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# USPHS Combined Category Newsletter

The Combined US Public Health Service Professional Advisory Committees Newsletter

## PAC Chairs' Corner

Hello fellow officers,

I am CDR Marisol Martinez, your PAC Chairs' Chair. Welcome to the Summer 2014 edition of your Combined Category Newsletter. This summer, the team has been hard at work preparing a quality publication that brings you a wide range of relevant information for everyone's benefit. We hope you expand your understanding about the unique jobs everyone has and how they contribute to our mission. From Dieticians to Veterinarians, and the categories in between, we all supply the underserved with valuable services and expertise that distinguish the Public Health Service from all the Uniformed Services.

The PAC Chairs group has been busy working on several projects since the new term started back in January. The greatest part about this leadership group is hearing the different view points and issues that are unique to each category. We have worked on projects such as PHS website migration, esprit de corps, fundraising, and readiness. I encourage everyone to stay active with your PAC and voice your ideas and concerns so that they can be discussed at your monthly PAC meetings. Every PAC Chair is your liaison for Corps issues, be it about promotions, new calls to active duty, or PHS policy.

Combined collaboration creates opportunities to share our work with the whole Corps. The PHS Scientific and Training Symposium showcases the culmination of our efforts to protect, promote, and advance public health as officers and civil servants. I challenge each of you to document your collaborations with other categories in the workplace or deployment setting. Demonstrate the synergistic effectiveness we have with cross category partnerships that results in promotion of the National Prevention Strategy. Consider developing a presentation for the next Symposium to inspire innovative teamwork in the spirit of providing world class Public Health!

I hope you enjoy this edition of the Combined Category Newsletter. The Publication Workgroup encourages participation through article submission. Let us know what you are doing for our Country and the Corps!

*Marisol*

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# Stress Eating, Distracted Eating, and Mindful Eating

By CDR Julie A. Chodacki, Health Services PAC

If you've ever drowned your sorrows in a pint of Ben and Jerry's or mindlessly made your way through a Costco-sized bag of chips, you won't be surprised to learn that, "Five minutes after dinner, 31 percent of the people leaving an Italian restaurant couldn't even remember how much bread they ate, and 12 percent of the bread eaters denied having eaten any bread at all!" (Wansink, 2006, p. 36) The average person makes over 200 food-related choices daily; most of those choices are outside his/her awareness and unrelated to hunger… a couple of M&Ms on a co-worker's desk, a sample at the grocery store, or a "last bite" of whatever is on your plate. Eating an additional 100-200 unnoticed calories per day can make a difference of 10 pounds in less than a year. Intuitive eating, also known as mindful eating or conscious eating, is a philosophy of eating which encourages conscious decisions about eating, basing those decisions primarily on internal cues rather than external forces, and savoring food as it is consumed. The bottom line: aim to eat when you're hungry and only when you're hungry and when you choose to eat, enjoy it.

Eating only when hungry may sound simple, but it's far from easy. The challenge lies in determining physical hunger. First, many confuse physical hunger and emotional hunger. Here are some basic ways to differentiate between physical and emotional hunger:

| PHYSICAL HUNGER | EMOTIONAL HUNGER |
|---|---|
| Comes on gradually | Triggered suddenly |
| Willing to eat anything | Only wants certain foods or types of food |
| Growling stomach, headache, lightheadedness | Visualizations of particular foods |
| Predictably occurs several hours after eating | Occurs after certain emotions |
| Savors/responds to tastes, smells | Mechanical consumption |
| Satisfied with food | Difficult to satisfy – eat the "whole" container |

The food cravings that accompany stress and its ensuing emotions can trick you into thinking you should eat even though you are not hungry.

Second, many factors disrupt the body's innate ability to recognize hunger and satiation. For example, only during sleep are the hormones ghrelin and leptin produced. Along with performing other functions, these hormones tell the body when it is full and when it is hungry. By restricting hormone production, insufficient sleep leads to increased appetite and decreased satiation regardless of food consumption. Artificial sweeteners and other "diet" foods also confuse the body's natural regulation. Research suggests that increased exposure to sweetness (even artificial sweeteners) increases cravings for more sweetness. In the case of artificial sweeteners in "diet" foods, there is no caloric reward; no satisfaction of the hunger, so additional food is consumed. Similarly, elimination diets that contribute to poor nutrition can interfere with the body's normal regulation. Also dehydration is often misinterpreted as hunger, leading a thirsty person to believe he/she is hungry and to consume many additional calories without being satisfied.

A third challenge to following through on eating only when hungry is the reality of the external environment. Various research approaches repeatedly indicate that in the absence of awareness of internal hunger cues, most people rely on external cues to determine when they should stop eating. Factors completely unrelated to one's hunger determine how much he/she consumes: research participants who could see the bones of their consumed chicken wings ate 28% less than those sitting at tables that were bussed; research participants who drank a smoothie that was blended longer to appear larger consumed less of the smoothie and reported feeling more full even though the drink had the same ingredients and portion as the other group; research participants eating with others ate according to the pace set by the other diners – when eating in groups, light eaters ate more and heavy eaters ate less; people who eat while distracted (either by television or conversation) eat more than those who focus on eating; and large plates lead to enlarged portions which lead to increased consumption. Of course, there are other ways the external environment drives food choices too; busy schedules and lack of access to food when hunger arises interfere with the ability to eat when hungry. Living with someone else whose meals are conjoined can also impact when one eats, what one eats, and how much one eats.

Given all these challenges, there are several ways to progress in the direction of conscious eating. The first is to journal all food consumption. Writing down what was consumed and when it was consumed will assist in raising awareness. For emotional eaters, it will be beneficial to also include some of the context for eating; specifically note the thoughts that accompany binging. Not surprisingly, those who tell themselves, "I ruined my diet already, I might as well finish the box" eat more than those who tell themselves, "It's just one cookie." Similarly less conscious thoughts that involve tradeoffs or justifications such as, "I'm having a small entrée, so I can get dessert" have been shown to increase calorie consumption in the long run (McGonigal, 2012). Raising awareness of thoughts also has the potential to uncover and examine inaccurate/irrational justifications for eating, such as "If I don't try that dessert now, I'll never have another opportunity."

