

2012 SUMMIT ON THE  
**SCIENCE OF ELIMINATING  
HEALTH DISPARITIES**  
BUILDING A HEALTHIER SOCIETY  
INTEGRATING SCIENCE, POLICY AND PRACTICE  
OCTOBER 31 - NOVEMBER 2, 2012  
GAYLORD NATIONAL RESORT AND CONVENTION CENTER  
NATIONAL HARBOR, MARYLAND



# ORAL HEALTH ADVOCATES IN PUBLIC HOUSING: ADDRESSING ORAL HEALTH DISPARITIES WHERE PEOPLE LIVE

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NIDCR - U54 DE019275**

***2012 Science of Eliminating Health Disparities Summit.  
Washington, DC – December 17, 2012***

# NIDCR EARLY CHILDHOOD CARIES COLLABORATING CENTERS (EC4)

## NIDCR Cooperative Agreements with:

- University of California, San Francisco  
Center to Address Disparities in Children's Oral Health (CAN DO) and Data Coordinating Center (DCC)
  - Stuart Gansky, PI, Steve Gregorich, DCC Director U54 DE019285  
[www.ucsf.edu/cando](http://www.ucsf.edu/cando)
- Boston University Goldman School of Dental Medicine  
Northeast Center for Research to Evaluate and Eliminate Dental Disparities (CREEDD)
  - Raul Garcia and Michelle Henshaw, Co-PIs U54 DE019275  
[www.bu.edu/creedd](http://www.bu.edu/creedd)
- University of Colorado Denver  
Center for Native Oral Health Research (CNOHR)
  - Judith Albino, PI U54DE019259  
<http://aianp.uchsc.edu/cnohr/index.html>



# CENTER FOR RESEARCH TO EVALUATE AND ELIMINATE DENTAL DISPARITIES



[www.bu.edu/creedd](http://www.bu.edu/creedd)





## *CREEDD 'THEMES'*

### Oral health promotion and disease prevention

- In “non-dental care” settings
  - The ‘well-child’ medical care visit, in community health clinics
  - Public housing developments
- Delivered by “non-dental care” providers
  - Medical care providers (MD/NP/RN/PA)
  - Public housing residents





# *CREEDD COMPONENTS*

Center Co-PI's

Raul Garcia, DMD, and Michelle Henshaw, DDS, MPH

Major Projects and Co-PI's

## **“Partnering with Community Health Centers to Prevent Early Childhood Caries”**

Judith Bernstein, PhD, and Paul Geltman, MD, MPH

Boston University Schools of Medicine and Public Health

Norman Tinanoff, DDS, University of Maryland Dental School

## **“Oral Health Advocates in Public Housing”**

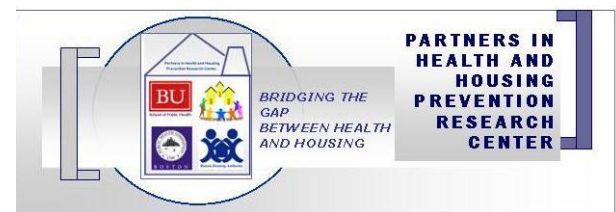
Michelle Henshaw, DDS, MPH, Boston University, and

Belinda Borrelli, PhD, Brown University School of Medicine



# THE OHAPH PARTNERSHIP

- Boston Housing Authority
- Partners in Health and Housing-Prevention Research Center (CDC U48 DP00058 )
  - Resident Health Advocate (RHA) Program
- Community Committee for Health Promotion (CCHP)
- CREEDD



# PUBLIC HOUSING

- Subsidized housing to low and moderate income individuals and families managed by the state or non-profit organizations
- **7.9 million individuals** live in public housing
- Average annual household income is **\$13,543.**
  - Federal poverty line is \$15,130 for a household of 2, and \$19,090 for a household of three according to the 2012 United States Health and Human Services Poverty Guideline

From: Public Housing Resident Characteristics Reports as of August 31, 2012.



# BOSTON PUBLIC HOUSING (BHA)

- Largest landlord in Boston, Massachusetts
  - The BHA has 63 (37 elderly/disabled; 26 family) developments in almost every neighborhood in the City of Boston.
  - The BHA currently owns approximately 14,000 units of housing in Boston and houses about 27,000 people under the public housing program.
- Tenant task forces
- Resource and development centers
- Child care centers
- Recreation centers
- Built near community health centers





# ORAL HEALTH DISPARITIES

- What we know: Racial and ethnic minority groups and individuals living in poverty are disproportionately affected by dental disease
- Boston Public Housing:
  - Median household income is typically well below the national poverty line
    - The annual household income of 57.9% of Boston families living in public housing is less than \$20,000.
  - Of families with young children, 54% are Hispanic, 33% are Black, Non-Hispanic and 6.7% are White, Non-Hispanic



# ORAL HEALTH AND PUBLIC HOUSING

## What we have observed:

- **Healthy Baby/Healthy Child Oral Health Study**
  - Clients primarily public housing residents
  - 36% of children aged 0-3 had signs of ECC
  - 73% of mothers with untreated decay
- **Boston modified Behavioral Risk Factor Surveillance System (BRFSS):**
  - Residents have poorer health status for virtually all measures compared with non-residents, after controlling for SES
  - Residents more than twice as likely as non-residents to not have had a preventive dental visit



# PROJECT DESIGN: COMMUNITY INPUT

## Open forums with the CCHP and Focus Groups

- Research design
  - Importance of peer interventionists
- Staff recruitment
  - Identificaton of community research personnel
- Recruitment materials
- Sub-committee for review of research instruments



# ORAL HEALTH ADVOCATES IN PUBLIC HOUSING





# ORAL HEALTH ADVOCATES IN PUBLIC HOUSING

Research question:

Does a behavioral intervention (Motivational Interviewing), delivered by public housing residents ('oral health advocates') to their peers, reduce incidence of early childhood caries over a two-year period?





# ORAL HEALTH ADVOCATES IN PUBLIC HOUSING

## Study design:

- Stratified group randomized trial

## Primary outcome assessment:

- 2 year caries incidence

## Intervention:

- Everyone receives oral health education, oral health assessments, fluoride application and referral
- Intervention group – receives the oral health information via an oral health advocate trained in MI

Control group – receives written oral health information





# ORAL HEALTH ADVOCATES IN PUBLIC HOUSING

## Target:

- Enroll 1,860 caregivers and their children between the ages of 0 and 5 years from 26 public housing developments

## Progress to date:

- Enrolled 814 caregivers and a total of 1038 children between the ages of 0 and 5 years from 21 public housing developments



# CHALLENGES

- Project development:
  - Partnership development requires long term commitment and resources prior to grant support
- Implementation:
  - Unreliable/unstable communication methods (e.g. disconnected phone numbers/limited calling plan)
  - Residents' reluctance to be 'study subjects'
  - Recruitment and retention resource intensive





# SUCCESSSES

## Early Childhood Caries Collaborating Centers (EC4)

- Development of Behavioral Risk Factor Questionnaire (BFRQ)
- Development of caries calibration model for Early Childhood Caries (ECC)

## Oral Health Advocates in Public Housing (OHAPH)

- Developed model for training lay persons to deliver Motivational Interviewing (MI) focusing on early childhood caries
  - Successfully trained interventionists and maintained high level of fidelity
- Community engagement
  - Build effective partnerships
  - Identify and utilize all access points into your community
- Recruitment and retention strategies effective in public housing settings



# THANK YOU!



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