



Dental Professional Advisory Committee Newsletter

Volume XVII, Issue II

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53rd Annual USPHS Scientific and Training
Symposium

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Co-Editor CDR Lori Snidow
Co-Editor LCDR Thuc Ngo

The USPHS Dental Newsletter is published twice annually, and is distributed electronically through the USPHS Dental Bulletin Board, and agency distribution lists. The next issue of the Newsletter will be published in the winter of 2019. If you have suggestions or comments about the newsletter, or would like to submit an article, please contact the co-editors [CDR Lori Snidow](#) or [LCDR Thuc Ngo](#)

53rd Annual USPHS Scientific and Training Symposium

LCDR Jason Single & LCDR Scott Eckhart



***PHS Dental Officers with: (Front L-R) Assistant Secretary for Health
ADM Brett Giroir, Surgeon General VADM Jerome Adams, Deputy
Surgeon General RADM Sylvia Trent-Adams, RADM Joan Hunter,
RADM Nicholas Makrides, and RADM William Bailey (Ret.)***

The 53rd Annual USPHS Scientific and Training Symposium was held in beautiful Dallas, TX, on June 4-8, 2018. This year's symposium was not only a great opportunity for Corps Officers to meet USPHS and DHHS Leadership, but it also served as an opportunity for Corps Officers to display their accomplishments and research from the previous year and learn together through both Category specific and general public health education lectures and continuing education courses.

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Dental Professional Advisory Committee Chief Professional Officer Column RADM Nicholas Makrides, DMD, MPH Federal Bureau of Prisons

As I pen this column, I realize that this may be my last communiqué as your Chief Dental Officer. Nominations for my replacement have been received at Head Quarters and soon a new officer will assume the duties as Chief Professional Officer (CPO). I once remember RADM Bailey mentioning that his role as CPO

was exhausting but extremely rewarding. I couldn't agree more. The opportunity to serve and represent our category has been my greatest honor as a Corps Officer.

Over the last 31 years, I have observed our Corps go through several difficult transitions. A month after I was commissioned, March 1987, the Corps was to undergo a comprehensive revitalization effort. The intent was to restore the Commissioned Corps to its leadership role as a mobile cadre of officers, who would serve the nation as health experts. Sound familiar?

Corps Officers referred to the process as "Revitalization". At the helm, was our beloved VADM C. Everett Koop. To say that it created a stir among officers and the agencies is an understatement. Not only was the new Corps to be mobile, we were expected to wear uniforms. For some, the sky was falling.

We weathered the storm and for the next 15 years the Corps grew. However, once again, PHS would have to address their relevancy. In 2003, VADM Richard Carmona testified before Committee on Government Reform at the United States House of Representatives to discuss a broader Corps mission, revamp recruitment efforts, improve the use of promotion systems to advance and reward the best qualities of a national mobile workforce, and bring administrative management systems into the 21st century. The process, as many of you may recall, was called "Transformation". In 2006, Secretary Levitt announced the new initiatives to transform our Corps.

I suppose the writer of Ecclesiastes was right that "there is no new thing under the sun". Words like "Reimagination" and "Reformation" are now part of our conversations. Today we face similar challenges. We have all read the White House OMB proposal and wondered how it will impact the future of the Corps. While I cannot forecast the future, I can say I have great faith in our Surgeon General (SG) and Assistant Secretary of Health (ASH). Both wear a uniform. Our uniform. And like SGs and ASHs before them, they have pledged to advocate for our Corps. Their vision for the Corps is threefold:

- 1) Serving the underserved of our nation
- 2) Developing a robust cadre of officers who can deploy to national disasters
- 3) Developing and advancing innovative public health solutions

Social media has, in some instances, created panic among officers. While I am not one to candy coat things, I am still bullish on the Corps. As we move ahead we must make ourselves relevant in a dynamic landscape. Find opportunities to promote our Corps. Be leaders at home, work, and communities.



RADM Nicholas Makrides

In closing, I want to express my sincere gratitude to the men and women who have devoted their lives to improve the oral health of their respective patient populations. I am truly humbled to have worked with so many talented dentists. Thank you for all you do and thank you for supporting me during my time as your Chief Professional Officer.

Steady On!!!!!!!

RADM Nick Makrides

Dental Professional Advisory Committee Chairperson Column CAPT Daniel T. Barcomb United States Coast Guard



CAPT Daniel Barcomb

This year is a year of changes in the Public Health Service. Some of these changes include the Blended Retirement System being implemented in January, the weight standards being implemented in October, and, of course, the Legacy Variable Special Pay and Board Certified Pay expiring in January and the Health Professions Special Pays (HPSP) being quickly implemented to provide much needed pay to our Dental Officers. A new, more extensive HPSP policy is being developed at the Division of Commissioned Corps Personnel and Readiness, and hopefully will be in place by 2019. RADM Makrides and DePAC are working hard to increase special pays and reinstate the Accession Bonus in order to make us more competitive with private practice and the other uniformed services, so that we can bring more dental officers into our service.

As many of you know, the number of dental officers in the dental category has been declining over the last several decades. One data point I have readily available is that there were 268 dental officers in June of 2016. Two years later in June of 2018 there were only 217 dental officers, which is a net loss of 51 dental officers or about 20% of the category. In the 1990s the dental category averaged about 75 officer accessions per year, in the 2000s we averaged about 25 officer accessions per year, and this decade we've averaged about 8 officer accessions per year. Last year we had 3 new dental officers. Thankfully, the quality of our new dentist accessions remains high, despite our current low recruitment rate. About a third of our billets are vacant and we'll need to recruit a lot more new officers to fill them and keep ahead of the number of officers who retire each year.

The Dental PAC is working hard to recruit and retain dental officers. Details about what we are doing can be found in our meeting minutes, most especially our recent March and April minutes where the workgroups and subcommittees presented on their current projects and recent accomplishments. The minutes are emailed to everyone each month via the Dental Bulletin Board, but they are also uploaded to the secure area of dental category website:

<https://dcp.psc.gov/OSG/dentist/users/login.aspx?ReturnUrl=%2fOSG%2fdentist%2fmembers%2fmeetingminutes.aspx>. If you have any ideas on how to help recruit or retain officers, or just want to help our category in

general, please consider applying to become a DePAC voting member or joining as a volunteer on one of the workgroups and subcommittees.

If you were able to attend the 2018 USPHS Symposium in Dallas this year, then you most likely heard the Assistant Secretary for Health, ADM Brett Giroir, and Surgeon General, VADM Jerome Adams, speak about their vision for a reimagined Corps. They spoke about securing funding to establish a Ready Reserve Corps and securing funding for more training, but they also spoke later to the dental category about how important we are to the mission of the PHS and that we all need to continue doing the valuable work we do every day. They praised the PHS volunteers who saw 566 patients and provided approximately \$300,000 of free medical care at the two-day Remote Area Medical (RAM) humanitarian mission in Durant, OK, the weekend prior, noting one patient who wrote that the volunteers “restored my faith in humanity.” Twenty-two PHS dentists participated, including RADM Makrides, who again lead from the front, treating patients in the challenging conditions alongside everyone else.

I would like to publically thank RADM Makrides for his 31 years of service and his tireless dedication to the Public Health Service. I’ve seen how hard he has worked to best represent the interests of our category, and I’m confident that the new Chief Professional Officer will share his desire to revitalize and strengthen the dental category. Please keep working hard at what you do, protecting, promoting, and advancing the health and safety of our nation.

