

Meetings of the American Public Health Association

November 4, 2013. Special invited session at the 141 Annual Meeting and Exposition of the American Public Health Association (APHA) in Boston MA. Session entitled “Importance of epidemiology education in key population sectors: Targeting the community, grade 6-12 students and their teachers, policymakers, and public health professionals,”

This invited session provided perspective on the “outreach” of epidemiology education beyond training of epidemiologists. We identify key target groups such as the lay public and members of the media who cover news on health/public health issues and policies. Another target is our youth and those who teach them in formal and informal settings. Others of importance are public health policy makers and professionals in the field. In this invited session, presenters will describe the importance and current status of educating these target groups about epidemiology, including examples of successes and discussion of gaps and challenges encountered. The session will conclude with panel/audience discussion of how the APHA’s Epidemiology Section and its Education Committee can help to initiate and enhance efforts to teach epidemiology to members of these key groups.

Four presenters from the Boston area presented the following:

“Cholera, tobacco, and obesity: Educating the community over time” Snehal Shah, MD, MPH. Research and Evaluation Office, Boston Public Health Commission, 1010 Massachusetts Avenue, Boston, MA 02118

“Challenging high school students to think about clinical trials: A laboratory approach” Don DeRosa, EdD. CityLab/Mobile Lab, Boston University School of Education, 675 Commonwealth Avenue, Boston, MA 02215

“Framingham heart study's influence on public health policy” Daniel Levy, MD. University School of Medicine and the National Heart, Lung, and Blood Institute, Framingham Heart Study, 73 Mt. Wayte Avenue, Framingham, MA 01702

“Advances in methods and content for education in global health epidemiology” Mary Kay Smith Fawzi, ScD. Department of Global Health and Social Medicine, Harvard Medical School, 641 Huntington Avenue, Boston, MA 02115

October 29, 2012. Special invited session at the 140th Annual Meeting and Exposition of the American Public Health Association (APHA) in San Francisco, CA, held by the Epi Section’s Epidemiology Section’s Epidemiology Education Committee, . Presentation entitled “The Case for Epidemiology Education in Key Population Sectors: Update on Progress and Prospects for APHA Epidemiology Section Involvement.” The central was

Who besides epidemiologists need to know about epidemiology? To help answer the question, four speakers from from the SF area and elsewhere were invited to speak about the current status and future challenges of epidemiology education focused on key target groups including the public health workforce; media, and the general public; and our youth and their teachers. These presentations are briefly summarized below.

Approaches to the enhancement of epidemiologic skills for members of the public health workforce [Marian Passannante, PhD](#), New Jersey Medical School and School of Public Health, University of Medicine and Dentistry of New Jersey.

Dr. Passannante discussed a variety of successful approaches which have been used to enhance epidemiologic skills for members of the public health workforce. These approaches include: 1) periodic half-day didactic training sessions; 2) webinars with pre-recorded didactic sessions followed by real-time discussion of a pre-distributed exercise; 3) a public health curriculum website with self-study materials and 4) the creation of content-specific customized epidemiology training materials.

Connecting the dots: Engaging the public in community epidemiological studies and public health decisions [Lawrence W. Green, DrPH](#), University of California at San Francisco, UCSF CCC.

Dr. Green pointed out that in the realm of public health there is little systematic development of epidemiological thinking and understanding for the public to connect the dots between news of etiological discoveries or threats and the actions they can take individually or collectively to protect themselves and their communities. His presentation suggested some actions that public health scientists and professionals can take to assure greater public participation in and understanding of the epidemiological research and evidence that pertains to their personal and community lives. For example, educational components would be included in an approach called “participatory research,” that involves all potential users of the research and other stakeholders in the formulation as well as the application of the research.

Effective epidemiology education: Integrating facts and frames. [Aaron Pope, BA](#), Manager of Sustainability Programs, California Academy of Sciences.

Mr. Pope began by emphasizing the connection between wellbeing and sustainability. For example, human impacts on the natural world, such as climate change, air pollution and water pollution, are greatly increasing health risks among human populations. From the perspective of an exhibit designer for the Academy, he noted that a host of factors make it difficult for many Americans to comprehend this

danger, or take action to protect their communities. Simply communicating the facts to them, without taking into account the ways that values, messengers, tone and context affect the way people process information, is a recipe for failure. The presentation highlighted work of cultural institutions to correct this through evidenced-based engagement strategies, such as framing (the setting of an issue within an appropriate, culturally understood context). Mr. Pope said that in his experience, adults and children have similar reactions to science education reasons for engagement or disengagement.

