vol 137, pages 1582-1591) the Air Force Dental Service made great strides in improving the oral health of the Air Force population. For those USAF active duty service members who were designated as high risk for dental caries during fiscal year 2001 (October 2000 through September 2001) and remained on active duty status through September 2004, improvement was demonstrated in 83 percent of these patients. Over the past 8 years there has been a 45 percent reduction in the number of high caries risk patients which equates to approximately 15,000 patients who have improved oral health and quality of life. At the end of fiscal year 2008 only 5.1 percent of USAF active duty personnel were classified as high risk for dental caries.

Over the past eight years there has been a significant increase in the number of individuals who use smokeless tobacco. Please ensure that all dental providers educate these individuals as to the risks of using tobacco and encourage them to stop.

Each USAF Dental Clinic should use their monthly Population Health Metrics to target their prevention efforts. The metrics can also be used to monitor trends for dental caries, periodontal disease and tobacco use. The metrics can also be used when reporting on the oral health status of the base's active duty population to the Population Health Committee. If you have any questions concerning Dental Population Health Metrics please contact Lt Col Barbara Martin at Commercial (210) 925-1748 or DSN 945-1748 or email Barbara.Martin@lackland.af.mil

3. Updated Caries Risk Assessment Guidelines.

Effective 1 May 2009 the USAF Dental Service implemented the updated Caries Risk Assessment Guidelines which are part of the Guidelines for Dental Population Health Metrics. These guidelines can be found at Attachment 3 (page 42) of the 1 May 2009 Air Force Medical Service Dental Clinical Practice Guidelines. This update is based on the May 2006 American Dental Association Council on Scientific Affairs evidence-based clinical recommendations on professionally applied topical fluoride. These ADA recommendations include a caries risk assessment system. There is a slight difference between the USAF Caries Risk Assessment Guidelines and the ADA's system. The difference is that the USAF Guidelines use findings at the **current exam** for the high caries risk patients **not** "in the last three years". This also required a minor change to the ADA's description for moderate caries risk which reads, "One or two incipient or cavitated primary or secondary carious lesions in the last three years". The USAF Guidelines for moderate caries risk reflects this change, "One or **more** incipient or cavitated primary or secondary carious lesions in the last three years". For those high caries risk patients, who at their next annual exam have less than three incipient or cavitated carious lesions, they will be assigned to the moderate caries risk category.

There has been some confusion as to what Dental Readiness Class patients who are participating in the high caries risk program should be assigned. When high caries risk patients have all their oral health needs completed to include placement of sealants, fluoride treatments, and only need a recall exam they can be updated to Class 1. High caries risk patients who do not participate in the program are updated to Class 1 when all their oral health needs have been completed. Please note that only a dentist can authorize class changes.

4. AFMS Dental Clinical Practice Guidelines 1 May 2009.

The Preventive Dentistry section of the guidelines starts on page 14 and includes Attachments 3-5. The guidelines can be reviewed on the Dental KX and the changes from the previous guidelines are highlighted in yellow. As noted on page 15 monitoring and reporting of fluoride levels in the base water supplies should be carried out according to the guidance in AFI 48-144, 19 March 2003, Safe Drinking Water and Surveillance Program, paragraph 2.6. Additionally, the Preventive Dentistry Officer should be aware of fluoride levels found in the water of communities surrounding the AF Base. The fluoride levels can be found in the annual water reports that are available at www.epa.gov/safewater/ccr/index.html . The report for 2008 is available in June-July 2009. If you have any questions please contact Col Gary Martin at DSN 285-6972/Com 301-319-6972 or email gary.martin@usuhs.mil

Attachment 5, Evidence-Based Clinical Recommendations for Professionally Applied Topical Fluoride, includes the recommendation that the application time for fluoride gel and foam should be four minutes. A one-minute fluoride application is not endorsed (JADA Vol. 137 http://jada.ada.orgAugust2006). During recent staff assistance visits several dental clinics have been found to be using a one-minute fluoride rinse/application. **All USAF Dental Clinics should not be using any one-minute fluoride application for gel/foam or rinses**.

5. Updated Preventive Dentistry Practice Guidelines 15 December 2008.

Please review the updated guidelines that provide guidance on scope of practice, training, supervision and competency assessment for delivering preventive dental care and service. It applies to Dental Hygienists, Advanced Oral Hygiene Technicians, and Oral Preventive Assistants. The guidelines can be found on the Air Force Dental Service's KX site in the section for Dental Guides.

Dental hygienists, Advanced Oral Hygiene technicians, and Oral Preventive Assistants should be practicing within their defined scope of care and documentation of their competence and currency in these procedures completed.

6. 2009 Listing of Preventive Dentistry Teams.

The most current listing of the Director/Chief of Preventive Dentistry for each USAF Dental Clinic can be found on the Dental Public Health (Preventive Dentistry) KX at the following URL:

https://kx.afms.mil/kxweb/dotmil/kj.do?functionalArea=DentalPubHealth

7. Organization of Preventive Dentistry Notebook Table of Contents & High Caries Risk Treatment Form.

There are two attachments to this Preventive Dentistry Update that DTFs can use to assist in organizing the Preventive Dentistry Notebook and for Management of the High Caries Risk Patients.

