# National Oral Health Conference® Pursuing Excellence in Dental Public Health 1 0 1

# April 26-28, 2010 **Hilton at the Ball Park St. Louis, Missouri**







American Association of Public Health Dentistry (AAPHD) & Association of State and Territorial Dental Directors (ASTDD)

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# 2010 National Oral Health Conference®

# Pursuing Excellence in Dental Public Health

# The National Oral Health Conference is sponsored by the:

Association of State and Territorial Dental Directors
American Association of Public Health Dentistry
Centers for Disease Control and Prevention
Health Resources and Services Administration

#### **Conference Partners Include:**

American Association for Community Dental Programs
American Dental Association
American Dental Hygienists' Association
Centers for Medicare and Medicaid Services
Indian Health Service
Medicaid/SCHIP Dental Association
National Institute for Dental & Craniofacial Research

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## **AAPHD President's Welcome**



Scott L. Tomar, DMD, DrPH

On behalf of the American Association of Public Health Dentistry, welcome to St. Louis and the 2010 National Oral Health Conference! We are pleased to continue our successful collaboration with the Association of State and Territorial Dental Directors in producing the nation's largest meeting focused on the science and practice of population oral health. We know this is a difficult financial climate, and we greatly appreciate your efforts to attend this year's Conference.

This has been an exciting and challenging year for AAPHD. We have been heavily involved in discussions and advocacy surrounding proposed reforms of our nation's

health care system to help ensure that oral health is included, with a particular focus on the dental public health infrastructure. As always, AAPHD promotes the adoption of evidence-based, cost-effective, and socially acceptable approaches to improving oral status and eliminating oral health disparities.

AAPHD was recently awarded grants from the Kellogg Foundation and the Josiah Macy Jr. Foundation to enable us to develop a framework for training dental therapists. Directed by one of our Past Presidents, Dr. Caswell Evans, this project represents a unique venture for AAPHD. The panel being assembled includes pre-eminent dental educators, who will establish a recommended curriculum for 2-year post-secondary dental therapists programs.

AAPHD has long been the sponsoring organization for the ADA-recognized specialty of Dental Public Health, and recently completed its periodic assessment of the specialty for review by the ADA Council on Dental Education and Licensure. The Summit on the Future of the Specialty of Dental Public Health that was convened by AAPHD this past summer has helped us focus our energy and resources to help ensure the growth and vitality of the specialty.

The Journal of Public Health Dentistry, our association's primary publication and one of the world's leading scientific journals on population oral health, has undergone some exciting developments under the leadership of its Editor, Dr. Robert Weyant. The Journal recently underwent a significant facelift to give it a more contemporary and functional cover. The advent of full electronic publication and our partnership with Wiley-Blackwell Publishing have greatly expanded the Journal's accessibility, visibility, submissions, and readership.

This conference would not be possible without the generous support of our sponsors and exhibitors. Please visit their booths, check out their useful products and services, and thank them.

We are confident that you will enjoy this year's National Oral Health Conference. It is a great opportunity to learn, to discuss, to network, and to share. We thank you for your commitment to the public's oral health and to continuous professional development. May you go from strength to strength.

Scott L. Tomar, DMD, DrPH

### **ASTDD President's Welcome**



Margaret Snow, DMD

Welcome to St. Louis for the 2010 National Oral Health Conference, the 11<sup>th</sup> Annual Joint Meeting of the American Association of Public Health Dentistry (AAPHD) and the Association of State and Territorial Dental Directors (ASTDD).

The National Oral Health Conference is recognized as America's premier dental public health conference not only because of the richness of the program, but also because of the wealth of knowledge, dedication and expertise that gathers here with our registrants, guests, exhibitors and presenters.

In public health, no one person, profession or organization can climb the mountain alone. The 2010 NOHC exemplifies the power of joining with others to accomplish great things.

Along with the AAPHD, I would like to thank two of the most significant sponsors of this conference: the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA). Their support continues to assure the success of the NOHC.

I would also like to thank our organizational and corporate partners, along with the many exhibitors, for their continuing support and involvement. Please take time to visit with the exhibitors to thank them for their support of the NOHC.

The program for the NOHC comes from the dedication and effort of many members of the planning team and the organizations they represent. In the early fall the planning team begins its work of selecting the program from over 100 excellent abstracts. Although exciting, it's also challenging to select from such high quality abstracts and predict just the right program to serve the spectrum of interests at the NOHC. The planning team strives to select sessions that present the best of new and relevant topics. In reviewing the conference agenda, I think we can all say the planning team did an outstanding job!

As stimulating as the program will be, let's not forget to have a good time. Please enjoy the program, the exhibits and social events, and be sure to make this an opportunity to form new friendships as well as mingle with those you already know. The NOHC is a great place to get to know people who will become your colleagues and friends as we climb that mountain!

On behalf of the officers and executive committee of ASTDD, we welcome you to St. Louis and ask you to join us as we anticipate the success of the 2010 NOHC!

Margaret Snow, DMD, MBA, MPH President, ASTDD

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# **2010 National Oral Health Conference**®

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# **Pre-Conference Schedule**

| <b>THUR</b> | SDAY. | APRI | L 22 |
|-------------|-------|------|------|
|-------------|-------|------|------|

| 8:00 a.m. – 12:00 p.m | ABDPH Board Meeting                                 |
|-----------------------|---|
| 8:00 a.m. – 1:30 p.m. | ABDPH Board ExaminationGateway V                    |
| 1:30 p.m. – 6:00 p.m. | ABDPH Board Examination4 <sup>th</sup> FI Boardroom |

#### FRIDAY, APRIL 23

| 8:00 a.m. – 6:00 p.m. | ABDPH Board ExaminationSoulard            |
|-----------------------|---|
| 1:00 p.m. – 5:00 p.m. | ASTDD Executive Committee Meeting Laclede |
| 2:00 p.m. – 5:00 p.m. | AAPHD Officer's MeetingMarket St.         |

#### **SATURDAY, APRIL 24**

| 7:00 a.m. – 5:00 p.m.  | Conference RegistrationGrand Suites   |
|------------------------|---|
| 7:30 a.m. – 1:00 p.m.  | Medicaid/SCHIP Dental Association Board Meeting   |
| 8:00 a.m. – 1:00 p.m.  | ASTDD Executive Committee Meeting Broadway  |
| 8:00 a.m. – 6:00 p.m.  | ABDPH Board Business MeetingSoulard   |
| 8:30 a.m. – 12:00 p.m. | ASTDD Session - Socialize It: An Introduction to Social Media for Health Promotion - CDE 3.25 Lindbergh   |
| 10:00 a.m. – 5:00 p.m. | AAPHD Officer's Meeting Laclede   |
| 1:00 p.m. – 5:00 p.m.  | <b>ASTDD National Oral Health - Leadership Institute</b> - CDE 3.75 - Sponsored by ASTDD - Invitation Only Market St. The ASTDD National Oral Health Leadership Institute is in collaboration with MSDA |
| 1:30 p.m. – 5:00 p.m.  | Medicaid/SCHIP Dental Association 2010 Symposium I - CDE 3.0  |
| 5:00 p.m. – 6:00 p.m.  | ASTDD Member Reception  |

## **SUNDAY, APRIL 25**

| 7:00 a.m. – 5:00 p.m.  | Conference RegistrationGrand Suites  |
|------------------------|--|
| 7:00 a.m. – 2:00 p.m.  | AAPHD EC Meeting   |
| 7:30 a.m. – 5:00 p.m.  | Medicaid/SCHIP Dental Association 2010 Symposium II- CDE 5.0                     |
| 8:00 a.m. – 5:00 p.m.  | ABDPH Board MeetingMarket  |
| 8:00 a.m. – 11:30 a.m. | ASTDD Session - Creating a Culture of Evaluation - CDE 3.25                      |
| 8:00 a.m. – 5:00 p.m.  | AACDP Annual Symposium - CDE 7.5   |
| 9:00 a.m. – 12:00 p.m. | Military Session- CDE 3.0 Salon AB   |
| 12:00 p.m. – 5:00 p.m. | ASTDD Members Lunch, Annual Business Meeting, State/Territorial SharingLindbergh |
| 12:00 p.m. – 6:00 p.m. | ABDPH Residency Directors' MeetingSalon AB                                       |
| 5:00 p.m. – 6:30 p.m.  | CDC Division of Oral Health Strategic Priorities Meetings                        |
| 6:00 p.m. – 8:00 p.m.  | Opening Reception - Sponsored by Medical Products Laboratories                   |

# 2010 National Oral Health Conference®

# Pursuing Excellence in Dental Public Health

# **Pre-Conference Schedule**

April 22 - 25, 2010

| THURSDAY, APRIL 22   | monitor what your audience is saying about your issue or  |
|--|---|
| 8:00 a.m. – 12:00 p.m  | program online.<br>Pre-registered attendees only.   |
| 8:00 a.m. – 1:30 p.m Gateway V<br>ABDPH Board Examination  | 10:00 a.m. – 5:00 p.mLaclede<br>AAPHD Officer's Meeting   |
| 1:30 p.m. – 6:00 p.m   | 1:00 p.m. – 5:00 p.m Market St.  ASTDD National Oral Health Leadership Institute - CDE 3.75   |
| FRIDAY, APRIL 23   | Chad Prewitt (Skill Path, Inc) Sponsored by ASTDD   |
| 8:00 a.m. – 6:00 p.mSoulard ABDPH Board Examination  | The ASTDD National Oral Health Leadership Institute is in collaboration with MSDA.  Pre-registered attendees only.  |
| 1:00 p.m. – 5:00 p.mLaclede  | rie-registered attendees only.  |
| ASTDD Executive Committee Meeting  | 1:30 p.m. – 5:00 p.mSalon EFG   |
| 2:00 p.m. – 5:00 p.m Market St. AAPHD Officers Meeting   | Medicaid/SCHIP Dental Association 2010 Symposium I 1:25 p.m. Welcoming Address: Robert Birdwell, DDS 1:30 p.m. Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) Provider Directory: |
| SATURDAY, APRIL 24   | Insure Kids Now (IKN) - CDE 1.5  Moderator: Nance Orsbon  |
| 7:00 a.m. – 5:00 p.m Grand Suites  | Panel Members: Nancy Goetschius, (CHIP)   |
| Conference Registration  | Under the Children's Health Insurance Program Reauthorization Act of 2009, the Centers for Medicare & Medicaid Services (CMS)   |
| 7:30 a.m. – 1:00 p.m Salon E<br>Medicaid/SCHIP Dental Association Board Meeting  | has been charged to work with the Health Resources and Services Administration to update the list of state and territorial dental providers posted on the Insure Kids Now public website.                   |
| 8:00 a.m. – 1:00 p.m Broadway ASTDD Executive Committee Meeting  | This session will provide background information on the 2009 CHIPRA legislation and update participants on how the website  |
| 8:00 a.m. – 6:00 p.mSoulard  | is working, as well as next steps.<br>3:00 p.m. Break   |
| ABDPH Board Business Meeting   | 3:30 p.m. Salon E F G   |
| 8:30 a.m. – 12:00 p.m. Lindbergh  ASTDD Session  | Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) Dental Quality Measures: What You Need to Know! - CDE 1.5  |
| Socialize It: An Introduction to Social Media for Health   | Moderator: Conan Davis, DDS (CMS) Panel Members: Jim Crall, DDS   |
| <b>Promotion</b> - CDE 3.25  Holli Seitz MPH; Jessica Schindelar   | (AAPD) The Children's Health Insurance Program Reauthorization Act  |
| This workshop is an introductory course designed for those   | of 2009 requires the Centers for Medicaid and Medicare Services   |
| wishing to expand their knowledge and utilization of social  | in concert with the Agency for Healthcare Research and Quality  |
| media in health communication and marketing strategies. This   | to develop a core set of quality measures for dental services. A Steering Committee with representatives from the ADA, AAPD,  |
| workshop will put social media into a marketing context, and introduce you to the various types of social media, including | MSDA, CMS, AHRQ and other organizations has been formed   |
| examples of blogs, micro-blogs, social networking sites, mobile  | to address this mandate. Participants in this session will learn  |
| applications of social media, user-generated media, widgets,   | about the steps have taken place to date, as well as the process  |

and timeline for the development of these measures.

5:00 p.m. – 6:00 p.m. Broadway

Pre-registered attendees only

ASTDD Member Reception

tagging, and more. You will also learn how these tools can be

used to influence knowledge, attitudes, and behaviors and how best to use social media to market and communicate

about your issue. Finally, this workshop will cover how to

#### **SUNDAY, APRIL 25**

7:30 a.m. – 5:00 p.m. ...... Salon EFG

**Medicaid/SCHIP Dental Association 2010 Symposium II** 

7:30 a.m. MSDA Breakfast

8:30 a.m. Medicaid Coverage of Dental Care for Pregnant

Women - CDE 1.5

*Moderator: Mary Foley (MSDA)* 

Panel Members: Jessie Buerlein, MSW, (CDHP) and Josefina Argueta, CDA, (Sanoval Health Commons, New Mexico); Cindy Sellon, MSW, (DentaQuest)

Oral health plays a significant role in attaining and sustaining the health of a woman during pregnancy. This session will highlight the impact of economic downturns on state Medicaid dental coverage for pregnant women, including challenges and solutions that states have faced in maintaining dental benefits for pregnant women when adult dental coverage is eliminated. One clinician shares her experience and addresses the importance of oral health and dental care services for pregnant women.

10:00 a.m. Break

10:30 a.m. Medicaid/SCHIP Dental Association (MSDA) Business Meeting

Moderator: Robert Birdwell, DDS (MSDA Chairperson)

This session is open to all MSDA members and associate members. Participants will take part in the business of the organization, and will learn about new projects and funding opportunities. Agenda will include: Chairperson's Report; Program Manager's Report; Treasurer's Report, Committee Reports, Old and New Business, and Election of Officers. Attendees will have the opportunity to meet new MSDA members, network and sign up for MSDA committees.

12:00pm Lunch

1:15 p.m. CMS Working Session - CDE 1.0

Conan Davis, DDS (CMS)

Conan Davis, CMS Chief Dental Officer will provide participants with an update on CMS and HHS national oral health initiatives in addition to discussing CHIPRA implementation and the possible impact of Health Care Reform. Part of this session will also involve an interactive component with the participants. All State Medicaid and CHIP dental programs will be receiving an important survey from CMS prior to this session. The preliminary results of this survey will be discussed and further input will be solicited from participants before the formal report will be written up for Cindy Mann, the CMSO Director.

2:15 p.m. National Maternal and Child Oral Health Resource Center Update - CDE .5

Sarah Kolo, (NMCOHRC)

This session will provide an update about the National Maternal and Child Oral Health Resource Center (OHRC). The resource center collaborates with federal, state, and local agencies; national and state organizations and associations; and foundations to gather, develop, and share quality and valued information and materials.

2:45 p.m. Break

3:00 p.m. **State Medicaid Dental Program Updates** - CDE 2.0 *Moderator: Nance Orsbon* 

Cathy Coppes and Lois Sandbothe LPN

Medicaid Oral Health Programs in each state are diverse in size, location in the bureaucracy, funding, staffing and focus. This

session provides an opportunity for dental representatives from various states to share information about their state Medicaid program. This year the agenda has highlighted lowa and Missouri Medicaid programs.

Pre-registered attendees only.

ABDPH Board Meeting

8:00 a.m. – 11:30 a.m. Soulard

# ASTDD Session - Creating a Culture of Evaluation: Weaving Accountability and Program Improvement into Everything You Do - CDE 3.25

B. J. Tatro PhD

This will be an interactive workshop designed to provide practical strategies for building strengths-based evaluation into all functions, including programs, policy, and communications. Participants will hear from their peers who have conducted successful evaluations and have an opportunity to discuss what works and how to overcome challenges to creating a culture of evaluation. The workshop will also address use of evaluation results to improve policy, programs, practices, and management, with particular emphasis on State oral health programs.

Pre-registered attendees only,

8:00 a.m. – 5:00 p.m. ...... Salon C

#### **AACDP Annual Symposium - CDE 7.5**

Judy Gelinas; Paul D Schulz DDS MPH; Lt Chuck Brucklier RDH; Jennifer Cleveland DDS MPH; Kris Drummond DDS MPH; Kathy Eklund; Chris Halliday DDS MPH; Shelly Gehshan PhD; Ron Nagel DDS MPH; Ann Battrell, RDH MSDH; Michael Scandrett JD; Mary Williard DDS; David Jordan

Once again, the American Association for Community Dental Programs has developed an exciting and thought provoking day long agenda to assist community dental program to design implement and evaluate community-based oral health initiatives. Presentations will include: the very popular annual overview of community issues and oral health programs of our host city region - this year St Louis; a panel of public and nonprofit mobile dental van operators and experts who will discuss target populations, scope of service and viability and sustainability of mobile programs; opportunities and challenges for oral-based rapid HIV testing in safety net programs; a recent OSAP sponsored effort for developing the essentials of infection control in screening, portable and mobile programs; and what has become an exciting annual panel to update all conference attendees on the latest in dental workforce models and changing state practice acts such as in Minnesota and other states, as well as how health care reform may impact community dental programs. New to this year's program will be a "Lunch with the Bunch", in which attendees will have an opportunity to participate in two of a variety of 45 minute round table sharing discussions such as Head Start, fluoride varnish efforts, geriatric care, dental clinic business planning and floor plan design, etc.

Pre-registered attendees only.

#### **SUNDAY, APRIL 25 - CONTINUED**

9:00 a.m. – 12:00 p.m. ...... Salon AB

#### **Military Session - CDE 3.0**

CAPT Tom Leiendecker DDS MPH; LTC Jeff Chaffin DDS MPH MBA MHA; LTC Georgia DelaCruz DMD MPH; Col Chad Martin DDS MPH

The Military Section meeting brings together dental public health specialists from all of the United States uniformed services. It is an opportunity to share new information regarding dental studies, surveys and information systems relating to military populations. The meeting is open to all interested parties.

12:00 p.m. – 5:00 p.m. ...... Lindbergh ASTDD Members Lunch, Annual Business Meeting, State/ Territorial Sharing

5:00 p.m. – 6:30 p.m. Manchester CDC Division of Oral Health Strategic Priorities Meetings

6:00 p.m. – 8:00 p.m. .....Arch View BR

Opening Reception

Sponsored by Medical Products Laboratories
Join fellow colleagues as we kick off
the 2010 Conference with a warm St.
Louis welcome. Come and grab a bite
to eat and maybe sing the blues.
Enjoy some favorite local fare while
you listen to the Soulard Blues Band.
Special thanks to Medical Products
Laboratories for their support to



make this evening possible We would be so "blue without you!"

# **AAPHD**Foundation

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Your Contributions are appreciated!

# **AAPHD** Foundation

# Raffle

Stop by the
AAPHD Foundation
Exhibit Booth and
purchase your
Raffle Tickets
for the following prizes:

- 2011 NOHC Registration
- Sony e-book
- Isabel Bloom figurines
- Handmade items
- · Other Items to be announced

Tickets are 1 for \$5 or 5 for \$20

### **Continuing Education Credits**

There are two types of CE credit available at the NOHC, ADA (American Dental Association) and AGD (Academy of General Dentistry). There are specific requirements to obtain each type of CE credit. An instruction sheet with directions on how to obtain ADA and/or AGD CE credit is included in your registration packet. Please be sure to review the process for the CE applicable to you.

AAPHD is an ADA CERP Recognized Provider.

ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry.

Concerns or complaints about a CE provider may be directed to the provider or to ADA CERP at <a href="https://www.ada.org/qoto/cerp">www.ada.org/qoto/cerp</a>.

## **Session Objectives**

Objectives for each session will be posted/announced prior to the start of each session. They will also be listed appropriately on the session evaluation.

#### **Disclosure**

All participating faculty are expected to disclose to the audience any significant financial interest or other relationship with:

- the manufacturer of any commercial products and/or provider of commercial services discussed in an educational presentation, and
- 2) any commercial supporters of the activity.



# 2010 National Oral Health Conference®

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### **Invited Pre-Conference Presenters**

#### Josefina Argueta CDA

Sandoval Health Commons Sandoval Dental Prevention Center Bernalillo, NM

#### **Ann Battrell RDH MSDH**

American Dental Hygienists Assn Chicago, IL

#### LT Chuck Brucklier RDH

Indian Health Service

#### Jessie Buerlein MSW

Children's Dental Health Project Washington DC

#### LTC Jeff Chaffin DDS MPH MBA MHA

TRICARE Management Activity Falls Church, VA

#### Jennifer Cleveland DDS MPH

Div of Oral Health, NCCDPHP Centers for Disease Control and Prevention Atlanta, GA

#### Jim Crall DDS ScD

UCLA School of Dentistry Los Angeles, CA

#### **Cathy Coppes**

Iowa Medicaid Enterprise Des Moines, IA

#### **Conan Davis DDS**

Center for Medicaid and State Operations Centers for Medicare & Medicaid Services Baltimore, MD

#### LTC Georgia delaCruz DMD, MPH

Office of the Army Surgeon General Falls Church, VA

#### Kris Drummond DDS, MPH

Akron Community Health Resources, Inc Akron, OH

#### Kathy Eklund RDH, MPH

The Forsyth Institute Boston, MA

#### **Shelly Gehshan PhD**

Pew Center of the States The Pew Charitable Trusts Washington, DC

#### **Judy Gelinas**

Ronald McDonald Mobile Dental Care Philadelphia, PA

#### **Nancy Goetschius**

Center for Medicaid and State Operations Centers for Medicare & Medicaid Services Baltimore, MD

#### **David Jordan**

Community Catalyst Boston, MA

#### Sarah Kolo

National Head Start Oral Health Resource Center Washington DC

#### **CAPT Tom Leiendecker DDS MPH**

Tri-Service Center for Oral Health Studies Bethesda, MD

#### Col Chad Martin DDS MPH

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#### **Ron Nagel DDS MPH**

Alaska Native Tribal Health Consortium Middleburg, FL

#### **Chad Prewitt**

SkillPath, Inc

#### Lois Sandbothe LPN

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#### **Cindy Sellon MSW**

DentaQuest Mequon, WI

#### **BJ Tatro PhD**

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#### **Mary Williard DDS**

Alaska Native Tribal Health Consortium Anchorage, AK

# Thank you to the following for their efforts to create an exceptional program.

Olubunmi Adekugbe

Aiysha Audil

Roosevelt Bush

Marlyn Betancourt

Vinodh Bhoopathi

Divesh Byrappagari

Donald Chi

Georgia dela Cruz

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Marguerite Laccabue

Julie Ann Janssen

Michele Junger

Linda Kaste

Clare Larkin

Arlene Lester

Walter Lucio

Mark Macek

Kavita Mathu-Muju

Julie McKee

Mathew Moncy

Bobbi Muto

Manthan Patel

Nam Phan

Patrick Rowe

Sheila Vandenbush

# **Schedule at-a-Glance**

# **MONDAY, APRIL 26**

| 7:00 a.m. – 5:00 p.m.       | Conference Registration   | Grand Suites |
|-----------------------------|---|--------------|
| 7:00 a.m. – 8:00 a.m.       | Continental Breakfast with Exhibitors   |              |
| 8:00 a.m. – 8:30 a.m.       | Opening Ceremony and Welcome  | Salon CD     |
| 8:30 a.m. – 10:00 a.m.      | Opening Plenary - CDE 1.5   |              |
|                             | THE REFRESH BUTTON: HHS Leadership and the New Oral Health Initiative   | Salon CD     |
| 10:00 a.m. – 10:30 a.m.     | Break with Exhibitors   | Gateway BR   |
| 10:30 a.m. – 12:00 p.m.     | Concurrent Sessions - CDE 1.5   |              |
|                             | ■ What If You Could Access Data From the Medicaid State Summary DataMart Every 3 Months?  | Salon AB     |
|                             | <ul> <li>Minnesota Story-The Effectiveness of Partnerships and Collaborative</li> <li>Practice in School and Head Start-based Care</li> </ul> | Salon C      |
|                             | Demystifying Organized Dentistry  | Salon D      |
|                             | ■ Improving Dental Care Delivery Systems Through Workforce Innovations  | Salon EFG    |
| 12:00 p.m. – 2:00 p.m.      | Roundtable Luncheon – CDE 1.5 (For All Registrants) Sponsored by the ADA  | Arch View BR |
| 2:15 p.m. – 3:45 p.m.       | Concurrent Sessions - CDE 1.5   |              |
|                             | ■ AAPHD Student Chapter Meeting   | Salon C      |
|                             | ■ AAPHD Special Update - Dental Therapist Curriculum Development Panel  | Salon D      |
|                             | Oral Presentations  | Salon AB     |
|                             | ■ From Peril to Promise: Strategies for Surviving the Economic Downturn   | Salon EFG    |
| 3:45 p.m. – 4:30 p.m.       | Break with Exhibitors   | Gateway BR   |
| 4:00 p.m. – 5:30 p.m.       | Poster Session - CDE 1.5  |              |
| 5:00 p.m. – 6:30 p.m.       | CDC Water Fluoridation Update   | Salon G      |
| 5:15 p.m. – 6:15 p.m.       | ABDPH Future Examination Orientation  |              |
| 6:00 p.m. – 9:00 p.m.       | ASTDD School and Adolescent Oral Health Committee Annual Dinner Meeting  By Invitation Only   | Manchester   |
| 6:30 p.m. – 9:30 p.m.       | ABDPH Diplomates' Dinner and Meeting (By Invitation Only - Pre-registered only)   | Lindbergh    |
| Evening Open for All Partic | ipants – Dinner On Your Own   |              |

# **TUESDAY, APRIL 27**

| 7:00 a.m. – 5:00 p.m.   | Conference Registration   |
|-------------------------|---|
| 7:00 a.m. – 9:00 a.m.   | Continental Breakfast with Exhibitors   |
| 7:00 a.m. – 8:30 a.m.   | ADHA Breakfast Reception Archview BR  |
| 7:30 a.m. – 9:00 a.m.   | AAPHD Annual Business Meeting   |
| 8:00 a.m. – 8:45 a.m.   | CDC Grantee Meeting   |
| 9:00 a.m. – 10:30 a.m.  | ABDPH Plenary Session - CDE 1.5 Ethics in Dental Public Health: Framework and LessonsSalon CD Supported in part by United Concordia Companies, Inc., administrator of the TRICARE Dental Program and Active Duty Dental Program |
| 10:30 a.m. – 11:00 a.m. | Break with Exhibitors   |
| 11:00 a.m. – 12:30 p.m. | Concurrent Sessions - CDE 1.5   |
|                         | <ul> <li>Horowitz Memorial Symposium - What You Need to Know about         Fluorides and Fluoridation!</li></ul>  |

# **Schedule at-a-Glance - Cont.**

# **TUESDAY, APRIL 27 - CONTINUED**

| 12:30 p.m. – 2:00 p.m. | ASTDD Awards Luncheon - For all registrants Arch View BR   |
|------------------------|--|
| 2:15 p.m. – 3:45 p.m.  | Concurrent Sessions - CDE 1.5  |
|                        | ■ NIH-Funded Collaborating Research Centers to Reduce Oral Health Disparities: Early Childhood CariesSalon D |
|                        | ■ National Plans to Improve Health Literacy Salon EFG  |
|                        | ■ Oral Presentations   |
|                        | ■ Hot Picks  |
| 3:45 p.m. – 4:00 p.m.  | Break with Exhibitors  |
| 4:00 p.m. – 5:30 p.m.  | Poster Session – CDE 1.5 Broadway  |
| 5:30 p.m. – 6:15 p.m.  | Ticket Pick-Up for Tuesday Evening Event West Lobby (Outside Lindbergh)                                      |
| 6:30 p.m. – 10:00 p.m. | Tuesday Evening Event  |

# **WEDNESDAY, APRIL 28**

| 6:00 a.m. – 7:00 a.m.   | NOHC Fun Run/Walk  |
|-------------------------|--|
| 6:45 a.m. – 8:15 a.m.   | Continental Breakfast with Exhibitors  |
| 7:00 a.m. – 8:00 a.m.   | ASTDD Executive Committee MeetingBroadway I  |
| 7:00 a.m. – 3:30 p.m.   | Conference RegistrationGrand Suites  |
| 8:15 a.m. – 8:30 a.m.   | Conference Registration  |
| 8:30 a.m. – 10:00 a.m.  | Duo Plenary Sessions - CDE 1.5   |
|                         | ■ Third World Dentistry or Access to Care? The Louisiana StorySalon D                            |
|                         | ■ The Next Crisis: Elder Oral Health Care  |
| 10:00 a.m. – 10:30 a.m. | Break with Exhibitors  |
| 10:30 a.m. – 12:00 p.m. | Concurrent Sessions - CDE 1.5  |
|                         | ■ Public Health Law: Advancing Oral Health Through Policy and Legislation II Salon AB            |
|                         | School and Community Partnerships for Children's Oral Health                                     |
|                         | New Technology for Prevention of Tooth-Decay/Combining New Agents with Fluoride Salon D          |
|                         | ■ Improving Oral Healthcare in Safety Net Settings Salon EFG                                     |
| 12:00 p.m. – 1:30 p.m.  | AAPHD Awards Luncheon (For All Registrants)  |
| 1:45 p.m. – 3:15 p.m.   | Concurrent Sessions - CDE 1.5  |
|                         | ■ Healthy People 2010/2020   |
|                         | Alternative Dental Workforce Models: Creating a Proposal and Building ConsensusSalon D           |
|                         | ■ Childhood Obesity – Is There a Role for the Dental Profession in this Health Crisis? Salon EFG |
|                         | ■ Oral Presentations   |

# **WEDNESDAY, APRIL 28 - POST CONFERENCE**

| 3:30 p.m. – 6:00 p.m. | 2010 MCHB Targeted Oral Health Service Systems (TOHSS) Grantee MeetingBroadway II  |
|-----------------------|--|
| 6:00 p.m. – 7:30 p.m. | 2010 MCHB Targeted Oral Health Service Systems (TOHSS) Grantee ReceptionBroadway I |

# **THURSDAY, APRIL 29 - POST CONFERENCE**

| 7:00 a.m. – 2:30 p.m. | 2010 MCHB Targeted Oral Health | Service Systems (TOHSS) | Grantee Meeting Salon AB |
|-----------------------|--------------------------------|-------------------------|--------------------------|
|                       |                                |                         |                          |

# 2010 National Oral Health Conference®

## Pursuing Excellence in Dental Public Health

#### **MONDAY, APRIL 26**

| 7:00 a.m. – 5:00 p.m<br>Conference Registration   | Grand Suites |
|---|--------------|
| 7:00 a.m. – 8:00 a.m<br>Continental Breakfast with Exhibitors                                   | Gateway BR   |
| 8:00 a.m. – 8:30 a.m<br>Opening Ceremony and Welcome<br>Welcome from the Presidents and Disting |              |

8:30 a.m. – 10:00 a.m. ..... Salon CD **Opening Plenary** - CDE 1.5

THE REFRESH BUTTON: HHS Leadership and the New **Oral Health Initiative** 

Howard K Koh MD MPH; Garth Graham MD MPH; Mary Wakefield PhD RN; Cindy Mann, JD

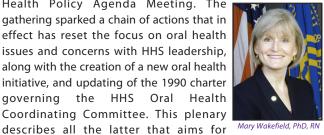
New leadership can bring about rearrangement, reorganization, or a retuning of vision and effort. Recent Presidential appointments have brought new leadership to the Dept of Health and Human Services (HHS), which is the United States government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves. The work of HHS is conducted by the Office of the Secretary and 11 agencies. This past February on the second anniversary of the tragic and preventable death of Deamonte Driver, the HHS Office of the Secretary, Office of Minority Health held an inaugural Oral Health Policy Agenda Meeting. The gathering sparked a chain of actions that in effect has reset the focus on oral health issues and concerns with HHS leadership, along with the creation of a new oral health initiative, and updating of the 1990 charter governing the HHS Oral Health Coordinating Committee. This plenary

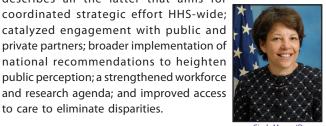
to care to eliminate disparities.





Garth Graham, MD, MPH





| 10:00 a.m. – 10:30 a.m. | Gateway BR |
|-------------------------|------------|
| Break with Exhibitors   |            |

10:30 a.m. - 12:00 p.m. ...... Concurrent Sessions - CDE 1.5

What If You Could Access Data From the Medicaid State Summary DataMart Every 3 Months? ..... Salon AB Laurie Barker; Rebecca Austen; Tracy Anselmo RDH MPH

The Medicaid Statistical Information System (MSIS) State Summary Datamart http://msis.cms.hhs.gov/, provides ready access to quarterly and monthly data cubes for each fiscal year (FY) beginning with FY 1999 (October 1998-September 1999). CMS developed this system to provide State-specific and/or national data quickly and efficiently to states and others with a need for such data. The quarterly and monthly data cubes contain measures and dimensions of the most commonly asked statistical questions. This session will demonstrate how this datamart can contribute data for national and state oral health surveillance and oral health program planning and monitoring.