(Continued on page 3)

# Stress Eating, Distracted Eating, and Mindful Eating Cont'd

A second strategy to increase mindfulness about food consumption is to make it more effortful to continue to consume food without thinking about it. Eating out of the preparation or serving container makes it easy to consume all that was prepared without noticing. Putting some food on a plate requires the additional effort of assessing hunger before reaching for seconds. Leaving the preparation or serving container in the kitchen while eating in the dining room or living room not only increases effort, but it ensures that a more deliberate thought process will ensue before more eating takes place. Some other general mindfulness principles are useful for eating as well. As in other mindfulness exercises, it is recommended that eaters are aware of employing all senses; mindful eaters actually taste, smell, and visually engage with food while eating, and periodically assess whether they are still hungry. Practicing mindful eating is maximally effective for the person who appreciates that the body functions as a unified whole; staying hydrated, getting sufficient sleep, exercising, and being spiritually, socially, and mentally engaged improve healthy eating too.

One of the goals of mindful eating is to remove the judgment, shame, and guilt that often accompany dieting and body image, and perpetuate unhealthy eating patterns. By making active choices guided by internal cues, mindful eaters regain control, and several studies support that they lose weight and show improvement on other health outcomes as well.

*Intuitive eating is the philosophy of eating based on internal hunger cues. Mindful eating is a component of intuitive eating. Mindful eating is an example of mindfulness as a general technique used to raise awareness in many areas of human behavior; ordinarily mindful eating refers to a style of increased awareness of food as it is being eaten. Conscious eating is sometimes used to refer to both mindful eating and intuitive eating, or to refer to the process of being deliberate about food choices. For the purpose of this article I use the terms nearly interchangeably.

References:

McConigal, K. (2012). The willpower instinct. New York: Avery.

Wansink, B. (2006). Mindless eating: Why we eat more than we think. New York: Bantam Books.

Yang, Q. (2010). "Gain weight by going on a diet?" Yale Journal of Biology and Medicine. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2892765/

# Prevention through Active Community Engagement (PACE): Promoting Officer and Branch Leadership to Implement the National Prevention Strategy

LT John Pesce and LCDR Leo Angelo Gumapas, Engineer PAC

As a nation, we have seen an ever-increasing rate of morbidity and mortality due to preventable diseases. To address this issue, the Office of the Surgeon General has developed the National Prevention Strategy (NPS) that clearly identifies a plan to a healthier and happier nation. One way for officers to make a difference is through their participation in the Prevention through Active Community Engagement (PACE) Program. PACE is designed to build collaboration between and among Commissioned Corps officers and local community organizations to educate and discuss the values of making good decisions that are outlined in the NPS. Through the NPS, Commissioned Corps officers have a common platform of public health related messages on which to focus regardless of their individual professional category.

The PACE program provides an administrative infrastructure to support officers in performing community outreach and advancing the NPS. Additionally, Commissioned Corps officers involved in the PACE program are currently developing NPS-specific presentations that can be used to augment existing outreach efforts by officers across the country. Finally, the PACE program has a built in reporting mechanisms to help with tracking individual officer or Commissioned Officers Association (COA) branch efforts and activities. This mechanism enables quantifiable metrics to be collected that can contribute in determining the Corps impact on the implementation of the NPS. (Continued on page 4)

The PACE program is seeking to expand to every location in the United States where a COA chapter is located. What we need from each local COA branch:

⇒ Identify contact information for 1-2 junior officers interested in taking on a leadership position to coordinate with PACE program leadership

⇒ Set a goal to participate in a minimum of 5 PACE related events each year (Continued on page 4)

# PACE: National Prevention Strategy Cont'd

The PACE Program benefits to COA branch are the following:

⇒ Increased visibility of the Corps in local communities
⇒ Opportunities for non-medical providers to interact with the public
⇒ Opportunities for officer leadership experience
⇒ Ability to directly measure individual officer's or a group of officers' contributions on a community.

As an example of the PACE Program success, the DC COA branch has been active in the formation and continued operation of the local PACE Program, with 28 officers participating in over 23 events providing 175 contact hours and reaching 1,963 attendees in support of DC area school systems. In addition to working with existing programs in the Montgomery County school system, work began on building relationships with other DC area school systems. Officers have participated in career fairs at all levels of school, showing our nation's youth a variety of career paths which serve the public's health and how they can become involved in that process. Officers have participated in family science and Science, Technology, Engineering and Math (STEM) nights, including a demonstration of how physical energy can be translated into electrical power for a stereo, and a description of how mucus acts as the body's first line of defense against disease. Summer programs were coordinated with schools to provide information on healthy living and good food choices.

Together, we can have a profound impact on the future health of our Nation and the Corps if we work together. But we need your help to institute this program at the local level. If you are interested

# Million Hearts® Initiative

RADM Nadine Simons, Nurse PAC

The Million Hearts® is a national initiative that was launched by the Department of Health and Human Services in September 2011 to prevent 1 million heart attacks and strokes by 2017.

Heart disease and stroke are two of the leading causes of death in the United States, and the Million Hearts® initiative brings together communities, health systems, nonprofit organizations, federal agencies, and private-sector partners from across the country to fight these two often preventable causes of death. Nurses can play a key role in helping patients reduce their risk for heart disease and stroke and lead longer, healthier lives. When nurses provide health education to their patients or communities, they can focus on the "ABCS"

Appropriate aspirin therapy,

Blood pressure control,

Cholesterol management

Smoking cessation

as well as healthier lifestyles, such as promoting heart-healthy habits like regular physical activity and a diet rich in fresh fruits and vegetables. As expert health communicators, nurses can ask their patients about what makes it hard for them to take their medications and help them to find ways to make it easier, as well as asking about smoking habits and providing smoking cessation counseling and tools to help current smokers quit. Nurses can connect at-risk patients with community resources for self-management, and they can help to decrease cardiovascular health disparities by using culturally appropriate education materials and working with other health professionals, such as pharmacists, social workers, and community health workers, to identify and address barriers to care.