I want to recognize the efforts of Col Joe Bartoloni and Col Susan Mongeau over the past four years to improve the oral health of our Air Force Population. Col Bartoloni was the Preventive Dentistry Course Director for 2005-2007 and Col Mongeau was the Course Director for 2008. We will miss the energy, professionalism, and smile of Col Bartoloni as he retires from the USAF Dental Service this August. If you have any questions please contact me at gary.martin@usuhs.mil or DSN 285-6972.

//Signed//
Gary C. Martin, Col, USAF, DC
Military Consultant to the USAF Surgeon General for Dental Public Health

Patient: _____Last four SSN: _____

TREATMENT PROTOCOL:

	Dates Treatment Completed
1. Discuss caries etiology, diet/nutritional counseling, and fluoride use Provider patient-specific recommendations and handout:	
2. Evaluate oral hygiene / Prophy / Instruct & demonstrate OH techniques to include OTC fluoride toothpaste	
3. THERAPY A. MANDATORY: In-office professional fluoride treatment [1] with fluoride varnish (or gel, if varnish not available). Follow protocol 1, 2 or 3. 1) 2-4 fluoride applications at 3 or 6 months intervals in a 12 month period. Or 2) 3 fluoride varnish applications in a 3 week time frame. Or 3) 4 fluoride gel applications in a 6-8 week time frame *Member is in Class 2 until restorative and fluoride therapy is completed B. HIGHLY RECOMMENDED (check all that applies to address individual risk factors) ____ Chlorhexidine rinse (Rx: 0.12% CHX rinse), as indicated ____ Fluoride (Rx: Prevident 5000 fluoride dentifrice/1.1% gel) ____ Xylitol products (gum, mints, rinses, toothpaste) _____ Calcium and phosphate containing products (e.g. MI Paste Plus®, Recaldent® gum, etc.) [1]JADA, Vol 137. Aug 2006. *Professionally applied topical fluoride: Evidence-based clinical recommendations*	#1 _____ #2_____ #3 _____ #4 _____ _____ _____ _____ _____
4. Complete restorative treatment	
5. Place sealants as indicated	
6. Enter patient's name into clinic's tracking system Dental Class 1 is appropriate if all restorative and fluoride treatment is completed. Dental Class 2 is appropriate if fluoride treatments are pending.	
7. Next Exam date is set at 3-6 months from date the restorative treatment is completed. Dental Class 1 is appropriate if no fluoride treatment is pending.	Due: Month_____ Year
8. Exam: Type 3 or Type 2 A. Type 3- limted oral eval, OHI, diet, Fluoride treatment with or without prophy, continue on HCR program and 3-6 month recall exam B. Type 2 – exam/x-rays/prophy with fluoride 1) New caries - start a new worksheet and keep in program. 2) No caries with risks–change to Mdr car risk continue with fluoride recall application at 6 mos interval. 3) No caries, no risks–change to Mdr car risk, option to continue with fluoride or remove from program	_____New worksheet _____ Fluoride recall: 3 months or 6 months _____ Remove from program Date:_____

Note: Print head-to-toe for readability in the dental record.

Due to your high incidence of cavities, you are a candidate for placement into a comprehensive program designed to fight tooth decay.

This program is voluntary, but will require time and effort on your part. The best professional intervention cannot succeed without a consistent commitment from you—at home and at the dental clinic. By signing below, you agree to comply with the recommendations made by the dentist. If you are unable or unwilling to participate any longer in the program (i.e., due to PCS, deployment, separation, lack of desire), please kindly notify us.

Patient's signature: _____ Date:

High Caries Risk Criteria

Criteria:

- 3 or more incipient/cavitated* primary or secondary carious lesions diagnosed during current exam
- Presence of multiple risk factors**
- Suboptimal fluoride exposure
- Xerostomia
- Poor oral hygiene
- Irregular dental visits (< 1x/yr)

* A ***cavitated*** carious lesion is a lesion that has penetrated the tooth's solid surface and is no longer considered reversible through remineralization

** ***Risk Factors-*** factors that increase the risk of developing caries include, but are not limited to: (Check all that apply)

- Localized white spots and/or incipient interproximal radiolucencies
- Deep pits and fissures
- Past root caries/ large number of exposed roots
- Frequent sugar intake (> 5x/day)
- Inadequate or no systemic or topical fluoride exposure
- Inadequate salivary flow, as determined from PMH or unstimulated salivary flow testing (< 0.2 mL/min) (Xerostomia may require SF Form 513)
- Generalized white spots and/or incipient interproximal radiolucencies with appliances (RPDs, Orthodontics)-
- Streptococcus Mutans levels $\geq 5.5x10^5$ CFU/mL in whole stimulated saliva
- Saliva pH < 5.0
- Developmental or acquired enamel deficits
- Many multisurface restorations
- Eating disorders
- Restoration overhangs and open margins
- Chemotherapy or radiation therapy
- Drug or alcohol abuse,
- Active orthodontic treatment
- Medication-, radiation- or disease-induced xerostomia

PREVENTIVE DENTISTRY
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