


Identifying Disparities in Oral Health Status at the National Level



Centers for Disease Control and
Prevention

National Institute of Dental and
Craniofacial Research

NHANES “Forever” Process

- Consortium: CDC/DHANES, CDC/DOH and NIDCR for 1999-2004 data collection
- Visual-tactile protocol
- Examinations by trained dentist
- Protocol was modified in 2000, 2001 and 2003
- NCHS releases 1999-2000, 2001-2002
- NCHS will release 2003-2004 by summer 2006
- Descriptive data have been published 

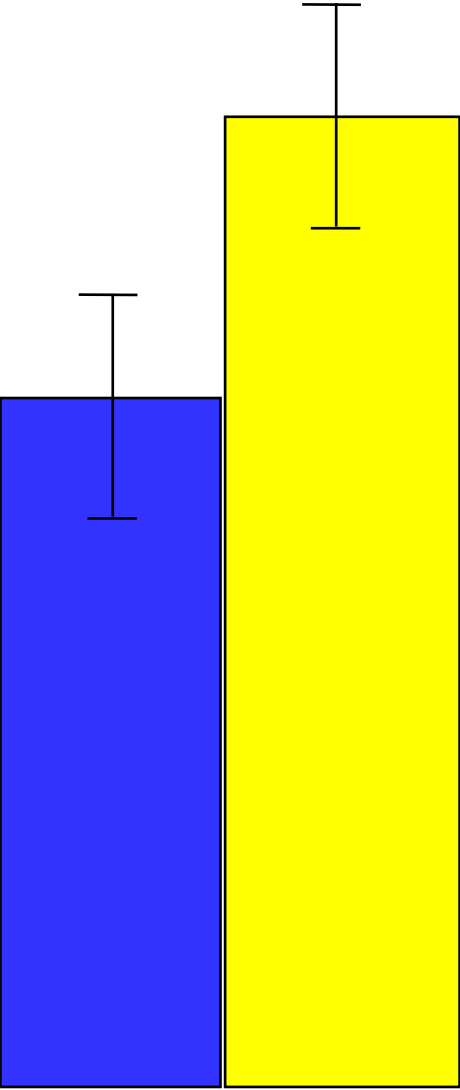
Oral Conditions Assessed at the MEC for NHANES 1999-2002

- Saliva flow rate (40+)
- Gingival bleeding (12-49)
- Traumatic injuries (6-29)
- Loss of periodontal attachment (18+)
- Recommendations for dental care (2+)
- Tooth count (2+)
- Coronal caries (2+)
- Root caries (18+)
- Dental sealants (2-34)
- Enamel fluorosis (6-49)