Many national nursing organizations have signed up as partners to the Million Hearts® initiative, including the American Nurses Association (ANA), Association of Public Health Nurses (APHN), Preventive Cardiovascular Nurses Association (PCNA), American Association of Nurse Practitioners (AANP), American Association of Colleges of Nursing (AACN) and National Association for Associate Degree Nursing (N-OADN). As federal healthcare professionals let's pledge to redouble our efforts to further the goals of the Million Hearts® initiative and work within our organizations and communities to sustain efforts to prevent heart disease and stroke. More information about the Million Hearts® initiative can be found at http://millionhearts.hhs.gov/index.html.

# Eat Local, Straight from Your Own Garden

LT Stephanie Magill, Dietitian PAC

Bite into a homegrown tomato and right away you can tell the difference between it and a store bought tomato. Everything just tastes better fresh from the garden. Planting a home garden may seem like a daunting task, but today you can find many resources online and in your community to help you get started. Community gardens (often called community P-Patches) seem to be popping up all over my city, and more and more schools have been adding school gardens. You can even find a fruit and vegetable garden at the White House. You do not even need a yard -- plant tomatoes, herbs, blueberries, or other "bush" variety plants in containers on your patio or balcony. Or, if you have the space, you can designate a sunny section of your yard for your garden. Gardens can be started at any time of the year, but during the summer growing season, you have endless varieties of vegetables and fruits to choose from and plenty of sun to help the plants grow.

Photos by Brent Magill

**Tips to start your garden:**

**1. Identify a sunny spot for your garden or container garden.** Depending on where you live, you might want to get your soil tested for possible contaminants.
**2. Make a list of your favorite vegetables, herbs and fruits.** You are more likely to harvest and eat what you like, but it is also fun to try planting a few things you have never tried.
**3. Buy seeds and vegetable starts for planting.** Some plants like broccoli, lettuce, and peas are more cold-hardy so you can start them earlier in the growing season. You can sow (plant) seeds directly in the soil for things like radishes, lettuce, peas and beans. Some vegetables like tomatoes and peppers must be started indoors until it is warm enough outside. But to make things easier, you can just buy small plants (vegetable "starts") at a local nursery, and plant them in the ground when the weather is warmer. You can even squeeze vegetable starts or herbs in between some of your flowering plants.
**4. Plant and water.** When you plant, make sure you put taller crops in the back so they will not block the sun for the smaller crops. You should also make sure you start the plants off with some good fertilizer. You will want to keep your garden well watered and weeded to encourage growth.
**5. Harvest.** Finally you get to enjoy the fruits of your labor. There are endless recipes available online to help you figure out how to prepare what you've just grown.

Planting a garden in your yard or in a community P- patch, and buying locally grown fresh fruits and vegetables at a farmer's market or through a Community Supported Agriculture CSA program contribute to the National Prevention Strategy's Healthy Eating priority. As PHS officers, we can set examples of healthy eating for our community and our families. My home garden often turns into a community garden when I have a surplus harvest and I can share it with my neighbors or people walking by. In Seattle, many of us have raised beds in the narrow grass strips between the curb and sidewalk, so my garden also becomes an opportunity to educate passersby who have questions about what I am growing or how I grow it. My kids and their friends will eat anything that they can pick from the garden (even if I have the same thing in my refrigerator). They are learning where and how food grows, and to appreciate fresh fruits and vegetables. They are also more willing to try something new!

There is nothing too magical about growing your own garden. It is often a lot of trial and error, but it can be a lot of fun trying new things and learning more as you go.

Here are some resources to get you started:

Garden Checklist: http://www.letsmove.gov/kitchen-garden-checklist

Seeds and supplies: http://www.territorialseed.com/

USDA: http://www.usda.gov/wps/portal/usda/usdahome?navid=GARDENING&parentnav=CONSUMER_CITIZEN&navtype=RT

USDA Extension Services: http://extension.umd.edu/hgic

# Inspiring Future Public Health Leaders at the USA Science and Engineering Festival

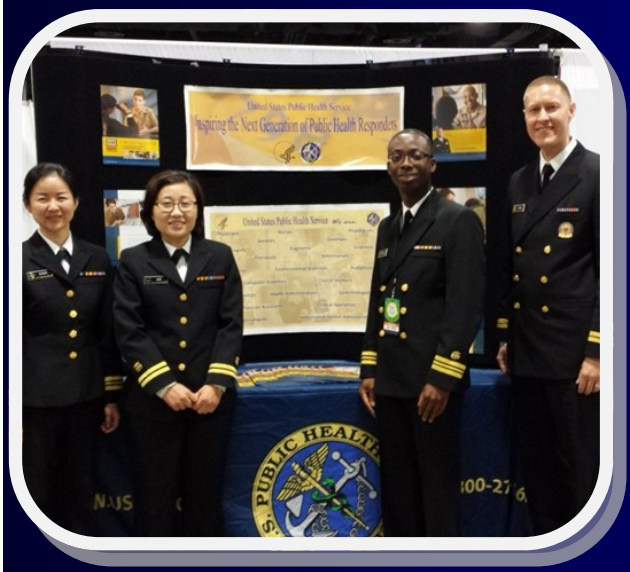
LT Samantha Spindel, Engineer PAC and LCDRs Qiao Bobo and Theodore Garnett, Scientist PAC

"STEMulating, Monumental, and Spectacular!" That was the feeling at the 3rd USA Science & Engineering Festival, held April 26-27 at the Washington, D.C. Convention Center. Twenty-five USPHS Commissioned Corps officers, representing six categories and five agencies, volunteered at the country's largest science festival to raise awareness of the importance of science and engineering for public health.

With thousands of exhibits and hundreds of stage shows, the festival celebrated science with much pizzazz. The crowd cheered science luminaries including theoretical physicist Dr. Michio Kaku and Bill Nye the Science Guy, and relished in the live performance of the musical group, They Might Be Giants. Attendance was more than double that of the 2012 festival with about 325,000 visitors. Attendees learned about space, watched 3-D printers work their "magic" and enjoyed many hands-on activities such as creating stick figures of molecular structures.

LT Samantha Spindel promoting public health to a very young lady at the 2014 USA Science and Engineering Festival.