**Minnesota Story - The Effectiveness of Partnerships** and Collaborative Practice in School and Head Startbased Care ...... Salon C Sarah Wovcha JD MPH; Ann Johnson MA; Colleen Brickle RDH **RFEdD** 

The Smiles Across Minnesota (SAM) coalition is a pioneering effort uniquely comprised of school district officials, head start leaders, local municipalities, public health officials, nurses, local United Ways, corporate philanthropists, public health clinicians and other community entities in order to expand the reach of public health dental services across Minnesota. In partnership with Children's Dental Services (CDS), a non-profit, public health dental clinic headquartered in Minneapolis, this novel program originated with a pilot project in the Minneapolis/St. Paul schools in 2005 proposed by national parent program Oral Health America. Because of the resounding success of the program CDS and SAM have expanded to five other underserved communities across Minnesota including Duluth, the St. Cloud region, the Iron Range, Faribault, and International Falls. This collaboration to meet the oral health needs of Minnesota would not be possible without the partnerships with the numerous entities listed above. The purpose of this session will be to educate and inform attendees on the importance of partnerships and collaborative practice in the provision of school and Head Start-based dental public health. The panel discussion will contain the co-chairs of the Smiles Across Minnesota coalition: Sarah Wovcha, Executive Director of CDS and Ann Johnson, Director of Community Affairs at Delta Dental of Minnesota. Additionally, Colleen Brickle, Dean of Health Sciences at Normandale Community College will

#### MONDAY, APRIL 26 - CONTINUED

present on the impact of collaborative practice hygiene on expanding access to dental care for underserved populations. Goals of this session will be for attendees to gain a broader understanding and knowledge of successful partnerships in public health dentistry, to encourage establishment of similar partnerships across the country, and to spur innovative discussion on how to further expand access to care through partnerships.

# **Demystifying Organized Dentistry ......** Salon D Lindsey Robinson DDS; Rebecca King DDS MPH; Jane Gillette DDS; Linda Niessen DMD MPH MPP

Organized dentistry: advocate or adversary? Who are those people? Many DPH folks steer clear of organized dentistry; while others regularly pay their dues with no clue of what they are supporting. Increasing familiarity between organized dentistry and dental public health is the goal of this session. Gain some insight into how an idea becomes ADA policy. How are council members chosen? Is there a requirement for council membership? How is diversity sought among leadership positions? How have organized dentistry and DPH collaborated for win/win situations in the past and brought other stakeholders to the table, such as foundations and the dental industry? The common ground is a lot broader than you would imagine. Who are these organized dentistry folks? They are us!

#### 

The Institute of Medicine (IOM) held a landmark conference in 2009 on the "Sufficiency of the Oral Health Workforce in the Coming Decade" which highlighted the trends in the current dental workforce, the problems of access to care and disparities in oral health outcomes resulting from the inability of the current workforce to meet the oral health needs of many populations. New workforce models were discussed; some were designed to meet specific unmet needs, while others were more focused on improving efficiencies in care delivery and linking of dental care with overall health care services. Toward the goals of promoting effective service delivery, educating professionals and policy makers and expanding the knowledge base on the relationship between the dental workforce, care delivery models and the outcomes for public's oral health, a special issue of JPHD has been commissioned which uses the IOM conference's findings as the basis for further discussion of how to improve the systems of oral health care delivery in the U.S. The theme of this issue is dental care delivery system improvement through workforce innovations. As the mission of AAPHD is primarily connected to the public's health, each article will;

- 1. Connect to a population group,
- Address successes and problems of oral health care delivery, and how they might be overcome, with a focus on workforce innovations, and

3. Discuss policy considerations. With health care reform upon us, and dental care reforms likely at least for the publicly subsidized systems of care this special issue will be instrumental in providing direction to decision makers as they search for value, quality, improved access to care, and reductions in the overall costs of the system. The special issue will be published in March 2010. This plenary will bring together authors representing the content of these articles to present on the key system redesign concepts covered in the edition, with particular attention to the role of workforce innovations in improving the dental care delivery system.

# 12:00 p.m. – 2:00 p.m. ..... Arch View BR Roundtable Luncheon – CDE 1.5

For All Registrants

#### Sponsored by the American Dental Association

A facilitated discussion includes scientific research, program evaluations, community-based interventions and partnerships related to dental public health. A complete list of topics and presenters is available at the conference registration desk.

2:15 p.m. – 3:45 p.m. ..... Concurrent Sessions - CDE 1.5

#### Oral Presentations ...... Salon AB

- 1. Policy Opportunities to Prevent and Manage Early Childhood Caries: What Every Policymaker Should Hear! Burton Edelstein, DDS, MPH, Children's Dental Health Project
- 2. Improving Children's Oral Health Through Perinatal Treatment and Education
  - Dennis J Lewis, DDS, Dental Aid Inc./Dental Director
- 3. Co-Locating Dental Hygienists in Primary Care Offices: Baseline Early Childhood Caries Prevalence and Parent Oral Health Knowledge, Attitudes, Beliefs and Behaviors Patricia A Braun, MD, MPH, Children's Outcomes Research, University of Colorado Denver-School of Medicine
- 4. Updating the Evidence Perinatal Oral Health Guidelines Jane A Weintraub, DDS, MPH, University of California, San Francisco School of Dentistry
- 5. Oral Health Care During Pregnancy Astha Singhal, BDS, MPH,NIDCR-NIH

#### 

The recent economic downturn in our nation has caused significant changes for the oral health safety net on both the local and national level. In addition to state-level budget deficits that have had a negative impact on oral health reimbursement in many states, widespread increases in job loss and loss of insurance coverage have simultaneously sent higher numbers of patients to community dental programs to receive their oral health care. This presentation will discuss the multi-level impact that the current economic climate has created for community dental programs and funders on a local,

#### **MONDAY, APRIL 26 - CONTINUED**

state and national level. Through the recounting of one state's experience dealing with particularly difficult economic and budgetary problems, participants will gain an understanding of how compounding economic issues can create not only significant barriers, but also promote the use of creative solutions in oral health to deal with new economic realities. Participants will learn how the American Recovery and Reinvestment Act has affected the oral health safety net, and what the stimulus dollars have helped safety net oral health providers achieve. Finally, this presentation will include an oral health funder's perspective of how the economic downturn has shifted priorities and impacted the way that foundations look at oral health grants. Participants in this discussion will leave with an increased knowledge of how our nation's economic problems have affected the oral health safety net as a whole, but more importantly, how we can most effectively take advantage of opportunities, despite the economic climate, that will strengthen the provision of quality oral health care in the safety net.

#### AAPHD Student Chapters Meeting ...... Salon C

Since October 2009, AAPHD has chartered six Student Chapters. This session is designed for the representatives and sponsors of the chapters to meet and learn about each other's projects. Others interested in learning more about the AAPHD Student Chapters or learning about how to start a Student Chapter at their school are welcome to attend.

#### **AAPHD Special Program Session – Dental Therapist** Curriculum Development Panel ...... Salon D

In January AAPHD was notified it would be receiving a grant from the W.K.Kellogg Foundation and the Josiah Macy, Jr. Foundation to develop a model curriculum for dental therapists. The model curriculum would serve as a starting point for states looking to include this position in its dental workforce as a way of improving access to care. In this session, Grant Facilitator Caswell Evans Jr., DDS, MPH will outline the work of the panel, its timeline and answer questions about this special project.

| 3:45 p.m. – 4:30 p.m. | Gateway BR |
|-----------------------|------------|
| Break with Exhibitors | -          |

## 4:00 p.m. – 5:30 p.m. ..... Broadway

#### Poster Session - CDE 1.5

Posters based on submitted abstracts of interest to dental public health professionals will be available for viewing and discussion. Posters 16-66 are presented today. Student posters are 55-66. Posters abstracts are listed in numerical order beginning on page 26.

| 5:00 p.m. – 6:30 p.m.         | Salon G |
|-------------------------------|---------|
| CDC Water Fluoridation Update |         |
|                               |         |

| 5:15 p.m. – 6:15 p.m.                | . Salon C |
|--------------------------------------|-----------|
| ARDDH Future Examination Orientation |           |

| 6:00 p.m. – 9:00 p.m.                   | Manchester       |
|---|------------------|
| ASTDD School and Adolescent Oral        | Health Committee |
| Annual Dinner Meeting - By Invitation C | Only             |

6:30 p.m. – 9:30 p.m. Lindbergh ABDPH Diplomates' Dinner and Meeting - By Invitation Only All attendees must be pre-registered

Evening Open for All Participants – Dinner On Your Own

#### **TUESDAY, APRIL 27**

| 7:00 a.m. – 5:00 p.m                  | Grand Suites |
|---------------------------------------|--------------|
| Conference Registration               |              |
| 7:00 a.m. – 9:00 a.m                  | Gateway Br   |
| Continental Breakfast with Exhibitors | Gateway Di   |

7:00 a.m. – 8:30 a.m. ..... Archview BR ADHA Breakfast Reception

7:30 a.m. – 9:00 a.m. ......Salon AB AAPHD Annual Business Meeting

8:00 a.m. – 8:45 a.m. ......Manchester CDC Grantee Meeting

9:00 a.m. – 10:30 a.m. ...... Salon CD

**ABDPH Plenary Session** - CDE 1.5

**Ethics in Dental Public Health: Framework and Lessons** The ABDPH is pleased that United Concordia Companies, Inc., administrator of the TRICARE Dental Program and Active Duty Dental Program, is helping support the ABDPH

James Thomas MPH PhD; Karen Yoder MSD PhD; Lawrence Garetto PhD FACD; Don Altman DDS MPH MBA MA

There is a growing awareness that public health practitioners commonly encounter circumstances that require an inherently unique set of ethical values, beliefs, and challenges compared to ethical concerns that usually arise in clinical care. The symposium will detail the components of public health ethics and, using its underlying principles, explore the role that ethics plays in various aspects of dental public health practice and research using examples from: a) Community-based collaborations which typically include vulnerable, underserved groups and communities, and, b) Dental public health initiatives or projects requiring complex interactions, trust and cooperation among multiple diverse partners (such as city or county governments, public health agencies and departments, state dental boards, community-based organizations, schools, non-profit and private sector entities).

10:30 a.m. – 11:00 a.m. ...... Gateway BR **Break with Exhibitors** 

#### **TUESDAY, APRIL 27 - CONTINUED**

11:00 a.m. - 12:30 p.m. ...... Concurrent Sessions - CDE 1.5

Horowitz Memorial Symposium - What You Need to Know about Fluorides and Fluoridation! ...... Salon AB Steven Levy DDS MPH; Jane McGinley RDH MBA; Margherita Fontana DDS PhD

The purpose of this session is to update participants on the latest science, practices, and activities of fluoride prevention programs and fluoridation.

**FUTURE SEARCH: Finding Common Ground While Honoring Our Differences** .......Salon C *Howard Ross; Steve Geiermann DDS; Gary Podschun BA MSW(c) MA(e)* 

In searching for answers to the complex issues surrounding access to care for underserved populations, multiple stakeholders must be involved for any serious solution to be implemented on a national or global scale. The Future Search model involves the WHOLE SYSTEM with emphasis on diversity and equity, not hierarchy. Future scenarios are put into HISTORICAL and GLOBAL perspectives. People SELF-MANAGE their work and use DIALOGUE, not problem-solving, as a means to find COMMON GROUND and achieve COMMITTED ACTION. Differences are honored, not reconciled. Common ground is the basis upon which a new paradigm of collaboration opens doors and makes an impact. The Future Search method was used successfully at the 2007 American Indian/Alaska Native Oral Health Access Summit and at the 2009 Access to Dental Care Summit; both summits were convened, but not led, by the American Dental Association. The facilitator for both Summits will share his perspective of how Future Search made a difference in these events and Summit coordinators will share an overview of challenges to the process, obstacles overcome, and outcomes realized thus far. Future Search is a tool that the dental public health community can embrace and promote.

#### 

This session presents a simple yet powerful solution to the challenge of preventing dental disease in low income children. WIC, the Special Supplemental Nutrition Program for Women, Infants and Children, is one of the largest providers of service to at-risk infants and toddlers. By providing dental care onsite, it enables WIC to serve as an entry point for dental care at age 1, when the disease can actually be prevented. The WIC dental program transfers and enhances common practices used in dental offices to a setting serving low income families, who would not otherwise be able to access early preventive care. Partnering with WIC also builds on its educational requirements of health promoting nutrition and feeding practice which are critical to support the dental health of infants and toddlers. Although the Program offers the basic infant oral care activities that are normally completed in a dental office, the visits have been customized to meet the culture, space and client flow of each WIC center as well as the professional resources available to provide the dental Ibden. This session provides insight on the rationale, considerations and processes for initiating dental visits at various types of WIC centers in two states.

Recent scientific evidence demonstrates that periodontal diseases are associated with several chronic diseases such as diabetes and cardiovascular disease, and with adverse pregnancy outcomes. However, the evidence for a potential causal relationship is still emerging and uncertain. In response to this relationship, dental public health and other healthcare professionals have developed broad collaborations and partnerships with other chronic disease programs in an effort to improve the health of the adult population. This presentation will examine the state of the science linking periodontal disease and diabetes, and present state and/or community approaches to educate, prevent and treat periodontal diseases as a strategy to a healthier adult population.

12:30 p.m. – 2:00 p.m. ...... Arch View BR ASTDD Awards Luncheon - For all registrants

2:15 p.m. – 3:45 p.m. ...... Concurrent Sessions - CDE 1.5

# NIH-Funded Collaborating Research Centers to Reduce Oral Health Disparities: Early

**Childhood Caries** ....... Salon D *Jane Weintraub DDS MPH; Michelle Henshaw DDS MPH; Judith Albino PhD; Stuart Gansky DrPH* 

The NIDCR established a group of three collaborating research centers (Univ of California, San Francisco, Boston Univ, Univ of Colorado Denver) to reduce oral health disparities, initially focused on preventing early childhood caries (ECC). This session will provide an overview of the purpose of the collaborative, describe the 6 randomized clinical trials to test interventions to prevent ECC in a range of high caries risk populations, the Centers' community engagement activities, and accomplishments to date. The accomplishments presented will include the multiple measures and methods developed by the Collaborative that will be used across all 6 of the studies to assess both oral health determinants and clinical and behavioral outcomes.

#### **National Plans to Improve**

In 2009, the U.S. Dept of Health and Human Services (HHS) and the American Dental Association (ADA) both proposed plans to address health literacy. The HHS National Action Plan to Improve Health Literacy seeks to engage communities, organizations, and individuals in a coordinated effort to increase access to understandable and actionable health information and services. The national plan is based on the

#### **TUESDAY, APRIL 27 - CONTINUED**

principle that everyone has the right to accurate, understandable, accessible and readily available health information and services that could make a difference in their health, longevity and quality of life. The ADA Council on Access, Prevention and Interprofessional Relations and its ad hoc advisory committee on health literacy in dentistry developed the Health Literacy in Dentistry Strategic Action Plan: 2010-2015 as a set of principles, goals and, in some cases, specific strategies to provide guidance to the Association and its Councils and Commissions, dental professionals, policy makers and others to improve health literacy. The ADA plan does not include a comprehensive list of strategies, and it is likely that more tasks, not in the document, will be undertaken and specified activities may be modified or abandoned, so the Council can be more responsive to emerging information and needs during the course of the plan. An example of a state initiative, in the context of these plans will also be explored. The Univ. of Maryland, School of Public Health, in cooperation with the Children's Dental Health Project, conducted focus groups with pregnant women and mothers with young children to assess oral health-related knowledge. This project included focus groups among low-income pregnant women and new mothers in both urban and rural communities in Maryland. Existing oral health knowledge and behaviors were explored, both for pregnant women themselves and for their care of infants and young children. Additionally, oral health educational materials were tested for effectiveness and improvement. Key findings, themes, and recommendations from the groups will be presented. This interactive session will focus on the content of both action plans, identifying common themes. Participants will discuss opportunities to be personally involved in health literacy improvement and identify suggested partnerships and activities to achieve the goals in the plans.

#### Oral Presentations ...... Salon AB

This session will feature scientific oral presentations of interest to dental public health professionals.

- 6. Parental Neighborhood Perception and Oral Health Status in US Children
  - Christopher Okunseri, BDS, MSc, FFDRCSI, Clinical Services
- 7. Washington State's Oral Health Workforce Susan M Skillman, MS, University of Washington Center for Health Workforce Studies
- 8. Diabetes Mellitus, Smoking History, and Periodontal Disease Scott K DuBois, DDS, MPH, New York Dept. of Oral Health
- Strategies for Improving Flossing Behavior Among Dental Patients Living with HIV AID Celeste A Lemay, RN, MPH, University of Massachusetts Medical School
- 10. Ethnic Differences in Self-Reported Oral Health Among Community-Dwelling Black, Hispanic and White Elders Bei Wu, PhD, UNCG-Gerontology Department

#### Hot Picks ...... Salon C

This session could not be more timely! Staff from the National Oral Health Policy Center will present the key provisions impacting oral health in the recently passed Health Care Reform legislation. Now what? A discussion of the roles of the various federal agencies (CDC, HRSA, etc) in implementing the legislation will occur, including the timeline for upcoming processes to secure appropriation for the various provisions. Reactors will highlight how the reform legislation will influence dental public health at the state and local level.

- 3:45 p.m. 4:00 p.m. ...... Gateway Br Break with Exhibitors
- 4:00 p.m. 5:30 p.m. ...... Broadway **Poster Session CDE 1.5**

Posters based on submitted abstracts of interest to dental public health professionals will be available for viewing and discussion. Posters 67-104 are presented today. Abstracts are listed in numerical order beginning on page 26.

- 5:30 p.m. 6:15 p.m.....West Lobby (Outside Lindbergh) **Tuesday Evening Event Ticket Pick-up**
- 6:30 p.m. 10:00 p.m. ...... Tuesday Evening Event Reception Sponsored by Aseptico

Let's play ball! After a full day of sessions it's time to relax and have some fun. Enjoy an evening of good food and great conversation as the hometown favorite St. Louis Cardinals take on the Atlanta Braves. After you pick up your tickets take the short walk to the ball park and enter through Gate 3 or 6. Ushers will guide you to the NOHC "party suites". (Food, beer and soda included with ticket.) Game time is 7:05p.m. You may want to bring a jacket in case it gets cool.

PLEASE NOTE: This is a ticketed event. THERE WILL BE NO ON-SITE REGISTRATION FORTHIS EVENT. ALL TICKETS MUST HAVE BEEN RESERVED PRIOR TO THE CONFERENCE. NOHC WILL NOT BE ABLETO PURCHASE TICKETS ON-SITE.



#### **WEDNESDAY, APRIL 28**

| 6:00 a.m. – 7:00 a.m<br>NOHC Fun Run/Walk                     | Hotel Lobby  |
|---|--------------|
| 6:45 a.m. – 8:15 a.m<br>Continental Breakfast with Exhibitors | Gateway BR   |
| 7:00 a.m. – 3:30 p.m<br>Conference Registration               | Grand Suites |
| 7:00 a.m. – 8:00 a.m<br>ASTDD Executive Committee Meeting     | Broadway I   |

#### WEDNESDAY, APRIL 28 - CONTINUED

8:15 a.m. – 8:30 a.m. ......Salon C & D
Greetings from the American Dental Association
Dr. Ronald Tankersley, President

Greg Folse DDS; Gustav Chiarello; Brad Mittendorf

The experience in Louisiana surrounding efforts to treat Medicaid eligible children using a school-based dentistry model and the ensuing battles with organized dentistry was profound. Fortunately, access to care has seen victory in the State Legislature and with the State Board of Dentistry. Coalition development, use of lobbyists, national support from several dental and non-dental organizations, and the mobilization of a united front of providers and activists has won the day. A historical timeline of events, views and opinions from both sides of the issues, and legal and political intricacies will be presented with a hope that this information will assist both the dental and political communities in the decision making process when these issues arise again.

# **The Next Crisis: Elder Oral Health Care** ...... Salon C Kathy Phipps DrPH; Barbara Smith PhD RDH MPH; Robyn Stone DrPh

There is increased awareness of the tremendous increase in the number of "seniors" in the U.S. as the first cohort of baby boomers turns 65. Most will be dentate and expect to have their teeth for a lifetime. With most states cutting their adult benefits under Medicaid, no oral health benefit in Medicare, and with little hope of adult/senior oral health services in health care reform, states need the tools to advocate for this population. The purpose of this session is to provide these tools: assessment (how to determine the oral health status of seniors, including sampling in nursing homes, congregate meal sites, and the development of a senior Basic Screening Survey); policy development (legislative and policy efforts to improve access to oral health services for senior populations, including government structure and key stakeholders to engage, and steps the ADA is taking to identify the best means of serving seniors); and assurance (successful state and community programs that provide oral health services to seniors, including Long Term Care, Old Age Pension, and funding mechanisms). The session will build on the successful webinars hosted by the ASTDD Healthy Aging Committee.

10:00 a.m. – 10:30 a.m. ...... Gateway BR Break with Exhibitors

10:30 a.m. - 12:00 p.m. ...... Concurrent Sessions - CDE 1.5

Public health law plays a critical role in public health. The greatest advancements in chronic diseases have been a result of policy and legislative activities such as tobacco control

legislation, immunizations prior to the entrance of school, and nutritional requirements in school programs. Advancing and implementing legislative initiatives can be both challenging and frustrating. This panel will examine strategies taken by states and their partners to encourage passage, implementation and evaluation of laws relating to oral health.

#### **School and Community Partnerships for**

**Children's Oral Health** ....... Salon C Sandra Maurizio PhD RDH; Sherri Lukes MS RDH; Bobbi Jo Muto RDH BS; Mary Beth Shea RDH

The session will describe the partnerships created between a baccalaureate dental hygiene program and community entities. Special emphasis will be placed upon the sustainability of services. Partnerships include Head Start and Early Head Start, area schools, mental health facility, Veteran Administration facilities, community health center, FQHC, migrant center, senior center, long term care facilities, public aid clinic and autism center. Additionally the session will present a model for sustainable preventative programs in rural, low income school, including ensuring a dental home for all students. This model also has a data collection and surveillance system that will be described.

New Technology for Prevention of Tooth-Decay—Combining New Agents with Fluoride .............. Salon D Peter Milgrom DDS; Ohnmar Tut BDS; Robert Berkowitz DDS Most public health workers recognize that topical fluoride treatments alone are insufficient to prevent tooth decay in children at high risk. New treatments modalities are needed. The goal of this session is to update participants on new findings that can be applied directly in public health practice. Speakers will address the rationale and provide examples and evaluation data on the new approaches.

#### **Improving Oral Healthcare in Safety**

- 1) Frame quality improvement in a systems perspective; acknowledge that these efforts are hard because of system inertia
- 2) Identify how knowing this helps us improve quality, thus the Model for Improvement.
- 3) Illustrate application of the Model for Improvement in dental settings.

12:00 p.m. – 1:30 p.m. ...... Arch View BR AAPHD Awards Luncheon - For All Registrants

#### **WEDNESDAY, APRIL 28 - CONTINUED**

1:45 p.m. – 3:15 p.m. ...... Concurrent Sessions - CDE 1.5

**Healthy People 2010/2020 .....** Salon C *Bradley Whistler DMD; Eva Moya LMSW; Gina Thornton-Evans DDS MPH* 

The Office of Disease Prevention and Health Promotion (ODPHP) conducted an independent assessment of Healthy People (HP) to address evolving national public health priorities. ODPHP begin a two-phased approach to develop a new framework for HP 2020 that included cross-cutting public health priorities that integrate determinants of health, diseases and disorders; along with Health IT, Preparedness, and Prevention. Phase I focused on the framework including goals, mission, and vision along with a graphic conceptual model. Phase II is focused on the development of objectives, baselines, targets, and implementation strategies and this phase is scheduled for release in January 2010. This session will provide an overview of the status of the Oral Health Objectives proposed for HP 2020 and current progress toward the HP 2010 targets as we approach the final review, the new aspects and progress to date regarding the HP 2020 framework, and the role that the social determinants of health will be used within this framework

Alternative Dental Workforce Models: Creating a Proposal and Building Consensus ....... Salon D Len Finocchio PhD; David Hemion; Michael Scandrett; Shelly Gehshan PhD

This breakout session will include four moderated components:

- A presentation of upcoming efforts in California to use the framework outlined in Help Wanted a policy maker's guide (a publication of the Pew Charitable Trusts and the Kellogg Foundation) to guide a state through the process of developing new workforce models. The steps include designing and administering a comprehensive needs assessment, exploring system capacity issues, identifying funding for care, and creating an appropriate workforce model.
- 2. A state official or dental association representative will describe the work of developing a sound proposal based on a state's particular experience and uniting stakeholders around a consensus position.
- A coalition expert from Minnesota will present on the efficacy of building a broad-based coalition focused on the needs of the underserved in order to push forward workforce reform policy change.
- 4. The session will end with a question and answer period.

Childhood Obesity – Is There a Role for the Dental Profession in this Health Crisis? ...... Salon EFG Mary Tavares DMD MPH; Virginia Chomitz PhD; Nancy Martin RDH MS

Twice as many U.S. children are overweight or at risk of being overweight as compared to 20 years ago. Integrating promotion of healthy behaviors and wellness into children's primary health care is increasingly important given the obesity epidemic in the United States. Dental professionals have an opportunity

to participate in obesity prevention at many levels. Dental settings, given the paradigm of their standard of care, offer an excellent opportunity for healthy weight interventions. Nutrition recommendations made by dental professionals for good oral health are similar to nutrition recommendations made to maintain healthy weight. Oral health assessment programs are well positioned to screen for obesity risks and to provide useful recommendations. This session will focus on the role of dental professionals in assisting with the problem of child obesity. It will present concrete examples of assessment and intervention programs. It will discuss the research that supports these programs and the basis for involving the dental profession in this area. An argument will be presented and supported that all outlets and sources, particularly those in healthcare, should be used to get the healthy weight message to children.

#### Oral Presentations ...... Salon AB

This session will feature scientific oral presentations of interest to dental public health professionals.

- 11. Preventive Oral Health Care in Early Childhood: Knowledge, Confidence, and Practices of Family Physicians and Pediatricians
  - Frank Catalanotto, D.M.D., Department of Community Dentistry and Behavioral Sciences
- 12. Building Bridges Between Dentists and Physicians: A Partnership of Professional Organizations

  Mary Hayes, DDS, Illinois Society of Pediatric Dentists
- ST. David's Dental Program Mobilizes Dentistry in Central Texas
  - Patrice Coons, DDS, St. David's Dental Program
- 14. Michigan Health Kids Dental Program: Impact on Dental Care and Costs
  - Woosung Sohn, DDS, PhD, DrPH, University of Michigan School of Dentistry
- A Consortium of Pediatric Dentistry Residency Programs: Access to Care and Dental Homes for EHS/HS Children in New York City
  - Neal G Herman, DDS, New York University College of Dentistry

# POST-CONFERENCE WEDNESDAY, APRIL 28

3:30 p.m. – 6:00 p.m. Broadway II 2010 MCHB Targeted Oral Health Service Systems (TOHSS) Grantee Meeting

6:00 p.m. – 7:30 p.m. ...... Broadway I 2010 MCHB Targeted Oral Health Service Systems (TOHSS) Grantee Reception

#### **THURSDAY, APRIL 29**

7:30 a.m. – 2:00 p.m. ......Salon AB 2010 MCHB Targeted Oral Health Service Systems (TOHSS) Grantee Meeting

# 2010 National Oral Health Conference®

# Pursuing Excellence in Dental Public Health

# **Invited Session Presenters**

#### Judith Albino, PhD

Colorado School of Public Health Aurora, CO

#### Don Altman, DDS, MPH, MBA, MA

AT Still University & Arizona School of Dentistry and Oral Health Mesa, AZ

#### Jay Anderson, DMD, MHSA

HRSA/BPHC Rockville, MD

#### Tracey Andrews, RDH, BS

Office of Oral Health Hartford, CT

#### Theresa (Tracy) Anselmo, RDH, MPH

Colorado Dept of Public Health and Environment Denver, CO

#### Rebecca Austen

Centers for Medicare and Medicaid Baltimore, MD

#### Laurie Barker, MS

Centers for Disease Control and Prevention Atlanta, GA

#### Cynthia Baur, PhD

Centers for Disease Control and Prevention Atlanta, GA

#### **Robert Berkowitz, DDS**

University of Rochester Rochester, NY

#### Colleen Brickle, RDH, RF, EdD

Normandale Community College Bloomington, MN

#### Jessie Buerlein, MSW

Children's Dental Health Project Washington, DC

#### **Gustav Chiarello**

Federal Trade Commission Washington DC

#### Virginia Chomitz, PhD

Institute for Community Health & Cambridge Health Alliance Cambridge, MA

#### **Joe Cichy**

North Dakota Dental Assn Bismarck, ND

#### Paul Eke, PhD, MPH

Centers for Disease Control & Prevention Atlanta, GA

#### **Burton Edelstein, DDS, MPH**

Founding Chair, Children's Dental Health Project New York, NY

#### Jared Fine, DDS, MPH

Alameda County Public Health Dept Oakland, CA

#### Len Finocchio, PhD

California Health Care Foundation Oakland, CA

#### **Greg Folse, DDS**

Outreach Dentistry Lafayette, LA

#### Margherita Fontana, DDS, PhD

Univ of Michigan, School of Dentistry Ann Arbor, MI

#### Ralph Fuccillo

DentaQuest Foundation Boston, MA

#### Stuart Gansky, DrPH

UCSF School of Dentistry San Francisco, CA

#### Lawrence Garetto, PhD, FACD

IN Univ School of Dentistry Indianapolis, IN

#### Shelly Gehshan, PhD

Pew Children's Dental Campaign Washington, DC

#### Steve Geiermann, DDS

American Dental Assn Chicago, IL

#### Jane Gillette, DDS

Bozeman, MT

#### Garth Graham, MD, MPH

US Dept of Health and Human Services Rockville, MD

#### **David Hemion**

Washington State Dental Assn Seattle, WA

#### Michelle Henshaw, DDS, MPH

Boston Univ Henry M Goldman School of Dental Medicine Boston, MA

#### Ann Johnson, MA

Delta Dental of Minnesota Eagan, MN

#### Rebecca S King, DDS, MPH

North Carolina Dept of Health and Human Services Raleigh, NC

#### Howard Koh, MD, MPH

US Dept of Health and Human Services Washington, DC

#### Robert Lewando, MD

Blue Cross Blue Shield of Massachusetts North Quincy, MA

#### Steven M Levy, DDS MPH

Univ of Iowa College of Dentistry Iowa City, IA

#### Marty Lieberman, DDS

Pudget Sound Neighborhood Health Center Seattle, WA

#### Sherri Lukes, MS, RDH

CASA School of Allied Health Southern IL Univ Carbondale, IL

#### Cindy Mann, JD

US Dept of Health & Human Services Baltimore, MD

#### Nancy Martin, RDH, MS

Dept of HHS State of New Hampshire Concord, NH

# 2010 National Oral Health Conference®

### **Pursuing Excellence in Dental Public Health**

# **Invited Session Presenters**

#### Sandra J Maurizio, PhD, RDH

CASA School of Allied Health Southern IL Univ Carbondale, IL

#### Jane McGinley, RDH, MBA

American Dental Assn Chicago, IL

#### James Mercer, DDS

South Carolina Dental Assn Columbia, SC

#### Elizabeth Mertz, BA, MA

Center for Health Professionals San Francisco, CA

#### Peter Milgrom, DDS

Univ of Washington Seattle, WA

#### Patti Mitchell, MPH, RD

FNS/USDA Supplemental Food Programs Div Alexandria, VA

#### **Brad Mittendorf**

Southern Strategies Baton Rouge, LA

#### Mike Monopoli, DMD, MPH, MS

DentaQuest Foundation Boston, MA

#### Eva Moya, LMSW

United State-Mexico Border Health Assn El Paso, TX

#### Bobbi Jo Muto, RDH, BS

Marshall Univ School of Medicine Hurricane, WV

#### Man Wai Ng, DDS, MPH

Children's Hospital Boston Boston, MA

#### Linda Niessen, DMD, MPH, MPP

Dentsply International Dallas, TX

#### Kathy Phipps, DrPH

AAPHD Morro Bay, CA

#### Gary Podschun, BA, MSW (c), MA (e)

American Dental Assn Chicago, IL

#### **Lindsey Robinson, DDS**

American Dental Assn Grass Lake, CA

#### **Howard Ross**

Cook-Ross, Inc Silver Spring, MD

#### Bobby Russell, DDS, MPH

lowa Dept of Health Des Moines, IA

#### Michael Scandrett, JD

LPaC Alliance Minneapolis, MN

#### **Richard Scoville**

Institute for Healthcare Improvement Chapel Hill, NC

#### Mary Beth Shea, RDH

Mid-Ohio Valley Health Dept Parkersburg, WV

#### Barbara Smith, PhD, RDH, MPH

American Dental Assn Chicago, IL

#### Robyn I Stone, DrPH

American Assn of Homes and Services for the Aging Washington DC

#### Mary Tavares, DMD, MPH

The Forsyth Institute Boston, MA

#### George Taylor DMD MPH DrPh

University of Michigan School of Dentistry Ann Arbor, MI

#### James Thomas, MPH, PhD

Univ of North Carolina at Chapel Hill Chapel Hill, NC

#### Gina Thornton-Evans, DDS, MPH

Centers for Disease Control and Prevention Atlanta. GA

#### Scott Tomar, DMD, DrPh

Univ of FL College of Dentistry Gainesville, FL

#### Ohnmar Tut, BDS

Ministry of Health, Republic of the Marshall Islands Majuro, MH

#### Mary Wakefield, PhD, RN

US Dept of Health and Human Services

#### Jane Weintraub, DDS, MPH

UCSF School of Dentistry San Francisco, CA

#### **Wayne Wendling**

American Dental Assn Chicago, IL

#### **Bradley Whistler, DMD**

Alaska Oral Health Program Juneau, AK

#### Alex White, DDS, DrPH

DentaQuest Foundation Westborough, MA

#### Sarah Wovcha, JD, MPH

Children's Dental Services Minneapolis, MN

#### Karen Yoder, MSD, PhD

IN Univ School of Dentistry Oral Health Research Institute Indianapolis, IN

<sup>\*</sup>Contributed paper presenters are listed under session information. Poster presenters are listed with their abstract.



