

# FRAIL-ELDERLY ORAL HEALTH DATA BRIEF

## 2015-2016 North Carolina Elderly Adult Basic Screening Survey

### Background

As the population of Americans age 65 and older continues to grow and as more adults are maintaining their teeth, the dental needs for this population should be better understood. Adults residing in long-term facilities are often dependent on caregiving staff for assistance with basic oral health care needs and therefore face greater challenges than the general population. During 2015-2016, the NC Oral Health Section (OHS) conducted its first dental public health surveillance activity of adults residing in assisted living facilities (ALF) in North Carolina. The goals of this survey were to determine baseline oral health status for their elderly residents as well as to better understand the connection of the housing facilities' and residents' demographics.

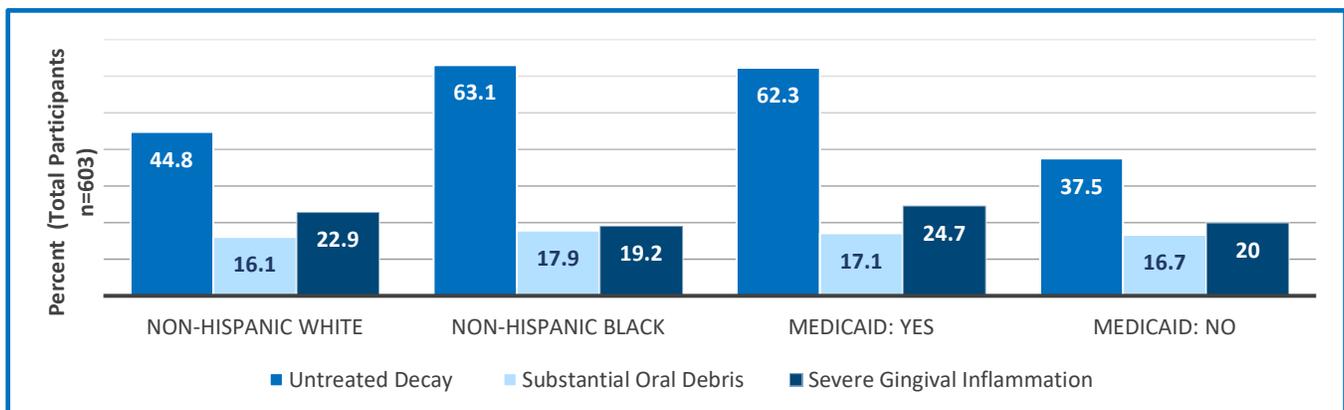
### Methods

Using the Association of State and Territorial Dental Directors (ASTDD) Basic Screening Survey (BSS) for Older Adults, the screening was conducted by calibrated OHS public health dental hygienists. A 15-item questionnaire accompanied each oral assessment. The questionnaire included questions related to **age, gender, race, ethnicity, length of admission, facility location and size, and Medicaid status**. Specific clinical oral health indicators included **number of natural teeth, complete denture status, untreated decay, presence of substantial oral debris, severe gingival inflammation, need for periodontal care, obvious tooth mobility, severe dry mouth, suspicious soft tissue lesions, and treatment urgency rating**. A random sample of 40 assisted living facilities from three different regions (Coastal Plains, Piedmont, and Mountains) in North Carolina was selected. A convenience sample of a minimum of 800 adults residing in assisted living facilities was sought to obtain a confidence interval of  $\pm 5\%$  with 95% confidence. Consent to participate was obtained for each screening.

### Results

Of the 854 participants screened, nearly a third (29%) were completely edentulous, with only half having a complete set of dentures. More men had untreated decay than women at 54.2% versus 45.6% and also had more substantial oral debris and severe gingival inflammation. In locations from west to east, (Mountains, Piedmont, and Coastal Plains) decreased levels of oral health status were found in smaller facilities. Additionally, smaller facilities had nearly 2 times more edentulous adults than medium sized facilities and untreated decay was more prevalent.

**Table 1** Results by race and Medicaid status of three clinical oral health indicators.



## Discussion

Medicaid beneficiaries were 2.5 times more likely to be edentulous than their non-Medicaid counterparts. Non-Hispanic Blacks were more likely to have complete tooth loss at 33.8% than non-Hispanic whites at 27.8% and less likely to have a complete set of dentures (32.1% versus 54.1%). Medicaid beneficiaries had more untreated decay at 62.3% than their non-Medicaid counterparts at 37.5%. In addition, more non-Hispanic Blacks had untreated decay than non-Hispanic whites at 63.1% and 44.8%, respectively. Substantial oral debris and severe gingival inflammation are similar regardless of ethnicity or Medicaid status. Findings reflect that these adults not only have unmet dental needs, but also disparities. Although disparities may not always be present (Table 1), they do exist at the facility-level.

It is worth noting that although ALF were targeted as sites to conduct this frail-elderly Adult BSS, approximately 30% of adults screened were under the age of 65. Perhaps this more accurately reflects the population domains of those residing in such long-term housing. ALF may have a third of their residents as those with intellectual and developmental disabilities or those physically impaired by temporary medical situations. For future oral surveillance activities of adults residing in assisted living facilities, an attempt will be made to consider the varied populations that generally reside in ALF.

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## Associated Publication

Stephens R, White BA. Oral health status of adults in North Carolina assisted living facilities. *J Public Health Dent.* 2019; 79(3): 198-206. doi: 10.1111/jpdh.12310.

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