The message of the USPHS exhibit booth was **"Inspiring the Next Generation of Public Health Responders".** In this spirit, our enthusiastic volunteers greeted a few hundred visitors, many of whom had never heard about our service before and were intrigued. Some were even interested in applying to the USPHS. The visitors included young children, high school students, undergraduate and graduate students, as well as parents, nurses, doctors, and other public health professionals. We spoke to a number of teachers and educators who were curious about our activities and plan to inform their students about the USPHS. We engaged students about their career interests, promoted our COSTEP opportunities, fielded questions about the PHS, handed out promotional materials, and directed them to our online resources for additional information. We emphasized that we are one of the government's best kept secrets!



*USPHS Officers (from left to right) LCDR Qiao Bobo, LT Jung Lee, LCDR Theodore Garnett and LT Charles Darr at the 2014 USA Science and Engineering Festival.*

The event was sponsored by the District of Columbia (DC) COA and supported by RADM Randall Gardner, Chief Professional Officer for the Engineer Category. RADM Gardner visited our booth on Saturday to show his support and encouragement, and also promoted the event to local engineers.

The USPHS representation at this highly-attended and visible festival would not have been possible without the hard work of members of the Science and Engineering Festival Subcommittee (a branch of the DC COA Community Outreach Committee) and the full support of DC COA.

*USPHS Officers (from left to right) LCDR Simleen Kaur, CDR Chekesha Clingman, CDR Kun Shen, LCDR Jonathan Kwan with the Chief Professional Officer for the Engineering Category, RADM Randall Gardner (center) at the 2014 USA Science and Engineering Festival.*

There were also 21 affiliate science and engineering events all over the country and in the United Kingdom in April, with many more events scheduled throughout the year (http://www.usasciencefestival.org/affiliate-events/2014-affiliate-event-map-and-directory.html). Please contact LCDR Qiao Bobo at qiao.bobo@fda.hhs.gov if other local COA branches are interested in manning a booth at one of these affiliate events. We would be happy to share our experience with you and assist in organizing a successful and rewarding event of your own.

Many thanks to all our Officers who volunteered for this event!

# Integrating Oral Health into Primary Health Care Settings

RADM William Bailey and LCDR Justin Vos, Dental PAC

There is a long-standing divide in societal consciousness between oral health and systemic health. Fortunately large purposeful strides are being taken toward incorporating oral health into primary health care and settings. By bringing greater focus on oral health to additional health care providers and settings we can help address one of the leading health indicators as addressed in *Healthy People 2020*: Oral Health. Out of twelve leading health indicators established in *Healthy People 2020*, only two have worsened since being announced, and oral health is one of them. This is all the more reason that the health care community is rallying around oral health. There are various groups that have taken up the challenge and are making significant progress toward integrating oral health into primary health care settings.

Acting on recommendations from a 2011 report from the Institute of Medicine (IOM), *Improving Access to Oral Health Care for Vulnerable and Underserved Populations,* the Health Resources and Services Administration (HRSA) convened key stakeholders from both the public and private sectors to develop a core set of oral health competencies for non-dental health care professionals. The Interprofessional Oral Health Core Clinical Competencies (IPOHCCC) were established to address oral health, promote preventive care and services, and are expected to improve access to care and health outcomes. The competencies are currently in pilot testing. The pilot is structured for competency development, systems approach and analysis, and exploration of implementation strategies. A full report of the program and findings is due this summer. The National Network for Oral Health Access (NNOHA) is the organization conducting the pilot and evaluation phase of the program at three community health centers.

The National Interprofessional Initiative on Oral Health (NIIOH) created the Smiles for Life curriculum, currently in its third edition. It is designed to enhance the role of primary care physicians in the promotion of oral health for patients of all ages. There are eight modules addressing: oral and systemic health; child oral health; adult oral health; acute dental problems; oral health and the pregnant patient; caries risk assessment, fluoride varnish and counseling; the oral examination; and geriatric oral health. Continuing education credit is available for physicians, nurses, physician assistants, pediatricians and midwives.

The Association of American Medical Colleges has developed seven oral health in medicine competency domains: general oral health, dental caries, periodontal disease, oral cancer and prevention, oral-systemic health interactions, public health, and emergency care. The content is available on MedEdPORTAL. The goal of the competencies is to highlight the oral-systemic link and improve comprehensive coordinated care.

The American Academy of Pediatrics (AAP) has developed a web-based training along with various guides and references pertaining to improving the overall oral health in children which are readily accessible with aspirations to help increase and accumulate knowledge of oral health and prevention in children. They also indicate when it is appropriate for a referral to a dental professional for medical educators; pediatricians; family medicine physicians; and health providers. The modules are appropriate for physicians' continuing medical education requirements. They also have practice tools which can facilitate the incorporation of oral health risk assessments in the pediatric population and the application of fluoride varnish into existing practices.

The HRSA Maternal and Child Health Bureau launched a grant program for School Based Comprehensive Oral Health Services. The grants will fund projects to integrate comprehensive oral health services into existing school-based health centers to decrease oral health disparities among children and adolescents from low-income families.

Teaching Oral Systemic Health (TOSH) is an activity that is part of the HRSA Bureau of Health Professions, Division of Nursing's Advanced Nursing Education Program. The goal is to implement an innovative, replicable, curricular model for developing primary care advanced practice nurses with competencies in oral-systemic health across the lifespan, and thereby expand access to oral health care for vulnerable and underserved populations in primary care settings. The goal of the program is to develop a collaborative model of health care with the best value for patients and practitioners.

The Department of Health and Human Services (DHHS) is currently finalizing a first-of-its-kind oral health framework. The framework has stakeholders from over 15 federal agencies and offices contributing. All major operating divisions staffing PHS dental officers are represented. The key areas of the framework will include integrating oral health into primary health care, focusing on prevention of disease and health promotion, reducing disparities, improving health literacy, improving the availability and usefulness of health information and advancing scientific knowledge.

There is a sizable move involving many stakeholders to engage a broader scope of health care professionals and involve them in interdisciplinary oral health care. Oral health is a *Healthy People 2020* leading health indicator and there are some large projects underway that give it the attention that it has been lacking in the broader health care picture. There is a very positive trend wherein oral health is being recognized as a key component of systemic health. The ultimate goal is to have better health care outcomes for patients, better access to care, better care experiences, and lower cost of care.

