# State Program Title: Public Health Dental Program

# **State Program Strategy:**

The Public Health Dental Program provides policy direction for oral health issues to promote the development of cost-effective preventive programs and the improvement of inequities in access to oral health care; provides consultative and technical assistance to county health departments, the Maternal and Child Health program, the School Health program, the Women Infant and Children program, schools, state and federal government entities, community and professional organizations, and private citizens; monitors state and county oral health status, dental treatment needs, utilization of dental services and Year 2020 objectives; evaluates and promotes the development of efficient and effective programs; and provides administrative and quality assurance guidance to CHD dental programs.

The program facilitates the continued development of an integrated, coordinated oral health system between the public and private sectors. In these efforts, the program coordinates the development and implementation of a broad-based, oral health improvement plan for disadvantaged persons. The program also administers contracts with the University of Florida, College of Dentistry, a Community Health Center, and several community-based programs to provide indigent dental care services and provide promotional and educational activities to address racial and ethnic disparities.

Community water fluoridation has been demonstrated to be the most cost-effective mechanism for preventing dental caries. The PHHSBG provides funding to conduct a statewide fluoridation project. The purpose of the project is to assist communities throughout Florida to promote, implement, and maintain fluoridation of their water systems. Information is provided to local health departments, fluoridation committee members and organizers, and city/county commissioners on the benefits of fluoridation and how to obtain grant dollars to implement water fluoridation. Communities that elect to add fluoride to their water may be provided with funds through contractual arrangement.

# **Primary Strategic Partners:**

The program has core partners who work to increase the number of communities that have access to fluoridation. Most, but not all of these partners are from the oral health or public health communities. Each community has its own set of challenges and strengths to getting fluoridation approved by the local officials. A community most often forms a coalition that represents the local community and takes the lead to educate local officials and the public. The Program's role is to inform, educate, and mobilize the local county health department staff (and stakeholders) in support of communities. The following is a list of internal (work for the DOH) and external partners that have historically played a role in getting fluoridation established in an area:

#### <u>Interna</u>

Florida Department of Health Statewide Public Health Dental Program Coworkers

Florida Department of Health Statewide Drinking Water Program Coworkers

Local County Health Department Administrators and Directors

Local County Health Department Dental Directors, Dentists, Dental Hygienists, Dental Assistants

Local County Health Department Health Educators

Local County Health Department Environmental Staff

### External

Florida Dental Association (including local district chapters)

Florida Dental Hygiene Association

Local community coalition groups supporting oral health, (e.g. Okeechobee Community Oral Health

Coalition), which often include several professionals from various organizations

Local City Council or County Commission Board Members

Local City and County Water Officials, Engineers

Local City Manager or County Administrators
Local City Water Operators
Dentists, Dental Hygienists, Dental Assistants, Physicians, Public Health Educators, and students of various professions
Community Advocates
University of Florida, College of Dentistry
NOVA Southeastern University College of Dental Medicine

# **Role of PHHSBG Funds:**

The PHHSBG funding is instrumental for communities to implement water fluoridation. The grant has direct impact, most noticeably, by allowing a community to purchase the equipment and services needed to build the community fluoridation system. This funding historically has and continues to play a critical role in helping local governing bodies to pay for the relatively high start-up costs, which greatly influences them to proceed to initiate fluoridation. The grant funding is an incentive to help city or county officials consider voting for this public health program. The publications that promote and announce the grant funding for fluoridation make communities aware of the state and federal governments' commitment to the oral health of its citizens. Municipalities are more willing to fund the costs necessary to maintain the water fluoridation in the years to come after they receive this grant funding. The relationship established when the funds are awarded also fosters a positive working relationship between the Public Health Dental Program and the community.

The PHHSBG funding is used to educate city and/or county officials of the public health significance of water fluoridation. Fluoridation is proven to be cost effective in the prevention of caries and thus saves families and individuals costly dental care. Individuals inside and outside the public health community benefit from the knowledge of water fluoridation and how fluoride helps to reduce dental decay. Misinformation about the safety and effectiveness of water fluoridation put the program at risk in many Florida communities. County health department staff and private individuals have requested assistance in the promotion of this public health measure. The Public Health Dental Program will use the funding to conduct preventive health services in the area of water fluoridation to enhance the state's progress toward the Healthy People 2020 oral health goals related to water fluoridation.

## **Evaluation Methodology:**

The current evaluation methodology of the Fluoridation Project focuses annually on calculating the number of people on community water systems that have optimally fluoridated water compared to the total number of people on community water systems. In addition to this, the Program monitors the quality of systems that adjusts their fluoride level by adding fluoride to the community water system. Every system that adjusts their fluoride level is required by Florida Administrative Code to send the Program office the "Monthly Operation Report for PWSs (Public Water Systems) Fluoridating Water," which details the level of fluoride tested and reported in the water for that water system. The report's data is reviewed and entered into a database, tracked monthly and feedback is provided. This data is submitted to CDC's Water Fluoridation Reporting System annually. The Program gives technical assistance to those systems not meeting the optimal levels.