# **ASTDD Past Presidents**

| 2008-09 | Christine Wood     | 1989    | C. Michael Fitzgerald | 1968-70 | Charles Gish      |
|---------|--------------------|---------|-----------------------|---------|-------------------|
| 2006-08 | Steven J. Steed    | 1988    | Gregory Connolly      | 1966-68 | E. A. Pearson, Jr |
| 2004-06 | Lewis N. Lampiris  | 1987    | Michael Morgan        | 1964-66 | Lloyd Richards    |
| 2002-04 | Lynn Mouden        | 1986    | Joseph Doherty        | 1962-64 | Linwood Grace     |
| 2000-02 | Diane Brunson      | 1985    | Paul Reid             | 1958-62 | Henry Ostrow      |
| 1998-00 | Kathleen Mangskau  | 1982-85 | Carlos Lozano         | 1956-58 | William Jordan    |
| 1995-98 | M. Dean Perkins    | 1980-82 | Nazeeb Shory          | 1954-56 | Carl Sebelius     |
| 1994    | Richard Hastreiter | 1978-80 | Durward Collier       | 1952-54 | James Owens       |
| 1993    | E. Joseph Alderman | 1976-78 | Fred Lewis            | 1950-52 | Richard Leonard   |
| 1992    | Robert Isman       | 1974-76 | William Johnson       | 1948-50 | Ernest Branch     |
| 1991    | John Daniel        | 1972-74 | Naham Cons            |         |                   |
| 1990    | William Maurer     | 1970-72 | John Peterson         |         |                   |

# **AAPHD Past Presidents**



| 2009 | Mark H.K. Greer      | 1985 | Myron Allukian, Jr.    | 1961 | William P. Kroschel      |
|------|----------------------|------|------------------------|------|--------------------------|
| 2008 | Caswell Evans, Jr.   | 1984 | W. Thomas Fields       | 1960 | David B. Ast             |
| 2007 | Kathryn Atchison     | 1983 | Robert C. Faine        | 1959 | Polly Ayers              |
| 2006 | Robert Weyant        | 1982 | M. Raynor Mullins      | 1958 | Roy D. Smiley            |
| 2005 | Jane Weintraub       | 1981 | Gene P. Lewis          | 1957 | Thomas L. Hagan          |
| 2004 | Candace Jones        | 1980 | John T. Hughes         | 1956 | Franklin M. Erlenback    |
| 2003 | William R. Maas      | 1979 | John L. Elliott        | 1955 | Fred Wertheimer          |
| 2002 | Kimberly McFarland   | 1978 | Kenneth R. Elwell      | 1954 | Francis A. Bull          |
| 2001 | Rebecca King         | 1977 | Richard F. Murphy      | 1953 | Carl L. Sebelius         |
| 2000 | Dushanka V. Kleinman | 1976 | Robert E. Mecklenburg  | 1952 | Philip E. Blackerby, Jr. |
| 1998 | B. Alex White        | 1975 | Durward R. Collier     | 1951 | William A. Jordon        |
| 1997 | Robert J. Collins    | 1974 | Edward B. Gernert      | 1950 | Robert A. Downs          |
| 1996 | Dennis Leverett/     | 1973 | Ernest A. Pearson, Jr. | 1949 | John T. Fulton           |
|      | Robert J. Collins    | 1972 | J. Earl Williams       | 1948 | Frank P. Bertram         |
| 1995 | Rhys B. Jones        | 1971 | David A. Sorcelli      | 1947 | Edward Taylor            |
| 1994 | Hermine McLeran      | 1970 | Gerald R. Guine        | 1946 | Frank G. Cady            |
| 1993 | Jack Dillenberg      | 1969 | Charles W. Gish        | 1945 | William R. Davis         |
| 1992 | Alice Horowitz       | 1968 | John K. Peterson       | 1944 | James G. Williams        |
| 1991 | E. Joseph Alderman   | 1967 | John R. Zur            | 1943 | Allen O. Gruebbel        |
| 1990 | R. Gary Rozier       | 1966 | Albert H. Trithart     | 1942 | Ernest A. Branch         |
| 1989 | Linda C. Niessen     | 1965 | Charles J. Gillooly    | 1941 | R. C. Dalgleish          |
| 1988 | Michael Easley       | 1964 | David R. Wallace       | 1940 | Leon R. Kramer           |
| 1987 | Joseph M. Doherty    | 1963 | David C. Witter        | 1939 | Vern O. Irwin            |
| 1986 | James Beck           | 1962 | Charles L. Howell      | 1937 | Richard C. Leonard       |
|      |                      |      |                        |      |                          |

# Recipients of Awards of the Association of State and Territorial Dental Directors

# **Outstanding Achievement Award**

Presented to a past or present member for significant contributions to ASTDD and dental public health.

| 2009 | Brad Whistler       | 1999 | M. Dean Perkins    | 1989 | George Dudney      |
|------|---------------------|------|--------------------|------|--------------------|
| 2008 | Michael L. Morgan   | 1998 | Raymond Flanders   | 1988 | Carlos Lozano      |
| 2007 | Lynn Douglas Mouden | 1997 | Raymond A. Kuthy   | 1987 | Durward R. Collier |
|      | and Warren LeMay    | 1996 | Mark D. Siegal     | 1986 | Charles Gish       |
| 2006 | A. Conan Davis      | 1995 | E. Joseph Alderman | 1985 | Lloyd Richards     |
| 2005 | Don Altman          | 1994 | William Maurer     | 1984 | Carl L. Sebelius   |
| 2003 | Diane Brunson       | 1993 | Joseph Doherty     | 1981 | Robert A. Downs    |
| 2002 | Greg Connolly       | 1992 | Paul Reid          | 1980 | E. A. Pearson      |
| 2001 | Kathleen Mangskau   | 1991 | Naseeb Shory       |      |                    |
| 2000 | Robert Isman        | 1990 | Joseph Yacavone    |      |                    |

# **Distinguished Service Award**

Presented to an individual or organization for excellent and distinguished service to dental public health.

| 2009 | Sue C. Dodd and Robert Klaus         | 1998 | Gerry Beverley                         |
|------|--------------------------------------|------|--|
| 2008 | Judy Sherman and Reginald Louie      | 1997 | Robert A. Sappington                   |
| 2007 | Lewis N. Lampiris                    | 1996 | Jack Dillenberg                        |
| 2005 | Julie Tang and Barbara Gooch         | 1995 | John Rosetti                           |
| 2004 | Beverly Isman                        | 1994 | Darrell Sanders                        |
| 2003 | Rhys Jones and Lawrence Hill         | 1993 | Alice Horowitz                         |
| 2002 | VADM David Satcher                   | 1991 | Tom Reeves                             |
| 2001 | Wendy E. Mouradian                   | 1990 | Ken Goff and Jim Collins               |
| 2000 | Burton L. Edelstein                  | 1987 | Jim Saddoris and Mary Winkeljohn-Kough |
| 1999 | Dolores Malvitz and Donald Schneider | 1984 | Cora Leukhart and John Small           |

## **President's Award**

Presented at the discretion of the President to individuals or organizations who have contributed to the advancement of state dental programs and dental public health.

| 2009 | Kathy Mangskau   |
|------|--|
| 2008 | Joseph M. Doherty  |
| 2007 | Donald Marianos  |
| 2006 | Beverly Isman, Julie M. W. Tang, NIcholas G. Mosca and Judith A. Feinstein |
| 2005 | Monette McKinnon and Christine Wood  |
| 2004 | Nicholas Mosca   |
| 2003 | Steven Geiermann   |
| 2001 | Stuart Lockwood  |
| 2000 | Michael W. Easley  |
| 1999 | The Honorable Christopher S. Bond  |

# Recipients of Awards of the American Association of Public Health Dentistry

#### **Public Service Award**

#### Presented to an individual for substantial contribution through action related to public health dentistry issues.

| 2010 | US Senator Sherrod Brown     | 2001 | VADM David Satcher        | 1991 | Kay Johnson                 |
|------|------------------------------|------|---------------------------|------|-----------------------------|
| 2009 | Mary Otto                    | 1998 | Scott Litch and           | 1990 | Julius Richmond             |
| 2008 | Rasmuson Foundation          |      | Judy Sherman              | 1989 | The Honorable               |
| 2007 | Richard H. Carmona           | 1997 | The Honorable Steny Hoyer |      | John David Waihee, III      |
| 2006 | Lawrence A. Tabak            | 1996 | The Honorable Edward      | 1988 | Marian Wright Edelman       |
| 2005 | US Senator Susan Collins     |      | Kennedy and Assembly      | 1987 | C. Everett Koop             |
| 2004 | Rob Reiner                   |      | woman Jackie Speier       | 1986 | The Honorable Claude Pepper |
| 2003 | US Senator Raymond A. Rawson | 1995 | Joe Garagiola             | 1985 | The Honorable Henry Waxman  |
| 2002 | US Senator Jeff Bingaman     |      |                           | 1984 | President Jimmy Carter      |

#### **Distinguished Service Award**

#### Presented to an individual for excellent and distinguished service to public health dentistry.

| 2010 Mark Siegal 2009 Burton Edelstein 2008 Helen Gift 2007 William Bird 2006 Linda Niessen 2005 Dushanka Kleinman 2004 Scott L. Tomar 2003 Lois Cohen 2002 Myron Allukian Jr. 2001 Brian Burt | <ul> <li>2000 R. Gary Rozier</li> <li>1999 Alice Horowitz</li> <li>1998 Naham C. Cons and<br/>John K. Peterson</li> <li>1997 Joseph M. Doherty and<br/>Helen K. Doherty</li> <li>1996 John C. Greene</li> <li>1995 Robert E. Mecklenberg</li> <li>1994 Martha Liggett</li> <li>1993 Dennis Leverett</li> </ul> | 1992 Durward Collier<br>1991 Irwin D. Mandel<br>1990 Stanley Lotzkar<br>1989 Max H. Schoen<br>1988 David Edward Barmes<br>1987 Herschel Horowitz<br>1986 David Soricelli<br>1985 John T. Hughes<br>1984 Donald J. Galagan | 1983 Albert L. Russell 1982 Polly Ayers 1981 Frank E. Law 1980 John W. Knutson 1979 James Morse Dunning 1978 Ernest A. Pearson, Jr. 1977 David F. Striffler 1975 Charles W. Gish 1973 John T. Fulton 1972 Kenneth Easlick |
|--|--|---|---|
|--|--|---|---|

#### **President's Award**

#### Presented at the discretion of the President to an individual for significant contributions to the welfare of the Association.

| 2009 | Reginald Louie   | 2004 | Joseph Doherty and | 1998 | Jane A. Weintraub | 1989 | Richard D. Mumma, Jr. |
|------|------------------|------|--------------------|------|-------------------|------|-----------------------|
| 2008 | Eugenio Beltran  |      | Stuart Lockwood    | 1997 | Raymond Kuthy     |      | and Joseph M. Doherty |
| 2007 | Alice Horowitz   | 2003 | Stanley Lotzkar    | 1996 | Robert J. Collins | 1988 | Edward N. Brandt, Jr. |
| 2006 | Nicholas Mosca   | 2001 | James Toothaker    | 1994 | Stephen B. Corbin |      | and Crystal Gayle     |
| 2005 | Steven Geiermann | 1999 | Teresa Dolan       |      |                   | 1987 | Robert E. Mecklenburg |

#### **Special Merit Award**

#### Presented to an individual for special meritorious service to public health dentistry.

| 2009 | Sena Narendran        | 2000 | Rhys B. Jones       | 1992 | Robert Faine        | 1982 | Janet Jester        |
|------|-----------------------|------|---------------------|------|---------------------|------|---------------------|
| 2008 | James Sutherland      | 1999 | Jane A. Weintraub   | 1991 | Gregory C. Connolly | 1969 | Walter J. Pelton    |
| 2006 | Helen Gift            | 1998 | Marsha Cunningham   | 1990 | Daniel Whiteside    | 1968 | Kenneth J. Ryan and |
| 2005 | Dolores M. Malvitz    | 1997 | Donald Marianos     | 1989 | Corrine H. Lee      |      | F. Gene Dixon       |
| 2004 | Anthony R. Volpe      | 1996 | Hermine McLeran     | 1988 | Alice Horowitz      | 1967 | Franklin Foote,     |
| 2003 | Donald A. Schneider   | 1995 | Howard M. Field     | 1987 | Myron Allukian, Jr. |      | Albert Heutis,      |
| 2002 | Robert Weyant         | 1994 | Jay W. Friedman and | 1986 | David F. Striffler  |      | Robert Jans, and    |
| 2001 | Robert J. Collins and |      | John Scott Small    | 1985 | Helen K. Doherty    |      | Bruce Keyworth      |
|      | Caswell A. Evans      | 1993 | R. Gary Rozier      |      |                     |      | •                   |

#### Special Merit Award for Outstanding Achievement in Community Dentistry - International

for dental public health contributions of individuals outside the United States

| 2006 | Thomas M. Marthaler  | 2003 | Aubrey Sheiham  | 2000 | John J. Clarkson   | Chaves             |
|------|----------------------|------|-----------------|------|--------------------|--------------------|
| 2005 | Prathip Phantumvanit | 2002 | Patricia Main   | 1999 | Mario de Magalhaes | 1998 Johng-Bai Kim |
| 2004 | Roberto Beltran      | 2001 | Fumio Yamashita |      |                    |                    |

#### **Abstracts**

Abstracts 1-15 are oral presentations. Abstracts 16-54 along with the student abstracts 55-66 are presented on Monday, April 26, 2010 during the Poster Session. Abstracts 67-104 are presented on Tuesday, April 27, 2010 during the Poster Session.

#### Abstract #: 1

# POLICY OPPORTUNITIES TO PREVENT AND MANAGE EARLY CHILDHOOD CARIES: WHAT EVERY POLICYMAKER SHOULD HEAR!

**Presenter:** Burton Edelstein, DDS, MPH, Children's Dental Health Project

Additional Authors: Karen VanLandeghem, MPH, President, VanLandeghem, Inc.; Burton Edelstein, DDS, MPH, Project Director, National Oral Health Policy Center; Jessie Buerlein, MSW, Project Director, Children's Dental Health Project; Marilynn Sutherland, Director, Klamath County

**Objectives:** To highlight emerging trends in children's oral health and identify policy and programmatic solutions that are grounded in evidence-based research and practice.

**Methods:** The National Oral Health Policy Center was created in 2008 as a collaborative effort of the AMCHP, ASTDD, CDHP, MSDA, and NASHP with funding from the federal Maternal and Child Health Bureau to promote the understanding of effective policy options to address ongoing disparities in children's oral health. Initial activities of the Policy Center have been to highlight cost-effective and efficient models for preventing and managing childhood tooth decay that can be adopted by state policymakers. This session provides 1) an overview of the National Oral Health Policy Center's TrendNote documents that have been developed for policymakers to highlight cost-effective policy options for preventing and managing childhood tooth decay; 2) a review of the Dental Home concept and what policy makers should know; 3) an synopsis of the recently released ASTDD Best Practice approach and state examples on prevention of early childhood caries; 4) Klamath County (Oregon's) innovative program targeting high-risk women and to prevent early childhood caries.

**Results:** Policy strategies exist to address the growing demand for oral health services while addressing the political realities of tightening State budgets.

**Conclusions:** Building on existing community-wide, evidence-based policies that promote children's oral health and prevent dental caries by targeting intensive interventions to those children at highest risk for the disease can be a cost-effective strategy for addressing the oral health needs of families.

Funding: DHHS/HRSA/MCHB

#### Abstract #2

# IMPROVING CHILDREN'S ORAL HEALTH TROUGH PERINATAL TREATMENT AND EDUCATION

**Presenter:** Dennis J Lewis, DDS, Dental Aid Inc./Dental Director **Additional Authors:** Karen Cody Carlson, Presidents and CEO, Dental Aid Inc.

**Objectives:** To determine the effect of treating mother's oral condition during pregnancy on the health of their children. The basic question was by lowering the harmful bacteria through preventive and restorative dental treatment during pregnacy is the transmision of the harmful bacteria lessened to the infant.

**Methods:** The women are referred to Dental Aid by local obstetricians. A case manager meets with each woman to assist in access to dental care and the management of her oral health treatment. The women were treated in all facets of dentistry during their pregnancy to eliminate oral disease. Oral health education including the transmisabilty of oral bacteria was a part of the oral health education the women received. The children's oral health was measured at various ages by using dmfs. The children born to mother's who had perinatal intervention were compared to children whose mother's did not receive perinatal care. Women have been followed for seven years allowing us to measure and follow the children up to age 6. All of the children's care in both groups was provided in the same pediatric dental practice.

**Results:** Children who were born to mother's receiving care during their preganancy had half as many decayed teeth. They were less likely to

need hospitilization for their oral disease treatment. We also found their parents were more likely to brush the child's teeth.

**Conclusions:** Intervention during pregnancy has a positive measurable effect on the oral health of the child. The child is likely to be seen at a much younger age and they have less severe dental caries.

**Funding:** The funding for the treatment of the mother's was a combination of Medicaid and private foundations in Colorado. The children's care was primarily funded through Medicaid and SCHIP.

#### Abstract #: 3

CO-LOCATING DENTAL HYGIENISTS IN PRIMARY CARE OFFICES: BASELINE EARLY CHILDHOOD CARIES PREVALENCE AND PARENT ORAL HEALTH KNOWLEDGE, ATTITUDES, BELIEFS AND BEHAVIORS

**Presenter:** Patricia A Braun, MD, MPH Children's Outcomes Research, University of Colorado Denver-School of Medicine

**Additional Authors:** Shelby Kahl, RDH, Sarah Ling, MPH, University of Colorado Denver, Children's Outcomes Research Program, Elaine Morrato, PhD, University of Colorado Denver, Children's Outcomes Research Program, Matthew F. Daley, MD, Kaiser Permanente, Denver, CO

**Objectives:** To 1) co-locate registered dental hygienists(RDH) into Colorado medical practices serving poor children; 2) measure baseline early childhood caries(ECC) prevalence in young children(0-36 months); and 3) describe parent/caregiver oral health knowledge, attitudes, beliefs and behaviors(KABB).

**Methods:** Prospective cohort study. Five primary care medical practices serving poor children at high risk for ECC were selected for colocation. RDHs were formally calibrated to assess ECC. RDHs visually measured baseline ECC using a light/no probing. A hand-written survey (English and Spanish) measured parent/caregiver oral health-related KABBs and sociodemographic characteristics. Study outcomes:surface precavities/cavities and parental/caregiver KABBs.

**Results:** Five co-located RDHs have seen 490 children in medical practices (mean age: 19 months(range 6-36) and 78%Medicaid/CHP). Eleven percent of children had baseline precaries(9%) and caries(3%). Most patients had never seen a dentist (reported by 91%). Reported barriers to getting dental care included cost(39%), finding a dentist who took their insurance(36%), and their child being afraid(29%). Forty-three percent of parents/caregivers reported being told by medical provider that their child should see a dental provider; 27% were told this by dental provider. Parents/caregivers agreed that dental health is important to overall health (reported by 97%); that dental care in the medical setting is convenient(99%); and they would be more likely to take their child to a dental provider in a medical office than in the community(92%).

**Conclusions:** Co-locating RDHs into medical practices that serve young children at high ECC risk is viewed favorably by parents/caregivers and provides dental access to young children not yet seen by a dental provider.

Funding: Delta Dental Foundation of Colorado

#### Abstract #: 4

#### **UPDATING THE EVIDENCE - PERINATAL ORAL HEALTH GUIDELINES**

**Presenter:** Jane A Weintraub, DDS, MPH, University of California, San Francisco School of Dentistry

**Additional Authors**: Ellen J. Stein, MD, MPH, Consulting physician, Barbara Aved, RN, PhD, MBA, Barbara Aved Associates, Rolande T. Loftus, MBA, California Dental Association Foundation.

**Objectives:** Many dentists do not consistently provide and other health professionals do not refer pregnant women for dental care. Our goal is to reduce these barriers by developing current, evidence-based perinatal oral health guidelines to inform safe dental treatment. These guidelines update those developed previously by the NY State Health Department.

**Methods:** Project Co-Chairs, Drs. Weintraub and Stein, representing dentistry and medicine respectively, co-chaired the process with the California Dental Association Foundation and the American College of Obstetricians and Gynecologists, Region IX, and an interdisciplinary advisory committee. An expert panel reviewed the scientific literature, gave presentations and developed recommendations at a consensus development conference. Dr. Aved compiled the guidelines, and community clinicians reviewed them and provided feedback.

**Results:** The consensus statement included "Prevention, diagnosis and treatment of oral diseases, including needed dental radiographs and use of local anesthesia, is highly beneficial and can be undertaken during pregnancy with no additional fetal or maternal risk when compared to not providing care." A comprehensive document with extensive references was developed with specific clinical recommendations for different types of professionals. The content includes maternal physiologic changes during pregnancy in relation to oral health, current clinical trial evidence, dental treatment during pregnancy (i.e. radiation, positioning, pharmacology), bacterial transmission and oral health in early childhood.

**Conclusions:** The successful collaboration between the medical and dental professions led to a document that can be used to improve the oral health of pregnant women and their children, develop policy recommendations, and increase appropriate dental utilization in this population.

**Funding:** California HealthCare Foundation, First 5 California, Sierra Health Foundation and Anthem Blue Cross Foundation

#### Abstract #: 5

#### **ORAL HEALTH CARE DURING PREGNANCY**

Presenter: Astha Singhal, BDS, MPH, NIDCR-NIH

**Additional Authors**: Amy Adams, PhD, NIDCR-NIH, Isabel Garcia, DDS, MPH, NIDCR-NIH, Amit Chattopadhyay, BDS, MDS, PhD, NIDCR-NIH

**Objectives:** To assess dental care needs and utilization trends and identify the factors associated with unmet dental care needs among pregnant women in Maryland.

**Methods:** Maryland Pregnancy Risk Assessment Monitoring System (PRAMS) is a survey of stratified random sample of women who deliver liveborn infants. It oversamples women who delivered low birth-weight infants and women >35 years of age. PRAMS questions include behaviors and experiences before, during and after pregnancy. Dental needs and service utilization (2001 to 2006) were assessed and compared based on socioeconomic-demographic factors, timing and content of prenatal care, healthcare access indicators and pregnancy stressors, employing SAS\*-v9.1 and Epilnfo.

**Results:** Preliminary results suggest an increase from 2001 to 2006 in the proportion of women dependent on Medicaid for prenatal care (23.4% to 28.3%) and delivery (26.2% to 33.5%). Each year, >50% of women reported not having a dental visit during pregnancy (range: 50.2%-61.1%) and not receiving dental advice during prenatal visits (range: 50.8%-58.4%). 27% of PRAMS mothers reported need for dental care in 2006, of whom 35% did not visit a dentist. Each year, fewer younger (<24 years of age) and Hispanic women visited dentists. Years of education was positively associated with dental visits (ChiSq=24.8;P<0.001). Those with 12 years (OR=2.25) and >12 years of education (OR=4.7) were more likely to visit a dentist than those with <12 years.

**Conclusions:** Majority of pregnant women in Maryland did not visit a dentist or receive dental advice, including some who reported a need for dental treatment. Education level was directly associated with dental visits.

Funding: None

#### Abstract #: 6

# PARENTAL NEIGHBORHOOD PERCEPTION AND ORAL HEALTH STATUS IN US CHILDREN

**Presenter:** Christopher Okunseri, BDS, MSc, FFDRCSI, Clinical Services **Additional Authors:** Ruta Bajorunaite, PhD, Medical College of Wisconsin, Department of Population Health

**Objectives:** Neighborhood conditions affect general health by influencing health behaviors. However, parental perceptions of their neighborhood and its influence on children's oral health status have received little attention. This study examines the association between

global rating of children's oral health and neighborhood perception, as reported by their parents/caregivers in the United States.

**Methods:** We analyzed data from the National Survey of Children's Health (NSCH), 2003-2004. Bivariate and multivariable analyses were used to explore the association between child's oral health status (rated as excellent vs very good/good vs fair/poor) and neighborhood perception based on parental responses to questions reflecting safety of the neighborhood and community social support.

**Results:** Parents who perceive their neighborhood as having strong community support were more likely to rate their children's oral health as excellent. Perception of safer neighborhood, school, and home environment was significantly associated with more positive child's oral health rating. Multivariate analysis indicate that neighborhood perception was significantly associated with reported status of child's oral health after adjusting for other significant factors which include race/ethnicity, poverty status, education, insurance status, age and gender of a child.

**Conclusions:** The study demonstrates that parental perception of their neighborhood is associated with rating of a child's oral health status. Oral health care programs and policies developed to address oral health disparities and access to dental care should include strategies aimed at influencing neighborhood perception.

Funding: Marquette University School of Dentistry seed grant 2009.

#### Abstract #: 7

#### WASHINGTON STATE'S ORAL HEALTH WORKFORCE

**Presenter:** Susan M Skillman, MS, University of Washington Center for Health Workforce Studies

**Additional Authors**: Joseli A Alves-Dunkerson, DDS, MPH, MBA, Washington State Department of Health, Wendy E Mouradian, MD, MS, University of Washington School of Dentistry, C. Holly A Andrilla, MS, Mark P Doescher, MD, MSPH, University of Washington Center for Health Workforce Studies

**Objectives:** To describe all components of the oral health workforce in Washington State, the programs by which residents receive oral health care and preventive services, current and future workforce gaps, and policy options to help ensure an adequate future oral health workforce.

**Methods:** Using data from surveys, professional licensure records, educational institutions, and a variety of oral health-related organizations and programs in the state, the study provides estimates of the size and distribution of Washington's oral health workforce; demographic, education and practice characteristics of the workforce; projections of state dental school graduates required to maintain statewide supply to 2027; and discussion of the state population's oral health needs.

**Results:** There are growing numbers of dentists, dental hygienists, expanded function dental hygienists, dental assistants, denturists, medical providers (physicians, advanced practice nurses and physician assistants), and supporting caregivers who provide oral health services in Washington. There remain, however, underserved populations in much of Washington. The state's oral health workforce appears unlikely to keep pace with population growth, and some provider groups will decline in relative size as baby boomers retire.

**Conclusions:** More providers are needed (from in-state educational programs and in-migration) who can provide preventive services to reduce the increasing oral health care demand that will be associated with the growth and aging of Washington's population. Dental education pipelines should better reflect underrepresented populations. Provider education and practice should be encouraged to emphasize practices that promote efficient and effective services and statewide oral health.

Funding: US DHHS HRSA

#### Abstract #: 8

## DIABETES MELLITUS, SMOKING HISTORY, AND PERIODONTAL

**Presenter:** Scott DuBois, DDS, MPH, New York Department of Oral Health

**Additional Authors**: Wenche S. Borgnakke, DDS, MPH, PhD, George W. Taylor, DMD, DrPH

**Objectives:** This study was undertaken to test the association between diabetes mellitus (DM), smoking history and periodontal disease in a group of federal inmates.

**Methods:** A total of 206 individuals participated in this study. The study participants were 100 diagnosed diabetes mellitus patients and randomly selected non-diabetes mellitus patients. The individuals were federal inmates residing at the Federal Correctional Institution/Federal Detention Center in Milan, Ml. Data were obtained from patient interview, electronic patient medical records and clinical examination. Periodontal disease was defined as bleeding on probing and at least two teeth with probing pocket depth of 5 mm or more. Diabetes status, pocket depth, periodontal bleeding index, calculus index, smoking history, race, education, income, extensive caries index and periodontal disease were determined for each participant. The data were analyzed using multivariable logistic regression.

**Results:** Individuals in this population with poorer controlled diabetes mellitus had a significantly higher prevalence of periodontal disease than those without diabetes (odds ratio=4.02; 95% Cl=1.21, 13.35), after controlling for income, tobacco use, calculus, and number of teeth. For the well-controlled participants, there also was a tendency for periodontal disease (odds ratio=2.11; 95% Cl=.84, 5.31

**Conclusions:** The present study has demonstrated an association between diabetes and an increased prevalence of periodontal disease, even after controlling for tobacco use, calculus, family income and number of teeth. Findings from the present study also indicate that the periodontal disease prevalence is higher in persons with diabetes who have poorer diabetes control, evaluated by hemoglobin A1C values, than those participants who have better glycemic control.

**Funding:** This study was supported by the New York Department of Oral Health but did not receive any funding.

#### Abstract #: 9

## STRATEGIES FOR IMPROVING FLOSSING BEHAVIOR AMONG DENTAL PATIENTS LIVING WITH HIV/AID

**Presenter:** Celeste A LeMay, RN, MPH, University of Massachusetts Medical School

**Additional Authors**: John R.Graves, DDS, MEd, Outer Cape Community Health Center, Anne McDonald, MS, RD, Harbor Health Services, Incorporated

**Objectives:** In 2006, Harbor Health Services, Incorporated was funded under the HRSA SPNS Oral Health Initiative. Although improving access to oral health care for people living with HIV/AIDS is the primary goal of this 5 year project, data collected includes patient knowledge, behaviors and attitudes regarding oral health and oral health care. At their baseline interview, 67% (70/104) of patients participating in the evaluation reported that they did not floss daily, with half (34) of these patients reporting they never flossed. Our objective is to improve patients' flossing activities, as measured by self-reported behaviors.

**Methods:** We designed a multi-staged program that includes educating dental and hygiene staff to incorporate systematic, evidence-based flossing education tools into practice, providing patients alternatives to dental floss (such as brush picks or soft picks) with instruction for their proper use, using the Transtheoretical Model to set realistic self-management goals with patients regarding flossing activities, and utilizing dental case managers as coaches for behavior change.

**Results:** We will present results of our process evaluation, including feedback from dental providers, patients, and dental case managers as well as information about patients' self-management goals and changes in behavior over time.

**Conclusions:** Changing oral health care behaviors can be very difficult, particularly for patients with chronic health problems. Understanding strategies used and the barriers encountered while implementing practice change in community health center dental clinics may facilitate progress toward improving oral health outcomes and overall health.

**Funding:** Health Resources and Services Administration Special Projects National Significance Oral Health Initiative.

#### Abstract #: 10

# ETHNIC DIFFERENCES IN SELF-REPORTED ORAL HEALTH AMONG COMMUNITY-DWELLING BLACK, HISPANIC AND WHITE ELDERS

Presenter: Bei Wu, PhD, UNCG-Gerontology Department

**Additional Authors**: Plassman BL, PhD., Duke University Medical Center.

**Objectives:** To compare differences in self-rated oral health among community-dwelling Black, Hispanic, and White adults aged 60 and older.

**Methods:** A total number of 4,859 dentate and edentulous respondents were selected from the National Health and Nutrition Examination Survey (1999-2004).

**Results:** Blacks and Hispanics reported poorer self-rated oral health than Whites while controlling for socioeconomic status, social support, physical health, clinical oral health outcomes and dental checkups. Self-reported oral health differences persisted for Hispanic elders in particular.

**Conclusions:** The study findings may have important implications for health policy and program development. Programs and services designed for minority populations should target treatments for dental disease and include components that take into account subjective evaluations of oral health conditions and perceived dental needs of the individuals.

**Funding:** This project is funded by the National Institutes of Health/National Institute of Dental and Craniofacial Research (NIDCR) (1R21 DE019518).

#### Abstract #: 11

PREVENTIVE ORAL HEALTH CARE IN EARLY CHILDHOOD: KNOWLEDGE, CONFIDENCE, AND PRACTICES OF FAMILY PHYSICIANS AND PEDIATRICIANS

**Presenter:** Frank Catalanotto, D.M.D, Department of Community Dentistry and Behavioral Sciences

**Additional Authors**: Jill Boylston Herndon, Ph.D., Institute for Child Health Policy and Department of Epidemiology and Health Policy Research, University of Florida College of Medicine

**Objectives:** Primary care physicians (PCPs) play an important role in preventing early childhood caries, one of the most common, yet preventable, diseases of childhood. Our study had two objectives designed to inform PCP oral health training programs: (1) to better understand the interrelationships between physicians' oral health training and their knowledge, confidence, and practices and (2) to examine the differences between family physicians and pediatricians.

**Methods:** Members of the Florida Academy of Family Physicians and the Florida Pediatric Society completed a self-administered questionnaire. Bivariate analyses were used to compare pediatricians' and family physicians' responses about their oral health knowledge, confidence, and practices. The potential pathways by which oral health training influences physicians' practices were analyzed using a recursive system of equations.

**Results:** The final sample was 421 physicians. Oral health training was positively associated with non-fluoride knowledge and physicians' confidence, but training was not directly associated with performing recommended oral health practices. Confidence had the strongest association with the frequency with which physicians performed recommended practices, suggesting an indirect effect of training. There were important differences by physician type. Family physicians were significantly less likely than pediatricians to answer fluoride-related knowledge questions correctly, and they were less likely to report being confident.

**Conclusions:** Oral health training appears to play an important role in promoting physician confidence in performing recommended anticipatory guidance and oral health risk assessment and screening. Our findings of differences between family physicians and pediatricians suggest that training programs should be tailored to the needs of each specialty.

**Funding:** Supported in part by grants from HRSA (T12HP07706-02-00), the Health Foundation of South Florida and the Florida Developmental Disabilities Council.

#### Abstract #: 12

## BUILDING BRIDGES BETWEEN DENTISTS AND PHYSICIANS: A PARTNERSHIP OF PROFESSIONAL ORGANIZATIONS

Presenter: Mary Hayes, DDS, Illinois Society of Pediatric Dentists

**Additional Authors:** Sue Bishop DDS, Illinois Academy of General Dentistry (IAGD) Jennie Pinkwater, Illinois Chapter of American Academy of Pediatricians (ICAAP)

**Objectives:** Increase collaboration among physicians and dentists serving young children by participating in the ICAAP's Bright Smiles from Birth Program (BSFB).

