

# CHILDHOOD OBESITY STATISTICS: ALABAMA

---

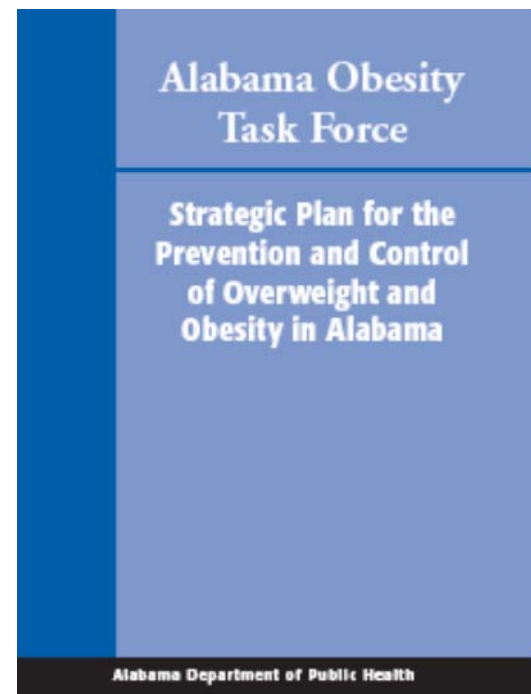
Surveillance, Research and Evaluation Sub-  
committee of the Alabama Obesity Task Force

8/2013



# Background

- The Surveillance, Research and Evaluation Sub-committee originally was charged with:
  - Identification of sources of obesity data for Alabama that are representative of the state, public health districts, and counties;
  - assessment of gaps in the overall state obesity surveillance system; and
  - development and implementation of a plan to address the gaps in the current system.



# Gaps

- Sources of representative data were found for all life stages except:
  - Preschool data
  - School-aged children
    - Self-report of high school students only

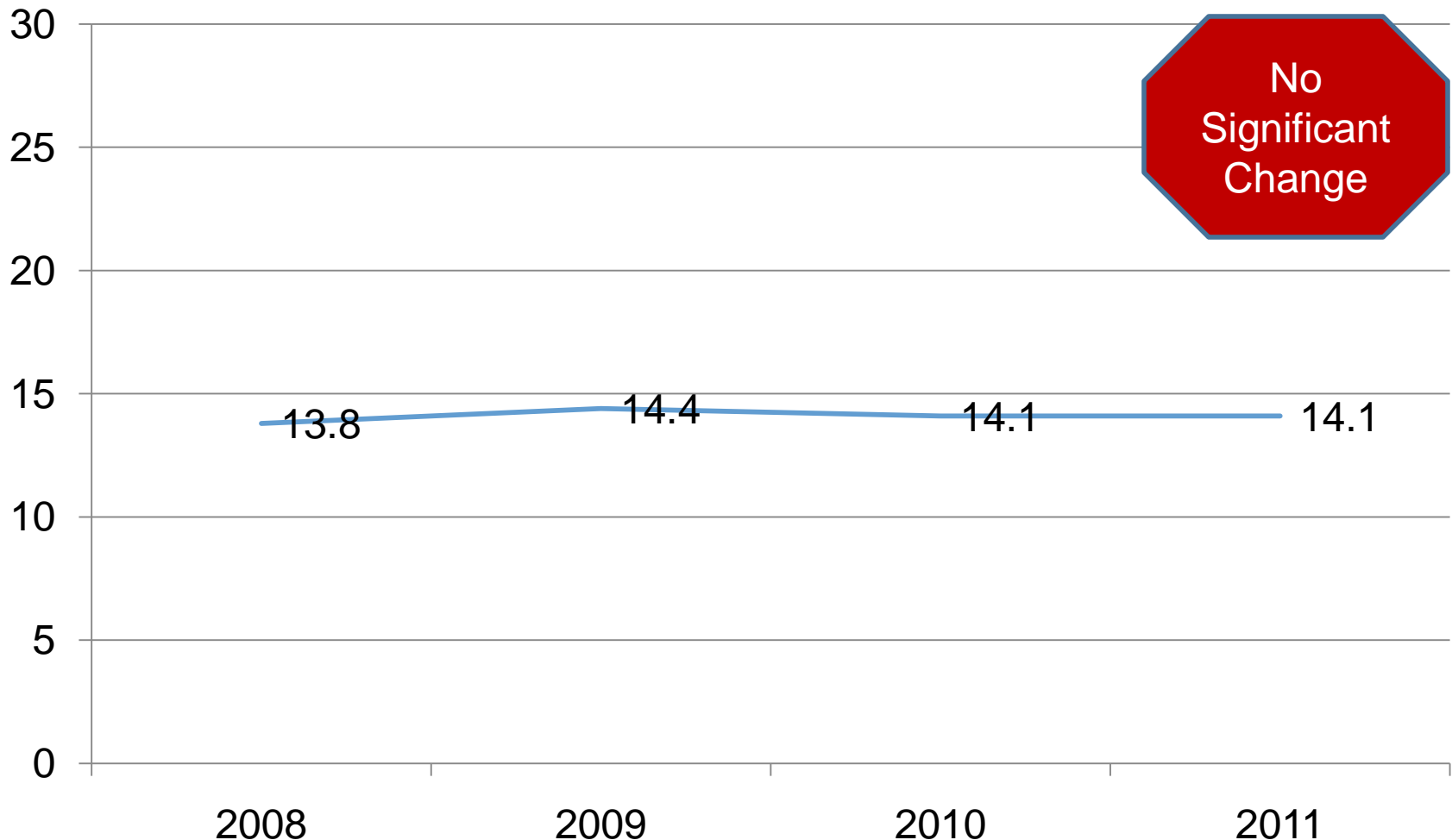
# Toddlers and Preschoolers

- Best Data Source: PEDNSS Data
- Collected=Public Health Department Offices (Ongoing)
- Population= 2-4 year old children participating in the Alabama WIC program
- Strengths=actual height, weight and age taken with standardized protocol
- Limitation=population limited to income eligible WIC participants