Dental Professional Advisory Committee Vice-Chairperson Column CDR Kevin Zimmerman Indian Health Service

Wow, what a start of the year! While the beginning of the year started with some uncertainty, I came away from the COA meeting with certainty that the ASH and SG are invested in the Corps and have exciting plans in store. I feel that when the Corps emerges from this period of reimagining we will be a stronger, healthier Corps. For my part, I have begun to take my health and physical fitness more seriously. For the past 4 months I have begun cutting sugar from my diet and started exercising more frequently. I have participated in 3 PHS Athletics certified 5K runs and even was able to run alongside the SG at the Surgeon Generals 5K run in Dallas (I let him win!). I’ve lost 30 lbs. and went from being borderline diabetic and high blood pressure to being healthy. It was challenging to get started but once the positive changes started happening, it became much easier. I feel that is the way the Corps’ reimagining is happening, and I encouraged everyone to stay positive and look for ways to improve yourself and others around you. I feel in this way we can all emerge stronger, happier, and healthier.



CDR Kevin Zimmerman

2018 Scientific and Training Symposium continued...

The event drew over 1300 attendees from various federal agencies making it the best attended conference to date. The theme for the 2018 COF Symposium was titled “Ensuring Health for Generations to Come: Science Matters.” Wednesday, June 6th, provided the opportunity for each of the USPHS Categories to host their own Category Day to provide category specific continuing education and to honor their officers with category specific awards.



CAPT Daniel Barcomb with a call to order to begin the session

The Dental Category was able to incorporate 6 hours of continuing dental education (CE) on a broad range of topics focused on enhancing the attendees’ skills as clinicians and public health administrators. This was just a portion of the 18.5 total hours of dental CE available during the entire Symposium.

CAPT Daniel Barcomb started Dental Category Day with a call to order followed by opening remarks by RADM Nick Makrides.

The first presentation of the day was from Dr. Tom Samuel, DDS, who serves as a Dental Officer for the BOP at FMC Carswell. Dr. Samuel’s presentation was titled “Predictable Composite Restorations.” Dr. Samuel discussed important points that a clinician needs to understand to predictably restore teeth using composite restorations. Proper tooth selection as well as the advantages and disadvantages of composite resins were discussed. Dr. Samuel also detailed the differences between modern composite resins and the different bonding agent generations.



*2018 David Satcher Keynote lecturer,
RADM William Bailey (Ret.)*

(Ret.) gave a short update on the changes and new standards being implemented that will affect the dental category.

The lunch break included exclusive time to visit the exhibition hall, talk with the vendors, as well as an opportunity to hear presentations from this year's sponsors.

The second lecture of the day was the David Satcher Keynote lecture presented by RADM William Bailey (Ret.). RADM Bailey talked about the key elements for ensuring health: Innovation, Integration, and Amelioration. He focused on the scientific advances, innovative practices, and professional improvement activities driving the art and practice of dentistry into the future. Topics included the major scientific, technological, educational, and social innovations that are changing the art and practice of dentistry. He also went into detail to describe current efforts to integrate oral health with primary care and behavioral health.

Prior to breaking for lunch, CAPT Dean Coppola



Category Day visit by Assistant Secretary for Health (ASH), ADM Brett Giroir and Surgeon General (SG) of the United States, VADM Jerome Adams

During the awards presentation, the Dental Category Officers and guests were honored to meet the Assistant Secretary for Health (ASH), ADM Brett P. Giroir, MD and the Surgeon General (SG) of the United States, VADM Jerome M. Adams, MD, MPH. They gave a motivational talk about their vision of the Corps moving forward and our role in advancing the public health of the Nation. They complimented the dental category on their support of the RAM Event held prior to the symposium and took time to answer questions from the attending officers. The awards presentation followed the ASH and SG walkthrough. RADM Makrides was honored to present the DePAC Awards and CPO Exemplary Service Awards. He thanked the Category Day Coordinators and planning committee members for doing a fantastic job of organizing the day's events and in coordinating the dental social. The awards ceremony concluded with RADM Makrides being presented with a personalized shadow box on behalf of DePAC.



DePAC Award Winners with RADM Makrides: L-R RADM Nicholas Makrides, CAPT Gregory Smith (Ret.), CAPT Donald Belcher, CAPT Vicky Ottmers, and LCDR Scott Eckhart



SG David Satcher Keynote Lecture Award Winner, RADM William Bailey (ret) with RADM Makrides



RADM Nicholas Makrides with CAPT David Lundahl, one of the CPO Exemplary Service Award Winners (CAPT Phillip Woods also received an award, but was not present)



RADM Makrides with Dental Responder of the Year Winner, LCDR Ann Truong (below)

Following lunch CAPT Steve Geiermann (Ret.), the Senior Manager for Access Community Oral Health Infrastructure and Capacity Council on Access Prevention and Interprofessional Relations at the ADA, gave a concise presentation on changes that have occurred in organized dentistry, along with results from the organized dentistry meetings and the federal government.

The day's next topic was presented by COL Cameron Cozzens (USA, Ret.). He spoke about developing an outward mindset as leaders in our field. COL Cozzens spent 25 years in the Army and the last 3.5 years with the Arbinger Institute. The leadership material being discussed has been used by Army Medicine for the last 5 years with over 20,000 personnel being trained with this system. The material teaches the difference between an inward mindset, which focuses on personal objectives, and an outward mindset, which focusses on our impact on others.

Next we were fortunate enough to hear CAPT Renée Joskow discuss the role of dentistry in natural disaster and emergency response. She talked about dentists although being under-utilized, we are able to contribute greatly in these situations. She described how dentists can contribute in clinical and non-clinical roles. She shared her own personal stories and photographs from her experiences being deployed in response to USPHS missions.

The final lecture of the day was from Dr. Nathan Suter, DDS, Vice Chair Missouri Coalition for Oral Health. Dr. Suter's lecture was titled "Moving Forward with Teledentistry." Dr. Suter discussed the model of teledentistry and his experience with implementing this mode of care in Missouri. He discussed legal and regulatory barriers to the program and how they needed to change the state's dental practice act in order to utilize teledentistry. He described the process of remote dental exams by using digital radiography, high quality intraoral photographs, and detailed charting and notes from a specially trained hygienist.

RADM Makrides provided closing remarks and the educational portion of Category Day concluded. Dental officers met at Houlihan's after the program for a wonderful night of food and socializing.

COF 2018 Dental Category Day Social at Houlihan's



The 2019 USPHS Scientific and Training Symposium will be held in Minneapolis, MN in May 6-9, 2019. Please visit the Symposium website (<https://www.phscof.org/symposium.html>) for updates registration and hotel information.



*RADM Makrides with
2018 Dental Category
Day Planning Committee.*

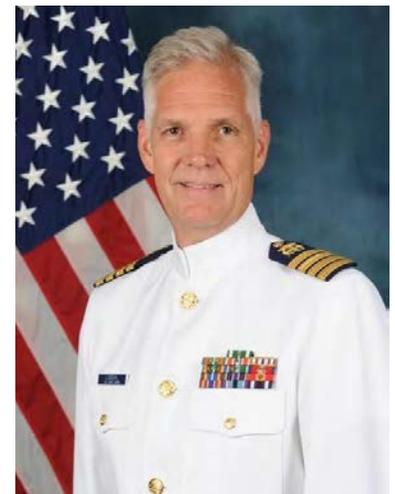
*L-R Back Row: CAPT
Philip Driscoll, CAPT
Robert Lloyd, LCDR Dane
McClurg, LCDR Darnell
Thomas*

*L-R Front Row: LCDR
Tequilla McGahee, CAPT
Daniel Barcomb, LCDR
Scott Eckhart, LCDR
Jason Single, CDR Carol
Wong, CAPT Vicky
Ottmers, LT Shea
Browning*

Agency Updates: United States Coast Guard CAPT David Lundahl

Hot Fun In The Summertime

I just returned from a very enjoyable week in the “Big D” attending the 2018 USPHS Symposium. It was a great week of learning and camaraderie, of seeing old friends, and making new ones. If you haven’t attended one of these events before, you really owe it to yourself to see what they’re all about. For mid-career and senior officers, the day-long Retirement Seminar is especially informative, and provides a lot of great information and valuable contacts for starting to plan for that important life event. For me, Category Day is always the highlight of the week, when each specialty breaks away and provides lectures and presentations specific to their group. This year, LCDR Scott Eckhart and LDCR Jason Single did an outstanding job of organizing a full day of great information for the Dental Category, including a fascinating lunch-and-learn on Outward Leadership, a great presentation by our very own CAPT Renée Joskow on Dental Opportunities in Emergency Response, and a very innovative presentation on new trends in Dental education by our past Chief Professional Officer RADM Bill Bailey (Ret.).