**Methods:** In 2004, ICAAP brought together a group of stakeholders to develop a fluoride varnish pilot program for primary care physicians. Working with ISPD, the Illinois State Dental Society (ISDS), and the Illinois Academy of General Dentistry (IAGD), ICAAP was able to create a program where dentists would go into local pediatric offices to train physicians and staff on prevention of early childhood caries and application of fluoride varnish

**Results:** To date, over 120 dentists have been trained in the BSFB curriculum and presented to almost 650 physicians in the Chicagoland area. Representatives from ISPD, IAGD and ISDS assisted in development of the BSFB program and serve as active advisors. Due to this partnership, ISPD was able to advocate for increase in reimbursement for application of fluoride varnish for dentists and continues to work to educate other dentists on performing year one visits.

**Conclusions:** This partnership among professional organizations has assisted in overcoming barriers associated with fluoride varnish programs. By using dentist trainers in the BSFB office, local physicians become more aware of the issues facing primary care providers and have created a personal connection among these professionals. This partnership will continue to move forward in development of new education modules for both dentists and physicians.

**Funding:** Bright Smiles from Birth project is funded by Illinois Children's Healthcare Foundation, Illinois Department of Public Health and Illinois Department of Healthcare and Family Services.

#### Abstract #: 13

# ST. DAVID'S DENTAL PROGRAM MOBILIZES DENTISTRY IN CENTRAL TEXAS

Presenter: Patrice Coons, DDS, St. David's Dental Program

**Objectives:** To describe a mobile program that takes preventive and restorative dental care directly to children at their school campuses.

**Methods:** St. David's Foundation in Austin has funded the operating budget of a mobile dental program for more than 10 years in cental Texas. Through regular evaluation, the Program has undergone improvement in focus, program monitoring, and has strengthened community partners.

**Results:** Our program began in 1998 and has grown to 6 mobile dental vans with a clinical staff of 18, traveling directly to school campuses. Our model provides care not only to those who need it the most but also to those whose voices are seldom heard: children with painful teeth who are sitting in classrooms and who go to bed at night, hoping for relief. We partner with Title 1 elementary schools, to reach the chilren who need our help. To keep our vans operating all year, our dental program collaborates with several safety-net medical clinics in our area to provide free dental care to meet urgent needs of their patients. When school is not in session, our vans move to these sites to continue to address access to dental care. By continuing to build these relationships, we serve central Texas 5 days a week, over 50 weeks a year.

**Conclusions:** People all over the world are talking about access to healthcare. In central Texas we are actively addressing the local situation by providing free preventive and restorative services to children in 6 elementary school districts in 3 counties.

Funding: St. David's Foundation

#### Abstract #: 14

## MICHIGAN HEALTHY KIDS DENTAL PROGRAM: IMPACT ON DENTAL CARE AND COSTS

**Presenter:** Woosung Sohn, DDS, PhD, DrPH, University of Michigan School of Dentistry

**Additional Authors**: Michael C. Manz, DDS, DrPH, University of Michigan School of Dentistry, Lingxia Liang, MS, University of Michigan School of Dentistry, Emily Light, MS, University of Michigan School of Dentistry.

**Objectives:** To compare access, utilization, treatment patterns, and costs of oral health care for Medicaid eligible children through the traditional Michigan Medicaid program vs. the alternative Healthy Kids Dental (HKD) program with claims procedures, reimbursement rates, and management by Delta Dental of Michigan.

**Methods:** Enrollment and claims data files for the years 2003-2007 were created using data from the State of Michigan and Delta Dental.

County data were categorized by traditional Medicaid dental coverage, HKD dental coverage for Medicaid eligible children, or transitioned from Medicaid to HKD coverage in 2006. We evaluated dentist participation, proportion of enrolled children receiving treatment, amount of services received, and treatment patterns. Costs are evaluated in terms of total program costs, costs per enrolled child, and costs of child utilizers.

**Results:** HKD counties have higher numbers of providers, and higher utilization rates of enrollees. Transition counties (2006) experienced increased dental care utilization and dentist participation following the program switch. A higher proportion of treatment services are provided in HKD counties, while Medicaid counties have higher diagnosis procedures proportionally. Total program costs and costs per child are higher in HKD counties, but are associated with more services provided.

**Conclusions:** Greater access, higher utilization, more favorable treatment patterns, and higher costs are seen with the Healthy Kids Dental program compared to traditional Medicaid dental coverage for children in Michigan.

**Funding:** This study was supported by the Michigan Department of Community Health and Delta Dental Michigan

#### Abstract #: 15

A CONSORTIUM OF PEDIATRIC DENTISTRY RESIDENCY PROGRAMS' ACCESS TO CARE AND DENTAL HOMES FOR EHS/HS CHILDREN IN NEW YORK CITY

**Presenter:** Neal G Herman, DDS, New York University College of Dentistry

Additional Authors: Jill B. Fernandez, RDH, MPH, NYU College of Dentistry

**Objectives:** Early Head Start (EHS) and Head Start (HS) centers face barriers to obtaining oral health care for their children. In the New York City (NYC) area, there are 15 pediatric dental residencies that offer a unique talent pool of faculty and residents that can provide oral health care and education for this population.

**Methods:** We organized a gathering of representatives from all stakeholders including NYC pediatric dentistry programs, Head Start Regional Office and major grantees. A directory was then provided to all EHS/HS centers in the NYC area. We also created a GIS map to identify the EHS/HS centers, then overlaid all types of dental providers.

**Results:** We obtained support from all pediatric residency programs. We will measure success by analyzing oral health compliance data over the next 12 months and by surveying the residencies and EHS/HS centers.

**Conclusions:** A partnership between EHS/HS programs and pediatric dental residencies has been initiated, attempting to reduce barriers to care. If successful, this could serve as a national model to help EHS/HS centers meet their mandated Oral Health Performance Standards.

Funding: AAPD

#### Abstract #: 16

# COMPARISON OF EFFECTS OF WATER FLUORIDATION ON CORONAL, ROOT CARIES, AND TOOTH RETENTION IN SENIOR WOMEN AND MEN

**Presenter:** Aida Chohayeb, DDS, MSD, Women's Network Collective **Additional Authors**: Rafi K. Saatciyan, DDS, New York City

**Objectives:** To compare the effects of water fluoridation on the oral health of seniors.

**Methods:** A cross sectional survey of general health and oral conditions of senior adults at a Women's Network meeting was conducted. Results were tabulated by gender and race/ethnicity.

**Results:** Data were collected for 6 males and 34 females. General health results for smoking, high blood pressure, diabetes, manic depression, and bipolar disease will be presented. Oral conditions for presentation include: edentulism, coronal caries, cervical and root caries, taurus status, teeth grinding and jaw clicking. Dental visits and oral hygiene behaviors will also be presented.

**Conclusions:** The study found a diversity of habits, general health, and oral health in this population. The results did not reflect the effects of water fluoridation on tooth retention or dental caries. Further research is needed on larger populations of seniors by gender and race/ethnicity.

Funding: None

# DENTISTS' EDUCATIONAL PRACTICES: CARIES PREVENTION FOR LOW-INCOME PEDIATRIC PATIENTS

**Presenter:** Carrie Y Tsai, BA, Harvard School of Dental Medicine, Harvard School of Public Health

**Additional Authors**: Kristin S. Hoeft, MPH, Univ of California-San Francisco Center to Address Disparities in Children's Oral Health; Erin E. Masterson, BS, Oregon Health & Science University; Judith C. Barker, PhD, Univ of California-San Francisco Center to Address Dispariti

**Objectives:** This study explores the health educational efforts by dental providers—dentists and dental assistants—to low-income children and their parents, considering the providers' educational roles, individuals taught, topics covered, and methods and strategies used. The quality of the health education method provided was also investigated.

**Methods:** Qualitative interviews were conducted with a convenience sample of 21 dental providers from two distinct locations: a low-income neighborhood in both a large urban and a small rural site. Three researchers independently read and thematically analyzed transcripts using NVivo® software.

**Results:** Respondents emphasized the importance of oral health education. They felt a responsibility to provide the necessary information on topics including oral hygiene techniques and diet. Didactic educational methods included telling (50%), telling and showing (38%) and telling, showing and skill building (12%). Some also distributed pamphlets and/or informational sheets (25%). Only three providers used "teach back" or "supervised demonstration" techniques. While dentists provided the instruction in most instances, assistants educated when their language (Spanish) skills helped. Providers' attitudes, whether pessimistic or hopeful, informed the educational strategies employed.

**Conclusions:** While all providers felt the majority of their patients had low knowledge about oral health, dentists' attitudes and, subsequently, the content and methods they used to educate, were varied. Findings indicate a need for further research around the most effective educational topics and techniques, as well as a standardization of such in dental schools and continuing education curricula.

Funding: USDHHS NIH/NIDCR grant # U54 DE14251.

#### Abstract #: 18

# MARYLAND'S MOUTHS MATTER: FLUORIDE VARNISH AND ORAL HEALTH SCREENING PROGRAM FOR EPSDT MEDICAL PROVIDERS

**Presenter:** Elizabeth Lowe, RDH, MPH, National Maternal and Child Oral Health Resource Center, Georgetown University

**Additional Authors:** Katrina Holt, MPH, MS, RD, Georgetown University; Norman Tinanoff, DDS, MS, University of Maryland Dental School; Harry Goodman, DMD, MPH, Maryland Department of Health and Mental Hygiene; Teresa Burke, BS, Maryland Department of Health and Mental Hygiene

**Objectives:** Dental caries is on the rise among children ages 2 to 5 in the United States. Currently, over one-quarter of children ages 2 to 4 have had dental caries. Of these children, approximately 20 percent have untreated decay. It is critical that young children have access to oral health care to ensure that oral disease, including dental caries, is prevented, or, if it already exists, that it is treated.

**Methods:** Medical providers (physicians and nurse practitioners) and their staff see young children earlier and more frequently than oral health providers. As a result, they can have a major impact on young children's oral health and overall health and well-being. In June 2009, a statewide program was established to train EPSDT medical providers to conduct caries risk assessments, perform oral health screenings, apply fluoride varnish, provide anticipatory guidance, and refer children to a dental home.

**Results:** Over 400 medical providers have received the training and are providing oral health care services in their practices. In addition, an online curriculum was developed to train additional EPSDT medical providers throughout Maryland. The Maryland Medicaid Program reported that, as of February 2010, EPSDT medical providers had been reimbursed for 4,700 fluoride varnish applications.

**Conclusions:** EPSDT medical providers in Maryland are generally receptive to learning about and incorporating oral health screenings and

fluoride varnish applications into well-child visit for children ages 9 to 36 months.

**Funding:** Maternal and Child Health Bureau (grant number H47MC08649), Health Resources and Services Administration, U.S. Department of Health and Human Services; Maryland Department of Health and Mental Hygiene, Office of Oral Health; and University of Maryland Dental School.

#### Abstract #: 19

#### EFFECT OF EARLY PREVENTIVE DENTAL CARE ON DENTAL DISEASE

**Presenter:** Heather A Beil, MPH, University of North Carolina at Chapel Hill Department of Health Policy and Management

Additional Authors: R. Gary Rozier, DDS, MPH, University of North Carolina at Chapel Hill Department of Health Policy and Management

**Objectives:** This study determines the effects of early preventive dental visits on subsequent dental caries history.

**Methods:** This retrospective cohort study used NC Medicaid claims (1998-2006) linked to NC oral health surveillance of kindergarten students (2005-2006). We identified 7,313 children in the surveillance database who were enrolled in Medicaid for at least 1-year starting before their first birthday. Caries experience (dmft) and untreated caries (dt) were compared for children who had a non-preventive dental visit (n=2875) or had their first preventive visit (preventive CDT codes and no treatment codes for 3 months following) by age 2 (n=301), 3 (n=777), 4 (n=1692), or 5 years (n=1668) using a zero-inflated-negative-binomial regression model controlling for individual and county characteristics.

**Results:** Children who had a preventive visit by age 2 had a 21.2% (95% CI:9.4, 31.6%) and 22.3% (95% CI:10.2, 32.8%) higher dmft and no difference in dt at age 5 than those who had preventive visits by age 4 and 5, respectively. Children without a preventive visit by age 5 had no difference in dmft and a 43.4% (95% CI:2.5, 200.7%) higher dt than children who had a preventive visit by age 2.

**Conclusions:** Early preventive visits did not lead to lower rates of disease in this high risk population, but they were effective in providing early detection and treatment of dental caries. Children enrolled in Medicaid who are at elevated risk for disease might be more likely to see a dentist at a young age than low-risk children. Future research should control for possible selection bias.

**Funding:** This work was funded by the Agency for Healthcare Research and Quality Dissertation Award, 1R36HS018076-01.

#### Abstract #: 20

#### IMPROVEMENTS IN THE ORAL HEALTH STATUS OF NH'S CHILDREN

**Presenter:** Nancy R Martin, RDH MS, NH Division of Public Health Services/Oral Health Program

**Additional Authors**: Ludmila Anderson, MD, MPH; NH Division of Public Health Services, Chronic Disease Epidemiologist

**Objectives:** We report on improvements in oral health among students attending public schools in New Hampshire (NH) and describe several oral health initiatives that may have contributed to this improvement. Baseline data were gathered through the third grade oral health survey in 2001, followed by similar surveys in 2004 and 2009.

**Methods:** Since 1993, NH school-based dental programs (SBP) have coordinated care to assure students receive needed restorative care. In 2003, application of dental sealants became a requirement for State-funded SBP. The NH Dental Society recruited dentists to examine students prior to sealant application in schools. Most recently, Head Start children were included as a priority population for SBP. Concurrently, the NH Medicaid dental program increased reimbursements and streamlined paperwork and NH's largest city began to fluoridate its water supply. The changes in children's oral health status were measured by statewide surveys in 2001, 2004; additional regional-level data became available in 2009.

**Results:** The statewide prevalence of dental caries history decreased from 52.0% in 2001 to 43.6% in 2009; untreated caries decreased from 21.7% to 12.0%; and sealants increased from 45.9% to 60.4%. Regional estimates indicate significant geographic differences, with the history of dental caries ranging from 38.9% to 64.0%, prevalence of untreated caries from 10.8% to 30.7%, and sealants between 23.7% and 63.8%.

**Conclusions:** In comparison with the previous surveys, the overall oral health status of NH third graders improved; however significant

differences exist among regions, and targeted interventions are warranted to address these disparities.

Funding: HNHfoundation

#### Abstract #: 21

# COMMUNITY RELATIONSHIPS: HELPING TO IDENTIFY ASSOCIATIONS AMONG CLINICAL FINDINGS AND REPORTED ORAL SELF-CARE RISK FACTORS AMONG LOW-INCOME CHILDREN

**Presenter:** Kim B Perry, DDS, Restorative Sciences, Texas A&M Health Science Center Baylor College of Dentistry

**Objectives:** The first step in reducing untreated dental caries, a major public health problem for children, is building community relationships, and collecting and assessing meaningful clinical oral health data. However, data on low-income children on a local and state level are rare or unavailable. The objective: promote oral health and disease prevention, establish community relationships, recruit participants, collect data, demonstrate need, identify relationships among clinical findings and self-reported risk factors associated with oral disease, and yield data for future oral behavioral science research involving the child and caregiver.

**Methods:** Cross-sectional pilot study conducted over 12-months during health-fairs in Dallas Fort Worth. Community dentists, academicians, nurses and oral health advocates performed oral and physical screenings referring those in need (children) of care for treatment.

**Results:** Developed community relationships resulting in the organization and participation in four community health fairs: 1-church, 1-school and 2-centers, and screened 122 low-income AA and Hispanic participants, median age 8. Among ages 6-9 (44/122)-those not seeing a dentist or having a cleaning (dental care) within 12 months, compared to those receiving dental care had more untreated dental caries (84.6% vs. 41.9%, p=0.02), and fewer fillings (23.1% vs. 67.7%, p=0.009). Participants reporting a medical visit compared to those without a medical visit, were more likely to receive dental care (85.7% vs. 43.8%, p=0.006). Race (AA vs. Hispanic) was not found to be significant in this study.

**Conclusions:** From this small study, we conclude community collaborations can build trust, increasing the likelihood of caregivers to allow their child to participate in research designed to ultimately improve outcomes for 3<sup>rd</sup> grade children.

Funding: 1KL2 RR024983-01

#### Abstract #: 22

#### **HEADSTART AND ORAL HEALTH IN ILLINOIS**

**Presenter:** Julie A Janssen, RDH, MA, Illinois Department of Public Health

 $\label{lem:Additional Authors: Sangeeta Wadhawan, BDS, MPH, IFLOSS Coalition and ASTDD:$ 

**Objectives:** A comprehensive effort to prevent and reduce the devastation of dental decay in young children targeting HeadStart centers.

**Methods:** The Illinois Department of Public Health, Division of Oral Health (Division) partners with the Head Start Collaborative Office and state Association to integrate oral health education, screening, fluoride varnish, referral to oral health care and data collection into Head Start throughout the state. Among other strategies, the Division has developed a system to collect oral health indicators to assess dental disease burden among Head Start children. Head Start agencies collect and send oral health data to the Division annually. Once gathered the data will be analyzed and results published.

**Results:** Eighteen out of 45 Head Start agencies statewide are participating in the 2010 school year. Information is being analyzed to compare with other local, state and national data sets. Caries experience, untreated decay and treatment urgency are captured by age. Annual reports of the information will track information over time.

**Conclusions:** The information will be important component of the Illinois Oral Health Surveillance System. Data will be utilized to drive early childhood oral health prevention program planning, resource development, evaluation and for targeting Healthy People Objectives.

Funding: State of Illinois

#### Abstract #: 23

#### **ORAL HEALTH-RELATED IMPACT ON QUALITY OF LIFE IN HIV PATIENTS**

**Presenter:** Sangeeta Gajendra, DDS,MPH, Eastman Institute for Oral Health

**Additional Authors:** Ron Billings, DDS, MSD, Eastman Institute for Oral Health/University of Rochester; Sheldon Fields, PhD, RN, APRN, BC, FNP, AACRN, School of Nursing/University of Rochester;

**Objectives:** A pilot study to assess the oral health related quality of life in HIV patients in a community health center in Rochester, NY.

**Methods:** Pilot data were collected from 123 adults between the ages of 20-64 years with HIV/AIDS at a Community Health Center in Rochester, NY. Each subject was given a clinical examination to assess the prevalence of dental caries, periodontal disease and presence of oral soft tissue and mucosal lesions. A questionnaire was administered to determine the impact of oral health on quality of life using the 14-item version of the Oral Health Impact Profile (OHIP) instrument. Descriptive statistics and Pearson's correlation were used to analyze the data.

**Results:** Of the total of 123 subjects, there were 73% males and 27% females with 49% being Caucasian, 42% African American, 1.6% Asians and 46% Hispanics. The mean age was 45.2 years (SD= 8.53). Mean DMFS= 18.31 (SD= 14.5) and mean CPI index= 2.5 (SD=0.94). For the OHIP domains, although more than two-thirds of the population reported no functional limitation, physical disability, social disability nor any handicap, 59% reported physical pain. The mean impact severity score= 16.23 (SD= 12.06). There was no correlation between impact severity scores and caries (r= 0.10; p> 0.05 for n= 110).

**Conclusions:** The high levels of oral pain and other forms of social impact suggest a need for improved delivery of oral care services to this vulnerable population.

**Funding:** AIDS Community Health Center, Rochester, NY; Center for Community Health, University of Rochester Medical Center, Rochester, NY

#### Abstract #: 24

#### PEORIA PARENTS' DENTAL PERCEPTIONS FOR SPECIAL VERSUS NON-SPECIAL NEEDS KINDERGARTNERS

Presenter: Linda M. Kaste, DDS, MS, PhD, UIC COD

**Additional Authors:** Jamie L. McCarthy, DDS, MS, Shahrbanoo Fadavi, DDS, MS, Anne Koerber, DDS, PhD, and Agatha M. Gallo, PhD, APN, CPNP, FAAN

**Objectives:** Children with special needs (SN) or without special needs (NSN) should be able to obtain dental treatment without encountering obstacles preventing access to care. This study's aim was to compare parental perceptions of oral health status and access to dental care for SN and NSN kindergarteners in Peoria, Illinois.

**Methods:** Parents/guardians of all kindergartners (55 SN and 253 NSN) at four public, urban schools were sent a 20-item questionnaire. Three distributions included questionnaire, cover letter, school principal and county dental director letters of support, and postage-paid-addressed-return envelopes. The study was approved by the School District and UIC IRB.

**Results:** Response rate was 62% (38% SN and 67% NSN). The groups statistically differed on household income (under \$30,000 for 71% SN and 60% NSN), and primary care giver (mother for 67% SN and 56% NSN) but were similar on child's birth order, age, and race. Group differences included: missing school (SN>NSN), referral to a different dentist (19% SN vs. 1% NSN) and tooth extractions (24% SN vs. 2% NSN). Group similarities included: age of first dental visit, dental need, having a dental home and seeing a dentist in the past year. Acceptance of behavior management techniques varied. "Cannot locate dentists accepting Medicaid" was top barrier for both groups.

**Conclusions:** Similarities and differences regarding oral health status and access to dental care for SN versus NSN kindergartners were found via parent/guardian perceptions. The unanticipated low response rate for the SN children raises questions for further study.

**Funding:** Institutional/Departmental funding was provided in support of the research as a UIC Pediatric Dentistry residency research project.

# "METH MOUTH": THE EFFECT OF DRUG USE PATTERNS, BEHAVIOR AND KNOWLEDGE ON CARIES STATUS BETWEEN METHAMPHETAMINE USERS AND NON-USERS

**Presenter:** Ronni Brown, D.D.S., M.P.H, Sonoma County Sheriff's Department, Santa Rosa, California

**Objective:** To examine the impact of drug use patterns on "meth mouth"; an accelerated pattern of dental decay associated with methamphetamine use.

**Methods:** A case-control study design was used amongst voluntary participants at the Sonoma County Main Adult Detention Facility. Participants were identified, on self-report, as methamphetamine users (MA users) or non-users (non-MA users). The author assessed dietary and oral hygiene behaviors, dental care access and knowledge of "meth mouth". MA users were asked about drug use patterns, history of xerostomia and perceived impact of the drug on their oral health. Oral examinations determined the number of decayed, missing and filled teeth (DMFT) for each cohort.

**Results:** MA users had higher mean DMFT scores (p=0.029) and were more knowledgeable about "meth mouth" (p=0.010) than non-MA users. Xerostomia, during drug use, was reported by 82% of MA users, (p=0.000). A significant decline in oral health (p=0.032) was reported by MA users. Participants who smoked or sniffed methamphetamine had higher mean DMFT scores than intravenous users (p=0.081). Only 8% of participants had received information about "meth mouth" from medical, dental or law enforcement professionals.

**Conclusions:** The findings of this study established a negative relationship between methamphetamine use and oral health. Dentists should offer MA users with salivary substitutes and other preventive measures to minimize the oral effects of the drug. Dental, medical and law enforcement professionals should provide all patients and detainees with "meth mouth" information to prevent continued or future use of this highly addictive drug.

Funding: None

#### Abstract #: 26

#### SCHOOL BASED ORAL HEALTH NEEDS ASSESSMENT

**Presenter:** Amanda R Kender, BS, Lehigh Valley Health Network, Division of Community Health, Health Studies and Education

**Additional Authors**: Amanda R. Kender, BS, Lehigh Valley Health Network, Erin E. Niclaus, MS, Lehigh Valley Health Network, Cathy A. Coyne, PhD, MPH, Lehigh Valley Health Network, Anthony Nerino, MA, Lehigh Valley Health Network

**Objectives:** To determine the burden of disease for planning and implementation of oral health programs and to gather baseline oral health data to examine the relationship between oral health, student academic performance and attendance.

**Methods:** Second through fifth grade students from two urban school districts, with parental consent, received oral health screenings. Dental hygienists performing the screenings were trained for consistency using an adapted version of the Basic Screening Survey. Parental consent forms included dental services survey questions. Individual tooth information was recorded and entered into electronic form. Electronic tooth data was provided to the school districts where it was linked with demographic information using district assigned unique identification numbers.

**Results:** Among the 3,468 students that were screened, 44% were found to have caries in one or more teeth. Over 90% of second grade students had at least one first year molar potentially eligible to receive a sealant and 32% had at least one deciduous tooth with untreated caries. Sixty-five percent of students at the larger of the two school districts were Hispanic and 72% were on a free or reduced lunch program.

**Conclusions:** The need for both preventive and restorative dental programs in Lehigh Valley is evident and has been recognized by various regional stakeholders. Over the past three years addressing access to dental services, particularly for low income children, has become a priority. Collaboration among public and private organizations is essential to assure continuum of care.

Funding: Dorothy Rider Pool Health Care Trust

#### Abstract #: 27

# AMBULATORY SURGERY FOR EARLY CHILDHOOD CARIES IN CALIFORNIA IN 2005

**Presenter:** Cheryl H Terpak, BSDH, MS, California Department of Public Health

**Additional Authors:** Zhiwei Yu, MPH, California Department of Public Health, Kathryn Martin, PhD, MPH, California Department of Public Health, Mike Curtis, PhD, California Department of Public Health,

**Objectives:** What populations use ambulatory surgery for the treatment of Early Childhood Caries (ECC) in California?

**Methods:** Children under 6 years old were identified in the 2005 ambulatory surgery data from the Office of Statewide Health Planning and Development (n=83,973). Principal diagnoses for dental caries were identified using the ICD-9 codes 521.00-521.09. The ECC ambulatory surgery utilization rate (per 100,000) was calculated by age, race/ethnicity, and Medicaid status using California population data from the Departments of Finance and Medicaid. Rates across counties were examined, as was the distribution of dentists using data from the California Dental Association.

**Results:** Dental caries was the second leading principal diagnosis (12%), behind otitis media and eustachian tube disorder (19%). Medicaid was the most frequent expected payer for the treatment of ECC (66%). The utilization rate for ECC was highest among 3 year olds (601.4), American Indians (597.3), and Hispanics (362.5). Children on Medicaid had a higher rate of surgery for ECC than children who were not on Medicaid, except for African Americans, who experienced approximately the same rate of treatment for ECC whether they were (232.7) or were not (249.2) on Medicaid. Counties in the Central Valley had the highest rates of treatment for ECC (e" 1971.5). These counties also ranked low with respect to dentists per capita.

**Conclusions:** Early Childhood Caries can affect children from all socioeconomic classes, but surgery for ECC is more prevalent among low-income populations, certain racial/ethnic groups, and certain regions of California.

Funding: Title V Block Grant

#### Abstract #: 28

#### COMPARISON OF ORAL HEALTH OUTCOMES FROM A SCHOOL-BASED PROGRAM TO A STATEWIDE ORAL HEALTH SURVEY

**Presenter:** Corinna S Culler, RDH, DrPH, Boston University Henry M. Goldman School of Dental Medicine

**Objectives:** To compare children's oral health outcomes from a state-wide survey to those found through a comprehensive school-based program located in one low-income, minority school district.

**Methods:** A stratified, random sampling of schools participated in the 2007 Massachusetts Oral Health Survey (MOHS). Dental screenings were conducted for 5,914 students in grades K, 3, and 6 as part of the survey. 887 students were screened as part of the school-based program in its 6th year of operation and located in Chelsea, MA. Bivariate analyses were used to examine differences in caries and dental sealant rates between groups, stratified by grade.

**Results:** Significantly more students in Chelsea had untreated decay than did students statewide (35.2% vs. 16.7%). Chelsea Kindergarten students also were significantly more likely to have large decay, pain, or infection (9.7%) than students statewide (5.2%). Students in third grade in Chelsea had equal rates of severe dental disease as students statewide. Significantly more Chelsea third graders had dental sealants (65.6%) then did third graders statewide (46.5%).

**Conclusions:** These results suggest a positive impact of the school-based oral health program. Students in this very high-risk community were found to have dental sealant rates that exceed state rates, and rates of serious decay, pain, or infection that were equal to the rest of the state.

**Funding:** The MOHS was conducted by Boston University Henry M. Goldman School of Dental Medicine and New England Research Institutes with funding from the Catalyst Institute, a division of Delta Dental Services of Massachusetts.

# ASSESSMENT OF KNOWLEDGE AND ATTITUDES OF DENTAL PUBLIC HEALTH PROFESSIONALS ABOUT THE EFFECTIVENESS OF XYLITOL IN CARIES PREVENTION

**Presenter:** Jehan Al Humaid, BDS, Department of Health Policies and Health Services Research/Henry M. Goldman School of Dental Medicine

Additional Authors: Ana Karina Mascarenhas, BDS, MPH, DrPH

**Objectives:** Little is known about dental professionals' knowledge regarding the effectiveness of Xylitol in caries prevention. Our aim was to assess the knowledge of dental professionals, particularly dental public health specialists, on the effectiveness of Xylitol products in caries prevention. Attitude towards recommending Xylitol was also assessed.

**Methods:** A cross-sectional survey was conducted on dental professionals attending the National Oral Health Conference at Portland, Oregon from 20-22 April 2009. A 31 item self-administered questionnaire survey was distributed. Knowledge questions included effective dose, frequency, mechanism of action and safety of Xylitol in caries prevention. Attitude questions included recommending Xylitol to the patients, and barriers to its use.

**Results:** Eighty-one subjects returned the survey, of these 77.5% were females. Almost 63% of subjects reported having some knowledge about Xylitol. Only 30% reported that the effective dose was 6-10g/day and 51.3% reported an effective frequency of 3-5/day. Additionally, reported Xylitol safety ranged between 24% for adults and school children to 13.2% for infants. Xylitol chewing gum was not recommended because 8.8% thought it was culturally unacceptable, 28% said it was prohibited in schools, 23.2% because of development of TMJ pain and 22.4% thought it was not safe for children under 6 years of age. Finally, 51% were interested in reading more articles about xylitol and 35% in attending CE courses.

**Conclusions:** An increase in the knowledge of dental professionals about the effectiveness of Xylitol in caries prevention is needed. Continuing education programs on Xylitol would be appropriate.

Funding: None

#### Abstract #: 30

# ACCEPTABILITY OF FLUORIDE VARNISH TO LOW-INCOME PARENTS OF VERY YOUNG CHILDREN

**Presenter:** Kristin S Hoeft, MPH, UCSF Center to Address Disparities in Children's Oral Health

**Additional Authors**: Zenelia Roman, BS; Margaret M. Walsh, EdD; Judith C. Barker, PhD,

**Objectives:** To understand what low-income parents of 1-3 year old children know and believe about fluoride and fluoride varnish and to assess its acceptability for application on their children's teeth.

**Methods:** Qualitative interviews were conducted in Spanish or English with a convenience sample of 50 low-income parents of young children aged 1-3 years at California dental clinics, primary care clinics and Special Supplemental Nutritional Program for Women Infants and Children (WIC) Centers. Recruitment included some sites with and without fluoridated water, but none currently offered fluoride varnish. Interviews were digitally recorded, transcribed, thematically coded and analyzed using NVivo® software.

**Results:** While some parents had heard about fluoride (65%), hardly any knew about fluoride varnish (5%). Many parents liked the idea of fluoride varnish, especially that it was a treatment applied directly to teeth. They were eager to get it for their children, but first wanted information on safety and side effects, preferably from a doctor (or pediatrician). Parents viewed both physicians and dentists as suitable for applying fluoride varnish, but felt access to dentists was unlikely for children in the 1 to 3 year age range. Another acceptable source of fluoride that was familiar to parents was toothpaste.

**Conclusions:** These low-income parents of very young children are receptive to learning about and accessing fluoride varnish to prevent tooth decay in their children. Outreach is needed to make them aware of its availability and benefits. Pediatricians could play a key role in reaching parents with young children after tooth eruption.

Funding: NIH/NIDCR U54 DE019285 and NIH/NIDCR U54 DE14251

#### Abstract #: 31

# ORAL HEALTH TREATMENT AND ITS IMPACT ON SELF-REPORTED ORAL HEALTH-RELATED QUALITY OF LIFE IN AN URBAN SETTING

**Presenter:** Karl Hoffmann, DDS, St. Luke's-Roosevelt Hospital/Center for Comprehensive Care

**Additional Authors:** Michael DeMayo, MPH, St. Lukes-Roosevelt Hospital/Center for Comprehensive Care, Donna Anckle, MPH, St. Lukes-Roosevelt Hospital/Center for Comprehensive Care, Jason Euren, MA, St. Lukes-Roosevelt Hospital/Center for Comprehensive Care, Victoria Sharp, MD, St. Lukes-Roosevelt Hospital/Center for Comprehensive Care

**Objectives:** To summarize our most current data on patient's self-reported oral health-related quality of life and clinical procedures most frequently conducted through the program to determine whether quality of life measures improved after receiving oral health treatment.

**Methods:** Data was assessed from 124 patients who completed a survey that included oral health related quality of life indicators at baseline and 12 months. Questions included self-perceived oral health status, frequency of difficulties interfering with daily life, and experience with oral pain. Questions employing the use of a Likert Scale were dichotomized into 2 groups for purpose of analysis.

**Results:** There was a statistically significant increase for self-perceived oral health after 12 months of treatment; 50% percent of the participants reported that after 12 months, the health of their teeth and gums shifted from either 'fair' to 'poor' to somewhere between 'good' and 'excellent.' There were also statistically significant decreases after 12 months in avoidance of food and difficulties with relaxation due to oral health. The most frequent procedures patients received included diagnostic (99% of patients), preventative (76%), and restorative services (76%).