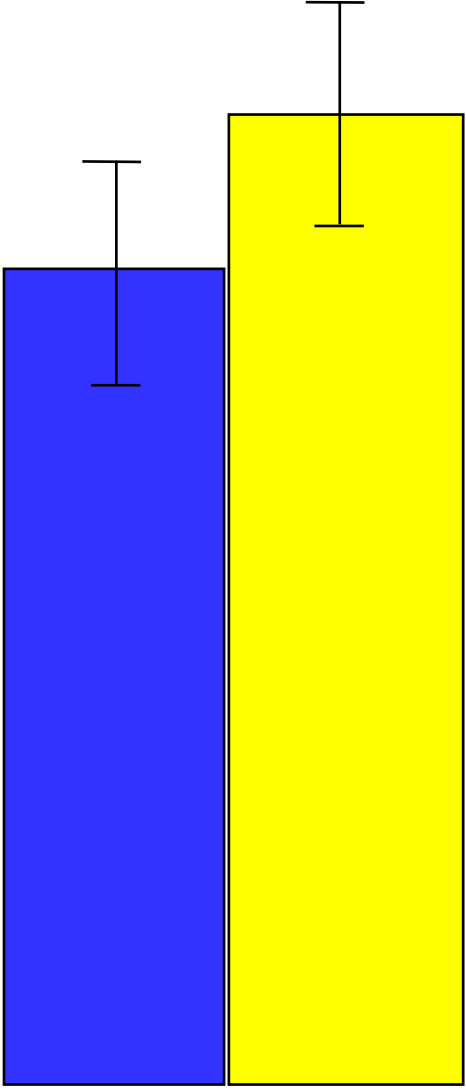
Stratification

- Age
- Sex
- Race/ethnicity
 - ❖ Non-Hispanic white
 - ❖ Non-Hispanic black
 - ❖ Mexican-American
- Poverty status (Federal Poverty Level)
 - ❖ $< 100\%$ FPL
 - ❖ $100\% \leq \text{FPL} < 200\%$
 - ❖ $\geq 200\%$ FPL
- Smoking Status (adults only)
 - ❖ Current, former and never