Resources:

1. Healthy People 2020 Executive Summary (pdf): http://www.healthypeople.gov/2020/LHI/LHI-ProgressReport-ExecSum.pdf
2. National Interprofessional Initiative on Oral Health: http://www.niioh.org/
3. National Network for Oral Health Access: http://www.nnoha.org/programs-initatives/ipohccc/
4. Association of American Medical Colleges: https://www.aamc.org/
5. American Academy of Pediatrics: http://www2.aap.org/commpeds/dochs/oralhealth/index.html

# Professional Development as it Relates to Continuing Education

LCDR Carlos Esteves, Therapist PAC

**With such a plethora of continuing education courses, it begs the question:**

**Which courses should I focus on?**

1) We often hear about ensuring we choose evidence-based courses, and rightfully so as these courses are rooted in science and objectivity via the rigors of clinical research.

**a) Look at the evidence!**

One must look no further than well…the evidence to identify who walks the walk regarding solid peer reviewed clinical research. By engaging in your respective peer-reviewed clinical journals, you can see who the top producers of good literature are. Often times these clinicians will host continuing education courses. While I'm not advocating you follow a specific individual, I am advocating a specific ideology when selecting a course that is rooted in sound evidence. Again, start with your respective journals and critique their work. As you become familiar with the author's work, you can do an online name search.

**b) If interested in a particular intervention or area of interest**

Often times your particular patient needs may call for a more specific course, or perhaps you have heard about the success of a particular intervention. In this case I would suggest doing a bottom-up approach. Rather than looking for authors, you want to look at the intervention in question and determine whether this intervention has been published in a peer-reviewed journal. If so, great! Perform a critical appraisal of that research to determine whether the study is sound. You may think why bother? Why do so much work? Well the area of continuing education is filled with interventions that profess to be the end all or the "best "and "only" way to treat your patients. How can such claims be made without any objective evidence other than their own claims? We are talking about your hard earned money spent on interventions that waste your time at best, or are not replicable and will do little to improve your patient's condition. Again, for that topic of interest do a clinical search and determine whether these interventions are backed by any peer-reviewed study. Start with PubMed or Google scholar.

2) What about those courses that have little evidence behind them?

I think there can be value in those interventions so long as the rationale is based on sound science. In other words, ensure that the explanation for its effectiveness is not pseudo-science. Course instructors can at times make absurd claims that cannot be backed by any means of main stream medicine. For example, courses that delve into mysticism, auras, or ideas that muscles can be spoken to and/or have the possibility to remember past traumatic experiences. These practices or interventions take you away from mainstream medicine and can threaten your credibility as a clinician when communicating with other medical professionals or the community at large. Always revert to science to question how the proposed mechanism is successful. Is the theoretical construct lining up with what we know about pain physiology and, or pathoanatomy? I recently attended a course where I questioned a proposed intervention. The instructor did not only have her anatomy wrong, but truly did not know why it would even work. She later admitted "they" just added this material to the course.

I've found that most instructors include in their courses a proposed mechanism to invite such types of questions. An immediate red flag comes from those who respond in defensiveness and or simply ignore the clinician's question or worse divert the question with mockery. As clinicians we all know that not all interventions that we employ are backed by the evidence. In the end "*Sola Indicium*" (only the evidence) is not evidence-based practice. According to David Sackett, a pioneer in evidence-based medicine, it is *The integration of the best research evidence with clinical expertise and patient values"(Sackett, et al. 2000).* The key word here is *clinical expertise,* which plays a significant role in selecting continuing education courses. After all, these clinicians have spent years and have treated hundreds of patients with their proposed intervention. I like the phrase "absence of evidence, is not evidence of absence." We have to keep in mind that often times, many of our interventions are behind on the research. But as mentioned previously we should still ensure we are weeding out those courses not rooted in science.

Make every effort to participate in your annual continuing education program. Some of you may be hindered by budgetary constraints. Even so I would recommend you consider investing in your education either through the GI Bill, state veteran assistance programs, or your personal funding. Consider onsite mentorship opportunities from reputable clinicians that espouse some of these concepts. Some of these clinicians may be willing to do this for free. Many may feel honored that you find an interest in their particular expertise. It never hurts to ask!

# Supporting the Surgeon General's National Walking Initiative during the 4th Annual Georgia Walk to School Day

CDR Andrea Sharma, Scientist PAC

Safe Routes to School (SRTS) is an international movement that began in the 1970s in Denmark and spread throughout the world, reaching the United States by the 1990s. The purpose of SRTS programs is to encourage kids to walk and bike to school and to improve safety in the vicinity of schools. Wednesday, March 5, 2014, marked the fourth annual Georgia Walk to School Day (gWalk). Organized by the Georgia Department of Transportation's (GDOT) Safe Routes to School Resource Center, gWalk events emphasize the importance of pedestrian safety; physical activity; concern for the environment; and building connections among families, schools, and the broader community.

Georgia Walk to School Day helps communities work towards goals including:

- Enhancing health by increasing the amount of physical activity for children, parents, and caregivers, especially through walking and biking to school
- Improving air quality by reducing automobile emissions in the school zone
- Making the streets safer by relieving traffic congestion and promoting pedestrian safety

A volunteer opportunity to support gWALK was spearheaded by a Scientist officer, and involved collaboration among 17 Atlanta-based PHS officers from a variety of categories. Officers assisted students, parents, and faculty at 6 elementary and middle schools across metro Atlanta during their Georgia Walk to School events. Officers helped students cross streets safely, participated in "walking school buses," distributed incentive prizes and information about SRTS, and helped children log their participation for school contests and awards. Participating officers included RADM Clara Cobb, CAPT Edecia Richards, CAPT (ret) Ralph O'Connor, CDR Tegan Boehmer, LT Laura Edison, CDR Nicole Flowers, CDR Andrea Sharma, LCDR Katrina Mosley-Sloan, LCDR Myoshi Francis, LCDR Beatrice Lunsford-Wilkins, LCDR Ekwutosi Okoroh, LCDR Sharyn Parks-Brown, LT Rachel Cook, LT Folasade Kembi, LT Jonetta Johnson, LT Shauna Mettee, and LCDR Donna Phillips.