**Conclusions:** Findings from the surveys show that receiving treatment increased improvement in many oral health-related quality of life indicators. These findings suggest that routine dental treatment may have positive implications on non-oral health clinical indicators specifically related to patients living with HIV.

Funding: Health Resources and Services Administration

#### Abstract #: 32

#### SPORTS DRINKS: A NUTRITIONAL TRAIN WRECK

**Presenter:** Jennifer S Sherry, RDH, MSEd, Southern Illinois University Carbondale

**Objectives:** The participants will be able to comprehend the concerns that encompass the use of sports drinks by children and why it is an issue to have access in a school setting. The participants will also be able to recognize the categories of sports drinks and how the pH/sugar content is measured and how it can affect nutrition.

**Methods:** Information was gathered from various research articles and assembled to outline the facts regarding sports drinks. A data table will be presented to display different beverage choices and compare nutritional information. Some statistics were utilized from existing research to show the concerns that parents, school leaders and other school personnel should have regarding sports drinks and their availability in schools.

**Results:** Substituting sweetened beverages for milk intake may reduce Vitamin A, D, Calcium, Magnesium and Phosphorus. Some sports drinks on the market have more sugar content than soda. Physical exercise can increase gastro esophageal reflux and in combination with sports drinks can compound adverse effects on their dental health and teeth.

**Conclusions:** Frequent intake of acidic drinks could lead to dental erosion. Also, sports drinks are considered to contain "empty calories" and have no nutritional value. School districts need to evaluate their own practices in selling sports drinks in vending machines and possibly restricting access to help prevent the future effects of osteoporosis, obesity, dental caries and fractures.

Funding: None

# DOMESTIC DEFLORIDATION TECHNIQUES; A NEW RAY OF HOPE IN PREVENTING THE PROBLEM OF FLUOROSIS IN INDIA

**Presenter:** Iqbal Singh, BDS, Department of Public Health Dentistry **Additional Authors:** Anup, N., BDS, MDS

**Objectives:** Fluorosis (both Dental and Skeletal forms) has become a major public health problem in India. Drinking water is a major source of Fluoride uptake that causes Fluorosis. Fluoride is a double edged sword and intake of optimum amount of Fluoride (0.6 to 1.2 PPM) will prevent dental caries and if it exceeds, lead to Flurosis.

**Methods:** Domestic Defluoridation Units are "point of use" units with higher degree of individual participation and turning out to be a promise for the future.

**Results:** Adsorption based techniques are the most popular and effective Defluoridation techniques in the developing nations. Because of the fruits of research by the Indian Institute of Technology (IIT), Kanpur, a Domestic Defluoridation Unit (DDU), based on adsorption technique using Activated Alumina (AA) was developed.

**Conclusions:** The present scientific paper is a review and has an objective of throwing light on the current concepts, technology, application, merits, and demerits of Domestic Defluoridation Technique in India.

Funding: none

#### Abstract #: 34

#### WATER FLUORIDATION PREVALENCE AND OCCURRENCE

**Presenter:** Kip Duchon, MSEnv, CDC-Division of Oral Health

Additional Authors: William Bailey, DDS, MPH, Laurie Barker, MSPH

**Objectives:** At the conclusion of this session, the participant will be able to: Describe the water fluoridation status of the U.S., including how access to water fluoridation has increased since 1945. Describe prevalence and occurrence of naturally fluoridated water supplies in the U.S. and State and local advances through legislation and case law relating to community water fluoridation. Identify strategies and opportunities to increase the number of people with access to fluoridated public water supplies.

**Methods:** Presentation of compilation of national fluoridation statistics and strategies to increase the number of people with access to fluoridated water

**Results:** CDC works with state governments to monitor water fluoridation programs and to report program statistics every 2 years. In 2008, 72.4 percent of the U.S. population served by public water systems had access to fluoridated water, up from 62.1% in 1992 and 65.0% in 2000. This presentation will show continued progress toward the Healthy People 2010 target of 75%, and additional information on the prevalence and occurrence.

**Conclusions:** Water fluoridation continues to be implemented at an increasing rate. Continuing declines in the percentage of the population receiving water with naturally occurring fluoride concentrations in the optimal range for caries prevention indicate that adjustment of fluoride in drinking water is essential to maintaining and increasing access to drinking water with fluoride concentrations optimal for caries prevention.

Funding: No outside funding for this paper

#### Abstract #: 35

## FAILURE OF A COMMUNITY WATER FLUORIDATION INITIATIVE: A PERFECT STORM OF CONTRIBUTING FACTORS

Presenter: Harris Contos, DMD, MBA, Asclepius Associates

**Objectives:** To underscore the criticality of well organized, coordinated, financed, agile, and broad-based coalitions to promote and achieve community water fluoridation, as was done in Boston and 33 surrounding communities in 1978, in the face of strident anti-fluoridation sentiment.

**Methods:** Detailed case study of the failed 2008 fluoridation initiative in Yarmouth, Massachusetts

**Results:** The 3:1 loss of the fluoridation initiative at the polls was a "perfect storm" failure. The confluence of local political machinations; the influence of individual personalities on the local board of health and in town government; community character; inadequate understanding by the media; ineffective and counterproductive involvement from

professional and health advocacy organizations at the local and state levels; and inability to form a sufficiently large and effective local coalition, among other contributing factors, led to ineffective containment of antifluoridation sentiment.

**Conclusions:** Thirty years after the major oral public health achievement of fluoridating the city of Boston and its environs, fluoridation has still proven elusive in many parts of Massachusetts, including the 15 towns on Cape Cod. The lessons of the organizational effort behind the Boston accomplishment have not been retained. Individual communities nowadays attempting fluoridation largely need to start *de novo*, with attending inefficiencies and increased risk of failure. It is imperative for the "institutional memory" of the Boston experience to be revived, retained, updated, and made readily accessible and adaptable to local conditions if oral public health proponents are to succeed in future community water fluoridation efforts.

Funding: None

#### Abstract #: 36

#### SOUTH CAROLINA WATER SYSTEM FLUORIDATION SURVEY

**Presenter:** Kim Douglass, MPA, South Carolina Department Health and Environmental Control (DHEC)

**Additional Authors:** Melissa English MPH, South Carolina Department of Health and Human Services

**Objectives:** The purpose of the study was to describe the needs of South Carolina's fluoridated water systems in regards to: 1) equipment replacement, 2) fluoridation training for water operators.

**Methods:** The Survey of South Carolina's Fluoridated Water Systems-2009 was mailed to SC water systems that adjust fluoride in their water systems. The survey concentrated on the areas of: equipment replacement, water operator training in fluoridation, knowledge of and participation with the DHEC administered fluoridation equipment mini-grants. Responses were collected, analyzed and reported.

**Results:** Equipment Replacement Needs: SCDHEC has a fluoridation equipment replacement and repair mini-grant program, which was implemented in 2003, with notable success. Despite the success of the program 51% of the water systems still report that they will have to replace equipment within the next two to three years.

**Conclusions:** There will be a need for continued mini-grants within the next five years with many of the respondents reporting that they will need to replace fluoridation equipment. Training for water systems operators will have to be increased, to accommodate the interest by water operators in additional fluoridation training.

Funding: Centers for Disease Control and Prevention

#### Abstract #: 37

## TOBACCO CESSATION EDUCATION IN UNITED STATES DENTAL SCHOOLS

**Presenter:** Staci T Robinson, B.S., Columbia University College of Dental Medicine

**Additional Authors:** David A. Albert, DDH, MPH, Columbia University College of Dental Medicine

**Objectives:** A survey was conducted to assess the current state of tobacco cessation education within 56 United States dental schools in 2008.

**Methods:** Surveys were administered to faculty identified as responsible for teaching tobacco cessation material. Survey responses were collected via an online survey collection tool and by telephone. The survey sought to determine the tobacco related course content, methods used to deliver course material, and barriers to implementing tobacco cessation into the dental education curriculum.

**Results:** Responses were received from 56 (100%) schools. Although 48(87%) respondents reported that tobacco related education was an integrated part of their school's curriculum, only 21(38%) had a specific tobacco cessation course. Tobacco education was most likely to be incorporated into courses such as: oral pathology/oral medicine (n=39, 67%) and periodontics (n=36, 64%). Pathologists were most likely to be responsible for the instruction of tobacco cessation material (n=31, 56%), followed by periodontists (n=19, 35%), general dentists (n=18, 33%), psychologists (n=11, 20%) and dental hygienists (n=11, 20%). Lack of time (n=33, 59%), lack of faculty knowledge (n=33, 59%), and no required

tobacco cessation competency (n=27, 48%) were the most commonly cited barriers to implementing tobacco cessation into the curriculum.

**Conclusions:** Tobacco related education is largely taught in relation to dental treatment and not as a preventive oral health measure. Additional focus needs to be placed on the overall oral and public health benefits of cessation. A more holistic approach to teaching tobacco related education, coupled with additional clinical exposure are needed within U.S. dental schools.

**Funding:** Division of Community Health, College of Dental Medicine, Columbia University

#### Abstract #: 38

# FIRST YEAR DENTAL STUDENTS' ATTITUDES TOWARD AND INTEREST IN RECEIVING TOBACCO INTERVENTION TRAINING

**Presenter:** Bhagyashree Pendharkar, MS, Department of Preventive and Community Dentistry

Additional Authors: Michelle R. McQuistan, DDS, Assistant Professor, Department of Preventive and Community Dentistry, College of Dentistry, University of Iowa; Steven M. Levy, DDS, MPH, Wright-Bush-Shreves Endowed Professor of Research, Graduate Program Director, Department of Preventive and Community Dentistry, and Professor, Department of Epidemiology, College of Dentistry, University of Iowa; Fang Qian, PhD, Adjunct Assistant Professor, Department of Preventive and Community Dentistry, College of Dentistry, University of Iowa, Christopher A. Squier, PhD, Professor, Department of Oral Pathology, Radiology and Medicine, College of Dentistry, University of Iowa, Nancy A. Slach, RDH, BS, Assistant in Instruction, Certified Tobacco Treatment Specialist, Department of Periodontics, College of Dentistry, University of Iowa, Mary L. Aquilino, MSN, PhD, FNP, Clinical Associate Professor, Assistant Dean and Director, Master of Public Health Degree Program, Director of Iowa Tobacco Research Center, Department of Community and Behavioral Health, College of Public Health, University of Iowa.

**Objectives:** To assess first year dental students' attitudes toward and interest in receiving tobacco intervention training.

**Methods:** All (N = 161) incoming first year dental students in 2008 and 2009 were invited to participate in the study during orientation at the University of Iowa. A self-administered questionnaire was completed to assess students' interest in receiving tobacco intervention training, knowledge related to tobacco-associated oral and systemic conditions, attitudes pertaining to tobacco cessation services, desired curriculum topics, teaching methods preferred for learning tobacco cessation, age, gender and tobacco use status. Descriptive statistics were conducted to report responses.

**Results:** The response rate was 98% (157/161). Eleven knowledge-related questions had more than 50% "I don't know" responses, including smoking is associated with implant failure (59%) and necrotizing ulcerative gingivitis (69%) and smokers have less bleeding on probing compared to non-smokers (59%). Respondents strongly agreed/agreed that dentists should: educate patients about tobacco-associated oral conditions (99%), ask patients about tobacco use (97%), discuss health hazards of tobacco use (97%) and discuss the benefits of quitting (97%). Seventeen percent were very much interested in receiving tobacco intervention training, 32% were moderately interested, 31% were slightly interested and 19% were not at all interested.

**Conclusions:** Although students may benefit from the tobacco intervention curriculum, it may be challenging to engage students in the curriculum and to get them to provide tobacco cessation services in the student clinics.

**Funding:** Supported by the Delta Dental of Iowa Foundation Graduate Student Thesis Award program and Dr.Levy's Wright-Bush-Shreves Endowed Professorship Fund.

#### Abstract #: 39

## OC EXAMINATIONS AND EDUCATION: WHAT'S KNOWN ABOUT THE PROFESSIONAL SIDE?

Presenter: Charles W LeHew, PhD, UIC IHRP

**Additional Authors:** Joel B. Epstein, DMD, MSD, UIC COD, Sara C. Gordon, DDS, MSC, UIC COD, and Linda M. Kaste, DDS, MS, PhD, UIC COD

**Objective:** HP 2010 Objective 21-7 is to "increase the proportion of adults who, in the past 12 months, report having had an examination to

detect oral and pharyngeal cancers." The midcourse review could not assess this objective "because of limited tracking data." Now at 2010, a look at the decade's professional preparation for such examinations could be helpful.

**Methods:** PubMed was searched for papers on experiences and education regarding oral cancer screenings and restricted to 2000-2009, focusing on dentists. Six searches were conducted for "mouth neoplasms" with "dentists' practice patterns", "clinical competence", "schools, dental", "students, dental", "faculty, dental", or "education, dental, continuing".

**Results:** The unrestricted six searches yielded 177 manuscripts with 74 non-repetitive papers for the 2000-9 time span. Most were in English (98.3%). Six journals accounted for 54% of the articles with Journal of Cancer Education being the largest single source. Geographic areas in the titles varied with 17 papers identifying 8 states (FL, IL, MA, MD, NC, NY, SC, TX) whereas 21 mentioned 15 non-US countries. The largest yield was "clinical competence" for 37 papers and the smallest "faculty, dental" for 2 papers. On average, a manuscript appeared in 1.38 searches.

**Conclusion:** While the US is not alone in seeking improvements for early detection of oral cancer, such as sought by the HP 2010 objective, states differ on reporting. While recent activity occurred, much of it appears in journals not regularly read by US dentists. Further exploration of health professionals' health literacy on oral cancer is warranted.

Funding: Unfunded

#### Abstract #: 40

## ORAL CANCER AWARENESS IN WOMEN RECOVERING FROM ADDICTIONS

**Presenter:** Mara Beth D Womack, RDH, MS, CDA, University of Southern Indiana

Additional Authors: Emily Holt, RDH, MHA, CDA, University of Southern Indiana

**Objectives:** Individuals fighting addictions are at higher risk of developing oral cancer due to their lifestyle factors. This population generally has decreased access to dental services as a result of lower incomes and mental health concerns related to their addictions. Due to the need for dental services, a community partnership was established between the University of Southern Indiana's (USI) Dental Hygiene Program and the Women's Addiction Recovery Manor (WARM) in Henderson, Kentucky.

**Methods:** Senior dental hygiene students and faculty members travel to the WARM facility each fall to educate the residents about oral cancer risk factors and signs and symptoms of oral cancer. Students also perform oral cancer screenings and provide oral health instructions. The supervising dentist evaluates suspicious oral lesions.

**Results:** The project reduces the cost to the residents and the community since this population typically seeks care for dental emergencies instead of preventive services. Care for dental emergencies is sought through the emergency room instead of visiting a dental office. This practice can lead to a financial burden for the individual and the community.

**Conclusions:** Positive comments from WARM program directors and residents included an increased knowledge and awareness of oral health among the residents. Students expressed a better understanding of the interpersonal skills needed when working with patients with addictive personalities.

**Funding:** The total budget includes USI's cash match of \$1,481 for faculty stipends and \$2,233 for supplies from the Indiana Campus Compact Scholarship of Engagement Faculty Grant.

#### Abstract #: 41

## HEAD & NECK CANCER SCREENING: WHAT IS OUR STANDARD OF CARE?

**Presenter:** Sara C Gordon, DDS, MS, University of Illinois at Chicago **Additional Authors:** Linda M Kaste, DDS, MS, PhD, University of Illinois at Chicago; James R Geist, DDS, MS, University of Detroit Mercy; Michael A Kahn, DDS, Tufts University.

**Objectives:** There is no formal delineation of the dentist's examination to detect cancer. The objective was to build consensus regarding what elements must be included in a head and neck oral cancer screening examination.

**Methods:** Members of the Oral and Maxillofacial Pathology section of the American Dental Education Association (ADEA) were surveyed regarding how they screened their patients for head and neck cancer. The anonymous survey was conducted online. Attendees at the ADEA annual meeting discussed the findings and reached consensus on what elements are essential.

**Results:** Participants agreed that even patients traditionally assumed to be "low risk" may develop cancer, so every patient needs to be screened at the first visit and all periodic re-evaluations, although high-risk patients may be screened more frequently. Tobacco, alcohol, and cancer history must be assessed; sexually-active patients should be asked about exposure to high-risk HPV. Radiographs should be used only according to ALARA guidelines. Areas to be palpated and viewed include: face, scalp, ears, eyes, nose, temporomandibular joint (TMJ), neck (including nodes and glands), lips, buccal mucosa, gingiva, hard and soft palate, floor of the mouth, lateral, dorsal, and ventral tongue. Clinicians should attempt to examine tonsils, base of tongue, and posterior pharynx, but if they cannot and suspect a lesion, they should refer the patient.

**Conclusions:** Dentists need to conduct a thorough head and neck exam every time they examine every patient. HPV should be discussed with sexually-active patients. Examination of the pharynx should be attempted, and radiographs only ordered when necessary.

Funding: None

#### Abstract #: 42

#### IMPACT OF FUNCTIONAL OCCLUSAL STATUS ON ORAL HEALTH-RELATED QUALITY OF LIFE OF ADULT AGRICULTURAL-WORKERS

**Presenter:** Susan Hyde, DDS, MPH, PhD, U. California, San Francisco, Department of Preventive and Restorative Dental Sciences

**Additional Authors:** Jane A. Weintraub, DDS, MPH, U. California, San Francisco, Department of Preventive and Restorative Dental Sciences

**Objectives:** To assess the impact of posterior functional occlusal contacts (FOC) on oral health-related quality of life (OHRQoL) in rural adult agricultural-workers.

**Methods:** As part of a larger cross-sectional, population-based study of Hispanic agricultural-worker families in rural California, 326 adults, mean age 36.9 /- 8.9 years, were interviewed about their oral health, and 273 received dental exams by a trained examiner. OHRQoL was measured using the short-form Oral Health Impact Profile (OHIP-14), and FOC was assessed by evaluating 12 posterior zones with the participant in centric occlusion: 6 from first bicuspid – second molar, left and right sides.

**Results:** The median OHIP-14 severity score was 7 (range 0-56). The median FOC was 10 (range 0-12). There were no significant sex differences for OHIP-14 or FOC scores. There were no significant age differences for OHIP-14 scores, but number of FOC significantly decreased with increasing age (p<0.001). Only 29% of participants retained all 12 FOC; 28% were missing at least one bicuspid, and 61% were missing at least one first molar. OHIP-14 severity scores significantly worsened with missing first molars (p=0.0004), weakly with missing second molars (p=0.0439), but not missing bicuspids (p=0.5884). These results were more pronounced for males (p=0.0003) and younger adults (p=0.0021).

**Conclusions:** Nearly two-thirds of adults in this Hispanic agricultural-worker population were missing at least one first molar, which may indicate poor access to preventive and restorative care early in life. OHRQoL was worse for those missing their first molars, which may reflect compromised functional masticatory efficiency.

Funding: USDHHS/NIH/NIDCR U54DE14251, NIOSH2U50OH007550-06, The California Endowment

#### Abstract #: 43

# PEDIATRIC ORAL HEALTH RESOURCES ON THE UNIVERSITY OF IOWA COLLEGE OF DENTISTRY'S WEBSITE

**Presenter:** Cathy Skotowski, RDH, MS, The University of Iowa Department of Pediatric Dentistry

**Objectives:** To create an awareness of the pediatric oral health resources available on the University of Iowa College of Dentistry's website.

**Methods:** Faculty members and residents from the University of Iowa's Department of Pediatric Dentistry have developed educational videotapes and fact sheets on various pediatric oral health topics and have recently made them accessible on their department website.

**Results:** The educational videotapes are entitled: Infant Oral Exam, Toddler Oral Exam, Caries Risk Assessment for the Young Child, Modified Toothbrushing Protocol, Oral Health for the Young Child, and Your Oral Health is Your Baby's. The fact sheets include information on the topics of dietary and oral hygiene messages pertaining to infants and toddlers, dealing with dental emergencies, and additional oral health resources for children.

**Conclusions:** By placing recently developed pediatric oral health resources on the internet, they are accessible to a much larger audience of health professionals and parents/caregivers.

Funding: Delta Dental Public Benefit Fund and The University of Iowa.

#### Abstract #: 44

ORAL HEALTH DURING PREGNANCY: A COMPARATIVE ANALYSIS REVIEWING QUALITATIVE DATA FROM THE 2005 AND 2008 PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (PRAMS) SURVEYS

**Presenter:** Carrie M. White, MPH, GINN Group, Centers for Disease Control and Prevention, Division of Oral Health

**Additional Authors:** Jessamyn Ressler-Maerlender, MPH, Centers for Disease Control and Prevention, National Center for Environmental Health; Gina Thornton-Evans, DDS, MPH, Centers for Disease Control and Prevention, Division of Oral Health, Valerie Robison, DDS, MPH, PhD, Centers for Disease Control and Prevention, Division of Oral Health.

**Objectives:** CDC's Division of Oral Health is exploring data sources which target women to gain a better understand women's attitudes regarding oral health and pregnancy. The project uses data from a state survey of pregnant women to understand how women's perception of oral health impacts their willingness to seek dental treatment while pregnant.

**Methods:** This analysis includes data from 11 states for two years of the survey. Survey data were searched for comments that mentioned oral health and pregnancy. Comments were written voluntarily by respondents on the survey; collected comments are being analyzed in MS Excel for relevance using codes that include tooth/teeth, mouth, gums, pain, and dentist.

**Results:** Findings show that most mothers did not make a dental visit during pregnancy. Women who reported having dental problems did not seek care. Some women indicated that poor oral health status during pregnancy is normal. Others expressed belief that they or their fetus could be harmed by treatment.

**Conclusions:** Attitudes and beliefs about pregnant women's oral health have not advanced with the science and best practices. If pregnancy status modifies perceptions of oral health and dental care in women, it may contribute to women's avoidance of dental treatment while pregnant. Researchers and health program planners should give increased attention to the oral health needs and behaviors of pregnant women. Education about oral health and prenatal care for healthcare providers should also be a priority.

Funding: Centers for Disease Control and Prevention

#### Abstract #: 45

#### PRENATAL ORAL HEALTH NEEDS ASSESSMENT

**Presenter:** Homa Amini, DDS, MPH, MS, Nationwide Children's Hospital

Additional Authors: Beth R. Noel, RDH, Nationwide Children's Hospital

**Objectives:** To describe the oral health status, treatment needs, beliefs and attitudes of a sample of pregnant women

**Methods:** 306 pregnant women were recruited from clinics and programs in Columbus, Ohio during 2009. Subjects participated in a basic screening and completed a questionnaire which gathered information related to habits, utilization of dental services prior to/during pregnancy, beliefs and attitudes, and obstacles to accessing dental care.

**Results:** The majority (52%) of women were African American, 27% were Caucasian, and 8% were Hispanic. Most (66%) were covered by Medicaid, 5% had private insurance, 42% were in the process of applying and 15% had no coverage. 44% had a dental visit in the last year, 39% had a dental visit in the last 2-4 years, 14% reported their last dental visit in the past 5-10 years and 3% had never been to a dentist. About half of the

participants gave details about having problems with their teeth or gums and 8% reported being in pain. The prevalence of untreated dental caries was 47% and 28% had at least one missing tooth due to caries. 80% believed it was safe to receive dental care during pregnancy while 10% believed it was not safe and 10% did not know. The main reason given for not seeking dental care was lack of insurance. Others included lack of perceived need, dislike of dentists, lack of transportation, and not knowing where to go.

**Conclusions:** It is important to establish a healthy oral environment during pregnancy and improve access to dental care.

**Funding:** This project was partly funded by a grant from March of Dimes.

### Abstract #: 46

#### WEST VIRGINIA UNIVERSITY CHILDHOOD ORAL HEALTH PROJECT

Presenter: Gina M Sharps, BS, West Virginia University

**Objectives:** The goal of the Childhood Oral Health Project is to increase the responsiveness of the West Virginia University Health Sciences Center (WVU HSC) to address issues related to childhood oral health.

**Methods:** Strategies included: (a) evaluating and modifying the curriculum at the West Virginia University Health Sciences Center to include oral health content (didactic and clinical training); (b) developing a continuing education course for the existing dental workforce to promote best practice guidelines related to infant and toddler oral health care and perinatal oral health; and (c) crafting and implementing advocacy actions to inform policy makers on oral health issues.

**Results:** The results of the COHP include the following: The results of the COHP include the following: A significant increase has been observed in dental utilization rates of the Medicaid pregnant women, from 27% to 48% when comparing 2004-05 (before COHP education efforts began) to 2006-07. For the First Smiles Continuing Education Program showed that 92% of the participating providers felt that the program increased their comfort in performing examinations on children less than3 years old and 31% of the providers increased the number of children less than 3 years old examined in their dental practices. Monthly evaluation results of medical students' clinical rotations within the School of Dentistry showed a positive effect on the knowledge and attitudes of the students.

**Conclusions:** The COHP have institutionalized the most current evidence-based protocols and best practice guidelines within the Schools of Dentistry, Medicine and Nursing; accelerated the science base transfer to State maternal child health programs; and effectively advocated for oral health legislation.

**Funding:** The project was funded by the Claude Worthington Benedum Foundation with an additional \$3,000 supplemental chapter grant from the West Virginia March of Dimes secured in year 2 of the project.

### Abstract #: 47

### ORAL HEALTH ASSESSMENT AMONG THREE CHICAGO COMMUNITIES

Presenter: Alejandra Valencia, DDS, MPH, University of Iowa

**Additional Authors:** Anne Clancy, RDH, MBA, Chicago Community Oral Health Forum, Heartland Health Outreach; Sangeeta Wadhawan, BDS, MPH, IFLOSS Coalition, ASTDD; Mona Van Kanegan, DDS, MS, Chicago Community Oral Health Forum, Heartland Health Outreach.

**Objectives:** To compare the results of the oral health needs assessments conducted in three unique communities in Chicago: Humboldt Park, Englewood, and Rogers Park.

**Methods:** This project was a pilot study of the Chicago Community Oral Health Forum that included several stages: Engaging communities, infrastructure assessment, and oral health needs assessment. The oral health needs assessment was conducted utilizing Association of State and Territorial Dental Directors' model in partnership with community members and organizations using the "Dental Health Survey". The purpose of the survey was to assess oral health attitudes, knowledge, and beliefs of residents as well as access and utilization of oral health services. Convenience sample techniques were used to collect data between 2008 and 2009. A total of 1273 surveys were collected. Each community's results were compared.

**Results:** Results of the study indicate that adults in the three communities experience important difficulties to access oral health services. Lack of dental insurance (41% HP- 47% E, 62% RP), difficulties to find a dentist (53% HP, 61% E, 74% RP), and high cost of oral health services (55% HP, 27% E, 50% RP), were identify as main barriers to care. Additionally, some differences were found regarding perceived oral health status.

**Conclusions:** Even though this is not a scientifically chosen sample. The random sample provides invaluable information regarding oral health needs, access, knowledge, beliefs, and attitudes of community residents towards oral health. Data results are instrumental in developing future projects and allocating resources in these communities.

Funding: Otho S.A. Sprague Memorial Institute.

#### Abstract #: 48

#### SCHOOL-BASED ORAL HEALTH PROGRAM IN DETROIT, MI

**Presenter:** Amanda Roffe, MPH, Henry Ford Health Systems: School-Based & Community Health Program

**Objectives:** The objectives are to: 1) increase oral health prevention services; 2) ensure restoration of active disease for children; and 3) reduce disparities through the provision of dental sealants and oral health education.

**Methods:** In Spring 2008, the University of Detroit Mercy (UDM) School of Dentistry (SOD), Henry Ford Health System School-Based and Community Health Program (HFHS SBCHP) and the Michigan Department of Community Health (MDCH) formed a partnership. The program targets children identified with high disease rates and lack of access to dental care. It is delivered in HFHS School-Based Health Centers (SBHC) and is facilitated by an Oral Health Coordinator and three UDM SOD PA 161 dental hygienists, providing preventive oral health care (screening, prophylaxis, sealant application, fluoride varnish, restorative care referrals, and health education). Children are referred to UDM SOD for restorative care. The coordinator is responsible for program coordination, administrative tasks, funding, and addressing patient barriers. Uninsured children are identified and are enrolled in Medicaid.

**Results:** Approximately 1,800 unduplicated children have been treated. Approximately 70% of the students were indentified as requiring additional restorative care. Only 15% of the students requiring restorative care are receiving necessary treatment.

**Conclusions:** Restorative rates continue to remain low. A parental education component will be added to address lack of knowledge as one method to increase restorative rates. Providing on-site restorative care is also being considered.

**Funding:** Funding is provided through the Michigan Department of Community Health, Delta Dental of Michigan, and Blue Cross/Blue Shield of Michigan.

### Abstract #: 49

### CHANGES IN RECEIPT OF PREVENTIVE DENTAL CARE AMONG AMERICAN INDIAN/ALASKA NATIVE CHILDREN: THE NATIONAL SURVEY OF CHILDREN'S HEALTH 2003 AND 2007

**Presenter:** Junhie Oh, DDS, MPH, Interdisciplinary Health Policy Institute, Northern Arizona University

**Additional Authors:** Kathy Phipps, DrPH, Health Research Consultant, L.D. Robertson, MD, MPH, Consultants in Pediatrics and Health Research

**Objectives:** Document changes in preventive dental care utilization among America Indian/Alaskan Native (Al/AN) children and evaluate by subgroup of Al/AN children.

**Methods:** The data sources were the 2003 and the 2007 National Survey of Children's Health (NSCH). Since Al/AN race is only released for 7 states where Al/AN children make up > 5% of the state's child population, analyses were limited to 1-17 year olds from those states. Bivariate analyses were used to test, by survey year, if race/ethnicity and other sociodemographic factors were associated with receipt of preventive dental care. SAS survey procedures were used to account for the complex survey design.

**Results:** Data was available for 962 and 832 Al/AN children in 2003 and 2007 respectively. There was no difference in the sociodemographic characteristics of the survey population, such as age, parental employment, household income, and child's insurance status between the two survey years. In 2003, significantly fewer Al/AN children than non-Hispanic White

children received preventive dental care  $(61.3\pm2.6\% \text{ vs. } 73.6\pm0.8\%, p<0.001)$ . In 2007, eight of ten  $(80.5\pm3.2\%)$  Al/AN children ages 1-17 received preventive dental service in the past year, which was not statistically different from non-Hispanic White children  $(79.5\pm0.9\%)$ . Between 2003 and 2007, there were significant increases in the receipt of preventive dental care among Al/AN children ages 1-5 year old  $(42.7\pm4.9\% \text{ in } 2003 \text{ vs. } 69.1\pm6.5\% \text{ in } 2007, p=0.0019)$  and Al/AN children who were not currently covered by insurance  $(57.3\pm6.1\% \text{ in } 2003 \text{ vs. } 82.1\pm5.2\% \text{ in } 2007, p=0.008)$ .

**Conclusions:** The gap in receipt of preventive dental care between AI/AN and other children appeared to be reduced over the period of 2003–2007 according to the NSCH. Caution should be used in interpreting these results and further research with the other source of AI/AN children's dental utilization is required to determine if the survey outcomes reflected the actual changes in the population.

Funding: None

#### Abstract #: 50

#### STUDENT MANAGED DENTAL CLINICS FOR UNDERSERVED PATIENTS

**Presenter:** Kimberly K McFarland, DDS, MHSA, UNMC College of Dentistry

Additional Authors: David G. Brown, Ph.D., UNMC College of Dentistry

**Objectives:** To determine if the newly implemented University of Nebraska Medical Center (UNMC) College of Dentistry's student managed evening clinic sessions called "Sharing Clinics" are providing care to underserved populations. The clinics were established to provide free dental care for local Lancaster County residents with significant dental needs who lack access to care and are referred from the faith community or a social service agency.

**Methods:** The Institutional Review Board (IRB) approved a study to conduct a retrospective analysis of all dental patient records for the Sharing Clinics in 2008 and 2009. Researchers completed a data collection form containing 14 items for each sharing clinic record. Dental records were analyzed for demographic, health status, and the type of free dental services the patient received. Database analysis was conducted utilizing Statistical Package for the Social Sciences (SPSS 17.0 version). Frequency distributions and chi-square tests were utilized to analyze the data.

**Results:** Dental students conducted 9 sharing clinic sessions in 2008 and 2009. Free dental care was provided for 359 patients. Of the 359 dental records analyzed, complete survey data was available for 333 patient records (n=333) or 92 percent. Approximately 86 percent of the patients lived within Lancaster County and 28 percent were unemployed. Most sharing clinic patients received oral surgery services (56 percent) and 27 percent received restorative dental care.

**Conclusions:** After hours student run dental clinic sessions can successfully target high need populations and provide a significant level of free dental care.

Funding: Univeristy of Nebraska Medical Center (UNMC)

### Abstract #: 51

### PREDICTOR VARIABLES ASSOCIATED WITH PATIENTS' COMPREHENSION OF PROPOSED DENTAL TREATMENT

**Presenter:** Asana Mohamad, BA, Preventive and Community Dentistry

**Additional Authors:** Michelle R. McQuistan, DDS, MS, University of Iowa College of Dentistry, Cody G. Olson, BBA, University of Iowa College of Dentistry, Cheryl L. Straub-Morarend, DDS, University of Iowa College of Dentistry, Susan R. Dobie, PhD, University of Northern Iowa.

**Objectives:** To ascertain which variables are associated with patients' comprehension of their proposed dental treatment

**Methods:** After obtaining IRB approval, new patients in the University of lowa College of Dentistry fourth-year student comprehensive clinic were invited to participate in the study (2008-2009). Subjects were recruited via fliers, mailings, and in person. A 65-item phone survey was developed to assess respondents' comprehension of their proposed treatment. Subjects completed the survey after receiving an exam and signing a treatment plan. Univariate and bivariate analyses were completed.