CAPT David Lundahl

A highlight of the day for me was the opportunity to witness the presentation of two prestigious awards to two USCG Dental Officers: Ernest Eugene Buell Dental Award to LCDR Scott Eckhart, and The Senior Clinician Dental Award to CAPT Don Belcher. Another high point of the trip was the Dental Officer mixer that evening at Houlihan's restaurant where we were able to visit with and toast RADM Nick Makrides in his upcoming retirement and express our appreciation for his tireless leadership and dedicated service to the PHS and support of our Category. Additional benefits of attending the Symposium were the opportunities to tour around Dallas in our spare time, and to enjoy delicious meals and fun conversation with good friends.

A bittersweet aspect of attending this year's Symposium was the knowledge that this was my last time attending as the Coast Guard's Chief Dental Officer as I return to clinical practice for the remainder of my PHS career. This position has provided a tremendous opportunity to serve and has been the source of many blessings along the way, and I am very grateful for the opportunity. I wish you all the best as you serve in so many important ways across the country, and am proud to be a part of such a great group of professionals!

Agency Updates:

Indian Health Service

CAPT Tim Ricks, Deputy Director, IHS

Division of Oral Health

IHS Clinical & Preventative Support Centers Aim to Help Reduce Oral Health Disparities

The oral health disparities of American Indians and Alaska Natives (AI/AN) are profound when compared to the general U.S. population. In August 2000, the Indian Health Service Division of Oral Health began a unique program, creating eight *clinical and preventative support centers* (also known as "dental support centers") to help provide the 400+ IHS, Tribal, and IHS-funded Urban dental programs with ongoing support to help reduce oral health disparities in the AI/AN population through an emphasis on health promotion/disease prevention projects.

When compared to other racial or ethnic groups, AI/AN children 2-5 years old have more than double the number of decayed teeth and overall dental caries experience as the next highest ethnic group, U.S. Hispanics, and more than four times that of U.S. white children.¹ In the 6-9 year-old age group, eight out of 10 AI/AN children have a history of dental caries compared with only 45 percent of the general U.S. population, and almost half of AI/AN children have untreated tooth decay compared to just 17 percent of the general U.S. population in this age group.² In the 13-15 year-old age group, eight out of 10 AI/AN dental clinic patients have a history of tooth decay, compared to just 44 percent in the general U.S. population, and almost five times as many 13-15 year-old AI/AN youth have untreated decay compared to the general U.S. population.³ In adults, the disparity in disease is equally as pronounced. 64 percent of AI/AN adults 35-49 years have



CAPT Tim Ricks

¹Indian Health Service. The 2010 Indian Health Service Oral Health Survey of American Indian and Alaska Native Preschool Children. Rockville, MD: U.S. Department of Health and Human Services. Indian Health Service, 2014.

² Phipps KR, Ricks TL, Blahut P. The Oral Health of 6-9 year old American Indian and Alaska Native children compared to the general U.S. population and Healthy People 2020 targets. Indian Health Service data brief. Rockville, MD: Indian Health Service 2014.

³ Phipps KR, Ricks TL, Blahut P. The Oral Health of 13-15 year old American Indian and Alaska Native children compared to the general U.S. population and Healthy People 2020 targets. Indian Health Service data brief. Rockville, MD: Indian Health Service 2014.

untreated decay compared to just 27 percent of the general U.S. population, and across all other age groups studied (50-64 years, 65-74 years, and 75 and older), AI/AN adults have more than double the prevalence of untreated tooth decay as the general U.S. population. In addition, the rate of severe periodontal disease in AI/AN adults is almost double that of the general U.S. population.⁴

The dental support centers (DSCs) are funded for five year cycles, and the current centers support 10 of the 12 IHS Areas. The Alaska Area DSC serves programs in the state of Alaska; the Albuquerque Area DSC serves programs in Colorado, New Mexico, and west Texas; the California Area DSC serves tribal programs in California; the Montana/Wyoming DSC serves programs in those states; the Nashville DSC serves programs in 14 states in the northeastern and southeastern U.S.; the Oklahoma Area DSC serves programs in Kansas, Oklahoma, and north Texas; the Southwest DSC serves programs in Nevada, Utah, Arizona, and the Four Corners' area; and the Northwest Tribal DSC serves programs in Washington, Oregon, and Idaho.

The work of the DSCs varies greatly. For example, the Alaska DSC is primarily focused on developing the dental health aide program to provide oral health care and prevention activities for Alaska's remote populations. The Northwest DSC is primarily focused on providing quality reviews with site visits to programs while also leading large initiatives such as an elder care initiative and a "Baby Teeth Matter Initiative." The California DSC emphasizes education of dental staff, holding a large CDE conference each year for almost 400 oral health professionals. The Albuquerque DSC is noteworthy for the many patient education materials that they have produced over the past two decades. Each of these programs addresses AI/AN oral health disparities in its own unique way.

The last few national IHS oral health surveys have shown reductions in caries prevalence and untreated decay in AI/AN children under 9 years of age, the first time such improvements have been measured, and this is due in no small part to the ongoing efforts of the IHS clinical and preventive support centers. For more information about the work of the IHS dental support centers, please contact Dr. Chris Halliday (RADM, Ret.) (Christopher.halliday@ihs.gov) or Dr. Jim Schaeffer (CAPT, Ret.) (james.schaeffer@ihs.gov), project officers.

⁴ Phipps KR and Ricks TL. The Oral Health of American Indian and Alaska Native adult dental patients; results of the 2015 IHS oral health survey. Indian Health Service data brief. Rockville, MD: Indian Health Service 2016.

Agency Updates: Health Resources & Services Administration CAPT Renée Joskow



CAPT Renée Joskow

On April 26, 2018 SAMHSA, IHS, AHRQ and HRSA held the Take Your Child To Work Day (TYKTWD) at 5600 Fishers Lane in Rockville, Maryland attended by over 800 people including > 530 children. HRSA sunk their teeth into the event by hosting a multi-media and interactive live show for participants on the “Cavity Creeps” and “To Tell the Tooth”. HRSA’s Chief Dental Officer, CAPT Renée Joskow was the MC and was assisted by HRSA staff- Rachel Moscato, Libby Martin & her son, Christian, an aspiring journalist and oral health enthusiast. The riotous event included flossing demos with raspberry jelly, word and picture puzzles, game-show style quizzes, as well as hands-on & activity stations including dancing and singing along with Sesame Street Brushy-Brush. Dentist, Dr. Mayté Canto, and dental hygienist, LCDR Nicki Bennett, provided toothbrushing and flossing demonstrations on a giant smiling dinosaur and the wildly popular dental sealant “play station” where kids were able to place and cure dental sealants on typodont models. The day was a huge success for all smiling kids and parents and we may now have a few more dentists for the pipeline. One parent wrote, “... My daughter has talked about it every day since. Also, she wanted me to ask you a question. She wondered if you would be doing a similar presentation next year for TYKTWD. I’m supposed to ask you and let her know.”