Despite some chilly weather, the events at all schools were a success! Schools had between 50 and 500 students walking to school and participating in organized activities. To see so many children and their families out walking and having fun was inspiring and a great way to start the day. Both the Georgia Safe Routes to School Resource Center and the participating schools reported that the officer volunteers provided greatly needed support to ensure the event was conducted safely and successfully.

In addition to raising awareness about the option of walking to school, the event also enhanced the visibility of the USPHS and the community was grateful for the help of the volunteer officers as evidenced by these notes of thanks:

- "Thank you for participating in the Walk to School day! The events would not be possible without your involvement. We were able to serve approximately 150 students. I know at times performing extra responsibilities may go unnoticed. However, please know we greatly appreciate your willingness to volunteer your time, energy and services for the betterment of our students!" – *Fairington Elementary, Dekalb County*
- "Thanks for helping with our Walk to School event. We certainly appreciated [the officers'] help as 2 of our volunteers were absent. We had over 110 walkers, representing 43 classes and an additional 16 students who had never walked before! The kids still love the stickers and signing the pawprint banner and that's how we keep count of walkers."–*Arcado Elementary, Gwinnett County*
- "Please give our many thanks to the USPHS officers who helped pass out prizes to our students. With over 350 students and their families walking to school, we need all the help we can get! Walk to school events help families realize how easy it can be to walk to school every day. Thank you for making our event a success! " – *Sagamore Hills Elementary, Dekalb County*


L to R: LT Shauna Mettee, LCDR Ekwutosi Okoroh, & CDR Andrea Sharma at Sagamore Hills Elementary School, preparing for the 2014 Georgia Walk to School Event.

(Continued on page 10)

## National Walking Initiative Cont'd

Participating in Walk to School activities supports the Surgeon General's Every Body Walk! Initiative and the National Prevention Strategy on Active Living. Engaging in regular physical activity is one of the most important things that people of all ages can do to improve their health. Physical activity strengthens bones and muscles, reduces stress and depression, and makes it easier to maintain a healthy body weight or to reduce weight if overweight or obese. As described by the Physical Activity Guidelines for Americans, adults should engage in at least 150 minutes of moderate-intensity activity each week, and children and teenagers should engage in at least one hour of activity each day.

The Georgia Safe Routes to School Resource Center is a federally-funded project of GDOT that provides education, encouragement, and planning support to schools throughout Georgia that partner with the Resource Center. For more information on the Safe Routes to School and the Georgia Safe Routes to School Resource Center, please visit www.saferoutesga.org.

# Space-A Travel for the Beginner

LCDR Hobart L. Rogers, Pharmacy PAC

**What is Space-A travel?** Space-A (space available) travel is a benefit and a privilege that allows uniformed service members and their dependents to occupy unused seats on DoD-owned or -controlled aircrafts. These unused seats can be used (for free in most cases) for travel to various destinations. The purpose of this article is to familiarize Commissioned Corps officers with this benefit and provide some resources so they may further educate themselves.

**What are the risks of Space-A travel?** Utilizing Space-A travel is inherently a risk/benefit proposition. Only you will be able to decide if Space-A is something you want to use. The risks are centered on not being able to find a flight to/from your destination and the possible consequences of having to purchase last minute commercial airfare in its place. The benefits of Space-A are manifold, but the main benefit is obvious; Space-A travel provides you with an opportunity to travel to various destinations for free or a simple head-tax (usually less than $20/person).

**Where can I find more information about Space-A?** There are a number of great resources available on the internet. The first place I recommend is www.spacea.net. This website acts as a detailed resource as it not only orients the user to the basics of Space-A travel, but it also answers various FAQs. After familiarizing yourself with the information on this website, you will have a good idea of the basics of Space-A. Another good resource is www.pepperd.com. This is a forum and requires sign-up before reading the threads, but it is an excellent source of information.

**Where do I go to take a Space-A flight?** Space-A flights originate from various military bases along with a few commercial terminals (BWI, SeaTac). A list of these terminals can be viewed on the aforementioned websites. Of note, some terminals regularly have flights, while others do not. One place to find flight schedules, and subsequent seat availability, is on the terminal's Facebook page. Flight schedules are usually posted 48-72 hours ahead of time.

**How do I go about participating in Space-A travel?** The first step is to sign-up for Space-A travel. To sign-up, you must be on leave status and remain on leave status to utilize Space-A travel. There are a number of ways to sign-up (online, phone, fax, in person). All of these ways inform the military terminal(s) that you are on leave status and are interested in taking a flight. I find the most convenient way to sign-up is www.takeahop.com. This website guides you through the sign-up process and necessary information. Without actually signing-up you can peruse this website to see what information is required.

So I hope I have piqued your curiosity about Space-A. Now you can utilize these tools to decide if Space-A is right for you. You owe it to yourself to at least look into this travel benefit we are afforded. Happy travels!