**Results:** 106 new patients completed surveys. All respondents stated they completely (67.0%) or mostly (33.0%) understood their proposed treatment. A majority of respondents correctly identified who is going to provide their treatment (72.4%) and the cost of their treatment (70.2%). In contrast, fewer respondents correctly identified their proposed treatment (56.6%) and how many appointments it will take to complete their treatment (50.5%). The following predictor variables were significantly (p<0.2) associated with patient understanding: age, sex, income, and history of dental care. In general, respondents with the following characteristics were less likely to understand the various components of their proposed treatment: respondents  $\leq$  65 years of age, male, an income  $\leq$  \$25,000, and a history of irregular dental care. Education, race and patients' perceptions of their oral health were not significantly related with patient understanding.

**Conclusions:** There are many aspects of proposed dental treatment that patients may not understand. Dentists should be cognizant of which patients are least likely to understand their proposed treatment.

**Funding:** Delta Dental of Iowa Foundation and University of Iowa, Dental Research Grant

#### Abstract #: 52

# THE UNIVERSITY OF IOWA PROGRAM EVALUATION AT A PEDIATRIC DENTAL FACILITY IN SOUTHEASTERN IOWA: PRELIMINARY

**Presenter:** Deise Oliveira, DDS, Department of Preventive and Community Dentistry

**Additional Authors**: Raymond Kuthy, DDS, MPH, University of Iowa; Michael Kanellis, DDS, MS, University of Iowa; Richard Burke Jr., DMD; Colleen Kummet, BS, MS, University of Iowa

**Objectives:** To determine the satisfaction of patients' parents of a University-operated pediatric dental program within the Muscatine Center for Social Action (MCSA). This program, which has been in operation since 2005, targets a population that has been underserved by local dentists.

**Methods:** 20-item satisfaction survey (English and Spanish versions) was distributed during November 2009 to parents of pediatric patients seen at the clinic. Besides demographics, the survey addressed the following items using a 5-point Likert scale: clinic hours; facilities; waiting time; explanation of treatment; and overall satisfaction. Chi-square and Fisher Exact tests were used for statistical analysis. This project received University of lowa IRB approval.

**Results:** 54 surveys were completed, of which 18 were in Spanish. 53.7% reported a child of Hispanic ethnicity. 62.8% of appointments were "needed for a check-up and/or cleaning". Primary reasons for choosing this dental clinic were Medicaid acceptance (37.7%) and convenient location (28.3%). Twenty-three percent of patients had never previously visited a dentist; whereas, 16.7% also maintain another dentist. Overall satisfaction did not differ significantly by ethnicity, income or waiting time (p> 0.05). Preliminary data showed that 100% of respondents were willing to return and recommend the MCSA pediatric dental clinic.

**Conclusions:** Parents are satisfied with the MCSA Pediatric Dental Clinic and identified dentists and accepting Medicaid as positive elements, while available clinic days were identified as an area for improvement.

Funding: None

### Abstract #: 53

### MYTHBUSTER: CAN DENTAL HYGIENISTS ASSURE COMPREHENSIVE ORAL HEALTH SERVICES? WE CAN...WE DO...WE ARE!

**Presenter:** Nancy J Rublee, R.D.H., CDHC, Price County Public Health Department

Additional Authors: Tracy Ellis, R.N., BAN, Price County Health Director/Officer

**Objectives:** To evaluate and interpret measurable outcomes of providing oral health care through local health departments. The overarching project goal is to improve the oral health of families with economic disparity and cultural differences through services provided by dental hygienists practicing in local health departments.

**Methods:** Outcome measures from June 2005 to December 2009 will include:

**Results:** In Wisconsin there are eight settings that dental hygienists may practice dental hygiene or perform remediable procedures. In three of the eight settings a dental hygienist may practice without authorization or oversight of a dentist. Politically charged rhetoric sometimes places a chilling affect on the use of dental hygienists. Those entities who overcome the chilling affect, contract or employ dental hygienists, take an evidence based approach, and integrate a consultation-referral model, are finding that people are receiving safe, effective services resulting in healthier individuals and communities.

**Conclusions:** There is a gap in public health practice that links oral health research outcomes to community practice. At this time community health centers are working to create a system of dental homes for those people who lack access to dental care (under 200 percent of the poverty level). Dental hygienists can support goals toward unprecedented access for all people, partnering with community health centers as a safety net.

Funding: Northern Area Health and Education Centers (NAHEC)

#### Abstract #: 54

### GENERAL DENTISTS' LIKELIHOOD TO REFER MEDICAID-ELIGIBLE CHILDREN TO PEDIATRIC DENTISTS

**Presenter:** Michelle R McQuistan, DDS, MS, University of Iowa College of Dentistry

**Additional Authors:** Fang Qian, PhD, University of Iowa College of Dentistry, Raymond A. Kuthy, DDS, MPH, University of Iowa College of Dentistry, Peter C. Damiano DDS, MPH, University of Iowa Public Policy Center, Marcia M. Ward, PhD, University of Iowa College of Public Health

**Objectives:** The purpose of this study was to determine which predictor variables are associated with general dentists' likelihood to refer Medicaid-eligible children to pediatric dentists.

**Methods:** A 51-item survey was developed and mailed to all lowa general dentists (N=1089). A follow-up survey was mailed to non-respondents. The main question asked "How likely are you to refer Medicaid-eligible children?" The responses "Never, Sometimes, Often, Always" were recoded as "Never/Sometimes vs. Often/Always." Predictor variables were grouped into three domains: patient, dentist and practice characteristics. Descriptive, bivariate and logistic regression analyses were conducted. Prior to conducting the study, IRB approval was obtained.

**Results:** Seven hundred twelve general dentists completed the survey for a response rate of 65.4%. Thirty-one percent of respondents reported often or always referring Medicaid-eligible children to pediatric dentists. At least one variable from each domain was significantly (p<0.05) related with dentists who often/always refer Medicaid-eligible children: perceived inadequate exposure to trauma or infection while in dental school (OR:2.29; p=0.0002); having a practice composed of 0-5% Medicaid patients (OR:11.84; p=0.0001); and often/always refers children with private insurance (OR:65.70; p=0.0001); severe decay-extensive treatment needs (OR:1.61; p=0.04); and uncooperative patients (OR:2.02; p=0.02) to a pediatric dentist.

**Conclusions:** Increased exposure to uncooperative children and children with severe decay and trauma during dental school and in continuing education courses may increases dentists' comfort in treating Medicaid-eligible children.

**Funding:** This study was funded, in part, by NIH/NIDCR T32 DE014678-02 and Delta Dental Plan of Iowa.

### Abstract #: 55

### DENTAL SERVICES UTILIZATION AND BARRIERS OF WILLOW RUN SCHOOL DISTRICT RESIDENTS

**Presenter:** Michelle Washburn, AAS, BIS, University of Michigan School of Dentistry

**Additional Authors:** Brittany Forga, BS, University of Michigan School of Dentistry, Tanzeela Rashid, University of Michigan School of Dentistry, Linda S. Taichman, RDH, MPH, PhD, University of Michigan School of Dentistry, Carrie Bigelow-Ghaname, RDH, MS, University of Michigan School of Dentistry, Woosung Sohn, DDS, MS, PhD, DrPH, University of Michigan School of Dentistry

**Objective:** To determine the willingness of Willow Run Community School district residents to use the Washtenaw Children's Dental Clinic's low-cost dental services for their child's dental needs and to identify barriers preventing use of the clinic by this community.

**Methods:** A self-administered questionnaire was distributed to third through fifth graders in the Willow Run Community Schools for their caregivers to answer questions regarding demographics, number of children, level of education, willingness to go to the Washtenaw Children's Dental Clinic (WCDC), availability of dental insurance and dental services utilization for the household.

**Results:** Having a current dentist for their child was the main factor in a parents' willingness to seek care at the WCDC for their child's dental needs. African American caregivers were more likely than Caucasian caregivers to be willing to take their child to the WCDC, had their child's teeth cleaned less frequently and were more likely not to have a dentist for their child. Caucasians were less likely to take their child to the WCDC due to having a dentist and not needing dental care; whereas African Americans cited distance to clinic and lack of transportation as reasons.

**Conclusions:** Not having a dentist for their child was a positive determinant in a parent's willingness to seek dental care from the WCDC. Among the families in the Willow Run district, Caucasians appear able to go to the clinic, but do not need to, while African Americans need to go to the clinic but do not appear to have the means to. It is recommended that the WCDC develop strategies to target these in-need families and address the barriers that hinder their use of the clinic.

Funding: N/A

#### **Abstract: 56**

### ORAL HEALTH PROMOTION PROGRAM PLAN FOR KENT COUNTY JUVENILE DETENTION CENTER

Presenter: Veronika N Stiles, RDH, BSDH, University of Michigan

**Objective:** To increase the availability of educational information pertaining to risk factors related to oral diseases for employees, residents, and parents at Kent County Juvenile Detention Center (KCJDC).

**Methods:** Following needs assessment and planning phases, a program of educational sessions was implemented for KCJDC residents, and staff. A separate educational session was provided for the parents of the residents. Program objectives addressed increasing knowledge of risk factors associated with oral disease; compiling and distributing a list of dental resources; and substituting healthy alternatives to decay promoting snacks. Program success was evaluated using pre-test/post-test results, counting the number of referrals made using the new dental resource list, and determining the number of days that the healthy snacks were offered.

**Results:** KCJDC residents, parents, and staff demonstrated increased knowledge of risk factors associated with oral diseases. The dental referral list was composed and provided to the facility. Healthy nutrition days were implemented at the facility on a one day per week basis.

**Conclusions:** Implementation of this program increased the oral health awareness of employees, residents, and parents at a juvenile detention center. Pamphlets providing information about various oral diseases and their prevention, as well as a resource for dental referrals, are now available for the employees, residents and their parents. This program has provided a model for continued progress related to oral health of the residents.

Funding: University of Michigan Dental Hygiene Program

### Abstract: 57

### **BRINGING DENTISTRY TO THE TABLE**

Presenter: Kailyn Tran, University of North Carolina

Additional Authors: Virginia L. McBride

**Objective:** To assess the need for dental care in elementary-aged children below the poverty line in Chapel Hill and Carrboro, and educate the children and their parents about oral health and proper toothbrushing methods.

**Methods:** Basic oral health information was provided to the sample population through the organization TABLE, which discreetly provides food to children below the poverty line over the weekend when they are at the largest risk for hunger. Pediatric toothbrushes and toothpaste were included with the information. A survey was distributed as well, assessing the oral health of the children and the usefulness of the brochure.

**Results:** Of the 48 surveys distributed, 19 were returned. The brochure was found to be helpful by 84% of the parents, with 79% of the

children using the samples provided. All parents but one reported that their children visit a dentist regularly, with the average time since the last visit being <6 months ago. 95% of the parents replied that it would be helpful to have dental information provided in the backpack regularly.

**Conclusions:** The information from the surveys did not enable proper assessment of low-income children due to the low rate of return. However, from the surveys returned, it was concluded that although many parents realize the need for dental care for their children, there are barriers to access to care, whether financial or due to time constraints. The majority of parents found the information helpful and would like more information to be placed in the backpacks in the future.

Funding: Toothpaste and toothbrushes provided by donors.

#### **Abstract: 58**

### DEVELOPMENT OF AN ORAL HEALTH EDUCATION PROGRAM FOR NICARAGUAN YOUTHS

Presenter: Natasha Varma, MPH, University of Alabama

**Objective:** To develop an oral health education program targeted at Nicaragua youth aged 10-13 and their caregivers (e.g. mothers, teachers). In addition to educating youth about the role sugar plays in increasing caries risk and encouraging a positive change in oral health behavior, oral hygiene supplies will be distributed to participants. Furthermore, the program will be made sustainable by training health care workers at a local Nicaraguan non-governmental organization (NGO) and Peace Corps Volunteers in Nicaragua on how to give similar oral health presentations.

**Methods:** The target population of youth aged 10-13 was chosen due to this age group's relative acceptance of behavior modification and their transition from primary to permanent dentitions. Coordinating with the health care workers at a Nicaraguan NGO and current Peace Corps Volunteers, presentations were planned at 5 schools and 2 community groups. The curriculum was derived from a similar oral health education program that was targeted at low-income Alabama youth. The curriculum was interactive and involved two small-group projects. At the conclusion of each presentation, participants were given various oral hygiene supplies.

**Results:** Eight oral health education presentations were delivered to 244 youth age 8-19 (females: n=124), 32 mothers, and 8 teachers. In addition, 8 health care workers and 6 volunteers were also directly trained on delivering oral health education. 590 toothbrushes, 1013 toothpastes, 575 packets of floss, and 144 bottles of mouthwash were distributed to participants. An instructional pamphlet based on the curriculum will be shared with Peace Corps Nicaragua headquarters for use by volunteers.

**Conclusions:** Youth, mothers, and teachers in the city of Matagalpa, Nicaragua directly received oral health education. They were also given the opportunity to ask questions about oral health, since most do not have access to a dentist. Health care workers at the NGO were trained on oral health education, so as to continue teaching once the program was complete. Furthermore, the entire population of Peace Corps Volunteers in Nicaragua will have access to the pamphlet based on the oral health curriculum. These volunteers can then teach oral health in their respective

**Funding:** University of Alabama School of Public Health, University of Alabama School of Dentistry, Corporate sponsors

### Abstract: 59

# PROJECT CHALLENGE: AN ORAL HEALTH AND DRUG PREVENTION PROGRAM FOR TEENS AND YOUNG ADULTS IN QUEEN CREEK, ARIZONA

Presenter: Kyla Hollen, BS, AZ School of Dentistry and Oral Health

**Objective:** To design and implement an educational program for troubled teens and young adults that raises awareness about methamphetamines and meth mouth, as well as to address issues relating to teenage and young adult oral health.

**Methods:** Project Challenge, a National Guard voluntary military-based educational program for troubled teens, identified a need to strengthen their current oral health curriculum through partnership with Arizona School of Dentistry and Oral Health. Through collaboration with Project Challenge educators, a student profile, assessment of student needs, and pilot curriculum was designed through group and educator interviews.

**Results:** Key issues were identified for the curriculum based on student need: oral health and hygiene education, methamphetamine and other high risk substances, lifestyle behaviors, and oral health careers. Specific implementations recommendations for each issue were developed with approval of the Project Challenge Academic Committee. Upon successful implementation of the pilot curriculum, a final curriculum was created with intention for future use by Arizona School of Dentistry and Oral Health dental students and Project Challenge educators.

**Conclusions:** The collaboration between the two educational institutions yielded a unique curriculum designed to exceed current federal guidelines for the Project Challenge oral health curriculum as well as to address the key issues facing Project Challenge students.

Funding: Colgate

### **Abstract:** 60

### A.C.T.I.O.N. PROJECT: A NEW MODEL FOR STUDENTS AND COMMUNITY CLINIC COLLABORATION

Presenter: Hyewon Lee, Harvard School of Dental Medicine

**Objective:** The objective of the project is to increase the capacity of a local community health center to provide pediatric dental care through student-led dental treatment and project administration. Action for Children and Teenagers In Oral health Need (A.C.T.I.O.N.) is a new student-led volunteer collaboration between the Cambridge Health Alliance (CHA) and Harvard School of Dental Medicine (HSDM).

**Methods:** A.C.T.I.O.N. provides pediatric dental services on one Saturday session each month at the Windsor Street Health Center (WSHC) in Cambridge, MA. At each session, 7 operatories are staffed by 14 HSDM pre-doctoral student providers and assistants, with 2 student coordinators managing patient flow, supplies, and sterilization with a certified dental assistant. The treatment teams complete preventive and restorative treatment under the supervision of an attending pediatric dentist.

**Results:** Using solely student volunteers, up to 28 multi-lingual low-income children are treated per session, totaling 145 children during the first six months of operation from July 2009 to December 2009. This augments the clinic's Saturday pediatric capacity, prior to the implementation of the A.C.T.I.O.N. project by 200%. Eighty-four predoctoral HSDM students have volunteered for the A.C.T.I.O.N. project (which represents 60% of the HSDM student body), with an ongoing team of 8 student-leaders who coordinate between attending dentist, clinic staff, and volunteers.

**Conclusions:** A.C.T.I.O.N. has improved access to oral health care for WSHC pediatric clients, and benefits all stakeholders: clinic staff, local patients, and dental students. The patients receive culturally-competent care, and the HSDM students experience regular community health exposure. The A.C.T.I.O.N. project serves as a model for a successful studentled collaboration between a dental school and a community clinic and exposes dental students to the delivery framework of a high-quality community health center.

Funding: None

### **Abstract:** 61

### **HEALTHY SMILES FOR BALTIMORE KIDS**

Presenter: Jessica J Lee, BS, University of Maryland

**Objective:** To develop and implement a comprehensive curriculum to educate inner city Baltimore children regarding oral health in an interactive and holistic manner.

**Methods:** The dental students collaborated with key community partners and curriculum development resources. The curriculum was developed at four inner city elementary schools from 2007-2008. The curriculum was expanded to include fourth and fifth graders in 2008-2009. In 2009-2010, the curriculum was expanded to include a culturally sensitive approach tailored to the Hispanic population of Baltimore.

**Results:** The holistic approach led to the incorporation of nutrition, tobacco prevention, physical exercise, self-efficacy enhancement, importance of positive role models, and oral hygiene instruction in the curriculum. Annual health fairs were used to provide preventative fluoride varnish and screening services and referrals as needed. The number of students reached with the program in the first year was approximately 125, the second year 140, and the third year 160 for a total of 425 inner city Baltimore children being educated through the program.

**Conclusions:** The holistic approach to curriculum development allowed inner city Baltimore city children to be taught in a meaningful way and to act as an additional safety net to those children who were screened at the annual health fairs.

**Funding:** Baltimore Albert Schweitzer Fellowship: 2007-2008 (Lee), 2008-2009 (Errington, Widmer, and Raines), and 2009-2010 (Blatt, Ninh, Sawaya, and Shah) and the University of Maryland, Dental School- Division of Pediatric Dentistry

#### **Abstract:** 62

### INCREASING ORAL HEALTH AWARENESS IN BALTIMORE CITY AMONGST DISADVANTAGED WOMEN AND CHILDREN

Presenter: Dorie Frank, University of Maryland

**Additional Authors:** Mary Beth Aichelmann-Reidy, DDS, Department of Periodontics, Sara Kramer, B.S., Dental Student, University of Maryland Baltimore College of Dental Surgery, Sarah Raymond, B.S., Dental Student, University of Maryland Baltimore College of Dental Surgery

**Objective:** To increase oral health awareness of economically disadvantaged women and children living in Baltimore City and surrounding communities. To increase awareness of resources available for the oral healthcare needs of economically disadvantaged women and children living in Baltimore City and surrounding communities.

**Methods:** Baltimore Education and Awareness for Mothers and Children increases awareness through educational seminars at shelters. The students provide gift bags with donated oral healthcare products and instructional materials to all women in attendance for themselves, their infants and children, along with instructions on their use and importance. Oral health care screenings are offered and advertised at the educational programs within the shelters so that specific focused individual recommendations can be made and resources for dental care can be identified or provided. Outcomes are measured by the contact hours, dental screening attendance, and surveys which determine the oral health behaviors of the target population.

**Results:** The success of the program was measured in the following ways: 1) The increase in awareness to the importance of oral healthcare, as measured by attending a screening or visiting a dentist after the educational program (2) Changes in behavior to improve oral homecare, as measured by reported frequency of tooth brushing (3) Provide a dental home for comprehensive dental care for women who have committed to a job training program, as measured by the number of women enrolled in the Smiles for Success Program.

**Conclusions:** This innovative program increased oral health awareness and improved oral hygiene practice of underserved women and children in Baltimore City through education, oral health screenings, and access to care.

**Funding:** Albert Schweitzer Foundation, Baltimore Area Schweitzer Fellowship, Smiles for Success (the philanthropic organization of the American Association of Women Dentists)

### Abstract: 63

# IMPACT OF CHRONIC CONDITION STATUS AND SEVERITY ON THE TIME TO FIRST DENTAL VISIT FOR NEWLY MEDICAID-ENROLLED CHILDREN IN IOWA

Presenter: Donald Chi, DDS, PhD University of Iowa

**Objective:** To assess the extent to which a child's chronic condition (CC) status and the severity of that CC affected how soon a child received dental services after enrolling in the lowa Medicaid program.

**Methods:** We analyzed administrative data from 2005-2008 for newly Medicaid-enrolled children ages 3 to 14 (N=10,270). 3M Clinical Risk Grouping (CRG) methods were used to identify CC status (yes/no) and CC severity (episodic/life-long or multisystem). Survival analytic techniques were used to identify the factors associated with earlier first dental visits.

**Results:** Children with a CC were 17% more likely to have earlier first dental visits (p<0.0001). There was no significant difference in utilization by CC severity. Among all children, those who lived in a dental Health Professional Shortage Area or failed to receive primary medical care were more likely to have later first visits whereas these factors failed to reach statistical significance among children with any CC.

**Conclusions:** While children with a CC were significantly more likely to have earlier first dental visits, we failed to detect a significant

relationship between CC severity and the time to first dental visit. Future studies should seek to identify the social and behavioral factors associated with CCs that are potential barriers to dental care access.

**Funding:** NIH/NIDCR NRSA Institutional Oral Health Research Training Grant T32-DE014678-06; HRSA Dental Public Health Specialty Training Grant D13-HP30026; MCHB Pediatric Dentistry Training Grant D13-HP30026; Delta Dental Foundation of Iowa Dissertation Research Grant; NIH/NMHD Loan Repayment Program Grant 1L60-MD003921-01.

#### Abstract: 64

### DESIGN AND DEVELOPMENT OF DENTIST WORKFORCE MODEL FOR USE IN STATE PLANNING

Presenter: Susan C McKernan, DMD, MS, University of Iowa

**Objective:** To identify relationships between county-level characteristics and primary care dentist supply in lowa and develop a conceptually valid and data-supported framework that can be used to critically evaluate counties for dentist shortage.

**Methods:** Secondary data representing lowa county characteristics were collected from public sources and categorized into four domains of demographic, economic, health status, and healthcare infrastructure characteristics. Dentist information was obtained from the lowa Dentist Tracking System; dentist-to-population ratios were calculated as the number of active practice primary care dentists in 2007 per 10,000 county residents. Relationships between county characteristics and dentist-to-population ratios were evaluated using bivariate and multiple regression analyses to examine how closely individual variables and each domain was related to workforce supply.

**Results:** In 2007, lowa county dentist-to-population ratios ranged from 0 to 7.3 dentists per 10,000 population. Over 100 candidate variables were screened; 28 county characteristics showed significant relationships with dentist ratios in bivariate analyses; 15 of these were used to build the final model. The final regression model accounted for approximately 31% of the variation in dentist-to-population ratios. From this model, three variables emerged as significant predictors of variation in dentist supply: pharmacists per 10,000 population, county non-white population (%), and population without medical insurance (%).

**Conclusions:** We were able to identify a previously undescribed relationship between pharmacist and dentist distribution in lowa. Further study should explore this, as well as the relationships between county ethnic composition, employment opportunities, and dentist workforce to determine whether certain industries are more important in establishing dentist practice opportunities.

**Funding:** Funded, in part, by Health Resources and Services Administration, DHHS (T12HP14992).

### **Abstract:** 65

### THE EFFECTS OF EARLY CHILDHOOD CARIES AND TREATMENT ON ORAL HEALTH-RELATED QUALITY OF LIFE IN YOUNG CHILDREN

**Presenter:** Joseph Abraham, BDS, MPH, University of North Carolina **Objective:** To determine the impact of Early Childhood Caries (ECC) on oral health-related quality of life (OHRQoL) in children and whether the relationship is modified by dental treatment.

**Methods:** A secondary analysis of information collected as a part of a cross-sectional survey of 3-year-old children and their parents in 20 counties in western North Carolina. The Early Childhood Oral Health Impact Scale (ECOHIS) is used to count up to 13 ECC impacts on children and their families. ECC is measured as a count of d2-3mfs and treatment by the proportion of d2-3mfs that is mfs. Control variables are selected according to the ECC etiologic model of Fisher-Owens et al. An OLS regression includes d2-3mfs as the primary predictor variable for ECOHIS. The effect of treatment on OHRQoL is evaluated by comparing mean ECOHIS scores by treatment (none, some), stratified by caries experience (low, other) using ANOVA.

**Results:** ECC was positively associated with ECOHIS (univariate r=+0.38; OLS Pvalue<. 001). Although showing a trend towards lower ECOHIS scores, treatment of those with low ECC had no statistical effect. Among those with a moderate-to-high level of ECC, some treatment compared to those with none resulted in a statistically significant increase in the mean ECOHIS score from 5.1 to 12.1 per person.

**Conclusions:** ECC negatively affects OHRQoL in children and their families. For those with severe ECC, treatment seems to exacerbate its impact on OHRQoL. Efforts are needed to help diminish the negative impacts of ECC on the quality of life of children and their families.

**Funding:** Information used in this secondary analysis was collected as part of a project entitled "Prevention of Early Childhood Caries in Medical Practice" funded by NIDCR grant No. R01 DE 013949.

#### **Abstract: 66**

# A SURVEY OF THE KNOWLEDGE AND INTERESTS IN DENTAL PREVENTION PROGRAMS OF MASSACHUSETTS LOCAL BOARDS OF HEALTH IN NON-FLUORIDATED COMMUNITIES

Presenter: Vijay Bhatt, DDS, Lutheran Medical Center

**Objective:** To determine the knowledge and interests in cost effective dental prevention programs of the 151 local Massachusetts Boards of Health in non-fluoridated communities

**Methods:** A letter was sent to 149 local Boards of Health in non-fluoridated communities by the Massachusetts Department of Public Health requesting the health agent and board chairperson to complete a pre-tested 28 question survey. Questions were structured to determine the knowledge and interests of Boards of Health on dental prevention programs such as fluoridation and school prevention programs. Questions were formatted as yes/no, rank order or based on a scale of agreement to the question. Two successive reminders were sent. Data analysis was completed using the web-based program Survey Monkey.

**Results:** Of the 149 surveys sent, 97(65%) completed the surveys. 62% of the respondents didn't know if residents have difficulty obtaining dental services and 23% didn't think that oral diseases are a public health problem. 43% of respondents didn't know which dental prevention programs are currently operating in their community and only 2.7% reported not knowing if fluoride helps prevent tooth decay. In a rank ordering of the most cost-effective dental prevention programs, screenings was the highest (39%), followed by fluoridation (26%), health education (21%), school fluoride rinse programs (10%) and then school sealant programs (4%). Of those interested in starting dental prevention programs, 78% were interested in school fluoride rinse programs and only 21% of respondents would consider implementing fluoridation in the next five years.

**Conclusions:** Local Boards of Health have a major responsibility for the health of their community, but have limited knowledge of cost-effective dental prevention programs and need to be better informed to serve their community.

Funding: None

### Abstract #: 67

### MOHC PLAN ON AWARENESS, EDUCATION AND PREVENTION AMONG DENTAL PROVIDERS TO PREVENT ABUSE AND NEGLECT

**Presenter:** Christine M Farrell, RDH, BSDH, MPA, Michigan Oral Health Coalition

**Objectives:** The objectives are to challenge dental care providers to recognize:

**Methods:** In 2008, the Michigan Oral Health Coalition established an Abuse & Neglect Prevention committee. The objective was to develop educational programs for dental care providers to increase their awareness, skills and knowledge about family violence and neglect. An action plan was developed to address the charge and the activities needed to accomplish the goal.

**Results:** The committee developed a two-year plan. Outside funding was sought and grant awarded for the MOHC to develop three brochures on child abuse prevention, elder abuse prevention and domestic violence awareness and distribute to every dental office in the State of Michigan. Brochure contents included an overview, information about the indicators and signs of abuse and neglect, the role of the dental provider, and information on community resources. A marketing plan was developed. A press release was sent to the news media.

**Conclusions:** As a non-profit organization, the MOHC can educate and inform the public, dental community, lawmakers and the media on a variety of health issues through its advocacy efforts.

**Funding:** Michigan Oral Health Coalition and grant from Verizon Wireless Foundation.

#### Abstract #: 68

#### UTILIZATION OF DENTAL CARE AMONG INDIVIDUALS WITH HIV/AIDS

**Presenter:** Robert Collins, DMD, MPH, Department of Preventive and Restorative Sciences

**Additional Authors:** Xiaoxian Meng, Joan Gluch, Robert Collins, Bryan Cole Smith, Mary Frances Cummings

**Objectives:** To investigate the factors affecting dental care utilization among individuals living with HIV/AIDS, especially the impact of a regular source of dental care and awareness of sources of dental care.

**Methods:** The Oral Health Outreach Program (OHOP) is a community-based educational initiative funded as part of the clinical care program for individuals with HIV disease. Given the OHOP goal to increase clients' utilization of dental care, intake information is collected regarding demographic data, dental care utilization behaviors, and HIV/AIDS status. Participants enrolled in thirty-five educational sessions in 2008 are the sample of analysis.

**Results:** 595 participants were enrolled in the OHOP in 2008. Among them, 57% did not have a dental visit within the past year. About 38% of participants did not have a regular source of dental care, and nearly 34% was not aware of any free or reduced cost dental care for persons with HIV/ AIDS. Logistic regression analyses assessed the multivariate relationships of the demographic factors, regular dental care resource, awareness of free/reduced fee dental care and the utilization behavior. Race (OR=2.17), county of residency (OR=0.52), and regular dental care resource (OR=2.34) were significantly associated with the utilization of dental care.

**Conclusions:** To effectively improve utilization of dental care among people with HIV/AIDS, efforts should be targeted at reducing racial disparities and providing regular dental care resources.

**Funding:** AIDS Activities Coordinating Office, Philadelphia Department of Health

#### Abstract #: 69

#### **ORAL HEALTH ACROSS THE COMMONWEALTH**

**Presenter:** Kathryn M Dolan, RDH, MED, Tufts University School of Dental Medicine, Department of Public Health and Community Service

Additional Authors: Wanda Wright DDS, MS, MSD, Tufts University School of Dental Medicine, Department of Public Health and Community Service

**Objectives:** To establish a "dental home" for every child in Massachusetts focusing on those children who have limited access to care.

**Methods:** Tufts University School of Dental Medicine and Commonwealth Mobile Oral Health Services LLC joined together in 2004 to launch the Oral Health Across the Commonwealth (OHAC) mobile dental program. This community-based oral health initiative addresses the need for a statewide population based dental program. The initiative is designed to reduce the burden of dental disease for school-aged children and increase the proportion of those who receive comprehensive dental care. Oral health services are delivered at community based program sites that include Head Start programs, preschools programs and public schools, grades K-12. Oral health services offered include dental exams and diagnosis, dental cleanings, radiographs, dental fillings, fluoride treatments, sealants, oral health education and referrals to specialty services.

**Results:** The Oral Health Across the Commonwealth program operates with a high degree of collaboration among various state and local agencies. Collaboration with 60 Head Start sites, 38 preschool sites and 143 public schools in Massachusetts allowed 8,500 children to receive comprehensive oral health services from the Oral Health Acreoss the Commonwealth dental providers during the 2008 - 2009 school year. Over 15,000 children have been served since 2004.

**Conclusions:** The Oral Health Across the Commonwealth program directly addresses the HP 2010 objectives and the call to action by the Surgeon General by creating a state infrastructure that improves access to dental care for underserved individuals children and adults, especially those who have Medicaid coverage.

**Funding:** Medicaid; Dentaquest Foundation of Massachusetts; and the Massachusetts Department of Public Health, Office of Oral Health

#### SAMPLING METHODS FOR BASIC SCREENING SURVEYS

Presenter: Michael C Manz, DDS, DrPH, ASTDD

**Additional Authors**: Laurie Barker, MSPH, CDC Division of Oral Health, Kathy Phipps, DrPH, ASTDD, Eugenio Beltrán-Aguilar, DDS, DrPH, CDC Division of Oral Health

**Objectives:** General guidelines are being developed to aid states in sampling design for surveys employing Basic Screening Survey (BSS) methodology.

**Methods:** States are conducting oral health needs assessment surveys to track indicators for constituent populations using BSS methods and materials provided by the Association of State and Territorial Dental Directors. General sampling guidelines are being developed to further aid states in conducting efficient surveys to maximize the precision of estimates for oral health indicators of interest in common target populations.

**Results:** New sampling guidelines focus on choosing target populations and employing appropriate stratification and cluster sample selection techniques. Schools for children in grades K-3, preschool centers for young children, and long-term care facilities or congregate meal sites for older adults represent natural clusters for sample selection. Effective stratification, based on geographic area or the proportion of students eligible for the free and reduced price meal program for example, can improve the statistical efficiency of sampling. Such stratification can be implemented, along with appropriate cluster selection, in stratified cluster and probability-proportional-to-size (PPS) sampling schemes. Standard sampling design methods and examples for employing such designs will be provided.

**Conclusions:** Utilizing common sampling techniques in combination with Basic Screening Survey methodology can improve the efficiency of state oral health needs assessment surveys, and improve precision and reduce bias in estimates and tracking trends for oral health indicators.

**Funding:** ASTDD cooperative agreements with HRSA, Maternal and Child Health Bureau, and CDC Division of Oral Health.

### Abstract #: 71

### TRENDS IN DENTAL EXPENDITURES IN THE CIVILIAN NON-INSTITUTIONALIZED U.S. POPULATION: MEPS 1996-2006.

**Presenter:** Bradley Christian, BDS, MDSc (Hons), National Institute of Dental and Craniofacial Research

**Additional Authors**: Isabel Garcia, DDS, MPH, National Institute of Dental and Craniofacial Research.

**Objectives:** To analyze time trends in dental expenditures and sources of payment for dental care, by socio-demographic variables, 1996 to 2006.