Since the State of Florida began receiving the Preventive Health and Health Services Block Grant funding in 1980, the percent of people on community water systems receiving fluoridated water has grown steadily. In 1980 the percent of population on community water systems receiving optimally fluoridated water was 25 percent. By 2001, the percentage increased to 65.8 percent and increased steadily to a high of 78% in 2006; the 78% continued until 2010 at which time the percentage decreased to 77% and then 76% in 2011. In 2012 the percentage remained about 76%.

In the past, larger and medium sized water systems allowed the state to make great strides in increasing the percent of persons receiving fluoridated water increase. Now as the number of larger systems that do not fluoridate decreases in number, efforts on the maintenance of the larger systems and reaching out to the medium and small sized systems will occur. While the percentages may not rise as fast as they have in recent years, moderate increases will benefit all who live in and visit Florida.

# **State Program Setting:**

State health department, Other: Community Water Systems

# FTEs (Full Time Equivalents):

Full Time Equivalents positions that are funded with PHHS Block Grant funds.

Position Name: Sean Isaac

**Position Title:** Fluoridation Project Coordinator State-Level: 100% Local: 0% Other: 0% Total: 100%

Position Name: Shannon Harp
Position Title: Operations Analyst II

State-Level: 100% Local: 0% Other: 0% Total: 100%

**Total Number of Positions Funded: 2** 

Total FTEs Funded: 2.00

# National Health Objective: HO OH-13 Community Water Fluoridation

### **State Health Objective(s):**

Between 10/2014 and 09/2016, Increase the proportion of people served by community water systems that are optimally fluoridated by 1.0%.

#### Baseline:

The baseline is 76.6 percent (2012) of the population in Florida served by community water systems.

#### Data Source:

Florida Department of Health Fluoridation Program Database

# **State Health Problem:**

# Health Burden:

Florida has the 4th largest population in the United States (U.S.) Census Bureau (2013 statistics - <a href="http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk">http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk</a>). According to the U.S. Census Bureau the U.S. population is projected to increase to 400 million by 2050

(http://www.census.gov/newsroom/releases/archives/population/cb12-243.html). Florida's population is projected to grow faster than most states in the nation. According to the Florida Demographic Estimating Conference by 2040 the state's population will surpass 25 million. In 2012, the Census Bureau also predicted the population age 65 and older will double from 43.1 million in 2012 to 92.0 million in 2060

(http://www.census.gov/newsroom/releases/archives/population/cb12-243.html). With continued improvements in oral health, more people are retaining more teeth for longer time periods. These increases in population and numbers of teeth that need care will create an increased need for oral health care and oral health care providers.

Dental diseases are chronic, progressive bacterial infections that affect almost everyone. The National Institute of Dental and Craniofacial Research (NIDCR) found for children age two (2) to eleven (11), 42% have experienced dental caries (1999-2004 National Health and Nutrition Examination Survey - NHANES). Black and Hispanic children and families with lower incomes have even more untreated levels of decay

(http://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/DentalCaries/DentalCariesChildren2to11). In children age two (2) to eleven (11), 23% were found to have untreated caries (1999-2004 NHANES). Again Black and Hispanic children and families with lower incomes have even more untreated levels of decay

(http://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/DentalCaries/DentalCariesChildren2to11). Dental diseases affect the quality of life and continue to consume considerable health care resources. A child experiencing dental problems is at high risk of poor educational outcomes. Loss of work and school days occur along with possible residual effects on speech, nutrition, and psychosocial functioning. According to the NIDCR the total amount of expenditures for dental services in 1998 were \$53.8 billion (4.7%) of the nation's total health expenditures. The nation's expenditures total \$1.1 trillion in 1998. (US Department of Health and Human Services.

Oral Health in America: A Report of the Surgeon General-- Executive Summary. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.)

Fluoridation is the most cost-effective mechanism to prevent dental caries. Water fluoridation when compared to the cost of restorative treatment, produces a cost savings (Garcia 1989). At the modest cost of less than one dollar per person per year to fluoridate water systems, the measure is recommended as the most cost effective method to prevent caries and few barriers exist except that of political opposition in certain communities and the technical difficulties and costs involved in fluoridating very small water systems. Increasing access to optimally fluoridated community water systems and maintaining the quality of existing fluoridating systems are necessary to prevent dental caries. Since the State of Florida began receiving the Preventive Health and Health Services Block Grant funding in 1980, the percent of persons on community water systems receiving fluoridated water has grown steadily. However, an estimated 4.7 million Floridians are served by community water systems with sub-optimal levels of fluoride. Non-fluoridating water systems are prioritized as follows: 21 systems serving over 50,000 persons; 71 systems serving between 10,000-50,000 persons; 44 systems serving between 5,000-10,000 persons; and 257 systems serving between 1,000-5,000 persons.