LCDR Hobart Rogers enjoying a Space-A trip to Spain on a KC-135

# The Model Aquatic Health Code: Making Swimming Healthy and Safe

CDR Jasen Kunz, MPH, Environmental Health PAC

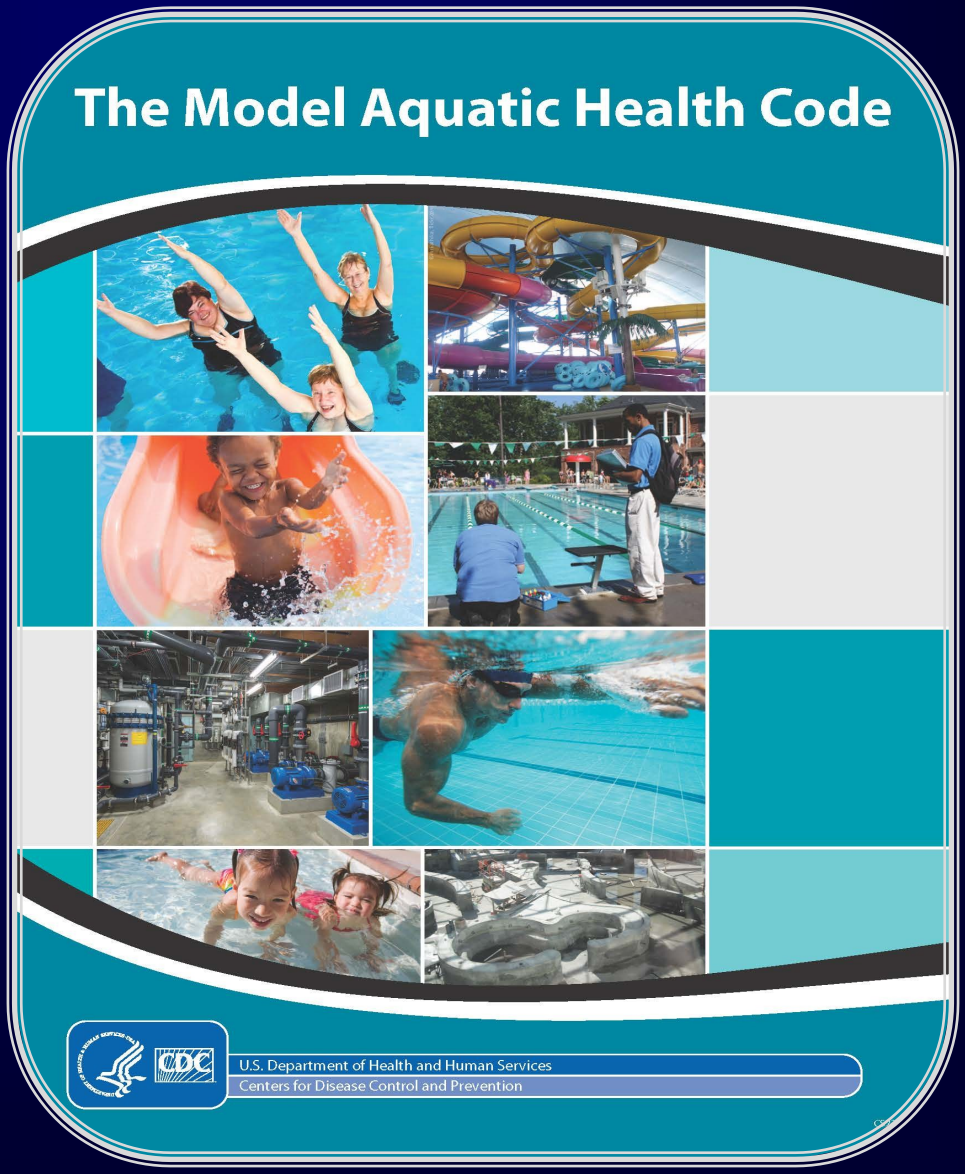
**Background**

People in the United States make more than 300 million trips a year to pools and other places to swim, making swimming one of the nation's most popular sporting and leisure activities. And two and a half hours per week of aerobic physical activity, such as swimming, can decrease the risk for chronic illnesses. Yet some people are swimming in pools that are not safe. In fact, a recent study found that 12% of public pools were closed after inspections identified serious violations of local and/or state codes. Waterborne disease outbreaks are on the rise, drowning continues to injure and claim the lives of far too many people, and swimming-related emergency department visits are in the thousands each year. Many of these tragedies occur in public pools, waterparks, and other aquatic venues—and many are preventable.

Since 2010, I have served as the coordinator of CDC's Model Aquatic Health Code (MAHC) in the Environmental Health Services Branch (EHSB), Division of Emergency and Environmental Health Services (DEEHS), National Center for Environmental Health (NCEH). The MAHC is a collaborative effort between the Centers for Disease Control and Prevention and more than 130 volunteers from across the United States with expertise in aquatic venues, health, or safety. These experts include federal, state and local public health officials, researchers, representatives of the aquatics industry, building code officials, certification organizations, and not-for-profit aquatic associations.

In the United States no federal regulatory agency is responsible for aquatic facilities. EPA regulation is limited to natural recreational waters such as lakes, rivers, and oceans. Swimming pool programs have long been considered a core function of state or local health departments; 68% have programs that regulate, inspect or license public swimming pools. This has led to significant variability in standards and requirements, and each locality must devote time and resources to create and update their respective codes.

The MAHC helps local and state agencies incorporate science-based practices into their swimming pool programs without "recreating the wheel." State and local agencies and policymakers can use existing MAHC language to develop or update codes for swimming pools and other facilities. It's important to understand that MAHC guidance is not federal law. The MAHC serves as a voluntary model and guide for local and state agencies needing to update or implement swimming pool and spa code, rules, regulations, guidance, law, or standards governing the design, construction, operation, and maintenance of public swimming pools, spas, hot tubs, and other disinfected aquatic facilities.




(Continued on page 12)

# Aquatic Health Code Cont'd

**Expected Impact**

Local and state agencies that voluntarily adopt key elements of the MAHC guidance document are expected to realize these benefits:

- Prevent injuries, disease transmission, outbreaks, and associated costs;
- Reduce pool code violations and closures related to imminent health and safety hazards;
- Facilitate use of a systems-based, risk reduction approach to pool design and operation;
- Incorporate science-based practices into pool programs ;
- Improve data collection by providing standardized inspection forms and inspector training;
- Expand the use of inspection data to improve surveillance and decision-making at the state and local levels; and
- Decrease resources for creating and updating state and local pool codes.

**What's Next?**

Currently CDC is addressing public comments received during the final public comment period, which closed on May 27th, 2014. The MAHC will be updated based on public comments and the final version is expected to be released for voluntary adoption in 2014. CDC will update the MAHC regularly through a process similar to that used to update the Food and Drug Administration's (FDA's) Model Food Code.

FDA updates the Model Food Code through an organization called the Conference for Food Protection (CFP). This organization solicits issues about the current food code from stakeholders and the issues are assigned to councils for discussion and recommendation. The CFP votes on these issues and submits them to the FDA, which considers whether to adopt them into the new version of the Model Food Code. Using this process allows new science and food protection methods to be considered for codification.