# National Data

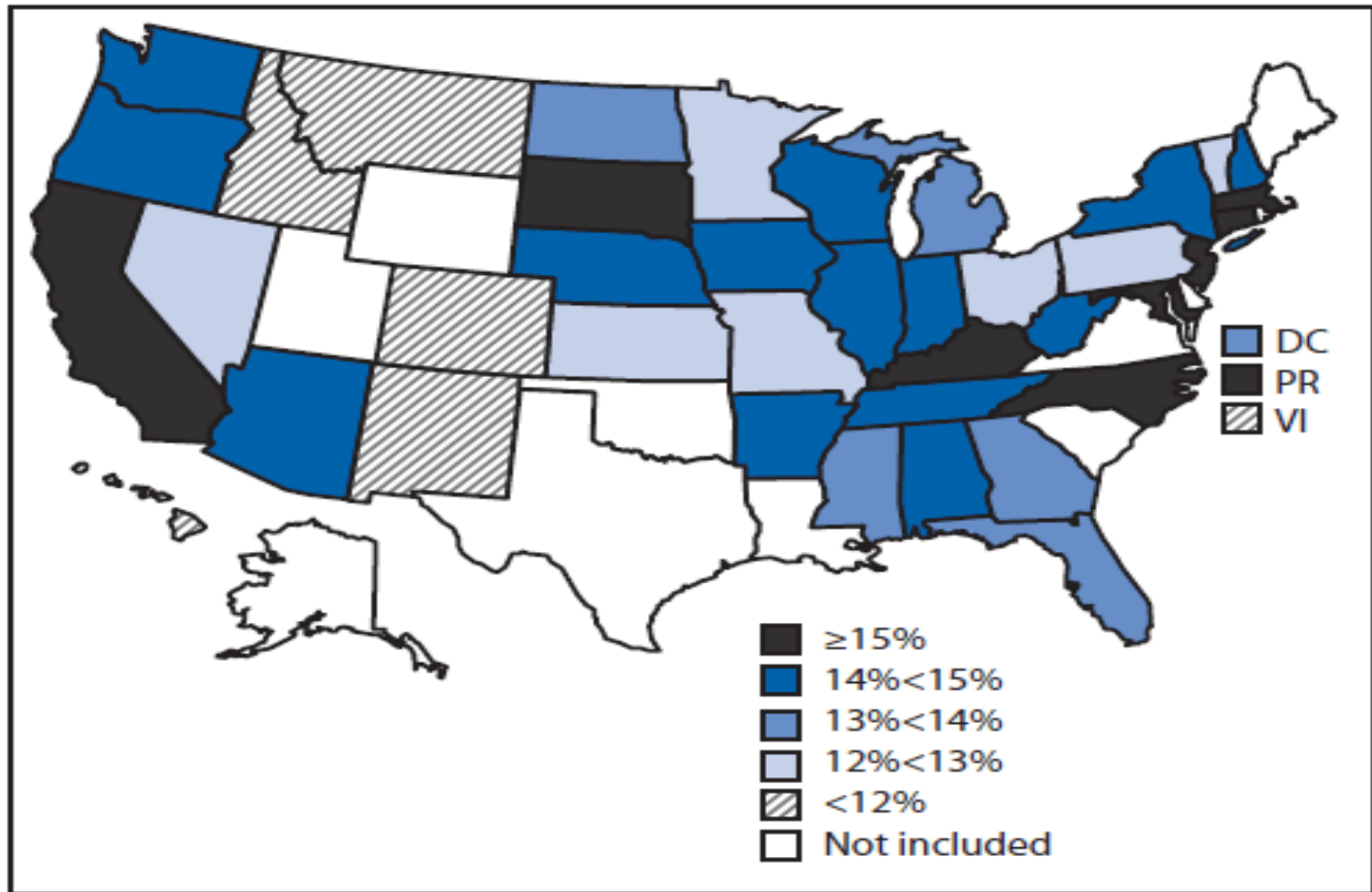
- NHANES 2009-2010
  - Prevalence of obesity among 2-5 year olds (all incomes)
    - 12.1%
  - Highest rates among minority groups
    - Non-Hispanic Blacks---18.9%
    - Hispanics-----16.2%