**Statistically different at $\alpha= 0.05$
Error bars do not overlap**

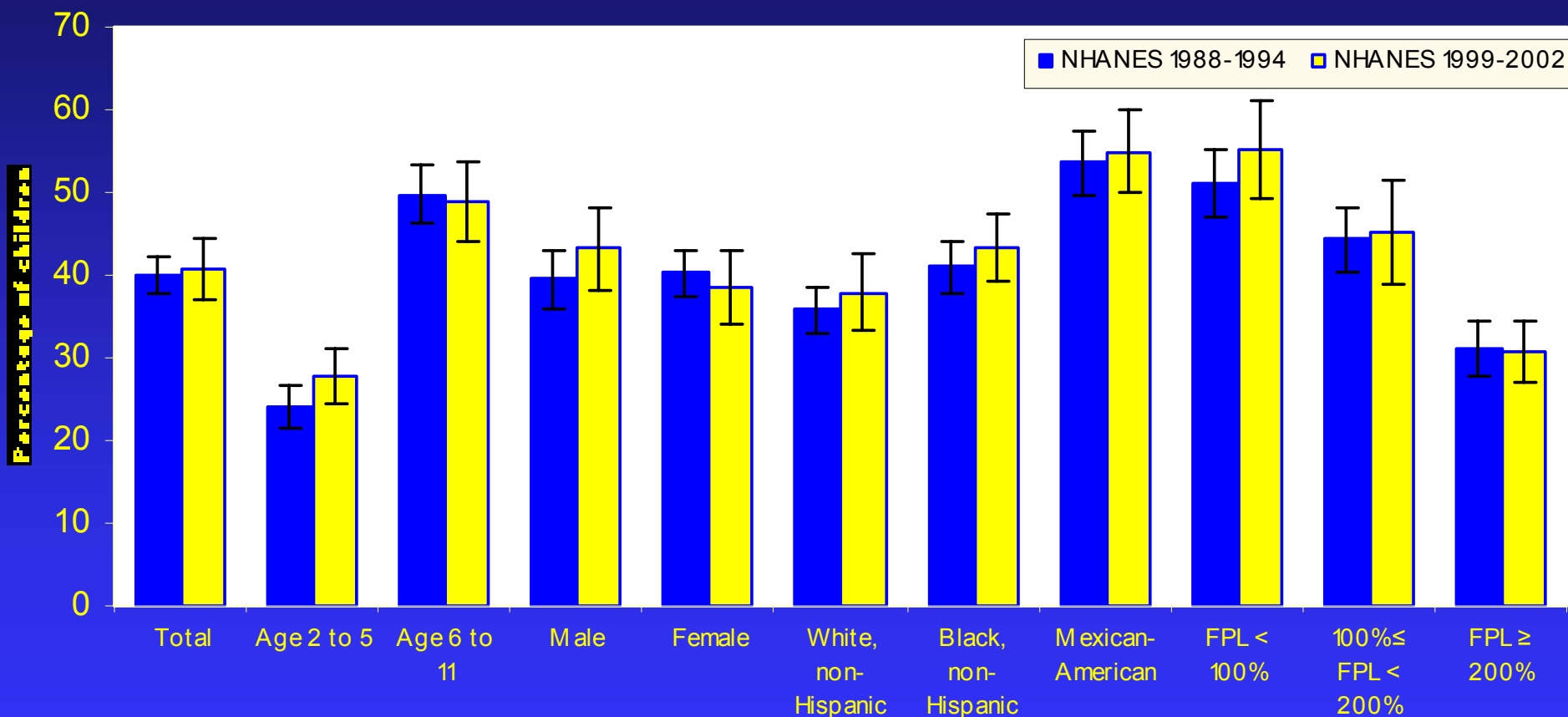


Not statistically different at $\alpha= 0.05$. Error bars overlap

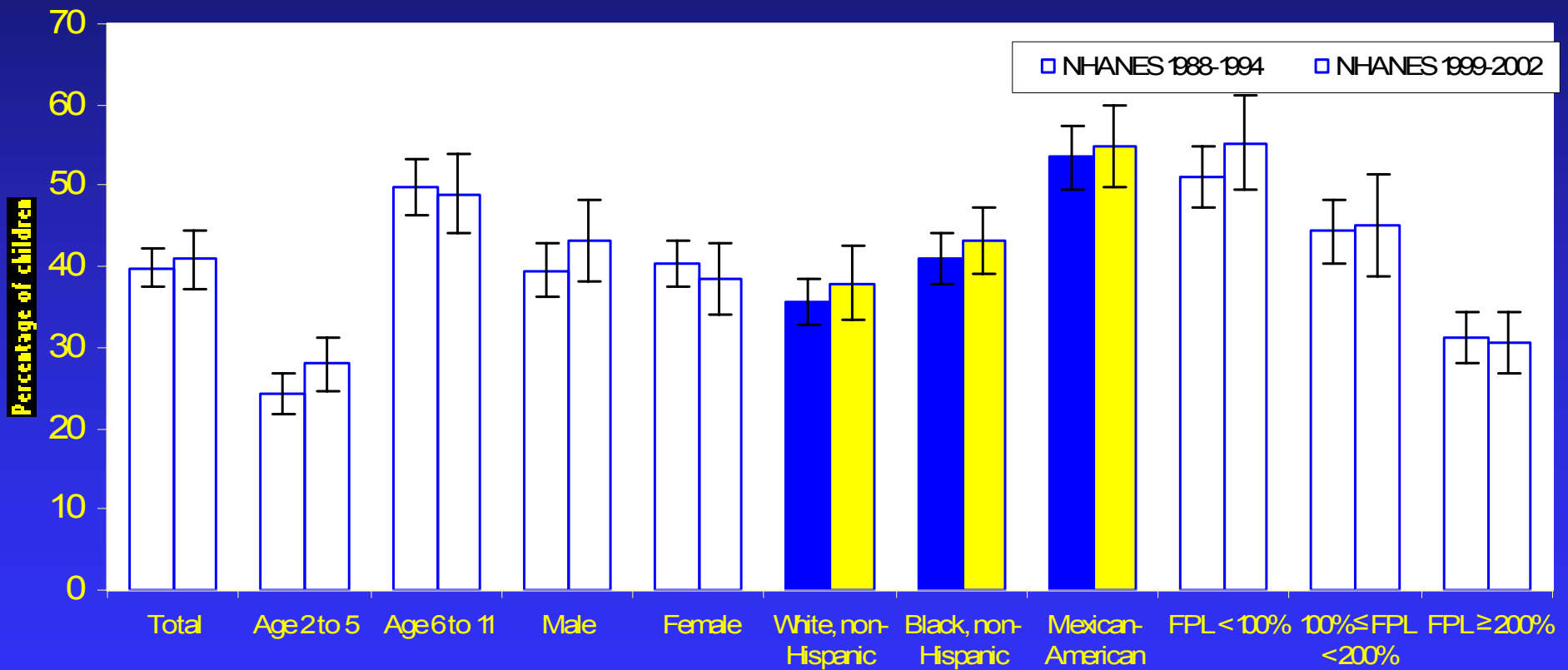