**Methods:** Medical Expenditure Panel Survey (MEPS) data (1996-2006), which provides nationally representative estimates for the U.S. non-institutionalized civilian population, were used for this study. Per-capita dental expenditures (CPI inflation-adjusted to 2006 dollars) were calculated and compared for differences, across years and by socio-demographic variables such as age, gender, race/ethnicity, income and socio-economic status. Estimates and 95% confidence intervals were calculated, after accounting for the complex sampling method, using appropriate standard errors employing MEPS query tool and SAS®V9.1.

**Results:** All estimates are in 2006 dollars. Preliminary analysis indicates a 20% increase in overall per-capita dental expenditures from \$493 (95%CI: \$474, \$512) in 1996 to \$607 (\$580, \$634) in 2006. Annual percent change in per-capita expenditures varied across years. Whereas dental expenditures increased by 6.39% from 1999 to 2000, they declined by 2.20% from 2000 to 2001. Out of pocket expenditures increased by approximately 18% from \$254 (\$241, \$267) in 1996 to \$299 (\$278, \$320) in 2006. In the same period, private insurance expenditures for dental care increased by 23% from \$209 (\$198, \$220) in 1996 to \$258 (\$245, \$271) in 2006. Similar analyses of dental expenditure time-trends by socio-demographic variables are being conducted.

**Conclusions:** The time-trend showed a marginal increase in dental expenditure between 1996 and 2006. However, this was not a sequential year to year increase. The share of expenditures for dental care paid out of pocket was the largest.

Funding: None

#### Abstract #: 72

### NEW YORK STATE ORAL HEALTH TECHNICAL ASSISTANCE CENTER (TAC)

**Presenter:** Dolores Cottrell-Carson, DDS, MSHA, New York State Oral Health Technical Assistance Center

**Additional Authors:** Buddhi M. Shrestha, DDS, MS, PhD, New York State Oral Health Technical Assistance Center, Paula Fischer, RDH, New York State Oral Health Technical Assistance Center

**Objectives:** To provide technical assistance statewide to communities and health organizations interested in building coalitions and/or public-private partnerships for developing innovative oral health programs that improve access and utilization of dental care to underserved vulnerable populations.

**Methods:** The technical assistance provided includes; 1) conducting oral health needs assessments, 2) addressing workforce needs, 3) improving the availability, quality and sustainability of oral health services, 4) enhancing collaborations. TAC receives requests for assistance via the website, direct contact, and through the NYDOH, Bureau of Dental Health. An intake form is completed to ascertain the needs of the agency requesting assistance, obtain contact information and determine if the request is within TAC's scope. TAC will then develop an action plan to provide assistance to the organization, which may include, site visits, conference calls, training sessions, phone calls and email communications.

**Results:** TAC has assisted a number of health and community organizations throughout the State during the past five years, including the development of nine rural and two inner-city school based dental programs serving over 90 schools, four new state-of-the- art dental facilities, recruitment of over 15 dental professionals in DHPSA sites, development of two rural satellite RDH training sites by Rochester's Monroe Community College, and dissemination of information on grant opportunities and regulatory issues. Because of TAC's success, the NYSDOH has committed an additional \$1.25 million funding through 2013.

**Conclusions:** TAC serves as a model for successful public-private partnerships in effectively addressing the oral health care needs of underserved rural and inner-city populations throughout the State.

**Funding:** New York State Department of Health (NYSDOH), Bureau of Dental Health

### Abstract #: 73

### THE IMPACT OF PRACTICE MANAGEMENT CONSULTING ON SAFETY NET DENTAL CLINICS

**Presenter:** Leonard J Finocchio, Dr.P.H., California HealthCare Foundation

**Additional Authors:** Mark Doherty, DDS, MPH, CCHP, Director, Safety Net Solutions, DentaQuest Foundation

**Objectives:** The California HealthCare Foundation launched the Strengthening Community Dental Practices demonstration project in California to help safety net dental programs make clinical and operational improvements to increase patient access and financial viability. Early into the project the state of California eliminated Medicaid adult dental benefits, further challenging an already strained safety net. Early results indicate that clinics have made significant organizational and practice changes to improve financial and clinical performance.

**Methods:** Structured practice management consulting has been provided to nine safety net dental clinics across California. The intervention aims to improve financial performance, clinical productivity, quality of services delivered, and overall clinic management. An independent evaluator has collected a standard data set at baseline in January 2009 and at quarterly intervals since June 2009. The evaluation also includes structured interviews with dental directors and staff.

**Results:** Preliminary qualitiative results show that all of the nine clinics have made practice changes including revised scheduling and fee collection procedures, adhering to clinical productivity benchmarks & staff role clarifications. Preliminary quantitative results show that most clinics have increased new patients, reduced accounts receivable days, and increased the percentage of Phase I treatment plans completed. It is too early for comprehensive quantitative results but they will be available by April 2010.

**Conclusions:** Early results show that safety net dental clinics have multiple financial and clinical challenges and that they respond positively to a structured practice management consulting intervention.

**Funding:** California HealthCare Foundation and The California Endowment

#### Abstract #: 74

### IS PERIODONTAL INFECTION A RISK INDICATOR FOR POOR GLYCEMIC CONTROL?

**Presenter:** George W Taylor, DMD, DrPH, University of Michigan School of Dentistry

**Additional Authors**: Thomas Simon, DDS, University of Michigan School of Dentistry

**Objectives:** This study evaluated the association between periodontal disease and poor glycemic control in people with type 2 diabetes. Both diabetes and periodontal disease are common chronic diseases. Bacterial and inflammatory factors in periodontal disease have been shown to affect glucose and lipid metabolism.

**Methods:** We analyzed data from a cross-sectional study of 249 participants with type 2 diabetes using two different case definitions for periodontal disease and poor glycemic control, while controlling for other confounding demographic, medical, behavioral, and periodontal covariates. Multivariable logistic regression models were used to estimate significant associations.

**Results:** Poor glycemic control was significantly associated with higher numbers of gingival bleeding sites, BANA scores, and numbers of teeth with plaque. One regression model estimated those with moderate to severe periodontal disease had three times greater odds of poor glycemic control than those with no or mild periodontal disease (OR=2.97, (95% CI: 1.3-6.7)). Another model estimated those with moderate periodontal disease had four times greater odds of poor glycemic control than those with no/mild periodontal disease (OR=3.99, (95% CI: 1.6-10.0)), while those with severe periodontal disease had one and a half times greater odds of poor glycemic control (OR=1.59, (95% CI: 0.53-4.8)). The final model also identified a possible association with putative periodontal pathogens using the BANA test.

**Conclusions:** Our findings provide additional evidence that periodontal disease is significantly associated with poor glycemic control in people with type 2 diabetes.

**Funding:** This study supported by NIH/NIDCR R01DE13796, and the University of Michigan School of Dentistry Student Research Program.

### Abstract #: 75

### ASSOCIATION BETWEEN DIABETES AND TOOTH LOSS: ANALYSIS OF NHANES DATA

**Presenter:** Manthanh Patel, BDS, MPH, Bureau of Dental Health, New York State Department of Health

**Additional Authors:** Jayanth V. Kumar, DDS, MPH, Bureau of Dental Health, New York State Department of Health

**Objectives:** Edentulism or total tooth loss is a poor public health outcome that has a negative impact on quality of life. Diabetes is associated with poor oral health. However, whether diabetes leads to tooth loss has not been studied adequately. Therefore, we conducted an analysis of the National Health and Nutrition Examination Survey data to understand the association between diabetes and tooth loss in the United States.

**Methods:** A cross-sectional continuous NHANES data from 2003-04 was used for the analysis. The data on demographics, oral examination, and self-reported diabetes were analyzed for 2,510 subjects representing civilian, non- institutionalized US population who were 50 years and older. Edentulism and total number of teeth were examined as outcome variables. We calculated descriptive statistics and used multiple linear and logistic regressions to assess the association.

**Results:** The prevalence of edentulism was 14% and 28% among non-diabetic and diabetic population respectively. In the multiple logistic regression, persons with diabetes were more likely to be edentulous compared to non-diabetic persons [Adjusted OR = 2.18, 95% CI - 1.17, 4.07]. Among dentate persons, diabetics had fewer teeth when compared to the non-diabetic population [ $\overline{x}$ =18.15 (SE 0.67),  $\overline{x}$ =21.34 (SE 0.29), p <0.0001]. This difference persisted even after adjustment for other

variables. Age, race/ethnicity, level of education, annual family income, and smoking were also significantly associated with tooth loss.

**Conclusions:** Diabetes was independently associated with edentulism and tooth loss. This analysis supports the need for identifying diabetic individuals and making appropriate referrals for dental care.

Funding: HRSA-1D5GHP160760100

#### Abstract #: 76

#### USING CQI TO IMPROVE PATIENT SELF-CARE OUTCOMES.

**Presenter:** Stephen M Gaarder, PhD, Community Health Center Inc. **Additional Authors:** Kasey Harding, MPH, Community Health Center Inc.

**Objectives:** In 2006 Community Health Center Inc. was funded under The HRSA SPNS Oral Health Initiative to improve access to oral health care for persons living with HIV. Access is not just the receipt of clinical services, but includes patient education, behaviors and attitudes on oral health. This presentation will summarize our most current data relative to patient self-care and steps taken for CQI to continue to improve oral health status among our patients.

**Methods:** Self-reported patient care data demonstrate the difficulty of changing behavior and oral health outcomes. How we change behavior and improve outcomes is critical. Effective strategies currently used are combined with new strategies that we could reasonably expect to change behavior and outcomes. Strategies are drawn from existing practices, the oral health literature, and the health education literature.

**Results:** Our presentation will detail our data on patient self-care, the existing and new strategies to improve the oral health outcomes, and the relationship between the two.

**Conclusions:** This presentation will review existing strategies such as group and individual instruction and print materials. We will also discuss new interventions such as targeting those whose self-care has not improved, sponsoring sessions with providers, and specific interventions for the more difficult to reach, such as homeless populations.

Funding: HRSA SPNS Oral Health Initiative

### Abstract #: 77

### IMPACT OF ORAL HEALTH EDUCATION ON INDIVIDUALS LIVING WITH HIV/AIDS

**Presenter:** Joan I Gluch, RDH, Ph.D., University of Pennsylvania School of Dental Medicine

**Additional Authors:** Xiaoxian Meng, Robert Collins, Bryan Cole Smith, Mary Frances Cummings

**Objectives:** Evaluate the effectiveness of an oral health education program on individuals living with HIV/AIDS, especially the impact on knowledge about oral health and treatment.

**Methods:** The Oral Health Outreach Program (OHOP) is a community-based educational initiative funded as part of the clinical care program for individuals with HIV disease. Thirty-five educational programs are conducted yearly to improve participants' oral health knowledge and awareness of sources of dental care. Program effectiveness is evaluated by participants' satisfaction with the program and immediate impact on knowledge via pretest/posttest comparison.

**Results:** 595 participants were enrolled in the OHOP in 2008.Most were black (62%) and lived in Philadelphia (69%). Majority of participants indicated they learned new information from the program (70%), especially the effects of HIV/AIDS on oral health (71%). Approximately 66% of participants reported an intent to see a dentist as a result of the program. After the program, 69% of participants agreed that they had a good idea of their oral health status. After adjusting for missing data, there was a significant difference in participants' knowledge between the pre and post tests.

**Conclusions:** Participants rated highly the effectiveness of the educational program and showed an immediate increase in oral health knowledge on post test measure. This study emphasizes the need to assess long term impact of changes in knowledge, as well as changes in skill, perception and utilization of dental care services.

**Funding:** AIDS Activities Coordinating Office, Philadelphia Department of Health

### EPIDEMIOLOGY OF THE MOST COMMON ORAL MUCOSAL DISEASES IN SCHOOL OF DENTISTRY

**Presenter:** Maria B Garcia, DDS - PHD, School of Dentistry - USF - Brasil **Additional Authors:** Silvia C. M. Torres, DDS Departament of Stomatology

**Objectives:** Dentists must be alert to the possibility of finding diseases of the oral mucosa in School of Dentistry. The present study aimed to review the most updated information and the experience of our group in order to yield epidemiological data that assist diagnosis of the most commom diseases of the oral mucosa in School of Dentistry, Bragança Paulista, Brasil.

**Methods:** Recent epidemiologic studies have shown a wide variability in the prevalence of oral mucosal lesions in different regions of the world and have led researchers to draw disparate conclusions. Moreover, studies have not been designed using standart criteria, further explaining the wide variability in the percentage of different groups with oral lesions, which ranges from 4,1 to 52,6%.

**Results:** The lesions most frequently considered by authors and most often appear in the different studies are: recurrent aphthous stomatitis, oral candidiasis, traumatic injury and inflammatory fibrosis hyperplasia.

**Conclusions:** Dentists must be able to detect any of the numerous possible disorders, in a different age, and perform the correct differential diagnosis, key to the treatment plan. The failing perception of the oral problems makes these patients face the psychosocial impacts like an inevitable consequence of the age, different from a problem that can be corrected.

**Funding:** The complete adaptation to these restrictions becomes these people resigned and indifferent to the bad conditions of their oral status.

#### Abstract #: 79

### INTEGRATING ORAL HEALTH INTO THE MEDICAL HOME

Presenter: Susan E Cote, RDH, MS, MaineHealth

Additional Authors: Barbara Crowley, MD, MaineGeneral Health

**Objectives:** From the First Tooth, Phase One provided funding to diverse organizations throughout Maine to embed the delivery of oral health assessments, fluoride varnish and parent counseling for children from the first tooth to their third well-child visit into the medical home. The goal was to determine the factors leading to the adoption of these services and the barriers/ challenges to gain insight for state-wide expansion.

**Methods:** Training and education were provided on oral health assessment, fluoride varnish and parent counseling. The sites represented diverse practices in urban and rural areas; pediatric residency, independent pediatric practice, hospital-based practices, family medicine, FQHC, Rural Health Centers and WIC. Quarterly reports were submitted with de-identified data on number of children receiving services, frequency of fluoride varnishes for each child and age distribution.

**Results:** The program provided 2,817 children with services and 4,405 fluoride. Age distribution was: 19% - under 1 year, 49% - 1 year and under 2, 20% - 2 year and under 3, 12% - 3 year and above. Fifty eight percent were provided at independent pediatric practice (urban and rural) and 18% at urban pediatric residency hospital practice. Thirteen percent were dispersed among 13 different rural, family medicine practices. Seven percent were at WIC sites. Results varied significantly to factors as provider engagement, office systems, etc.

**Conclusions:** Results indicate a significant proportion of children receiving services are at pediatric practices between the ages of 1 and 2 years old. There are challenges in providing services in both rural and family medicine practices.

Funding: Sadie and Harry Davis Foundation

### Abstract #: 80

### PREPARING DENTAL HYGIENE STUDENTS TO RECOGNIZE AND REPORT CHILD ABUSE AND NEGLECT: HOW ARE WE DOING?

**Presenter:** Ronda R DeMattei, RDH, MSEd, PhD, Southern Illinois University Carbondale

Additional Authors: Jennifer S. Sherry, RDH, MSEd, Southern Illinois University Carbondale; Jan Rogers, PhD, Southern Illinois University Carbondale, Julie Freeman, PT, Southern Illinois University Carbondale

**Objectives:** The purpose of the study was to compare knowledge, attitudes, and opinions of current dental hygiene students regarding child abuse and neglect to that of dental hygiene students enrolled in 1994.

**Methods:** A seventeen item survey was developed and administered to 125 dental hygiene students enrolled in a midwestern university and community college. Of the seventeen items, ten statements were presented to assess knowledge, attitudes, and opinions. Student re

**Results:** Comparisons were made between students enrolled in 1994 and 2009. Students appear to have knowledge deficits in legal aspects of reporting, as well as when and how to report suspicions of child abuse and neglect. Current students perceive they are more pr

**Conclusions:** Students perceive they need more education pertaining to the signs and symptoms of child abuse and neglect along with the legal aspects of reporting. Because dental hygienists are mandated reporters, it is important for them to possess accurate up-to-date

Funding: none

#### Abstract #: 81

### A NEW ORAL HEALTH CARE ACCESS POINT FOR UNDESERVED CHILDREN IN PALM BEACH COUNTY, FLORIDA.

**Presenter:** Claudia A Serna, COA, RDH, MPH, CHES, Florida Public Health Institute.

**Additional Authors:** Claude Earl Fox, MD, MPH, Florida Public Health Institute, Debora Kerr, MA, Florida Public Health Institute, Catherine Cabanzon, RDH, Florida Public Health Institute, Claudia A Serna, COA, RDH, MPH, CHES, Florida Public Health Institute.

**Objective**: This pilot study was designed to increase preventative oral health services to undeserved children in Palm Beach County, Florida. With the expanded scope of hygienists and the integration of activities from the existing oral health workforce, a new oral health care access point was created in two Pediatrician's offices.

**Methods**: The pilot study was developed in two pediatrician offices in Palm Beach County, Florida. The sample consisted on 100 undeserved children ages 0 to 43 months. A Dental Hygienist performed dental charting, applied fluoride varnish and provided oral health education.

**Results:** From the 100 patients enrolled in the pilot study, 100 % of the patients received dental screening, 92% received flourish varnish applications, 100 received patient educations and 98% of the patients received dental referrals.

**Conclusions:** The study established the benefit of involving Dental Hygienists in Physician's offices. This new health care access point, reached, screened and provides preventive oral health services to undeserved children in Palm Beach County, Florida.

Funding: Florida Public Health Institute

### Abstract #: 82

### PREVENTING OBESITY: A SCHOOL-BASED HEALTHY WEIGHT INITIATIVE

**Presenter:** Amanda S Dewundara, BA, Forsyth Institute **Additional Authors:** Mary Tavares, DMD, MPH, Forsyth Institute,

**Objectives:** Due to rising rates of childhood obesity, it is critical for healthcare providers to become involved in prevention efforts, such as the Healthy Weight Initiative (HWI). Its aim is to increase awareness about healthy weight behaviors during a routine hygiene visit. Shown to be feasible in clinic settings, this project seeks to develop and assess its viability in school-based dental programs. Targeted communities are those populations with the highest obesity risk: low-income and racial minorities.

**Methods:** The HWI involves several components. Height and weight are measured for calculation of the Body Mass Index (BMI) and percentile. A questionnaire evaluating dietary intake, physical activity, and screen time is administered. Results are compared to standard recommendations and discussed in the form of an "HWI Report Card". Lastly, using motivational interviewing techniques, each child chooses a personal goal.

**Results:** Data from approximately 400 children, ages 7-13 has been collected so far. The current amount of time needed for administering HWI is approximately 10 minutes. Baseline findings, to be presented, include BMI ranges, responses to behavioral risk factor questions, and categories of goals set by students.

**Conclusions:** HWI can be easily replicated in various settings, both clinical and school-based. The current time requirement is most suitable to models of school-based dental programs that resemble a dental clinic. However, HWI tools can be adapted to other models with minimal impact on work flow.

Funding: National Institutes of Health

### Abstract #: 83

### HEALTHY SMILE HEALTHY GROWTH 2008-09: SECOND ROUND BASIC SCREENING SURVEY OF ILLINOIS THIRD GRADE CHILDREN

**Presenter:** Sangeeta Wadhawan, BDS, MPH, IFLOSS Coalition and ASTDD

**Additional Authors:** Julie Janssen, RDH, MA, Illinois Department of Public Health, Anne Clancy, RDH, MBA Chicago Community Oral Health Forum, Mike Manz, DDS, DrPH, University of Michigan and ASTDD, Linda Kaste, DDS, PhD, University of Illinois at Chicago

**Objectives:** To assess the oral health status and Body Mass Index (BMI) on a stratified random statewide sample of Illinois third grade children.

**Methods:** The Illinois Department of Public Health, divisions of Oral Health and Chronic Disease, collaborated to conduct a second open mouth survey utilizing the Association of State and Territorial Dental Director's "Basic Screening Survey" methodology. Height and weight data were also collected to generate BMI data. A stratified probability proportional to size sampling of schools was performed with implicit stratification on urban/rural status, and free/reduced lunch eligibility. Thirty local agencies were trained to collect data.

**Results:** Out of 7,063 third grade children enrolled among 87 sampled schools, a total of 3,696 children were screened (positive response rate = 52.3%). Estimates for the oral health indicators were: 46.6% with caries experience, 29.1% with untreated caries, 5.4% with urgent treatment needs and 41.5% with at least one molar sealed. BMI indicators were, 17.6% overweight and 20.3% obese. Results were classified by urbanicity, gender, socioeconomic status, race and ethnicity. The data is being compared to 2003-04 results.

**Conclusions:** These data reveal trends for the oral health and BMI in Illinois. They provide valid & current state and regional estimates on oral health and BMI status and will be utilized for program planning, and for providing county specific estimates for larger counties such as Cook and DuPage. The local agency training program enabled participating communities to conduct similar future assessments with the potential for establishing an ongoing statewide surveillance system.

**Funding:** Chicago Community Oral Health Forum, Association of State and Territorial Dental Directiors (ASTDD) & Illinois Department of Public Health

### Abstract #: 84

# ILLINOIS PRIMARY HEALTH CARE ASSOCIATION (IPHCA) ORAL HEALTH NETWORK (OHN) ENCOURAGING INTEGRATION OF CARE THROUGH COLLABORATION

**Presenter:** Sharon R Clough, RDH, MS Ed, Illinois Primary Health Care Association Oral Health Network

**Additional Authors:** Julie Janssen, RDH, MA, Illinois Department of Public Health, Jennie Pinkwater, Illinois Chapter, American Academy of Pediatrics

**Objectives:** Increase integration of oral health care with primary care at community health centers (CHCs) through collaborative efforts of OHN partners

**Methods:** Survey results from the 2008 IPHCA Oral Health Needs Assessment of CHCs indicated that 60% of respondents were able to define integration of care; however, only 37% had primary care providers perform oral health risk assessments and 15% applied fluoride varnish to very young children. The most often chosen reason for not integrating care was lack of training (66%). Accordingly, the OHN collaborated with the state oral health program, IFLOSS Coalition and Illinois Chapter, American Academy of Pediatrics (ICAAP) Bright Smiles from Birth (BSFB) program to raise

awareness about the importance of integration through ICAAP BSFB trainings, peer-to-peer discussion between dental and primary care providers and individualized discussion with CHCs and other safety net clinic administrators.

**Results:** Sixty-four percent of CHC sites that agreed to receive BSFB training are integrating care. However, despite physician and dentist willingness to adopt integration, funding challenges remain a barrier for CHCs.

**Conclusions:** Collaboration has been instrumental in increasing awareness about the benefits of integration of care. For those CHCs with funding challenges, OHN partners will continue efforts in providing follow-up services such as working with partners to assure funding for fluoride varnish until new protocols are established.

**Funding:** The OHN is funded by Illinois Department of Public Health (IDPH). ICAAP's Bright Smiles from Birth project is funded by Illinois Children's Healthcare Foundation, IDPH and Illinois Department of Healthcare and Family Services.

#### Abstract #: 85

#### ORAL HEALTH ASSESSMENT OF MISSOURI'S ILL AND WELL ELDERLY

**Presenter:** Bonnie G Branson, RDH, PhD, University of Missouri-Kansas City, School of Dentistry

**Objectives:** To conduct oral health assessments of individuals living in skilled nursing facilities (ill elderly) and those seeking services at a senior center (well elderly).

**Methods:** An oral health assessment was conducted on 1,186 individuals living in a skilled nursing facility and 464 individuals seeking services at a senior center. The assessments, conducted by a team of calibrated dental hygienists, examined for 1) condition of the lips and tongue, 2) presence of teeth in both arches, 3) presence and condition of denture/s, 4) untreated decay, 5) severe periodontitis as evidenced by mobility and visible furcation involvement, 6) candidiasis and other oral lesions, 7) saliva status, 8) oral cleanliness, and 9) treatment urgency.

**Results:** Elderly residents of skilled nursing facilities were more than twice as likely to have untreated decay as those seeking services at a senior center (44% vs. 19%). Furthermore, individuals living in skilled nursing facilities were more likely to exhibit severe periodontal disease than the well elderly (22% vs. 14%). The ill elderly were more likely to be classified as needing "urgent" dental treatment (treatment within 24 hours) if residing in a skilled nursing facility when compared to those considered to be well elderly. The presence and condition of dentures also varied between the two groups.

**Conclusions:** The data collected in this state-wide assessment will support efforts toward better oral health for the elderly as outlined in the state's oral health plan.

**Funding:** Health Resources and Services Administration and Missouri's Department of Health and Senior Services.

### Abstract #: 86

### ADVOCATING FOR POLICY CHANGE: REIMBURSEMENT OF DENTAL IMPLANTS BY MEDICARE

**Presenter:** Chitvan Sharma, BDS, MPH, Eastman Institute for Oral Health. Rochester, NY

**Additional Authors**: Jayanth V. Kumar, DDS, MPH. Bureau of Dental Health, New York State Department of Health,

**Objectives:** Since the 1980's osseointegerated dental implants have dramatically improved the treatment options for the oral rehabilitation of edentulous patients. The treatment of edentulous patients using implants to retain overdentures has been suggested to be the standard of care. However, dental benefits under Medicare are limited to only medically necessary dental procedures. Our objective was to assess and discuss the Medicare policy regarding coverage of prosthetic devices and implants in order to advocate for dental implant coverage in edentulous patients.

**Methods:** A review of Medicare policies regarding coverage of prosthetic devices and implants was undertaken. We assessed the coverage of prosthetic devices and implants with respect to definition, type of coverage provided and medical need.

**Results:** Medicare provides coverage for a number of prosthetic devices that are needed to replace an internal body part or function

including artificial limbs and eyes, breast prostheses, eye glasses and therapeutic shoes or inserts for people with diabetes. Similarly, Medicare covers cochlear and ocular lens implants. Currently, dental implants are not covered by Medicare even in cases of severe need in the treatment of edentulous patients.

**Conclusions:** We found examples of coverage of implants and prosthetic devices under the Medicare program that may help to create a narrowly defined benefit for implant supported prosthesis under special circumstances.

Funding: There is no source of funding for this project.

### Abstract #: 87

### ARE RACE AND ETHNICITY REPORTED IN A SYSTEMATIC MANNER IN DENTAL PUBLIC HEALTH RESEARCH?

**Presenter:** Harlyn K Susarla, MPH, Harvard School of Dental Medicine **Additional Authors:** Marcus T'ron Swann, DDS, Harvard School of Dental Medicine and Harvard School of Public Health

**Objectives:** To evaluate how race and ethnicity are identified, categorized, and utilized in contemporary dental public health research.

**Methods:** We completed a literature review of all articles in Community Dentistry and Oral Epidemiology and the Journal of Public Health Dentistry over a five-year period (2004 – 2009). Articles pertaining to the study of US-based populations with any mention of race or ethnicity were included. For the articles included in the study, the following data were abstracted: 1) the context in which race and ethnicity was used, 2) where in the article the concept of race or ethnicity was first mentioned, 3) the purpose of using race and ethnicity, 4) the method of using race and ethnicity, and 5) measurement of race and ethnicity.

**Results:** There was significant variation in the terms used to refer to race and ethnicity, discordance between the stated purpose of using these variables and their use in context, and inconsistent documentation of how race and ethnicity were measured.

**Conclusions:** While race and ethnicity are important measures for public health studies and are frequently reported in dental public health research, there is no clear system for classifying these measures.

 $\textbf{Funding:} \ \ \text{This study was funded by the National Institutes of Health} \ \ (5K08DE016956-04, RR).$ 

### Abstract #: 88

### DISPARITIES IN STATE INVESTMENT FOR DENTAL HEALTH LEADERSHIP

Presenter: William R Maas, DDS, MPH, Pew Center on the States

**Objectives:** To measure state financial investment in dental health leadership and determine if differences in the current level of investment among states provide any guidance for establishing recommendations.

**Methods:** All state dental directors were asked to participate in a phone interview conducted by the Association of State and Territorial Dental Directors (ASTDD) to collect data for the Pew Center on the States (PCS) about staffing and budget of state oral health programs. Former state dental directors served as consultants to ASTDD and PCS to determine which expenditures for the 2009, or most recent, state fiscal year were for infrastructure and dental health leadership, as contrasted with supporting programs providing services to state residents.

**Results:** States can be categorized into three groups reflecting population size and potential system complexity. Within each group, the staffing and resource requirements to provide dental health leadership for each state is comparable. Within each group, one-third of states had a leadership budget that met or exceeded a threshold that coincided with recommended minimum staffing requirements. However, there were many-fold differences between states with lowest and highest investment.

**Conclusions:** This assessment indicates that not only are some states lagging others in terms of health status and preventive programs, but they also lack the recommended capacity for dental health leadership to give policymakers information about state health needs or to direct preventive programs that policymakers would seek to implement or expand.

Funding: Pew Center on the States

#### Abstract #: 89

### TRACKING PROGRESS: THE GROWTH OF STATE ORAL HEALTH PROGRAMS

**Presenter:** Kisha-Ann Smith, MPH, CHES, Northrop Grumman, Centers for Disease Control and Prevention

**Additional Authors**: Cassandra Martin, MPH, CHES, Northrop Grumman, Centers for Disease Control and Prevention

**Objectives:** To illustrate the growth and accomplishments of state oral health programs through the tracking of CDC cooperative agreement (CA 3022) activities and performance measures. To demonstrate the impact of sequencing of state oral health program activities over a five year period.

**Methods:** CDC developed a performance measurement database to track funded states progress in completing core measures; additional measures were documented to observe growth beyond core activities. Data were abstracted from state reports and products submitted during 2003 – 2008 to identify and document state progress in building infrastructure. SPSS statistical software was used to establish frequencies and sequencing of activities.

**Results:** The state oral health programs focused heavily on building and maintaining program staff, and developing the coalition, state plan and burden document. Capacity in evaluation and water fluoridation management showed a significant growth over the five years. Many states were able to expand beyond the core performance measures and leverage resources such as transitioning contract staff to state FTEs. Data also highlighted the correlation between activities such as establishing a coalition and developing a state plan and hiring of an epidemiologist and developing surveillance capabilities.

**Conclusions:** Although too soon to determine the impact on oral health outcomes, tracking progress through performance measures provides a foundation of knowledge for states to grow their oral health programs. With a solid foundation, state oral health programs can expand their capacity and leverage their achievements to better position the program for long-term sustainability.

Funding: Center for Disease Control and Prevention (CDC).

### Abstract #: 90

### MEXICAN IMMIGRANTS' CHILDHOOD DENTAL EXPERIENCES AND THEIR CARE-SEEKING PRACTICES IN THE UNITED STATES

**Presenter:** Erin E Masterson, BA, Oregon Health & Science University **Additional Authors:** Kristin S. Hoeft, MPH, University of California-San Francisco, Judith C. Barker, PhD, University of California- San Francisco

**Objectives:** This study examined Mexican immigrants' personal experiences and health utilization behaviors surrounding oral health care and hygiene as children in Mexico and later, as adults in the U.S.

**Methods:** In urban San Jose, CA, a convenience sample of 42 low-income Mexican immigrant mothers of young children provided in-depth qualitative interviews in Spanish regarding their personal oral health experiences prior to and after immigrating to the U.S. Transcripts were independently read and thematically analyzed by two researchers using NVivo® software.

**Results:** The women interviewed described very late initiation of tooth brushing, at nearly ten years of age, and seeking dental care in Mexico mainly for painful and urgent problems. Many of these women visited a dentist for the first time ever as adults living in the U.S. Participants expressed a common desire to improve their oral health status, but even after an average of 10 years residence in the U.S., their reported careseeking habits and decision-making processes reflected behaviors and cultural beliefs established in childhood. When teamed with financial and structural barriers to care, such habits were reinforced.

**Conclusions:** The cultural norms and behaviors established in their homeland strongly influenced Mexican immigrants' oral health decisions and care-seeking behaviors as immigrant adults in the U.S. This study provides understanding of the multiple and interrelated reasons why many Mexican immigrants do not obtain regular dental care in the U.S.

Funding: Funded by NIDCR U54 DE14251.

# ANALYZING RESOURCE EFFICIENCY: MOBILE DENTISTRY PROGRAMS AT THE ARIZONA SCHOOL OF DENTISTRY & ORAL HEALTH FOR GERIATRIC PATIENTS AND THOSE WITH SPECIAL NEEDS

**Presenter:** Nishant Chauhan, B.S., Arizona School of Dentistry & Oral Health

**Additional Authors**: Melissa Joy, B.A., Arizona School of Dentistry & Oral Health, Maureen Romer, D.D.S., M.P.A., Arizona School of Dentistry & Oral Health

**Objectives:** The Smiles Over Miles and Dental Outreach in Arizona (DORA) mobile dentistry outreach programs have been designed to provide comprehensive dental care to patients who have disabilities, are homebound, or indigent.

**Methods:** Both programs receive referrals from community partners to schedule appointments and provide services at no cost or on a sliding fee schedule. Human resources, mobile dental equipment, and supplies are transported via vans and trailers to treat patients in private homes, group homes, and community centers.

**Results:** Collectively, many patients have received emergency or comprehensive dental care since program inception. However, fiscal analysis reveals that the cost to benefit ratio for treating patients has been higher than projected, partly due to time commitments and restrictions associated with the capital grants.

**Conclusions:** The Smiles Over Miles and DORA programs represent mobile models for public health programs that provide necessary treatment for an underserved population, but will face challenges to become self-sustaining. Several proposals are presented to enhance the efficiency of the programs and plan for long-term success.