# Obesity Rates: Low Income Children 2-4 Years Old; 2008-2011



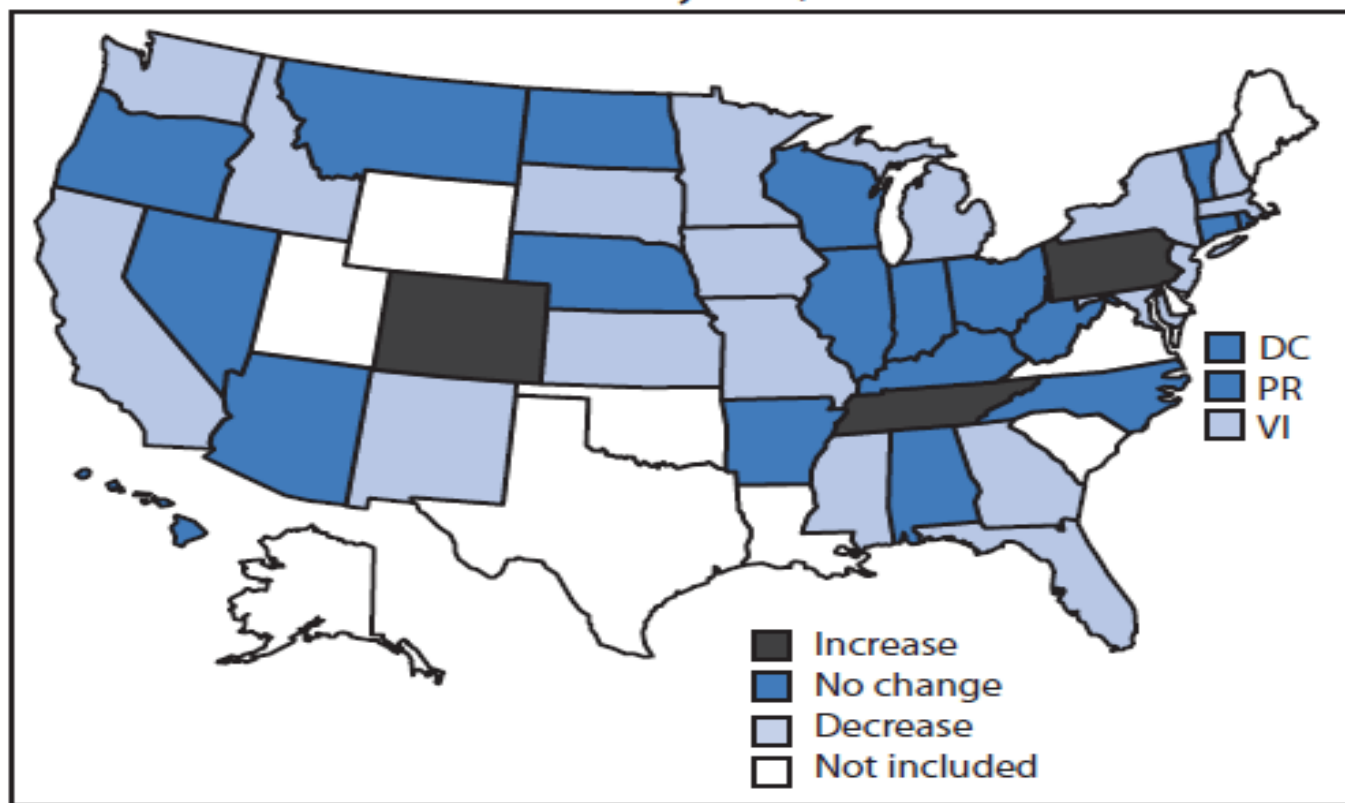
CDC. Vital Signs: Obesity Among Low-Income, Preschool-Aged Children — United States, 2008–2011. MMWR 2013; 62(31);629-634.

# Prevalence of Obesity, Low Income Children, 2-4 years old; 2011



CDC. Vital Signs: Obesity Among Low-Income, Preschool-Aged Children — United States, 2008–2011. MMWR 2013; 62(31):629-634.

# Changes in Obesity Rates of 2-4 Year Old Low Income Children by State; 2008-2011



CDC. Vital Signs: Obesity Among Low-Income, Preschool-Aged Children — United States, 2008–2011. MMWR 2013; 62(31);629-634.

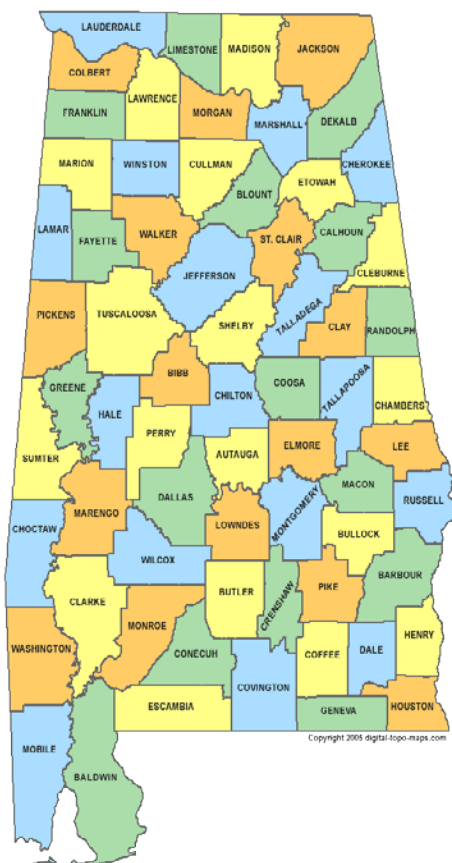


# School-age Children

- Best Data Source: Oral Health Screening Data
- Collected=ADPH Oral Health Screening Program (every 5 years)
- Population= Kindergarten and 3<sup>rd</sup> grade students
- Strengths=actual height and weight taken with standardized protocol; age estimated
- Limitation=
  - 2006-7: Convenience sample
  - 2011-12: Random Sample of Schools by Dental District and Stratified by income