For more information about HRSA and oral health, <https://www.hrsa.gov/oral-health/index.html>

Deployment Ready: A Resource Section for Deployments LT Gary Wright



LT Gary Wright

The Treaty of Versailles, which ended World War I, limited Germany's army to no more than 100,000 troops. In the three years before the start of World War II, Germany expanded its army to more than 1.5 million well-trained troops who were able to rapidly mobilize and capture most of the European continent. The German plan worked because the original 100,000 troops became the backbone for the much larger conscription army. The scalable cadre were competent and professional leaders who could adapt and overcome while teaching others to do the same. Similar to that cadre, the U.S. Public Health Service (USPHS) fills an important role as a knowledgeable and adaptable force of health professionals who can respond to public health incidents and events.

The USPHS can easily integrate with federal, state, and local resources to respond to emergency and non-emergency conditions that threaten the public's health. We assist as valuable assets in many areas, including: situational assessment, resource management, medical response, humanitarian assistance, supplies management and distribution, responder health and safety, epidemiology surveillance, psychological crisis intervention, and even animal health support. In his nomination hearing on August 1, 2017, VADM Jerome Adams stated, "The Health Service Corps serves as our National Health Army, ready to deploy whenever a man-made or natural crisis has placed our public's health at risk." VADM Adams established his expectations for this "army" during his first All Hands Call on February 21, 2018. He stated, "We have an opportunity now to really show the value proposition of the Corps. We *have* to be clinically competent, we *have* to be fit, we *have* to be deployable. We're the only uniformed service dedicated to public health and we *have* to meet the conditions of service. Our goal should be 95-100% basic readiness." The message is clear: we are needed outside the walls of our dental clinics!



Our first step in answering this call is to become "basic ready." Basic readiness requires at least a satisfactory Annual Physical Fitness Test score, current Basic Life Support certification and immunizations, a valid professional license, and a current medical examination. For most of us, these requirements are necessary for treatment credentialing. Basic readiness also requires the one-time completion of twelve courses through Responder e-Learn. The courses provide foundational knowledge for crisis response and recovery operations and can enhance our overall competence. To maintain basic readiness, dentists can employ helpful tips, such as setting calendar reminders to

upload documents for expiring requirements or reviewing readiness status on important anniversaries (e.g. commissioned date, birthday).

Dentists who are "basic ready" are assigned to one of five Tier-3 response teams. It is unlikely that dentists would deploy to perform clinical duties, but they could deploy to augment other tiered response teams or to

support national special security events. Dentists are warned at least 72 hours in advance for any kind of deployment while assigned to a Tier-3 response team, and most taskings are voluntary.

With supervisor permission, dentists can also find opportunities to deploy by joining Tier-1 or Tier-2 response teams. Tier-1 teams include Rapid Deployment Force (RDF), Incident Support (RIST and NIST), and Capital Area Provider teams. Teams are “on call” every five months; team leaders communicate with team members to notify them of impending taskings in order to prepare for deployment as far in advance as possible. However, some deployments can be short notice during “on call” months, especially during an active hurricane season. Deployments typically last 2-3 weeks and could be anywhere in the United States or, rarely, abroad. Each of the five RDFs have a clinical dentist position that occasionally become available, but they also accept dentists to serve in other capacities based on skill sets (e.g. computer support) and team needs. RISTs and NISTs also accept dentists in other capacities such as logistics, finance and administration, operations, and planning.

The tradition of the USPHS mission to champion the downtrodden is manifest in no better way than deploying. Occasionally, dentists lose sight of what “really matters” when they are weighed down by reducing overhead and wait times for care. The camaraderie of a deployment team is refreshing, and the mission opens our eyes to other career fields and public health challenges we never before considered. The personal growth that accompanies team membership carries over into professional development, too. Completing a deployment makes us more credible and confident in our dealings with our patients, our coworkers, and our USPHS colleagues. Dentists with supervisor support who are interested in joining a Tier-1 or Tier-2 team should contact team leaders or colleagues who are part of deployment teams in order to find vacancies.

As dentists, we serve the public and improve the health of our nation on a daily basis while running our dental clinics for the underserved. Our management expertise, penchant for interprofessional collaboration, agility from dealing with the unexpected, communication skills, and compassion qualify us for service outside our clinic. As part of the broader USPHS, we can answer the call to deploy in response to public health incidents and events. A few days away from the comforts of home is a small sacrifice to pay to assist those who may no longer have a home!



Clinical Article: Juvenile Sleep Apnea

C. Michael Beck, DDS, MS, MPH

Indian Health Service

About the author: C. Michael Beck, DDS, MS, MPH served as a dentist and orthodontist for the IHS from 1968 to 1992. He was awarded his doctorate of dental surgery in 1968 from Fairleigh Dickinson University, and his master of science in orthodontics and master of public health from the University of Michigan in 1977. He is currently the CEO of Nizhoni Smiles, a non-profit dental and orthodontic clinic in Shiprock, NM, which serves the Navajo people. He is also a consultant to the Alaska native health corporations.



Dr. Michael Beck

Introduction

In recent years “Sleep” has made its way into the everyday vocabulary of dentists. Most of the attention is directed to the cause and effects of sleep apnea in adults. Often overlooked is Obstructive Sleep Apnea (OSA) in children which is the focus of this paper. The primary cause of sleep disruption in children is enlarged tonsils. In this article, we look at the impact that disrupted sleep has on the mental and physical health of children and the possible implications for the remainder of their lives.

What is Sleep Apnea?

Humans have a relatively narrow upper airway, so even mild swelling in the throat – from an infected or inflamed tonsil, for example – can cause the airway to narrow or obstruct entirely. During sleep, this can cause one to stop breathing. You’ll either wake up from a light sleep immediately, or possibly stop breathing ten seconds or longer and then wake up. In this latter situation, you would have experienced what’s called an “apnea” or “loss of breath.”

Obesity can play a role in reducing the airway with or without tonsils present. In a few instances we have noticed a partial resolution of the airway issue with tonsillectomies, but the obesity factor negated the full effect.

Cataletto states, “Disordered breathing during sleep is a hallmark of obstructive sleep apnea syndrome. Breathing abnormalities include apnea (cessation of airflow) and hypopnea (decreased airflow). In addition, in contrast to adults, some children exhibit a variation of obstructive sleep apnea termed obstructive hypoventilation (OH). Children with obstructive hypoventilation demonstrate periods of hypercapnia that occur in the absence of discrete respiratory events that fulfill the criteria for apnea or hypopnea.”

According to Steven Park, MD: “There is one more piece to the puzzle that can prevent you from feeling better: This is the piece that many patients and many doctors overlook. If you stop breathing, even temporarily, you’ll create a vacuum effect in your throat, where your stomach juices literally get suctioned up into your throat. Small amounts of acid, bile, digestive enzymes, and bacteria can cause your tonsils to stay swollen, aggravating this vicious process. Even worse, your stomach juices can then travel up into your nose or down into your lungs, creating more havoc. Add to this a stuffy nose, then another vacuum effect is created downstream, and the tongue can fall back even further.”

Most people have adapted to having numerous short obstructions and arousals—this is why if you have a simple cold, you won't sleep as well, since you'll toss and turn more often than normal. Luckily, in most situations, once the infection goes away, you'll return to normal.

This means that enlarged tonsils not only affect how sore one's throat feels, they can also cause one to sleep poorly. In fact, tonsils are one of the primary causes of sleep apnea in children.

Obstructive Sleep Apnea in Children

Obstructive Sleep Apnea (OSA) was described more than a century ago, but today it remains a common, often-undiagnosed condition in children.

Pediatric sleep disorders increasingly interfere with daily patient and family functioning. While interest in and treatment of sleep disturbances in children continues to grow, research lags.

Unfortunately, OSA may lead to substantial morbidity if left untreated.