# **Target Population:**

Number: 4,762,395

Ethnicity: Hispanic, Non-Hispanic

Race: African American or Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific

Islander, White

Age: Under 1 year, 1 - 3 years, 4 - 11 years, 12 - 19 years, 20 - 24 years, 25 - 34 years, 35 - 49 years, 50 - 64

years, 65 years and older Gender: Female and Male Geography: Rural and Urban Primarily Low Income: No

# **Disparate Population:**

Number: 4,762,395

Ethnicity: Hispanic, Non-Hispanic

Race: African American or Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific

Islander, White

Age: Under 1 year, 1 - 3 years, 4 - 11 years, 12 - 19 years, 20 - 24 years, 25 - 34 years, 35 - 49 years, 50 - 64

years, 65 years and older Gender: Female and Male Geography: Rural and Urban Primarily Low Income: No Location: Entire state

Target and Disparate Data Sources: Florida Department of Health Fluoridation Program

## Evidence Based Guidelines and Best Practices Followed in Developing Interventions:

Best Practice Initiative (U.S. Department of Health and Human Service) Guide to Clinical Preventive Services (U.S. Preventive Services Task Force)

MMWR Recommendations and Reports (Centers for Disease Control and Prevention)

### Funds Allocated and Block Grant Role in Addressing this Health Objective:

Total Current Year Funds Allocated to Health Objective: \$369.410

Total Prior Year Funds Allocated to Health Objective: \$0 Funds Allocated to Disparate Populations: \$369,410

Funds to Local Entities: \$369,410

Role of Block Grant Dollars: No other existing federal or state funds

Percent of Block Grant Funds Relative to Other State Health Department Funds for this HO:

100% - Total source of funding

### **OBJECTIVES - ANNUAL ACTIVITIES**

Allocated funds are used to achieve Impact & Process Objective outcomes and to carry out Annual Activities that are based on Evidence Based Guidelines and Best Practices identified in this work plan.

#### Objective 1:

# **Community Information**

Between 10/2014 and 09/2015, the Public Health Dental Program staff will provide technical assistance and funding to partners for the promotion of water fluoridation and oral health to <u>15</u> of the largest 20 non-fluoridated community water systems in Florida.

# **Annual Activities:**

### 1. Information

Between 10/2014 and 09/2015, the Public Health Dental Program will provide information, training and guidance to a minimum of 100 key stakeholders, community leaders, dental, health and water professionals on water fluoridation, preventive public health dentistry practices and other public health dentistry topics. Information will be provided to individuals and groups through the following media: correspondences, discussions, conference calls, training sessions, webinars, presentations, meetings and other venues as determined appropriate.

# 2. Fluoridation and Oral Health Knowledge and Awareness

Between 10/2014 and 09/2015, the Public Health Dental Program will provide a minimum of 20 non-fluoridating communities with information on the benefits of water fluoridation and information on how to obtain the grant funds available. Information will be disseminated through statewide fluoridation publications and communications with local water operators and municipal staff.

# Objective 2:

### **Community Water System Management**

Between 10/2014 and 09/2015, the Public Health Dental staff will review <u>116</u> fluoridating community water systems in Florida for reporting compliance in accordance with Florida Administrative Code. The Program will also review a sample of the reports to validate the data.

# **Annual Activities:**

### 1. Water Fluoridation Monitoring

Between 10/2014 and 09/2015, the Public Health Dental Program staff will monitor all fluoridating community water systems' daily operational and split sample results monthly by recording the results, determining compliance and submitting the information to the Centers for Disease Control and Prevention.

### 2. Contract Manager Review

Between 10/2014 and 09/2015, Public Health Dental Program staff will conduct at least one on-site visit or desk review per contract to evaluate contract compliance on fluoridation projects.

## 3. Data Collection and Submission

Between 10/2014 and 09/2015, the Public Health Dental Program will collect, monitor and submit to the Centers for Disease Control and Prevention the annual Florida Fluoride Report. This report indicates the level of fluoride provided to each Florida community water system fluoridating drinking water.

### Objective 3:

## **Partnerships**

Between 10/2014 and 09/2015, Public Health Dental Program staff will provide technical assistance, information or funding to **3** non-fluoridating communities that have expressed an interest in attaining water fluoridation.

# **Annual Activities:**

# 1. Community Technical Assistance

Between 10/2014 and 09/2015, Public Health Dental Program staff will provide technical assistance to 100% of local fluoridation coalitions and communities that request assistance.

# 2. Fluoridation Feasibility Review

Between 10/2014 and 09/2015, the Public Health Dental Program staff will identify a minimum of three non-fluoridating community water systems and provide technical assistance for fluoridation coalitions to assess the feasibility of initiating fluoridation in their community by reviewing the community water system design as well as community awareness and support for fluoridation.