# School-age Children

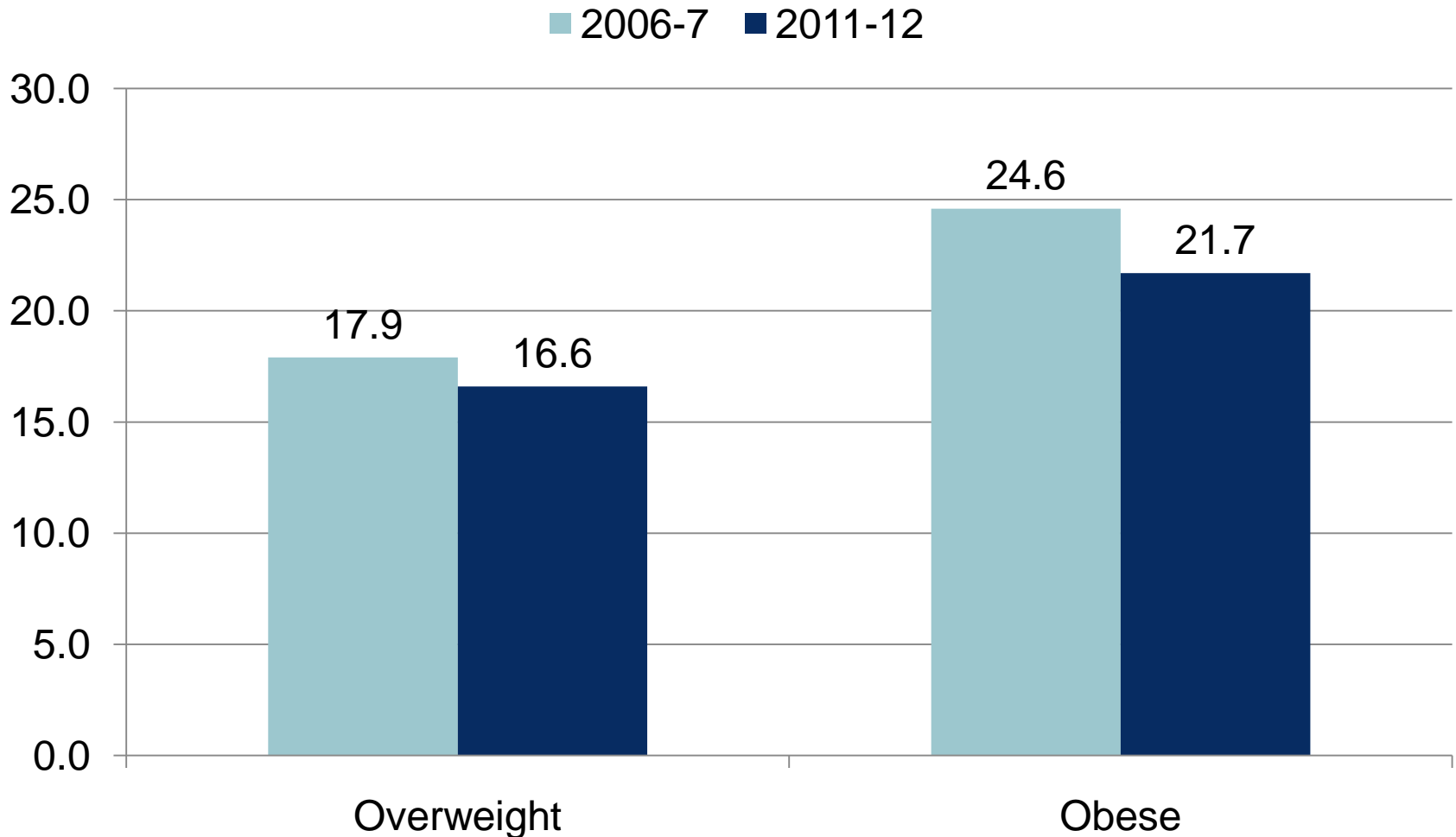
- 2011-2012 data
  - Sample includes:
    - 4362 kindergarteners
    - 3952 third graders
  - Random sample of schools within each dental district was selected
    - Sample stratified by income
  - All kindergarteners and third graders present on the date measures were taken were included in the initial sample
  - Sample sizes within districts range from 380 to 789
    - Exceptions:
      - Dental District 4 (South East corner of the state—high poverty counties) (38 K, and 46 3<sup>rd</sup> graders) and
      - Dental District 9 (Mid-state and West of Montgomery) (172 K, 261 3<sup>rd</sup> graders)
  - Exclusions:
    - Height or weight was entered in error (biologically impossible)
    - Height, weight or birthday was not taken
    - Not appropriate age for school year