One survey indicated that pediatricians were more likely to prescribe antidepressant medications for insomnia than psychiatrists. The consequences of untreated sleep problems can include significant emotional, behavioral, and cognitive dysfunction. The magnitude of these sequelae is inversely proportional to the child's overall ability to adapt and develop in spite of the sleep disturbance.

Sleep Apnea and Tonsils and ADHD

If a child snores and has behavior problems during the day associated with Attention Deficit Hyperactivity Disorder (ADHD), a behavior disorder or an "oppositional defiant disorder," talk with the parent(s) and pediatrician about the possibility that there could be a relationship.

The Halbower/Michigan study did show that children with obstructive sleep apnea may also have ADHD but recommended further study.

"They noted that if you have a child who snores and has behavior problems during the day, conduct disorder, or oppositional defiant disorder, you should talk with their pediatrician about the possibility that it could be associated with ADHD." Dr. Chervin commented that, "I don't think sleep problems can explain the majority of ADHD but it may explain a minority of ADHD."

Following this study the medical community realized that there was a possible link between Juvenile Obstructive Sleep Apnea and ADHD that needed to be investigated.

Adenotonsillar hypertrophy is recognized as the most common cause for the obstruction of the upper airway in children. As such, it might also be associated with ADHD, one of the most common psychiatric disorders of childhood. Despite the concurrence of these two conditions, obstruction of airways and ADHD at the time of the Amiri study, no conclusive etiologic relationship had been established between adenotonsillectomy (AT) and ADHD symptoms.

The authors (Amiri, et. al 2015) undertook a study to evaluate the effect of AT on the ADHD symptoms in children with adenotonsillar hypertrophy and sleep disorder breathing (SDB).

The design of the study consisted of a pretest and a post test, followed by a post hoc test. The study group consisted of 53 children, ages three to 12, referred from the Pediatric Hospital of Tabriz University. The children selected for this study had been diagnosed with SDB and ADHD based on the DSM- IV criteria. The

scores of ADHD symptoms were evaluated before AT and at three and six months postoperative intervals based on Connor Parents Rating Scale-Revised (CPRS–R) questionnaire.

AT resulted in a significant decrease in the severity of ADHD symptoms, oppositional behavior, cognitive disorders, inattention, hyperactivity and ADHD index at three and six month postoperative intervals with more significant decreases at the six month postoperative interval compared to the three month interval.

Based on the results of this pilot study, AT in children with OSA associated with ADHD resulted in a significant decrease in the severity of the ADHD symptoms.

At about the same time (Dadgarnia, MH and associates) chose to study the efficacy of AT on the improvement of ADHD symptoms in 35 children aged five to 12 years with adenotonsillar hypertrophy and ADHD. The children were evaluated six months following surgery. The diagnosis of ADHD was based on the DSM – IV criteria.

Finally 17 boys and 18 girls were evaluated. They reported the frequency of combined type of ADHD decreased six months after an AT. The ADHD inattention score, the hyperactivity score, as well as ADHD combined score, improved significantly after surgery.

They concluded, “Upper airway obstruction due to adenotonsillar hypertrophy is an important and treatable cause of ADHD and should be considered in evaluation of affected children.” Adenotonsillectomies in the study subjects were associated with improvement of ADHD symptoms.

A recent study published in the journal, Pediatrics, showed that about 50 percent of children with ADHD could be cured with adenotonsillectomies (this is removing both the adenoids and tonsils). Countless studies report significant improvement in children’s cognitive, behavioral, memory, IQ, and sustained attention scores after tonsillectomies.

Sleep Apnea and Brain Damage

JOHNS HOPKINS STUDY

In 2006 research from Johns Hopkins University concluded that children with untreated sleep apnea performed significantly worse on IQ tests and may have a brain impairment that could hinder their ability to learn new tasks.

“This is paving new ground, scary new ground,” said Dr. Ronald Chervin, the Director of the University of Michigan Sleep Disorder Center. “The fact that children with sleep apnea scored worse on neurocognitive testing than normal children is not new, the new part is actually showing evidence of neurochemical changes in the brain.”

Dr. Ann Halbower, Medical Director of the Pediatric Sleep Disorders Program at the Johns Hopkins Children's Center in Baltimore, looked at 19 children with OSA compared to 12 children not affected by the disorder. The findings were significant. They used a special type of MRI and identified changes to the hippocampus and the right frontal cortex. Then, using IQ tests and other standardized performance tests that measured verbal performance, memory, and executive function, they were able to link the changes in the two brain structures to deficits in neuro-physiological performance.

Halbower states they found a very strong association between changes in the neurons of the hippocampus and the right frontal cortex and IQ and other cognitive functions in which children with OSA scored poorly.

The children with OSA had lower mean IQ test scores (85) than children without OSA (101), note a 16 point differential. Children with OSA also performed worse on other standardized tests measuring executive functions such as verbal working memory (8 vs 15) and word fluency (9.7 vs 12).

The researchers used the special MRI to plot graphs of peak levels of brain chemicals. They compared the ratios between each two of three chemicals: creatinine, choline, and N-acetyl aspartate (NNA) in children with sleep apnea and those without. The hippocampus and right frontal cortex of children with sleep apnea showed altered ratios of these neurochemicals that are not unique to one disease but indicate injury to brain cells.

They concluded that in both children and adults, untreated sleep apnea can be linked to cardiovascular issues, learning, and memory defects. They suggested the cognitive effects of untreated sleep apnea might be more damaging to the developing brain of children than the mature brain of an adult.

Halbower notes that their studies (2006) have shown that some children with obstructive sleep apnea also have attention deficit disorder (ADHD).

University of Chicago

A more current study in 2017 authored by Leila Kheirandish-Gozaei, MD, from the University of Chicago Medical School, studied children between the ages of seven and 11 years of age who had moderate to severe obstructive sleep apnea and compared them to children of the same age who slept normally.

In the OSA children they noticed significant reductions of gray matter brain cells in several regions of the brains involved with movement, memory, emotions, speech, perception, decision-making, and self-control.

For the study researchers recruited 16 children with obstructive sleep apnea. Then each child's sleep patterns were evaluated overnight at the University of Chicago's pediatric sleep laboratory. Each child went through neurocognitive testing and had his/her brain scanned with a noninvasive magnetic resonance imaging (MRI). Their associates from UCLA performed the image analysis. The researchers then compared those scans plus the neurocognitive test results with MRI images from nine healthy children of the same age, gender, ethnicity and weight who did not have apnea. They also compared the 16 children with OSA to 191 MRI scans of children who were part of an existing pediatric MRI database assembled by the National Institutes of Health.

They found reductions in the volume of gray matter in multiple regions of the brains of children with OSA. These included the frontal cortices (which handle movement, problem-solving, memory, language, judgment, and impulse control), the prefrontal cortices (controlling complex behaviors, planning, personality), parietal cortices (integrating sensory input), temporal lobe (monitoring hearing and selective listening), and the brainstem (controlling cardiovascular and respiratory functions).

Although these gray matter reductions were rather extensive, the OSA consequences can be difficult to measure.

David Gosai, MD, (co-author) noted, "...the scans do not have the resolution to determine whether brain cells have been shrunk or lost completely. We can't tell exactly when the damage occurred. But previous studies from our group show that we can connect the severity of the disease with the extent of the cognitive defects, when such defects are detectable."

The authors concluded that “the exact nature of gray matter reductions and their potential reversibility remains virtually unexplored and that altered regional gray matter is likely impacting brain functions, and hence cognitive development potential may be at risk.”

University of Kansas

In a small study at the University of Kansas published in 2017, Philby, Macy, and Associates demonstrated that “children with moderate to severe OSA exhibited extensive regionally demarcated gray matter losses compared to healthy children. In a contextual setting that OSA is fraught with increased risks for a variety of end organ morbidities, the mechanisms underlying such extensive MRI changes, the exact nature of the gray matter reductions and their potential reversibility remain virtually unexplored, and should prompt intensive future research efforts in this direction.”