Progress in teaching and learning epidemiology in grades 6-12. [Mark A. Kaelin, EdD](#), Montclair State University.

Dr. Kaelin began by discussing how the science of epidemiology gives young students tools with which to make informed lifestyle and societal decisions that affect their health. Understanding epidemiology can also build scientific literacy and influence students' choices of science courses and careers in public health. He then described an expanding cadre of teachers and epidemiologists with a personal passion and professional interest in integrating epidemiology and other PH sciences into middle and high school education. The presentation highlighted recent progress such as the development of several new epidemiology curricula tailored to middle and high school students. In particular, project-based learning (PBL) has been useful in helping students "think like epidemiologists." Additionally, innovations in professional development are being used to help teachers meet the challenge of teaching a science that is likely to be new to them.

The last 30 minutes of the Invited Session were reserved for panel and audience feedback and to consider: *How can the Epidemiology Section's Education Committee help advance epidemiology education of professionals, the general public, and students?*

October 31 - November 2, 2011: Special oral session at the 139th Annual Meeting and Exposition of the APHA in Washington, DC. The session was entitled, "*Think Like an Epidemiologist Challenge: A Science Olympiad High School Event.*" Members of the Movement described this Science Olympiad pilot event held in New Jersey.

October 31, 2011: A special poster session at the 139th APHA meeting (above): "Training Future Epidemiologists." Posters were entitled: (1) "Think Like an Epidemiologist Challenge (Epi Challenge);" (2) "Epidemiology and the Energy Balance Equation: A Curriculum and Field Study for Middle School Students;" (3) "Epidemiology for Younger Students: A Middle School Epidemiology Club;" (4) "Fit for Fulfillment: The relationship between participation in sports and life satisfaction" (Cherry Hill High School East, NJ); and (5) "Observing the Effects of Watching TV on Stress Levels in West Windsor Plainsboro High School South Students" (NJ). Many thanks to the

APHA's Epidemiology Section for supporting the participation of the NJ high school students and their coaches.

November 6-10, 2010: Two presentations at the 138th Annual Meeting and Exposition of the APHA in Denver, Colorado. The presentations were entitled: 1) "Innovations in teaching epidemiology to younger students: Experience-based Public Health Club Model"; and 2) "Scorecard for the 'Movement' to infuse epidemiology into grades 6-12: What progress has been made in the past five years?" See this link for a summary of Movement and related activities during the first five years. [\(add the link to this presentation I have it\)](#)

November 7-11, 2009: Presentation at the 137th Annual Meeting and Exposition of the APHA, entitled "Incorporating Epidemiology into the Middle and High School Curriculum."

October 28, 2008: Roundtable session entitled "Teach Epidemiology. Professional Development Workshops. Infusing Epidemiology Education into Grades 6-12 Curricula" at the Annual Meeting and Exposition of the APHA San Diego, CA.

November 3-7, 2007: Invited session at the 135th Annual Meeting and Exposition of the APHA in Washington DC. Movement members held a session entitled "Future of Epidemiology - Epidemiology Education in Grades 6-12: The Epi Education Movement." Similar to the format at last year's roundtable, participants involved in epidemiology-related 6-12 classroom activities shared their experiences. Dorothy Washington-Calvin from the University of Illinois in Chicago shared her experiences in implementing an epidemiology curriculum to eighth grade students via public health graduate students. <http://www.uic.edu/sph/diversity> Brian Szklarczyk, Research Promotion and Outreach, Public Health Agency of Canada, demonstrated materials that are used in middle school exercises in Canada to help children experience a food borne epidemic. Lynn Tarant and Jeanne Murgolo, from School 9, Paterson, NJ, related their experiences in adapting Detectives in the Classroom exercises. Ms. Andreea Seicean, a 2005 Young Epidemiology Scholars (YES) Competition winner, from Bay Village, Ohio, enthusiastically related her experiences with her study, "A Significant Association between Short Sleeping Hours and Teens Overweight / Obesity: Results from Bay High School."

November 4-8, 2006: Roundtable session entitled "Epidemiology Education Movement" at the 134th Annual Meeting and Exposition of the APHA in Boston MA. Held by members of the Movement, several participants in epidemiology-related 6-12 classroom activities shared their experiences (see ["PREPARE TEACHERS - Implement demonstration projects in a variety of school and non-school venues"](#)).

December 11-15, 2005: Presentation entitled "Epidemiology Education in Grades 6-12" at the 133rd Annual Meeting and Exposition of the APHA in

Philadelphia PA. The Movement was introduced for the first time at a professional meeting by several of its early members. The audience participated in a lively discussion and several expressed interest in keeping abreast of Movement activities. (See [presentation](#))