Dental Caries in Primary Teeth

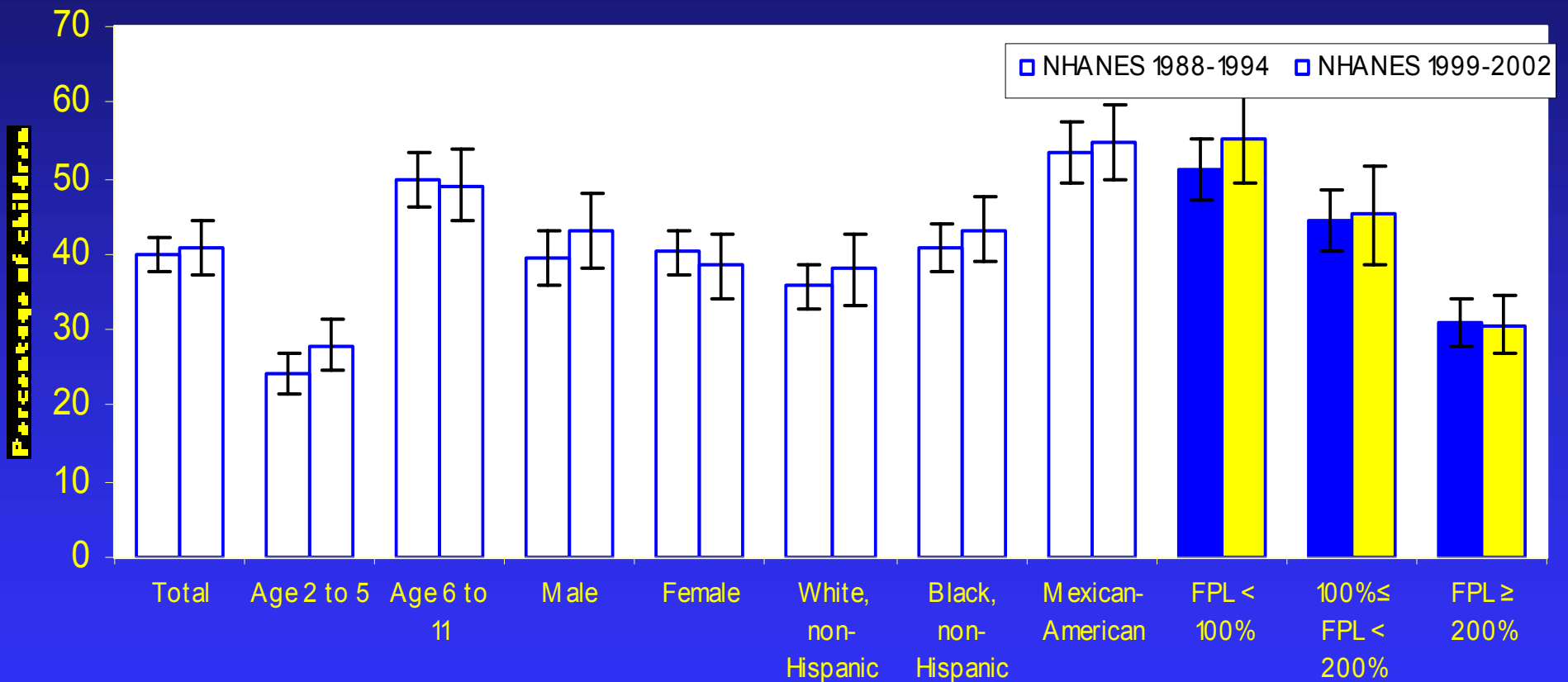
Prevalence of dental caries in primary teeth* among children aged 2 to 11 years -- United States, 1988-1994 and 1999-2002