Diagnosis and Treatment

Most early sleep studies were small and not evidence-based, so they provided little or no substantiated guidance for diagnosis and treatment. To remedy this situation, the American Academy of Otolaryngology (AAO) in 2011 released “Clinical Practice Guidelines” to help doctors and parents identify the best candidates for adenotonsillectomy surgery.

Following a discussion of the “Gold Standards” for adenotonsillectomy, they listed other rationale for the procedure, including: “Children who have enlarged tonsils, and any of the breathing problems noted during sleep, may also have associated daytime problems such as growth delay, prolonged bed-wetting, behavior problems, and poor school performance. In a significant number of children these problems improve after adenotonsillectomy surgery.”

The AAO recommends that in the context of tonsillectomy surgery, clinicians ask parents about growth retardation, poor school performance, enuresis, and behavioral problems.

The classic symptoms of obstructive sleep apnea are not always clearly evident as they can be nonspecific and thus require increased awareness by a primary care provider. OSA symptoms can include:

- Breathing abnormally during sleep
- Waking frequently or restless sleep
- Frequent nightmares
- Difficulty awakening
- Enuresis
- Daytime or nighttime mouth breathing
- Excessive daytime sleepiness
- Hyperactivity
- Behavior problems
- Irregular sleep patterns
- Difficulty with concentration
- Bruxism (primary and permanent dentition)

Recommended treatments for obstructive sleep apnea include (adeno)tonsillectomy, palatal expansion, and CPAP.

Tonsillectomies have been practiced for over 2,000 years, having been first described by Celsius in 50 AD. The procedure is remarkably common, with more than 500,000 operations annually, and safe. CDC estimates one in 27,000 patients may experience severe complications.

“A recent study showed that compared with tonsillectomy alone, orthodontic palatal expansion was equally effective. When both procedures were performed, the results were additive. This study demonstrates that dental and orthodontic issues may be important considerations long before parents consider braces for their teens.” (S. Park)

It should be noted that a narrow maxilla (<35mm 1st molar to 1st molar) is suggestive for sleep apnea. Widening the maxilla with an orthodontic palatal expansion appliance prior to the end of the last growth spurt will reduce the effect of lost maxillary development due to obstruction and the resulting decreased nasal airway. McNamara found a stable four mm arch perimeter gain with orthodontic expansion appliances in the mixed dentition.

The CPAP machine, while very effective in increasing oxygen saturation levels, is the worst alternative in terms of compliance. It will abate the symptoms in children and adults if worn as prescribed but not address the cause.

Conclusion

Sleep has increasingly come into focus in the dental universe in recent years, but more needs to be done. Dentists in particular are in a pivotal position to advocate for and participate in the diagnosis and treatment of obstructive sleep apnea in children and adults.

The consequences of leaving sleep apnea untreated can be unforgiving. Obstructive sleep apnea in children may contribute to behavior disorders and brain damage which may not be reversible. In adults, it is associated with increased risk of heart attack, strokes, high blood pressure, decreased productivity at work, decreased attentiveness at home, early onset of dementia and Alzheimer's, and sudden death.

In our orthodontic program, each of our patients receives a clinical evaluation of his/her tonsils and a questionnaire – to be filled out by a parent or guardian – which helps us to identify those who might be at risk or suffering from sleep apnea (see our example at the end of this article). Siblings are often a more reliable source of information than the parent so involving them in the process is helpful.

We refer children with symptoms of sleep apnea to an ENT expert for further consultation. In most cases, they receive (adeno)tonsillectomies and because it's common for children with sleep apnea to have a parent with sleep apnea (75 percent), we use this opportunity to talk to parents about their own risk. A form (PSQ) was developed by the University of Michigan and tested against a physical diagnosis of sleep apnea. For children, it proved to be 80-85 percent as effective as the polysomnogram. It is available for download.

For our part, we have seen that early recognition and treatment of obstructive sleep apnea can make a profound difference in the life of a child and perhaps curb the necessity for surgical or CPAP intervention later in life.

At NS we make a concerted effort to look past the white and look at how we can impact the lives of our patients.

NSI Sleep Apnea Exam

Score each question based on the scale below--

Scale:

1. Does not occur
2. Occurs very rarely
3. Occurs 2-4 times per week
4. Occurs 5-7 times per week
5. Occurs daily

My child:

- | | |
|---------------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Snores | <input type="checkbox"/> Has attention deficit disorder (ADHD) |
| <input type="checkbox"/> Has labored, loud breathing at night | <input type="checkbox"/> Sleeps restlessly |
| <input type="checkbox"/> Has interrupted snoring | <input type="checkbox"/> Grinds teeth |
| <input type="checkbox"/> Is hyperactive | <input type="checkbox"/> Has frequent throat infections |
| <input type="checkbox"/> Mouth breathes during the day | <input type="checkbox"/> Feels sleepy or irritable during the day |
| <input type="checkbox"/> Mouth breathes while sleeping | <input type="checkbox"/> Has a hard time listening |
| <input type="checkbox"/> Has frequent headaches in the A.M. | <input type="checkbox"/> Fidgets, or does not sit quietly |
| <input type="checkbox"/> Has allergies | <input type="checkbox"/> Wets the bed |
| <input type="checkbox"/> Sweats excessively while sleeping | <input type="checkbox"/> Has bluish skin at night |
| <input type="checkbox"/> Talks while asleep | <input type="checkbox"/> Has sensory issues |
| <input type="checkbox"/> Has difficulty in school | <input type="checkbox"/> Avoids certain types of food |
| <input type="checkbox"/> Falls asleep while watching TV | <input type="checkbox"/> Has speech problems |
| <input type="checkbox"/> Stops breathing more than 2x/hour | <input type="checkbox"/> Wakes up at night |

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Do you know about the DePAC Awards?!

The following eight DePAC Awards are available annually for nominations.

For more information and criteria for each award, please visit:

<https://dcp.psc.gov/OSG/dentist/awards.aspx>

Dental Responder of the Year Award

Established in 2006 by the USPHS Chief Dental Officer (CDO) to recognize a dentist's impact on emergency preparedness, disaster response, and contributions to local, national or international public health threats.

Ernest Eugene Buell Dental Award

Established in 1989, CAPT Buell was the first U.S. Public Health Service (USPHS) Commissioned Corps dental officer. He was commissioned in June 1919 and assigned to the Division of Marine Hospitals and Relief. This award is presented annually to a junior dental officer or equivalent-level civilian dentist (O-4/GS-13 or below) who has made a significant contribution in oral health education, research or service.

Ruth Lashley USPHS Dental Award

Established in 2005 by the USPHS CDO and is presented each year to a mid-career dentist. CAPT Lashley had a stellar career during her assignment to the Federal Bureau of Prisons. The award is named to honor her work as an inspiration to all dentists.

Jack D. Robertson Dental Award

Established in 1982 by the U.S. Public Health Service (USPHS) CDO, in honor of CAPT Robertson, and is presented each year to a senior dental officer or equivalent-level civilian dentist (O-5 or GS-14 and above) whose professional performance best exemplifies the dedication, service, and commitment to the PHS demonstrated by CAPT Robertson during his career.

Senior Clinician Dental Award

Established in 2001 by the U.S. Public Health Service (USPHS) CDO to recognize a senior dental officer or equivalent-level civilian dentist who has chosen a clinical career track and excels in clinical skills.

John P. Rossetti Dental Mentor of the Year Award

Established in 2012 by the USPHS CDO and the DePAC to recognize outstanding mentors as evidenced by their significant contributions towards enhancing the professional growth and career development of junior Commissioned Corps dental officers or equivalent level General Schedule dentists. CAPT Rossetti completed a stellar career in the USPHS, helping many fellow officers and making lasting contributions to public health.