# Sample Characteristics; 2012-13 Oral Health Screening

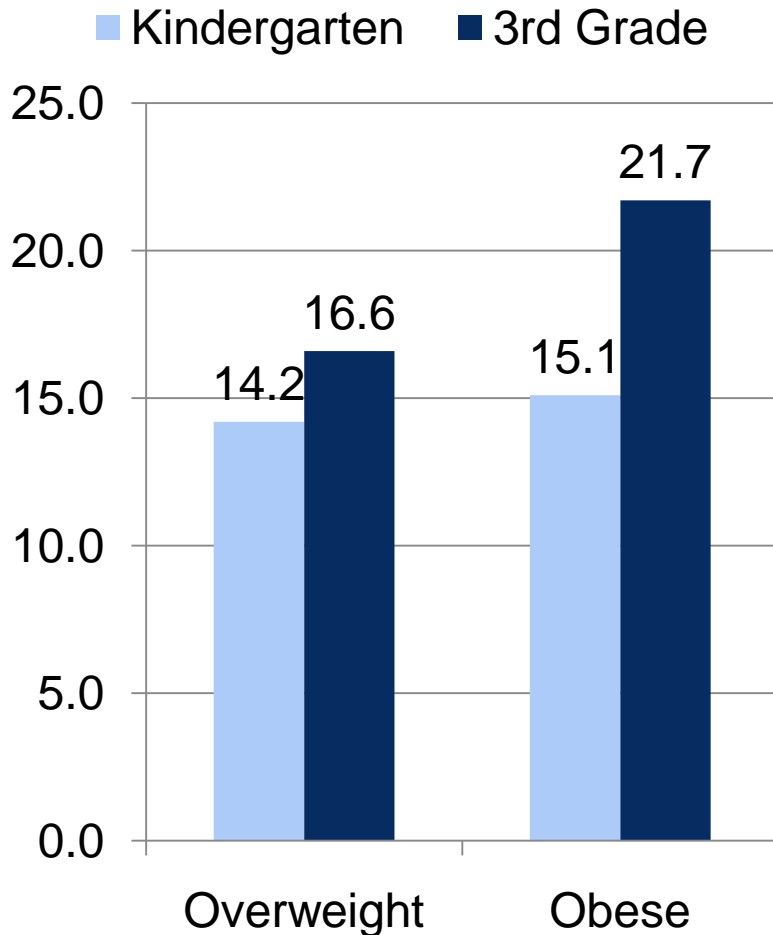
	<b>Kindergarten Number (%)</b>	<b>3<sup>rd</sup> grade Number (%)</b>
<b>Sex</b>		
Male	2471 (51.4%)	2010 (50.5%)
Female	2334 (48.6%)	1969 (49.5%)
<b>Race/Ethnicity</b>		
White	2752 (57.9%)	2212 (56.5%)
Black	1523 (32.1%)	1392 (35.6%)
Hispanic	294 (6.2%)	306 (5.2%)
Other	180 (3.8%)	107 (2.7%)
<b>Sample with Valid Heights and Weights</b>	<b>4362</b>	<b>3952</b>

# Overweight and Obesity Rates, Alabama 3<sup>rd</sup> Grade Students; 2006-7 and 2011-12



Caution: One should not compare the years because sampling designs differed.

# Overweight and Obesity: Alabama Kindergarten and 3<sup>rd</sup> Grade; 2011-12

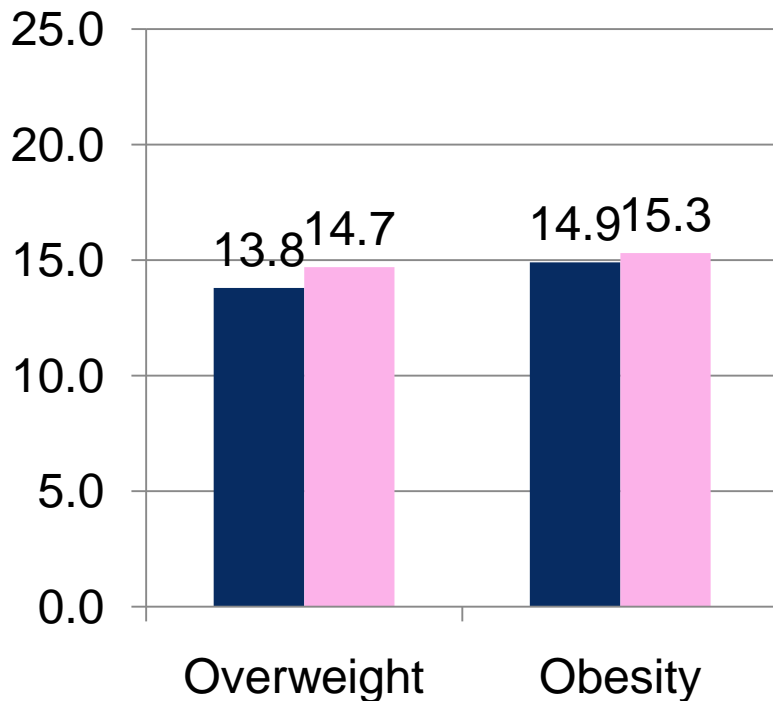


- Obesity rates in Kindergarteners slightly higher than low income 2-4 year olds (14.1%)
- Rates of obesity increase with age in US children
- National obesity rate for 6-11 year olds in 2009-2010 was 18.6%

