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 #25

1. **2011 Preventive Dentistry Course.**
   The USAF Preventive Dentistry Course will be held at the Dunn Dental Clinic, Lackland AFB Texas from 18-22 April 2011. The 2010 Course attendees included dental officers, military and civilian hygienists. The energy and professionalism of all the attendees 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). 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 2011 Preventive Dentistry Course using local funds should contact Col Kevin Murphy, Chief Dental Operations Division, AFMOA-SGDD by email at Kevin.Murphy.1@us.af.mil or phone DSN 945-5244/Com 210-925-5244. Link to Prev Dent KX https://kx.afms.mil/kxweb/dotmil/kj.do?functionalArea=DentalPubHealth

2. **Future Training of Specialists in Dental Public Health.** I am pleased to announce that the USAF Dental Service is anticipating selecting dental officers for training in Dental Public Health. The Dental Education Board will convene in October 2010 and will evaluate applications from candidates interested in the two-year residency in Dental Public Health and will select qualified candidates to start the residency in the summer/fall of 2011. Please share this information with all dental officers at your base. The two-year residency includes one year in obtaining a Master's in Public Health (MPH) followed by a second year at an ADA Accredited Dental Public Health Residency (DPHR). Applicants who have already obtained a MPH will only need to complete the one-year DPHR. Applicants who are selected must coordinate their application for civilian training with the Consultant in Dental Public Health. Applicants are not restricted by AFSC. In other words, any specialist or general dentist may apply. Specialists who apply must comply with established Air Force policy concerning training in a second residency. Air Force Dental Officers who have completed multiple assignments and have a diversity of experiences, are best suited for this specialty. Civilian senior dental students (2011 graduates)and Health Profession Scholarship Students are not eligible to apply. Upon completion of the two-year residency dental officers are awarded an AFSC of 47G3D. Dental Public Health is one of the eight recognized specialties by the ADA and successful completion of the residency is a requirement to be eligible to challenge the American Board of Dental Public Health. The field of Dental Public Health encompasses many areas of dentistry including preventive dentistry, infection control, epidemiology, research methods, manpower modeling, population/community health, quality assurance/risk management. The two-year residency includes one year in obtaining a Master’s in Public Health (MPH) and than a second year at an ADA Accredited Dental Public Health Residency completing two research projects. If you have any questions please contact Col Gary Martin at DSN 285-6972.

Our efforts to assist the USAF personnel who are at high risk for dental caries have significantly improved the oral health of this population. Over the past nine years there has been a 63.7 percent reduction in the number of high caries risk patients which equates to approximately 22,000 patients who have improved oral health and quality of life. At the end of fiscal year 2009 only 4.0 percent of USAF active duty personnel were classified as high risk for dental caries.

Over the past nine years there has been an increase in the number of USAF personnel who do not use tobacco from 73.3% in FY 2001 to 76.4% in FY 2009. The percentage of smokers has decreased from 22% in FY 2001 to 18.2% in FY 2009. However, the percentage of smokeless tobacco users has increased from 4.0% in FY 2001 to 4.5% in FY 2009 and there has been a similar increase in those who use both smokeless tobacco and smoke. 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 either Lt Col Dawn Wagner at Commercial (210) 925-5229 or DSN 945-5229 or email dawn.wagner@lackland.af.mil or Col Gary Martin at Commercial (301) 319-6972 or DSN 285-6972 or email gary.martin@usuhs.mil

4. Management of High Caries Risk Patients

To properly manage a population of high caries risk patients each USAF dental clinic should be tracking the current status of these patients. This includes identification in the monthly population health metrics and more importantly a local database, (Excel or Access) that tracks the status of the treatment protocol. The monthly population health metrics for each base will provide the total number of active duty who are high caries risk patients and the local database should provide how many are actually participating/enrolled in the dental clinic’s high caries risk protocol. The percentage of active duty that initially elects to enroll in the high caries risk program should be above 50%.

There are many products to choose from when providing fluoride varnish and xylitol chewing gum or mints. Currently there are no clinical research results to support one fluoride varnish being more effective than others, however all should be a 5.0% NaF varnish product. For those specific teeth that have been treatment planned for re-mineralization therapy, documentation should be provided in the dental record as to the clinical outcome. To be most effective xylitol should be the listed as the first ingredient on the packaging information and should be used at least 3 times per day for five minutes, usually after meals.

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. This is noted in the USAF Treatment Protocol Form for high caries risk patients at section 6 and 7. 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.
5. **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](http://www.epa.gov/safewater/ccr/index.html). The report for 2009 is available in June-July 2010. 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](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.**

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

If you have updates for your Dental Clinic please call or email Col Gary Martin.

If you have any questions please contact me at gary.martin@usuhs.mil or DSN 285-6972.

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