Herschel S. Horowitz Oral Health Research and Policy Award

Established in 2005 by the USPHS CDO as a Dental Category award. CAPT Herschel S. Horowitz, a researcher, educator, and Dental Public Health specialist exemplified dedication and commitment to improving the public's health through research and action. The award will be presented annually to a USPHS Dental Officer(s) or equivalent level General Schedule dentist(s) whose performance contributes to improving the oral health of the public.

SG David Satcher Keynote Lecture Award

A United States Public Health Service (USPHS) Dental Category award that was developed as a tribute to Surgeon General Satcher for his contributions to the Dental Category upon his departure. The lecture is delivered annually at the PHS Professional Conference to honor former Surgeon General David Satcher due to his commitment to health promotion and disease prevention and his inclusion of oral health as part of general health and well-being.

****Nominations must be submitted annually by September 15****

If you have any questions, please contact the following:

Awards Workgroup Chair, CDR Rodica Popescu: Rpopescu@southcentralfoundation.com

Awards Workgroup Co-Chair, CDR Jonathan Chiang: Jonathan.Chiang@ihs.gov

Senior Officer Spotlight

CAPT Nixon Roberts

Federal Bureau of Prisons

Can you provide a brief summary of your training and education?

I graduated from the University of the West Indies in 1990 with a Bachelor of Science degree in Social Sciences. This was followed by a Master of Arts degree in International Economics from City University New York in 1993. Dental school was next, and I completed the DDS degree at Howard University College of Dentistry in 2001. In 2009, I became a Fellow of the Academy of General Dentistry, and completed the Master of Public Health (MPH) degree at the University of Massachusetts Amherst in 2011. In 2015, I completed a Dental Public Health (DPH) residency at Boston University, and thereby earned the Certificate of Advance Graduate Study in Dental Public Health. I became board certified in Dental Public Health in 2018.



CAPT Nixon Roberts

Can you tell our readers how long you've been a PHS officer and describe your duties at your present site?

I became a PHS officer in March 2005. Since 2012, I have been the Chief Dental Officer at the Federal Correctional Complex in Florence, Colorado. The Complex houses roughly 3000 inmates at any point in time. I supervise all dental staff and determine all clinical dental staff assignments at the institution. I also provide clinical feedback to the institution's Business Office regarding contracting officers for all contract dental clinical staff. My duties also include planning, directing, and managing the various areas of the department, including budgetary and fiscal matters, in addition to pharmacy operations. I conduct reviews of staff performance; coordinate and ensure compliance with local and national policy, as well as the dental treatment of inmates. I am also responsible for the diagnosis and treatment of difficult dental problems in a correctional environment. I assist in the coordination of the dental program, providing input regarding proposed modification to operating procedures. I also assist in establishing and maintaining quality control measures to ensure that the final product conforms to standards set forth by the American Dental Association, the National Board for Certification of Dental Technicians, and the Dental Service of the Federal Bureau of Prisons.

What led you to consider a career in the PHS dental program?

I started government service as a Civil Service dentist. At that time, my wife was a PHS officer, and I really liked the rigor and discipline that was involved in being a Corps officer. I especially liked the challenges that were involved in career advancement, as well as the possibility of promotion potential. After a bit of hand wringing, I became convinced that the PHS organization would be a good fit for me, so here I am.

What did you find to be the most challenging aspect of your transition into the Public Health Service?

After two and a half years as a Civil Service dentist, I transitioned to the PHS. It was a natural fit. The change immediately filled the unexplained void I felt as a Civil Servant. I instantly felt like I had arrived where I belonged, in the PHS. The one factor that really bothered me at the start of my PHS career was the steep decrease in salary that I endured in transitioning from the Civil Service to the Corps. However, senior officers

assured me at the time, that this condition would be temporary, and that the imbalance would change over time. That assertion turned out to be extremely accurate.

What has been the most rewarding aspect of your service thus far?

I like service. I feel like the gene to serve is present somewhere inside my DNA. Thus far, I have worked in the frontlines of the fight to control oral diseases among populations that are somehow disadvantaged, or institutionalized. Among the various populations however, inmates are the ones that express gratitude most often. They understand that many in the free world have no appetite for a group of felons receiving any healthcare. Therefore, as conventional wisdom has it - gratitude abounds where services are few. I feel like I am accomplishing my goal when inmates return to my clinic with an expression of gratitude, and verifiably improved oral hygiene.

Describe some of your hobbies and activities outside of the PHS?

I do some form of workout every day, alternating between the gym and the outdoors. I am an ardent hiking enthusiast. I live with a family of hikers. The longer the hike, the more we enjoy it. I am also a huge soccer fan, and a lifelong supporter of the Liverpool Soccer Club in the English Premier League. In addition, I enjoy travelling. I have done a fair degree of domestic and foreign travel over several years.

Has your experience in the PHS thus far lived up to your expectations?

My experience in the PHS has exceeded my expectations. I thoroughly enjoy serving as an officer. I appreciate the magnitude of the mission, as well as the challenges that we all face on a daily basis. I also enjoy the big successes as well as the small accomplishments we achieve, notwithstanding the tough odds we face. Despite the issues that exist, I would do it all over again in a heartbeat.

Junior Officer Spotlight

LCDR Laura Hain

United States Coast Guard



LCDR Laura Hain

Can you provide a brief summary of your training and education?

I received my undergraduate degree in Biology from the University of California Santa Cruz in 2006. I then attended the Arizona School of Dentistry and Oral Health at A.T. Still University in Mesa, Arizona, graduating with my D.M.D. in 2010. I was lucky enough to receive the Health Professions Scholarship Program for four years of dental school, so after graduation I attended Officer Development School in Newport, R.I, then served in the Navy at Naval Air Station Lemoore in California until 2014.

Can you tell our readers how long you've been a PHS officer and describe your duties at your present site?

I have been a Commissioned Corps officer for almost 3 years, and have been stationed with the USCG in North Bend, Oregon during that time. As the sole Dental Officer at this duty station, I am responsible for the dental health and readiness of the active duty Coast Guard members stationed in the area, and spend the majority of my time providing clinical care. I also serve as the Senior Health Services Officer for the clinic, and therefore have oversight of the medical operations at the clinic as well, and work with the local command to ensure that the clinic is providing the support the command needs to carry out their operations. I also have numerous collateral duties, including Quality Improvement Coordinator, Infection Control and Prevention Officer, and Victim Advocate.

What led you to consider a career in the PHS dental program?

During dental school, one of my classmates told me about her prior service in the USPHS as a dental hygienist with IHS. She had great things to say about the Commissioned Corps, and I tucked the idea away, since I knew I had 4 years of commitment to the Navy after graduation before I could even contemplate a career in the USPHS. Later, during an externship in my senior year of dental school, I was assigned to a Community Health Center in Montana. One of the dentists who supervised me was a Commissioned Corps officer working for HRSA, and his enthusiasm and professionalism solidified my interest in one day pursuing a career in the USPHS. As I served in the Navy, I found that I loved my job and the patients I took care of, however, the commitment to extended operational tours and time away from my family led me to consider other options. It seemed that the USPHS would offer me the best of both worlds, so I applied and was commissioned in 2015.

What did you find to be the most challenging aspect of your transition into the Public Health Service?

Having experience in the Navy allowed my transition into the Coast Guard to be fairly easy. The hardest part was probably the changes to the clinic dynamic in which I was working. I came from a clinic with 9 dentists, and a support staff of about thirty people, to being the sole dental provider with one dental assistant and a part time hygienist at a remote duty station. Getting used to this change was challenging, but it has been extremely rewarding as well.

What has been the most rewarding aspect of your service thus far?