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# A History of the United States Public Health Service

LCDR Ian A. Myles, MD Physician PAC

***Chapter One: The Prequel***

"Thank you for your service". Apart from those officers that have former experience in the armed forces, it is unlikely that any USPHS officer had a random stranger make such a statement to them prior to joining the Commissioned Corps. While we may all be aware that the citizen is likely thanking us for the work of our sister services, how do we respond to such gratitude? Do we hang our head with an "awe shucks, I'm just USPHS" or do we stand tall and reply "You're welcome, and thank you"? While this article series in no way intends to compare the incomparable – that is the sacrifice demanded from the armed forces as they conduct their missions versus that which is expected of the PHS – the goal is to fully educate today's USPHS officer on the rich history and storied accomplishments of the Corps. In so doing we hope to improve esprit de corps so that everyone in our ranks can fully appreciate the service that the USPHS has provided this nation, a level of service most certainly deserving of a national 'thank you'.

The history of the United States Public Health Service has its roots in crisis response. As new challenges sprung up for our nation, the USPHS was tasked to deal with each in turn. Each generation of USPHS officers successfully met the challenges they were asked to address while building upon the mission success of the prior generation. Our current level of impact is directly thanks to the accomplishments of those that came before us, whilst any future impact depends on the work we do today.

Yet much like any quality US television show, our roots begin in the United Kingdom. Injured or ill sailors were routinely abandoned at port cities; generating a crisis for both the port and sailor. Sailors, of course, were being left with minimal medical care and even less ability to pay. Meanwhile, most port cities had little ability to care for the injured or infirmed. In many towns, the hospital and hotel were one and the same – meaning it could be quickly overrun with any significant demand. (Continued on page 13)

# PHS History Cont'd

In 1590, in response to the need for better medical care for sailors, England created the Chatham Chest. It was a form of taxation on the wages of all sailors that went into a physical chest (think of a cartoon drawing of a treasure chest, it looked just like that), from which money could later be drawn to pay for sailors' medical bills and pensions.

That remained unchanged until 1694, when a hospital was specially constructed for injured sailors in Greenwich. The Greenwich Hospital for Sailors still stands (pictured above), and is today part of the Royal Naval College.

In the earliest days of our nation, the United States Congress faced a similar public health crisis as that of the Royal Navy, when US sailors were abandoned at port cities, which had little-to-no ability to adequately deal with their unique needs. The initial colonial response to this crisis was very similar to that of the UK. Virginia, North Carolina, Boston, and New York all had relief societies – which provided either a version of the Chatham Chest or Royal Naval Hospital to provide for the care of injured and infirmed sailors. However this was seen as inadequate due to the spotty coverage provided. In 1788, in a move not too dissimilar to today, the very first Congress responded to the crisis by requiring the formation of a committee to review and recommend a better approach. Two years later, the Congress required each ship to have a medical chest aboard – similar to today's first aid kits (an 1835 version from the Martha's Vineyard Museum is pictured below). This order was signed by President George Washington and required that all ships over 10 tons and with more than 15 sailors be required to carry "an apothecary of known reputation" (a far more elegant term for what would be today's 'formulary') which included items like iodine, a bone saw, and a tincture of opium to go with it. The ship's owner was required to offer and maintain the apothecary at absolutely no charge to the sailors; the ship's captain was expected to know how to dispense the supplies but did not require any formal training to prove he actually possessed this knowledge.

By 1798, the Congressional committee tasked with advising on sailor care concluded that the nation needed a central fund to provide for the needs of the sailors and ports – similar to a Chatham Chest, but a ledger of numbers rather than a physical pot of money. On July 16th, 1798 President John Adams signed "An Act for the Relief of Sick and Disabled Seamen", creating the Marine Hospital Fund. A 20-cent per sailor tax was levied on each ship, creating a fund from which medical care could be provided. At that moment, for all intents and purposes, the United States Public Health Service was born.


Select references:

J. Bold, P. Guillery, D. Kendall, *Greenwich: an architectural history of the Royal Hospital for Seamen and the Queen's House* (Yale University Press) 2001

Funding the Chatham Chest. The Actuary. http://www.theactuary.com/archive/old-articles/part-3/funding-the-chatham-chest/ [accessed 8 July 2014].

Mullan, Fitchugh. Plagues and Politics: The Story of the United States Public Health Service. Basic Books. September 1989.

## Upcoming Events

- PAC Meetings:

Dentists——————— 08/15/14 at 1300 EST

Dietitians——————09/18/14 at 1200 EST

Engineers——————09/17/14 at 1400 EST

Environmental Health ——08/12/14 at 1300 EST

Health Services————— 08/01/14 at 1300 EST

Nurses——————- 08/15/14 at 1500 EST

Pharmacists——————08/07/14 at 1400 EST

Scientists ——————— 08/05/14 at 1100 EST

Therapy ——————-08/15/14 at 1200 EST

Veterinarian——————08/28/14 at 1300 EST

## CONTACT INFORMATION

**Committee members:**

LCDR Justin Vos, Dental PAC
jvos@bop.gov

CDR Blakeley Fitzpatrick, Dietitian PAC
blakely.fitzpatrick@fda.hhs.gov

LCDR Chris Vaught, Engineer PAC
cjvaught@anthc.org

CDR Lisa Delaney, Environmental Health PAC
lkd2@cdc.gov

CDR Ieshia Jones, Health Services PAC ie-shia.jones@hhs.gov

CAPT Victoria Vachon, Nurse PAC
Victoria.Vachon@cms.hhs.gov

CDR Jodi Tricinella, Pharmacy PAC
Jodi.tricinella@ihs.gov

LCDR Ian Myles, Physician PAC
myles@niaid.nih.gov

LCDR Loren Rodgers, Scientist PAC
izj8@cdc.gov

LCDR Brian Saunders, Therapist PAC
b1saunders@bop.gov

CDR Christa Hale, Veterinarian PAC
hgk5@cdc.go

**Editor:**
CDR Jodi Tricinella

**Issue Copy Editors:**

CDR Lisa Delaney

LCDR Ian Myles

LCDR Chris Vaught

**Layout & Design:**

CAPT Victoria Vachon

LCDR Justin Vos