# Comparisons: Alabama Oral Health Data; 2011-12

## Kindergarten

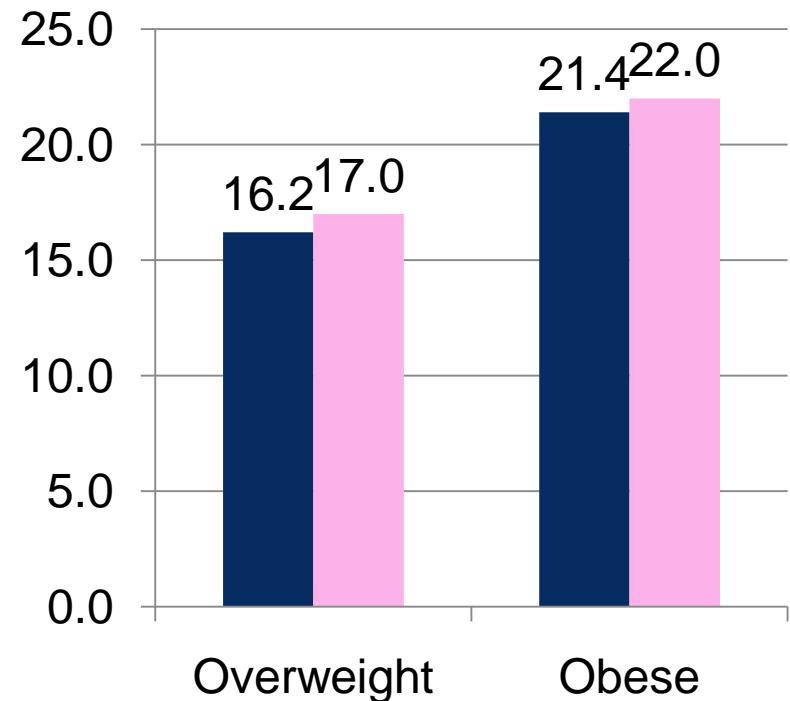
■ Boys ■ Girls



P=0.63

## 3<sup>rd</sup> Grade

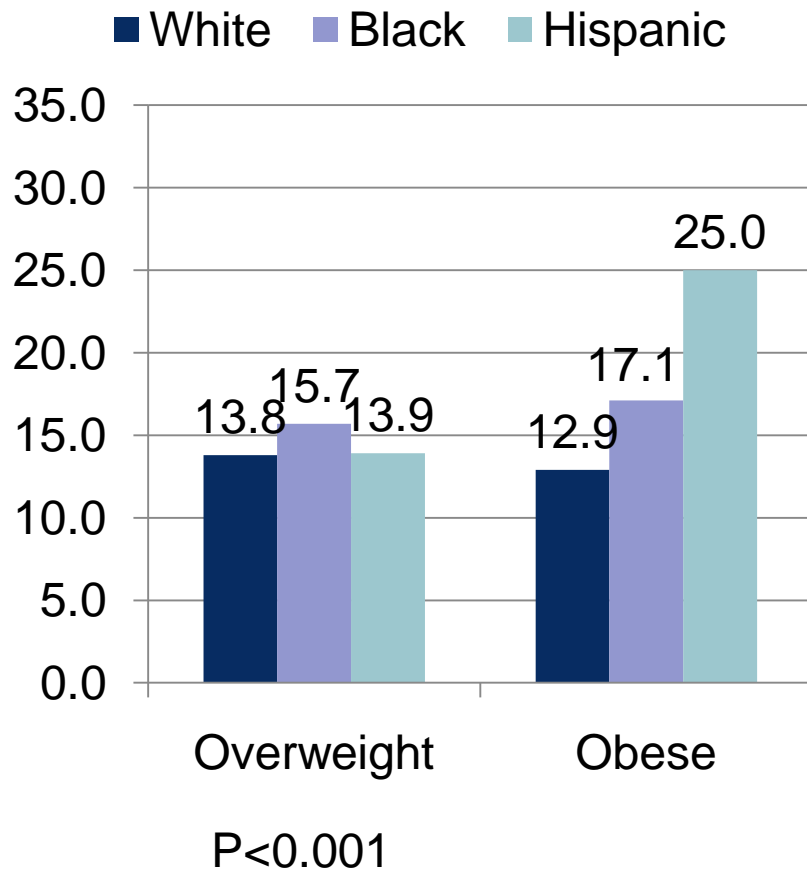
■ Boys ■ Girls



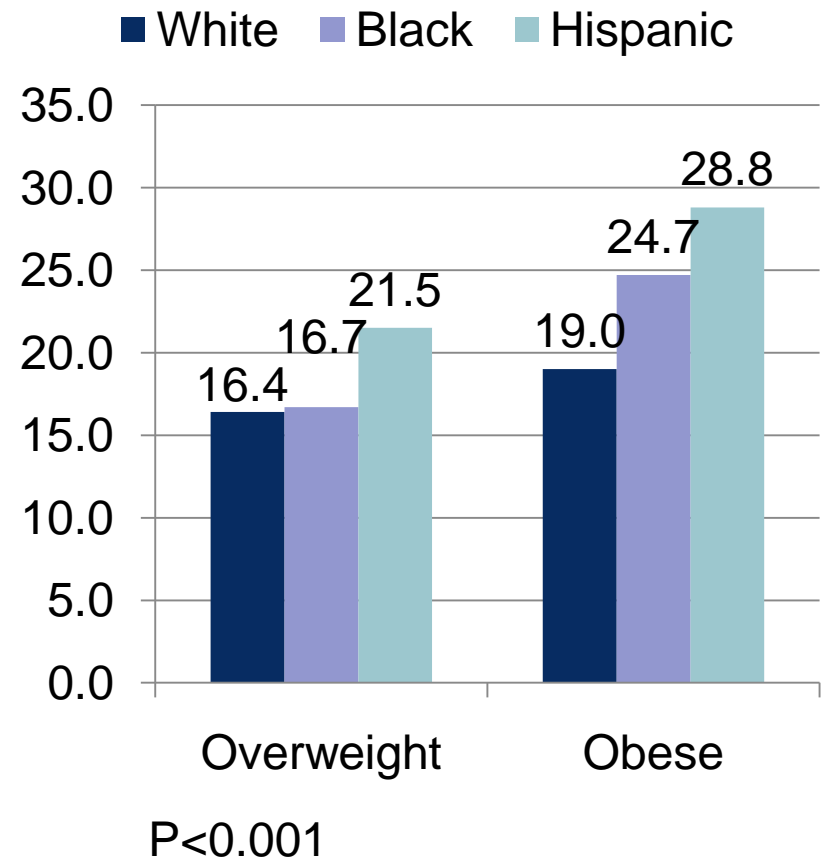
P=0.64

# Comparisons: Alabama Oral Health Data; 2011-12

## Kindergarten

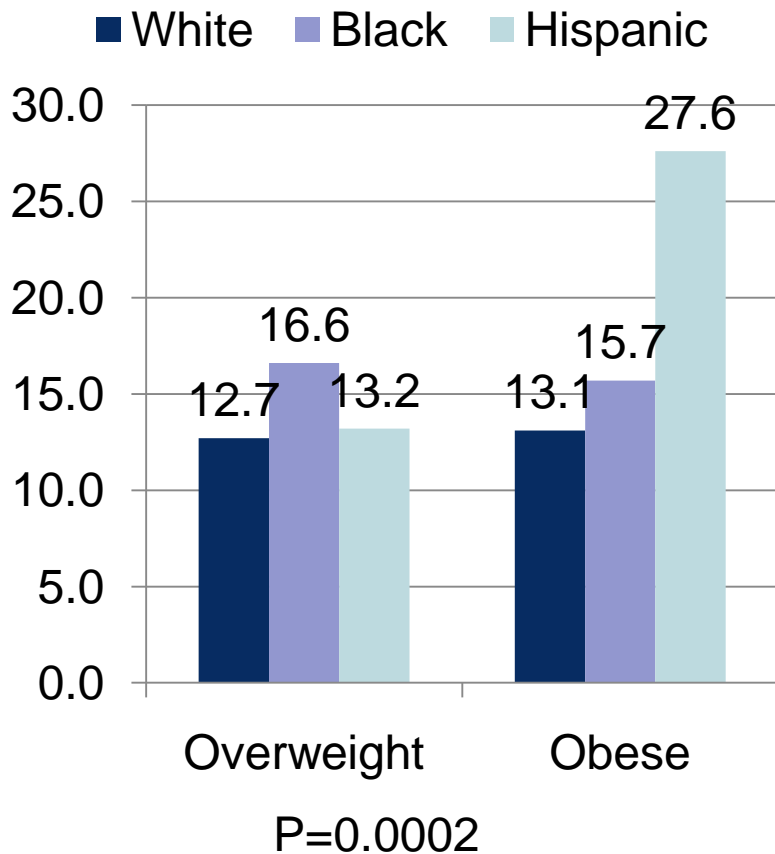


## 3<sup>rd</sup> Grade

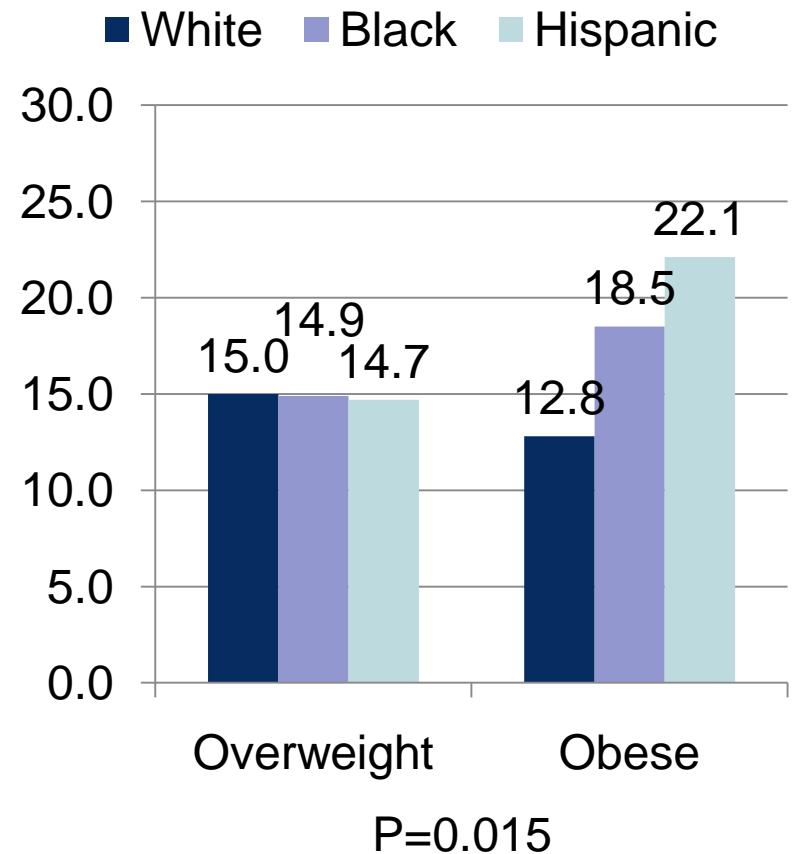


# Alabama Oral Health Data: Kindergarten Sample by Gender and Race; 2011-12

Boys