The most rewarding part of my service so far has been the honor of providing healthcare to the hardworking and courageous men and women of the Coast Guard. I feel privileged to work alongside and provide support to those who serve this country with pride and honor, where saving lives is all in a day's work. Being able to wear the uniform and seeing smiles that I have had a hand in creating and maintaining gives me a great sense of pride and appreciation for being able to serve.

Describe some of your hobbies and activities outside of the PHS?

Outside of work, I enjoy hiking, traveling, baking, gardening, and spending time with my four children and two golden retrievers. I have challenged myself to grow tomatoes in our cool coastal climate the past three summers, and have had increasing success each year that I am very proud of!

Has your experience in the PHS thus far lived up to your expectations?

It has far exceeded my expectations! I enjoy coming to work every day, and appreciate the great work-life balance I am able to have. I plan to make the USPHS my career, and am excited by all the opportunities available to me in the future. I am grateful every day that I made the choice to become a Commissioned Corps officer!

Hails and Farewells

Welcoming our newest Dental Officers and Civil Servants

LCDR James Parker	BOP
CAPT Carol McDaniel (returning to service)	IHS
LT Cam-Van Huynh	IHS
LT Nhi Huynh	IHS
LT Paul Tran	IHS
LT VyVy Vu	IHS
LCDR Rachel Rachuba	USCG
LT Dmitry Keysalov	USCG

Fair Winds and Following Seas

LCDR Mariely Marquez-Lorenzo	USCG
CAPT Khoi Nguyen	USCG
CAPT Kristin Sareault	USCG
CAPT Jennifer Borden	IHS
CAPT Daniel Brockmeier	IHS
CAPT John Etter	IHS
CAPT Daniel Huber	IHS
CDR Richard Hudon	IHS
CAPT Linda Markle	IHS
CAPT Coleman Palmertree Jr.	IHS
CAPT James Schaeffer	IHS
CAPT Claudia Von Hendricks	IHS

Upcoming Events

Agency/Organization	Web Link/Info	Meeting Date	Meeting Location
California Dental Association Scientific Session	https://www.cdapresents.com/	Sept. 6-8, 2018	San Francisco, CA
American Association of Women Dentists	https://aawd.org/	Oct. 4-6, 2018	Savannah, GA
American Dental Association Annual Meeting	http://www.ada.org/en/meeting	Oct. 18-22, 2018	Honolulu, HI
American Academy of Periodontology Annual Meeting	https://members.perio.org/am2018/home?ssopc=1	Oct. 27-30, 2018	Vancouver, BC, Canada
Mid-Continent Dental Congress	http://www.greaterstlouisdentalsociety.org/meetings-events/attendee-main	Nov. 8-9, 2018	St. Charles, MO
Chicago Dental Society Midwinter Meeting	http://www.cds.org/meetings-events/midwinter-meeting	Feb. 21-23, 2019	Chicago, IL
American Dental Education Association Annual Meeting	http://www.adea.org/2018/	Mar. 16-19, 2019	Chicago, IL
Hinman Dental Meeting	https://www.hinman.org/	Mar. 21-23, 2019	Atlanta, GA
Western Regional Dental Convention	https://www.westernregional.org/2019/	Apr. 4-6, 2019	Glendale, AZ
Academy of Laser Dentistry	http://www.laserdentistry.org/index.cfm/conference	Apr. 4-6, 2019	Dallas, TX
American Association of Endodontics	http://www.aae.org/annualsession/	Apr. 10-13, 2019	Montreal, Canada
National Oral Health Conference	http://www.nationaloralhealthconference.com/index.php?page=main	Apr. 15-17, 2019	Memphis, TN
American Academy of Cosmetic Dentistry	https://www.aacdconference.com/	Apr. 24-27, 2019	San Diego, CA
The Texas Meeting: Annual Session Texas Dental Association	https://tdameeting.com/attendees/general-information/future-meetings/	May 2-4, 2019	San Antonio, TX
USPHS Scientific & Training Symposium	https://www.phscof.org/symposium.html	May 6-9, 2019	Minneapolis, MN
California Dental Association Spring Scientific Session	https://www.cdapresents.com/	May 16-18, 2019	Anaheim, CA
American Academy of Pediatric Dentistry Annual Session	http://www.aapd.org/events/71st_annual_session/	May 23-26, 2019	Chicago, IL
Academy of Prosthodontics	http://www.academyofprosthodontics.org/2019_Banff_Canada.html	May 29-June 1, 2019	Banff, Canada
IADR/AADR Annual Meeting & Exhibition	http://www.iadr.org/AADR/Meetings	Jun. 19-22, 2019	Vancouver, BC, Canada
Pacific Northwest Dental Conference (WSDA)	http://www.wsda.org/future-pndc-dates/	June 20-22, 2019	Bellevue, WA
Academy of General Dentistry Annual Meeting	http://www.agd.org/agd-meeting	July 18-20, 2019	Uncasville, CT
National Dental Association	http://www.ndaonline.org/2018-nda-convention/	Jul. 11-15, 2018	Orlando, FL
American Academy of Esthetic Dentistry	http://www.estheticacademy.org/?page=AAEDMeetings	Aug 8-10, 2019	Alberta, Canada

Online Oral Health Resources & Continuing Education Opportunities

Agency/Organization	Description	Web Link
American College of Dentists	CE - Dental Ethics Course	http://www.dentaethics.org
ADA	CE – online continuing education opportunities	http://ebusiness.ada.org/education/default.aspx
Centers for Disease Control and Prevention (CDC)	Resource - Oral Health Resources	http://www.cdc.gov/oralhealth/
Colgate	CE – Free Live and On-Demand Webinars for continuing education	http://www.colgateoralhealthnetwork.com/Dental-CE-Course/
Health Resources and Services Administration (HRSA)	Resource - HRSA Home page	https://www.hrsa.gov/oral-health/index.html
Hu-Friedy	CE – online continuing education opportunities	https://www.hu-friedy.com/education/continuing_education_classes
IHS Division of Oral Health	Resource - Early Childhood Caries Initiative	https://www.ihs.gov/doh/index.cfm?fuseaction=ecc.materials
Inside Dentistry	CE - online continuing education opportunities	https://id.cdeworld.com/courses
National Institute of Dental and Craniofacial Research	CE - Practical oral health care for patients w/ developmental disabilities	http://www.nidcr.nih.gov/EducationalResources/HealthCareProviders/POCPDD.htm
National Institute of Dental and Craniofacial Research	Resource - Dental Providers Oncology Pocket Guide. Reference on treating pts before, during and after cancer treatment	http://www.nidcr.nih.gov/oralhealth/Topics/CancerTreatment/ReferenceGuideforOncologyPatients.htm
National Maternal & Child Oral Health Resource Center	Resource – OH Resource Center	https://www.mchoralhealth.org/
Naval Postgraduate Dental School	Resource - Clinical updates archives	http://www.wrnmcc.capmed.mil/ResearchEducation/NPDS/SitePages/Research/ClinicalUpdatesIndex.aspx
Naval Postgraduate Dental School	CE - Correspondence Course Program	http://www.wrnmcc.capmed.mil/ResearchEducation/NPDS/Shared%20Documents/Correspondence%20Course%20Brochure.pdf
Northwest Center for Public Health Practice	CE - Basic Public Health principles study modules	http://www.nwcphp.org/training
Ohio Department of Health, the Indian Health Service, and the Association of State and Territorial Dental Directors	Resource - Safety Net Dental Clinic Manual	https://www.dentalclinicmanual.com/index.php
Proctor & Gamble	CE – online continuing education courses	https://www.dentalcare.com/en-us/professional-education/ce-courses
The University of Iowa	Resource - Oral Pathology Photos	http://guides.lib.uiowa.edu/c.php?g=131885&p=864394

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