**Funding:** These programs are funded by two capital grants received in 2006 and 2007 in the amount of \$50,000 and \$114,000, respectively, and various in-kind donations.

#### Abstract #: 92

### USC MOBILE DENTAL CLINIC: PROMOTING INNOVATIVE ACCESS TO CARE TO UNDERSERVED POPULATIONS

**Presenter:** Christopher J. Neal, DDS (2011), University of Southern California, Herman Ostrow School of Dentistry

Additional Authors: Marjorie Domingo, DDS, Assistant Professor Pediatric Dentistry (USC Mobile Dental Clinic), University of Southern California, Herman Ostrow School of Dentistry; Susan P Poorsattar, DDS (2010), University of Southern California, Herman Ostrow School of Dentistry

**Objective:** To demonstrate an innovative model of a dental delivery system that provides oral health care to underserved areas of California in collaboration with multiple community partners.

**Methods:** As a student-run volunteer program, the USC Mobile Dental Clinic effectively delivers high quality dental treatment. Demographic and utilization data from a five year history will be reviewed to demonstrate effective mobile and portable delivery methods.

**Results:** Over 6000 patients were provided comprehensive dental care in the five year service study time interval. As a process of our continuous improvement program, a utilization review compared usual and customary fee schedule versus Medicaid reimbursement rates as treatment market value of our services. An estimated five million dollars of relative treatment was provided for the period of time studied. Every year over one million dollars of care is provided at no cost to the patient or their family. Over 90 percent of these patients have never seen a dentist prior to this experience. Our study concluded that we provided over \$6 million valued treatment and served over 6,000 patients (over 8000 patient visits).

**Conclusions:** This program has the ability to act as a prototype for "Access to Care" populations across the United States. The USC Mobile Dental Clinic provides patients with the highest standard of care from trained dental professionals.

**Source of funding:** Operating expenses are provided by contracts and grants from government agencies, foundations, and service clubs in collaboration with multiple community partners. Equipment and vehicles have been donated by individuals, organizations, and dental manufacturers.

#### Abstract #: 93

#### MAKING MILWAUKEE SMILE: ONE CHILD AT A TIME

**Presenter:** Matt Crespin, RDH, BS, CDHC, Children's Health Alliance of Wisconsin

**Additional Authors**: Tifany Frazer, MPH, Medical College of Wisconsin; Bill Solberg, Columbia St. Mary's; Earnestine Willis, MD, MPH, Children's Hospital of Wisconsin & Medical College of Wisconsin; Whitney Vann

**Objectives:** Reduce by 15% the proportion of students with urgent oral health referrals through a mobile school-based program. Access to oral health care in Milwaukee is less than adequate and a school-based model was implemented to address this health disparity.

**Methods:** Consents for dental treatment and research were distributed (754 students). A mobile dental team performed screenings and preventive care. SEALS (Microsoft Office Excel) was utilized to conduct descriptive analysis by: age; insurance coverage; sealants and early or urgent dental referrals. Children's Hospital of Wisconsin Human Research Review Board approved this research.

**Results:** Three-fourths of students at Starms Schools were Medicaid-eligible. One-third of students (N=64) consented to the treatment and research in year 1 (T1) and year 2 (T2). Students' ages ranged from 6-12 years with a median of 9 years. Insurance coverage increased from 82% (T1) to 94% during T2. The maximum number of sealants applied decreased from 13 (T1) to 8 during T2. Oral health referrals decreased from 69% (T1) to 54% during T2. Over two years, urgent care referrals decreased from 11% (T1) to 2% during T2, an 82% reduction

**Conclusions:** Starms' oral health program is effective to identify early dental disease and improve access to oral healthcare. Further analysis is required to demonstrate the long term significance of this school-based model.

Funding: Healthier Wisconsin Partnership Program

#### Abstract #: 94

### DENTAL, DENTAL HYGIENE AND DENTAL THERAPY STUDENTS' ATTITUDES TOWARDS CARING FOR THE UNDERSERVED

**Presenter:** Christine M Blue, BSDH, MS, University of Minnesota, School of Dentistry

**Objectives:** The creation of the new dental therapy program at the University of Minnesota has raised awareness of oral health disparity nationwide. This study solicited dental, dental hygiene and dental therapy students' attitudes toward providing oral care for the underserved.

**Methods:** Dental, dental therapy and dental hygiene U of M students were surveyed about their attitudes using the "Attitudes Toward Healthcare" instrument. The questionnaire consisted of 23 statements: six on society's expectation, eight on health professionals' responsibility to care for the underserved, four on personal efficacy to provide care for the underserved and five on access to care.

**Results:** The overall comparisons were statistically significant for the total score and all component scores except access to care. The students scored 81.06(SD=11.1) points out of a maximum of 115 on the instrument. Maximum scores reflected the strongest possible "idealistic" attitudes: society has an obligation to make dental care available for everyone. First year dental hygiene students had the highest total mean attitude scores, dental therapy students the second highest and fourth year dental students had the lowest.

**Conclusions:** Dental, dental hygiene and dental therapy students have positive attitudes related to providing care for the underserved. First year dental therapy, dental and dental hygiene students have the highest idealistic attitudes about oral health for the underserved. Dental and dental hygiene students in their final year however, are less certain of who should be responsible for providing care and their own capability to address the problem of dental care for the underserved.

**Funding:** Funding source: author's University allocated research funds.

### DENTAL SCHOOL FACULTY PERCEPTIONS AND ATTITUDES TOWARD THE NEW DENTAL THERAPY MODEL

Presenter: Naty Lopez, BSN, MEd. Ph.D., Primary Dental Care

**Additional Authors:** Christine Blue, BDH, MA, University of Minnesota School of Dentistry

**Objectives:** This study explores perceptions and attitudes of dental and dental hygiene faculty towards the dental therapy program that was established in the dental school in September 2009. This was in response to the new law enacted by the Minnesota legislature that created a midlevel dental practitioner to expand access to oral health care in the state.

**Methods:** Focus groups were conducted with randomly selected dental and dental hygiene faculty to assess attitudes towards the new program. Results were used to construct a survey questionnaire consisting of 25 statements regarding access to care for the underserved, education and employment of dental therapists. This was distributed to all full-and part-time faculty. Descriptive and chi-square statistics were used to analyze results.

**Results:** 64% participated in the survey; 79% male, 40% fulltime, 54% clinical faculty, and 56% are in private practice. 78% agree all dentists have personal responsibility for the underserved; one-third agrees the dental therapy (DT) model is part of the access solution or that it will increase the number of dental practices that will provide care for the underserved. The majority are uncertain dental therapists will be accepted by patients or of the cost-effectiveness of having DTs in a practice. More fulltimers accept personal responsibility in ensuring the DT model succeeds. Employment of dental therapists in private practices is not widely accepted especially by faculty who own private practice.

**Conclusions:** Faculty may not personally support the dental therapy model but accept professional responsibility of educating dental therapy students and would ensure that the program succeeds.

Funding: Departmental funds

### Abstract #: 96

### PREVENTIVE TREATMENT PRACTICES OF THIRD AND FOURTH YEAR DENTAL STUDENTS

**Presenter:** Kenneth A Bolin, DDS, MPH, Baylor College of Dentistry, Dept. of Public Health Sciences

**Additional Authors**: Vaishnavi Iyer, BDS, MPH, Hoda Abdellatif, BDS, MPH, DrPH; Baylor College of Dentistry, Department of Public Health Sciences

**Objectives:** To test the null hypothesis: There is no significant difference in selected preventive procedures performed by third and fourth year dental students in one U.S. dental college.

**Methods:** A random sample of 106 electronic patient records from each cohort of students' patients was selected for a retrospective record review. The frequencies of selected preventive procedures recorded in the records were analyzed and comparisons between the two groups of patients were performed. Procedures included completion of the Oral Disease Risk Assessment (ODRA), nutritional counseling, tobacco history, oral self-assessment for oral cancer, and fluoride application.

**Results:** 84% of 3rd year students completed the ODRA vs. 56.6% of the 4th year students and 65.4% of 3rd year students prescribed fluoride vs. 9.4% of 4th year students. While 62.5% of 3rd year students completed the tobacco history, only 12.5% of the 4th year students did so, and the oral self-assessment training for oral cancer was completed by 50.0% and 12.5% of the 3rd and 4th years students respectively. Chi-square analysis of the two groups were significant in all procedures (p<.05) There were significant gender differences in completion of the ODRA in both 3rd and 4th year students (p<.05).

**Conclusions:** This study shows that there is a significant difference in the completion of indicated preventive treatment procedures performed between two class groups of students as taught and prescribed by Baylor College of Dentistry's protocols. These discrepancies may indicate a need for a reevaluation of how prevention is taught and supervised in the dental school studied.

Funding: Funded by a HRSA Dental Public Health training grant.

#### Abstract #: 97

### EMERGENCY PREPAREDNESS PROTOCOLS FOR STATE AND TERRITORIAL ORAL HEALTH PROGRAMS

**Presenter:** Theresa G. Mayfield, DMD, University of Louisville School of Dentistry

Additional Authors: Lori Kepler Cofano, RDH, BSDH, Nevada State Health Division, Bureau of Child, Family & Community Wellness Oral Health Program; Emanuel Finn, DDS, MS, District of Columbia Department of Health, Oral Health Division; Renée Joskow, DDS, MPH, FAGD, CAPT, USPHS, National Institutes of Health, National Center for Research Resources, Division for Clinical Research Resources; Nicholas G. Mosca, DDS, Mississippi State Department of Health, Office of Oral Health; Jim Sutherland, DDS, MPH, Retired, CAPT, USPSHS, HRSA Regional Dental Consultant, Office of Performance Review, Denver Regional Division

**Objectives:** To prepare standard operating protocols to assist state dental directors and collaborative partners in improving the oral health community's emergency preparedness and response capabilities

**Methods:** The impact of natural disasters and man-made events underscore the importance of having knowledgeable personnel, well-organized response operations, and effective communications to respond to any public health crisis event. In a survey of the Association of State and Territorial Dental Directors (ASTDD) membership, only 35% of respondents indicated that their state had an emergency preparedness plan that includes oral health professionals. The ASTDD Oral Health and Medical Response Team committee in collaboration with representatives and reviewers from state oral health programs, state and federal agencies, and academia worked together to identify appropriate emergency preparedness and response protocols for oral health programs.

**Results:** A guidance manual for state and territorial dental directors entitled Emergency Preparedness Protocols for State and Territorial Oral Health Programs was developed.

**Conclusions:** The Emergency Preparedness Protocols for State and Territorial Oral Health Programs highlights the essential operations and relationships that should be in place to enable an effective recovery of the oral health infrastructure from a crisis event. Additionally, the manual provides guidance to the state's oral health community, state health agency officials and public health administrators in the development and operation of oral health emergency preparedness and response at the state level.

**Funding:** This project was supported by Cooperative Agreement U44MC00177 from HRSA, Maternal and Child Health Bureau and Cooperative Agreement U58DP001695 from CDC, Division of Oral Health.

### Abstract #: 98

### DENTAL PROFESSIONALS' WILLINGNESS TO PROVIDE IMMUNIZATIONS DURING BIOTERRORIST EVENTS

**Presenter:** Vinodh Bhoopathi, BDS, MPH, Division of Dental Public Health, Dept of Health Policy Services and Research, Boston University Henry M. Goldman School of Dental Medicine

Additional Authors: Dr. Ana Karina Mascarenhas, BDS, MPH, DrPH

**Objectives:** To compare the similarities and differences of dental professionals (DPs) who were willing to provide immunizations during bioterrorist (BT) events compared to those not willing.

**Methods:** An 18 item pre-tested, self-administered questionnaire was used during the 2005 Oregon Dental Conference (n=156) and 2005 Yankee Dental Conference (n=297), to collect data on DPs knowledge and opinions about BT preparedness, willingness to provide care during BT events, and perceived need for education in BT preparedness and management. Means and frequencies were calculated. Chi-square, Fisher exact, and t-tests were performed. Multivariate logistic regression model predicting DPs willingness to provide immunizations during BT events was developed.

**Results:** Bivariate analyses showed that those willing to provide immunizations during BT events were more likely to be males, dentists, Oregon practitioners, having higher actual knowledge (p=0.023), motivated (p<0.0001), agree with roles ADA recommends DPs to play (p<0.01), and recognizing the need for BT education (p=0.0009), compared to those not willing. No significant difference in self-perceived knowledge was observed. A logistic regression model (R2=0.21) showed that dentists (p=0.0003), Oregon practitioners (p<0.0001), those agree with roles ADA

recommends DPs play during BT events (p=0.0003), and who believed that he/she is part of a public health response team (p=0.0052) were significantly more willing to provide immunizations during BT events.

**Conclusions:** There were significant differences among dental professionals willing to provide immunizations during bioterrorism events compared to those not willing.

Funding: Not Applicable

#### Abstract #: 99

#### **BUILDING A DENTAL PUBLIC HEALTH WORKFORCE**

**Presenter:** Catherine Hollister, RDH, MSPH, PhD, United South and Eastern Tribes, Inc.

**Additional Authors**: Tim Ricks, DMD, MPH Indian Health Service

**Objectives:** To increase the number of dental professionals in the Nashville Area Indian Health Service with public health training.

**Methods:** Sponsor 3 dentists and 3 dental hygienists in a Community Dental Health Certificate online program.

**Results:** All participants have completed at least 1 of the 4 required classes for the certificate. All have developed evidence-based oral health promotion/disease prevention programs at their sites.

**Conclusions:** Providing financial support and professional expertise to IHS employees will increase the dental public health workforce and improve the quality of community based dental services in Native American communities.

**Funding:** American Association of Public Health Dentistry Foundation, 2008

#### Abstract #: 100

### SIGNIFICANT PREDICTORS OF INTENT TO LEAVE AMONG ARMY DENTAL CORPS JUNIOR OFFICERS

**Presenter:** Johnette J Shelley, DDS. MHA, University of Iowa Department of Community and Preventive Dentistry

**Additional Authors:** Michelle R. McQuistan, DDS, MS, University of Iowa Department of Community and Preventive Dentistry, Elizabeth T. Momany, PH.D, University of Iowa Public Policy Center, Teresa A. Marshall, PH.D, University of Iowa Department of Community and Preventive Dentistry, Fang Qian PH.D, University of Iowa Department of Community and Preventive Dentistry, Georgia G. DelaCruz DDS, MPH, Department of the Army Office of the Surgeon General

**Objectives:** To identify the significant predictors associated with Army Dental Corps Junior Officers' intent to leave the military.

**Methods:** A secondary data analysis was conducted utilizing the responses from the 2009 Army Dental Officer Retention Survey. The 91 item questionnaire consisted of questions addressing retention issues. Although the survey was distributed to all Army dental officers, only junior officers were considered for this study. The dependent variable was junior officer's intent to leave the military prior to retirement (stay, maybe stay/maybe go, go). Predictor variables were grouped into six domains: environmental, military specific work conditions, structural, intervening, demographic and pre-entry individual variables. Univariate, bivariate and linear regression analyses were conducted using the SPSS 17 Gradpack Statistical Software package.

**Results:** Forty-six percent of junior officers completed the survey (N=577; n=267). Fifty-eight percent of respondents reported an intent to leave the military prior to retirement. In the final regression model, Six variables were significantly (p < .05) associated with an officer's intent to leave: military lifestyle (Beta= .236; p<;.001); professional development (Beta= .194; p< .023); benefits (Beta= -408; p< .001); age (Beta= -.133; p<.002; 002); unit of assignment (Beta=.144; p<0.009); and specialty training status (Beta=.098; p<.001). The model accounted for 45.7% of the total variance.

**Conclusions:** Variables other than pay, bonuses, deployments, and assignment (e.g., multiple moves, current assignments) were significantly associated with intent to leave. Future studies should be conducted to more fully understand how the identified significant predictor variables impact intent to leave so that policies can be developed to help reduce turn-over among junior dental officers.

Funding: None

#### Abstract #: 101

### EVALUATION OF SUMMER ORAL HEALTH EDUCATIONAL PROGRAM FOR MINORITY HIGH SCHOOL STUDENTS

**Presenter:** Rehab Z Alabduljabbar, BDS, Department of Health Policies and Health Services Research, Henry M. School school of Dental Medicine

**Additional Authors**: Jehan A. AlHumaid, BDS, Department of Health Policies and Health Services Research; Ana K. Mascarenhas, BDS, MPH, DrPH, Department of Health Policies and Health Services Research

**Objectives:** Data have shown that there are not enough dentists from minority populations. It is also evident that there are more oral health disparities in this population. This program aims to increase the knowledge of minority high school students on various oral health topics.

**Methods:** Seventeen summer high school students between 9 and 12 grades were enrolled in a four-week oral health educational program. Topics given included: dental history, oral health and its relation to general health, oral hygiene, dental decay, prevention, tobacco, drugs, sport injuries, and oral health careers. Increase in knowledge was evaluated using pre/post-tests for each class. Mid-program and final evaluations were used to assess effectiveness and to monitor changes in attitudes and behaviors of students. Increase in knowledge for each individual student and the whole class was tested using paired t-tests.

**Results:** Each student showed increase in knowledge for the classes they attended ranging between a minimum of 1% to a maximum of 50%, with an average of 18.8%. Differences were seen by topic in the increase in knowledge, with lower increases in two topics: dental decay and oral health careers. On average, students scored 2.57/5 on the pre-tests and 3.5/5 on the post-tests this difference being statistically significant (p-value= 0.0001). Final evaluation showed that almost 57% were very much or somewhat interested in becoming an oral health professional.

**Conclusions:** This program shows promising results in both increasing oral health knowledge among high school students and encouraging them to seek oral health careers in the future.

Funding: Pioneer Valley (AHEC).

### Abstract #: 102

### **IOWA DENTIST WORKFORCE: 12-YEAR TRENDS (1997-2008)**

**Presenter:** Raymond A Kuthy, DDS, MPH, Public Policy Center and Department of Preventive and Community Dentistry, University of Iowa

Additional Authors: Susan C. McKernan, DMD, MS, Public Policy Center and Department of Preventive and Community Dentistry, University of Iowa

**Objectives:** To monitor the number of dentists in a relatively rural state.

**Methods:** Biographical, educational, and professional information about every active lowa dentist is gathered and updated through the lowa Dentist Tracking System (IDTS). These data, combined with graduation information from the University of Iowa (UI) during the same period (1997-2008), formed the basis for this analysis.

**Results:** While there has been a steady number of dentists (range 1417-1457) throughout this time frame, the percentage of women has nearly doubled (11.4% to 19.5%). Also, the percentage of private practitioners 60 years and older increased from approximately 13 to 18%. The overall percentage of part-time dentists has decreased from 15.6% to 11.3%, with females remaining slightly higher than males (22.4% to 18.5% of all female dentists vs. 14.7% to 9.6% of male dentists). Retirement accounted for the plurality of the annual attrition rate (range 40.6-64.0%), while out-of-state relocation accounted for an additional 25.0% to 40.6% of this rate. Nearly three-quarter of lowa dentists are UI graduates, yet only 34.3% of UI graduates who graduated during the study period currently are lowa active dentists. The number of counties (N=99) where the population-to-dentist ratio is greater than 5000:1 has increased from 4 to 16

**Conclusions:** There has been a dramatic increase in the percentage of female dentists. It is anticipated that more rural counties will be adversely affected as a large bolus of dentists reach retirement age.

**Funding:** Funded, in part, by Health Resources and Services Administration, DHHS (T12HP14992)

### A MULTIDISCIPLINARY APPROACH TO THE DEVELOPMENT OF A COMMUNITY BASED FLUORIDE VARNISH PROGRAM

**Presenter:** Julie Nocera, RDH, MS, Tunxis Community College/ Dept. of Dental Hygiene

Additional Authors: Robin Knowles, RDH, MPH

**Objectives:** Cross training of public health nurses to integrate a fluoride varnish program into existing well child medical visits.

**Methods:** Based on DMFT data collected by dental hygiene students, the need for a preschool fluoride varnish program in a targeted urban community was determined. A partnership was established between the Tunxis Dental Hygiene Program and the New Britain, CT Public Health Dept. to investigate the feasibility of training pubic health nurses to provide fluoride varnish applications in conjunctions with preschool children's immunization and well child visits.

**Results:** Public health nurses and APRNs participated in a training program developed by students which included presentation of content and a demonstration followed by a hands on supervised workshop that allowed the dental hygiene students to observe and provide feedback to the nursing staff. A reference guide was developed for the nurses as well as written materials for parents. One year later, the program was evaluated by another teamof students to determine the efficiency of the program and provide assistance to the staff.

**Conclusions:** A sustainable fluoride varnish program for the city of New Britain was implemented using non-dental health care providers who had exisitng access to a population of high risk preschool children.

**Funding:** Supplies were purchased by the New Britain CT Health Dept. from exisitng funds.

#### Abstract #: 104

### INFORMING POLICY: HOW WORKFORCE SURVEY DATA SHOULD INFLUENCE THE DENTAL WORKFORCE DIALOGUE

**Presenter:** Kim S Kimminau, PhD, University of Kansas Medical Center **Additional Authors:** Katherine Weno, DDS, JD, Kansas Department of Health and Environment, Anthony Wellever, MPA, University of Kansas Medical Center and K. Allen Greiner, MD, MPH, University of Kansas Medical Center

**Objectives:** The project objective was to collect data from dentists and Extended Care Permit dental hygienists that would inform statewide oral health workforce planning in Kansas.

**Methods:** A stratified, random sample of licensed primary care dentists and a census sample of ECP dental hygienists (ECPs) were surveyed on the following: demographics, work hours and retirement planning, office characteristics, education, and opinions regarding current and emerging oral health issues. Data were analyzed separately for both groups by rurality, demographics and level of experience/time since graduation.

**Results:** Response rates were high (78% dentists; 79% ECPs) and respondents shared concerns and suggestions for workforce improvement. Age and retirement plans leave frontier and small rural communities with a critical shortfall of dentists in the next 3-5 years. ECPs use their ECP skills for eight or fewer hours per week, although they are willing to do more. ECPs are strongly supportive of a mid-level provider (84%) and 83% said they would seek to become a mid-level provider. By contrast, 27% of responding dentists agree that mid-levels are needed and 53% think the issue is "slightly unimportant" or "not important at all."

**Conclusions:** Ten key findings that can inform workforce planning were revealed through surveying two groups of the current workforce. Disparities between the workforce and those served persist; safety net clinic dentists are younger and more attune to providing care to underserved populations; perceptions of access barriers vary; one in four dentists accepts Medicaid; and there is little agreement about the need for a new mid-level provider.

**Funding:** Health Resources and Services Administration grant #T12HP14991

### **Special Thanks to the following:**

- Joe Alderman NOHC Photographer
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- American Dental Association Roundtable Luncheon Sponsor
- Medical Products Laboratories Opening Reception Sponsor
- Aseptico Tuesday Event Sponsor
- Melissa Bealon Chief Meeting Planner
- Sandi Steil NOHC Staff
- Dustin Scott NOHC Staff
- St. Louis CVB Special Sponsorship
- Hermine McLeran AAPHD Foundation Raffle Coordinator
- Judith Feinstein coordination of ASTDD Fluoridation Awards
- Beverly Isman coordination of pre-conference workshops

### **AAPHD Student Merit Awards Program**

### Leverett Graduate Student Merit Award for Outstanding Achievement in Dental Public Health

### **First Place**

Donald Chi, DDS, PhD

University of Iowa

Title: Impact Of Chronic Condition Status and Severity On the Time To First Dental Visit For Newly Medicaid-Enrolled

Children In Iowa

Sponsor: Dr. Peter Damiano

### **Second Place**

Susan C. McKernan, DMD, MS

University of Iowa

Title: Design and Development of Dentist Workforce Model

for Use in State Planning

Sponsor: Dr. Raymond Kuthy

### **Third Place**

Joseph Abraham, BDS, MPH

University of North Carolina

Title: The Effects of Early Childhood Caries and Treatment on Oral Health-related Quality of Life in Young Children

Sponsor: Rebecca King, DDS, MPH

### Predoctoral Dental Student Merit Award for Outstanding Achievement in Community and Preventive Dentistry

### **First Place**

Natasha Varma, MPH

University of Alabama

Title: Development of an Oral Health Education Program for

Nicaraguan Youths

Sponsor: Dr. Huw Thomas

### **Second Place**

Kyla Hollen, BS

AZ School of Dentistry and Oral Health

Title: Project Challenge: An Oral Health and Drug Prevention Program for Teens and Young Adults in Queen Creek, Arizona

Sponsor: Prof. Michelle Panico

### **Third Place**

Hyewon Lee

Harvard School of Dental Medicine

Title: A.C.T.I.O.N. Project: A New Model for Students and

Community Clinic Collaboration

Sponsor: Dr. Bruce Donoff

### Dental Hygiene Student Merit Award For Outstanding Achievement in Community Health Dentistry

### First Place

Michelle S. Washburn, AAS, BIS

University of Michigan

Title: Dental Services Utilization and Barriers of Willow Run

School District Residents

Sponsor: Prof. Wendy Kershbaum

### **Second Place**

Veronica Stiles, RDH, BSDH

University of Michigan

Title: Oral Health Promotion Program Plan for Kent County

Juvenile Detention Center

Sponsor: Prof. Wendy Kershbaum

### **Third Place**

**KailynTran** 

University of North Carolina

Title: Bringing Dentistry to the TABLE

Sponsor: Prof. Sally Mauriello

### Leverett Graduate Student Merit Award for Outstanding Achievement in Dental Public Health

### **Honorable Mention:**

Vijay Bhatt, DDS

The Lutheran Medical Center

Title: A Survey of the Knowledge and interests in dental prevention programs of Massachusetts local Boards of Health

in non-fluoridated communities

Sponsor: Dr. Myron Allukian

### Predoctoral Dental Student Merit Award for Outstanding Achievement in Community and Preventive Dentistry

### **Honorable Mentions:**

Dorie Frank

University of Maryland

Title: Increasing Oral Health Awareness in Baltimore City

amongst Disadvantaged Women and Children

Sponsor: Dr. Mary Beth Aichelmann-Reidy

Jessica Lee, BS

University of Maryland

Title: Healthy Smiles for Baltimore Kids

Sponsor: Dr. Clemencia Vargas

### **Important Information**

### **Conference Attire**

All conference functions are business dress unless otherwise noted. Please keep in mind that meeting room temperatures vary. You may want to bring a jacket or sweater to all sessions.

### **Getting Around St. Louis**

MetroLink is the St. Louis metropolitan region's light rail system and is operated by Metro as part of a fully integrated regional transportation system. MetroLink has 37 stations and stretches 46 miles. It serves several municipalities in St. Louis County, Missouri, St. Clair and Monroe Counties in Illinois, and the City of St. Louis. Metrolink timetables and information: <a href="https://www.metrostlouis.org">www.metrostlouis.org</a>. A route map is posted near registration. Fares start at \$2.25.

### In-house Restaurants Imo's Pizza

Imo's Pizzeria has been the number one pizza choice in St. Louis for over 40 years. Serving lunch and dinner. Hours: Daily 11:00 AM - 11:00 PM

### **Starbucks Coffee**

Hours: Daily 6:00 AM - 9:00 PM

### **Market Street Bistro and Bar**

American Cuisine. Serving breakfast, lunch and dinner. Hours: Daily 6:30AM – 10:00 PM

### Mike Shannon's

Steaks and seafood. Serving lunch and dinner. Located adjacent to hotel, attire is business casual. The spot to be on game days! Hours: M-F 11:00AM-11:00pm; Sat-Sun, 5:00pm-11:00pm

### **Lobby Bar**

Beverages, light meals, snacks. Serving lunch and dinner. Hours: M-Sat. 4:00 PM – 12:00 AM

### **Hospitals**

St. Louis University Hospital 3635 Vista Ave St Louis, MO 63110 (314) 577-8000 (2.69 miles away)

Barnes-Jewish Hospital 1 Barnes Jewish Hospital Plz St Louis, MO 63110 (314) 747-3000 (4.01 miles away)

### **Pharmacies**

CVS Pharmacy (very small) 909 Chestnut St # 105 St Louis, MO 63101 (314) 588-0356 (0.27 miles away)

### **Medicine Shoppe**

415 N Tucker Blvd St Louis, MO 63101 (314) 588-0795 (0.53 miles away)

### Grocery

Schnucks Culinaria 315 N 9th St St Louis, MO 63101 (314) 436-7694 (0.31 miles away)

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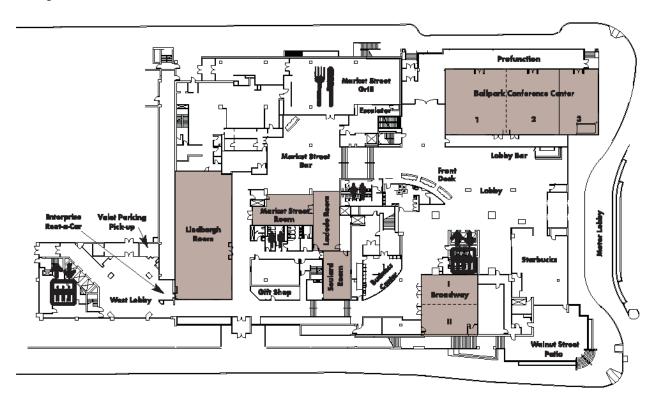
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April 11-13, 2011 Westin Convention Center Pittsburgh, PA

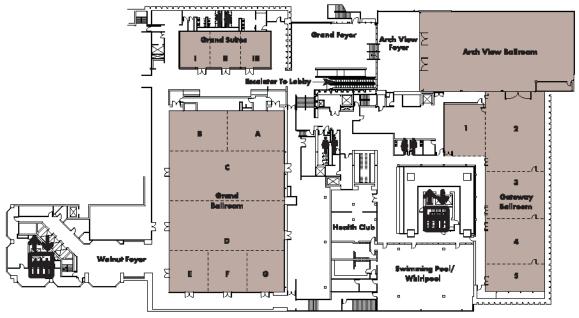
# **Getting Around the Hotel**

Note: The Manchester Room is located on the 4th Floor of the West Tower.

### **Lobby Level**



### **Meeting Rooms**



# **Course Attendance Form**

# **2010 National Oral Health Conference**April 26-28, 2010 - St. Louis, Missouri

This form is provided for your own use to help you keep track of the sessions that you attended at the Conference.

| TITLE  | SESSIONS |
|--|----------|
| ACTOR C. '. C. '. I'. III. A. I. I. I. I. C. '. IAA I'. (. II. III. D I'.                      | ATTENDED |
| ASTDD Session - Socialize It: An Introduction to Social Media for Health Promotion             |          |
| ASTDD National Oral Health Leadership Institute  |          |
| Medicaid/SCHIP Dental Association 2010 Symposium I   |          |
| Medicaid/SCHIP Dental Association 2010 Symposium II  |          |
| AACDP Symposium  |          |
| ASTDD Session - Creating a Culture of Evaluation: Weaving Accountability and Program.          |          |
| Military Session   |          |
| Opening Plenary - The Refresh Button: HHS Leadership and the New Oral Health Initiative        |          |
| What if You Could Access Data From the Medicaid State Summary DataMart Every 3 Months?         |          |
| Minnesota Story - The Effectiveness of Partnerships and Collaborative Practice in School and . |          |
| Demystifying Organized Dentistry   |          |
| mproving Dental Care Delivery Systems Through Workforce Innovations                            |          |
| Roundtable Presentations   |          |
| Oral Presentations   |          |
| From Peril to Promise: Strategies for Surviving the Economic Downturn                          |          |
| Poster Session   |          |
| ABDPH Plenary- Ethics in Dental Public Health: Framework and Lessons                           |          |
| Horowitz Memorial Symposium - What You Need to Know About Fluorides and Fluoridation!          |          |
| Future Search: Finding Common Ground While Honoring Our Differences                            |          |
| NIC: Building Collaboration to Improve Oral Health   |          |
| Periodontal Disease and Chronic Diseases: Emerging Science and Programs                        |          |
| NIH-Funded Collaborating Research Centers to Reduce Oral Health Disparities: Early Childhood   |          |
| National Plans to Improve Health Literacy  |          |
| Oral Presentations   |          |
| Hot Picks  |          |
| Poster Session   |          |
| Duo Plenary Session - Third World Dentistry or Access to Care? The Louisiana Story             |          |
| The Next Crisis: Elder Oral Health Care  |          |
| Public Health Law: Advancing Oral Health Through Policy and Legislation II                     |          |
| School and Community Partnerships for Children's Oral Health                                   |          |
| New Technology for Prevention of Tooth Decay - Combining New Agents with Fluoride              |          |
| mproving Oral Healthcare in Safety Net Settings  |          |
| Health People 2010/2020  |          |
| Alternative Dental Workforce Models: Creating a Proposal and Bulding Consensus                 |          |
| Childhood Obesity - Is There a Role for the Dental Profession in this Health Crisis?           |          |
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| Oral Preser  | ntations |

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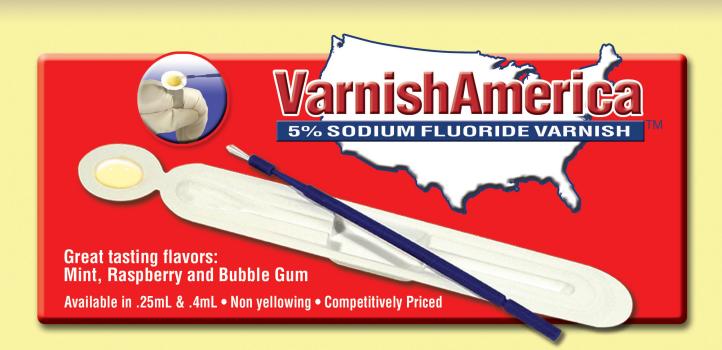
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