Girls

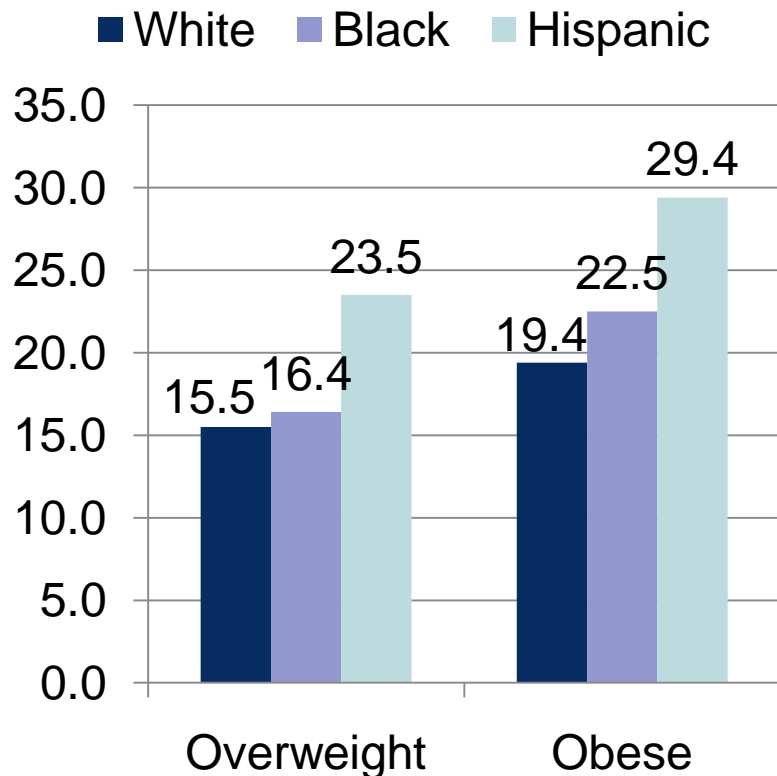




# Alabama Oral Health Data: 3<sup>rd</sup> Grade

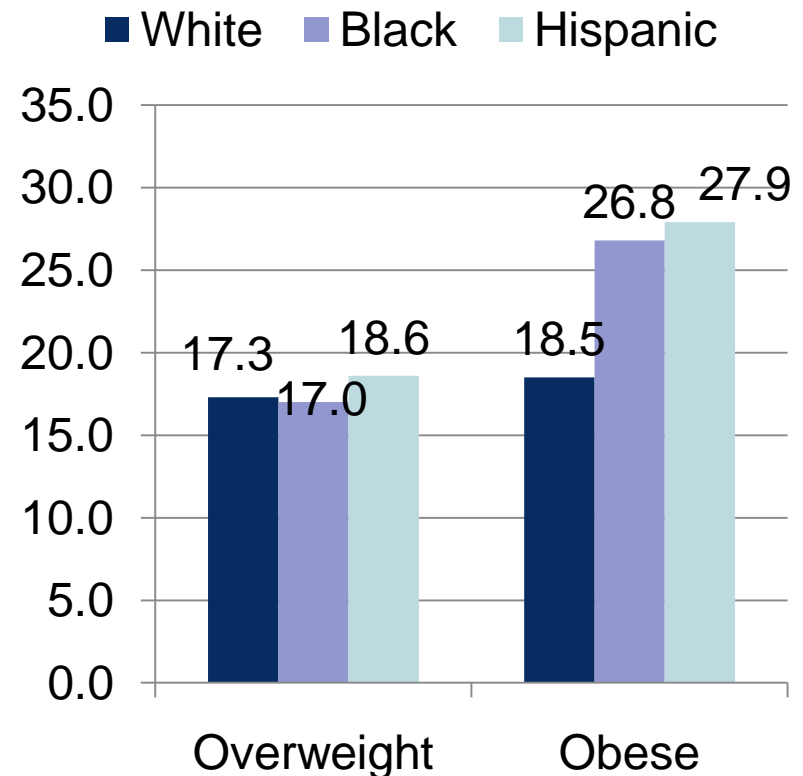
## Sample by Gender and Race; 2011-12

Boys



P=0.014

Girls



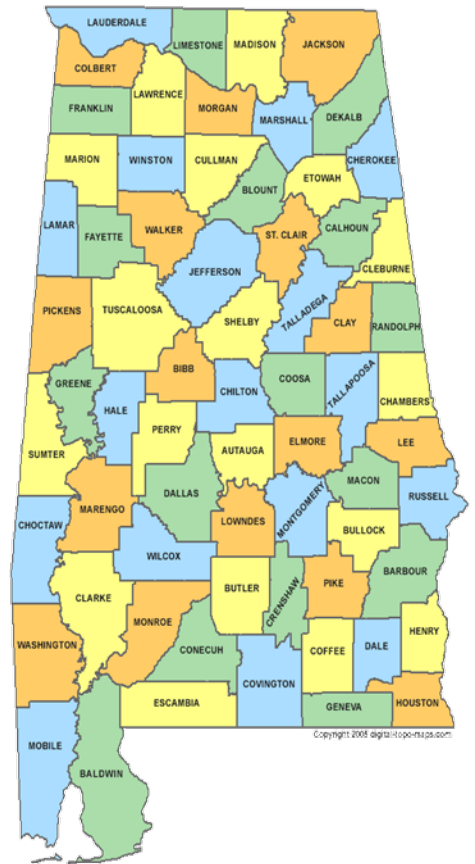
P=0.002

# Conclusions

- Analysis of PEDNSS data and ADPH Oral Health Data fill a gap in our understanding of obesity rates in Alabama children
- Obesity rates in low income Alabama preschoolers have stayed the same between the years 2008-2011
- Obesity rates in Alabama school-age children are higher than the national average
- Obesity rates are higher among minority children with the highest rates found in Hispanic children

# Next Steps

- Data Release for the AOTF webpage
  - Handout that highlights the data presented today
- GIS Maps
  - Map the data by dental district



# Thank You

- Sherry Goode
- Krishona Lee
- Mim Gaines
- Carrie Shepherd
- Stuart Lockwood
- Sub-committee members
  - Richard Sinsky
  - Kim Blake