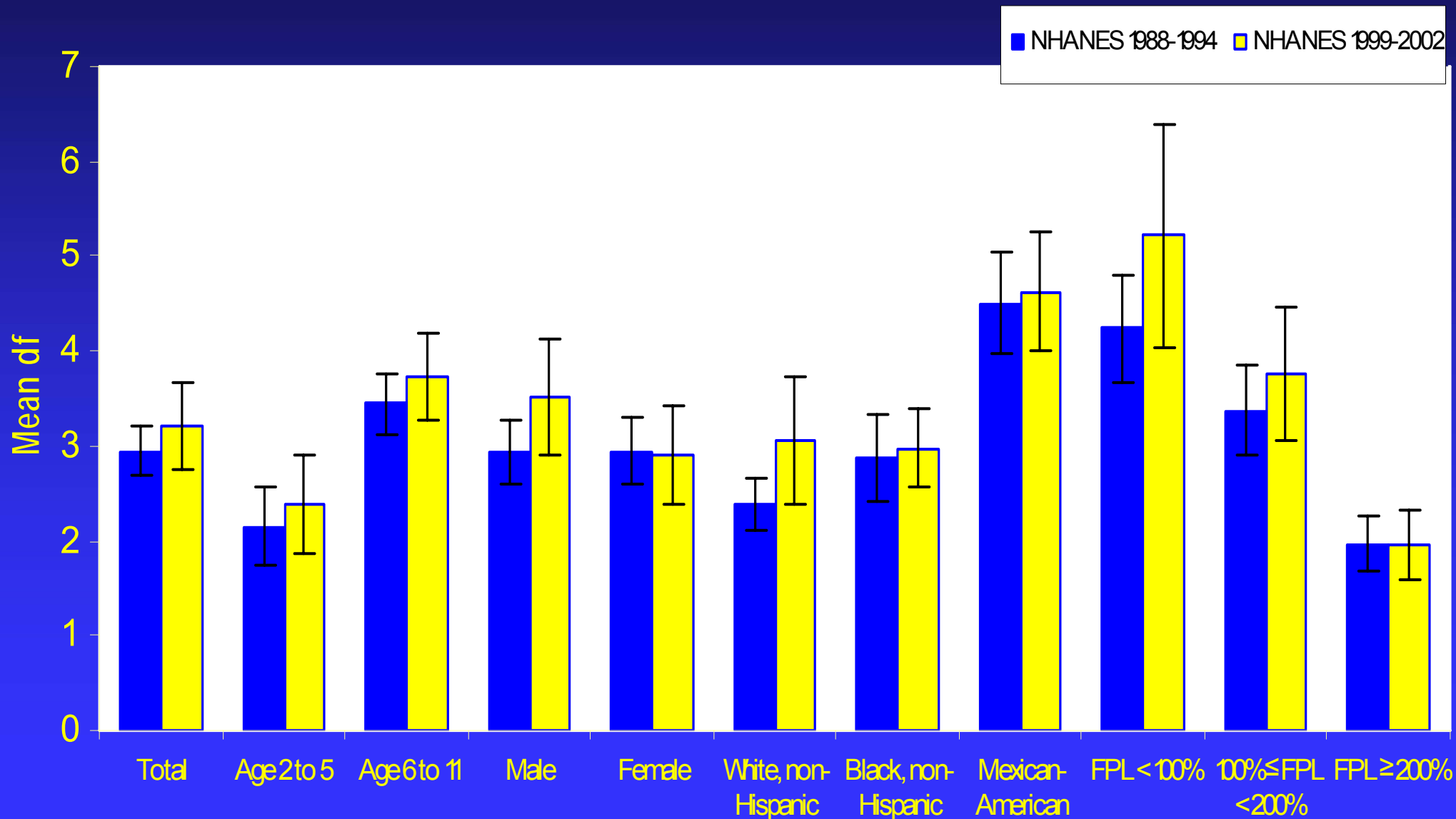
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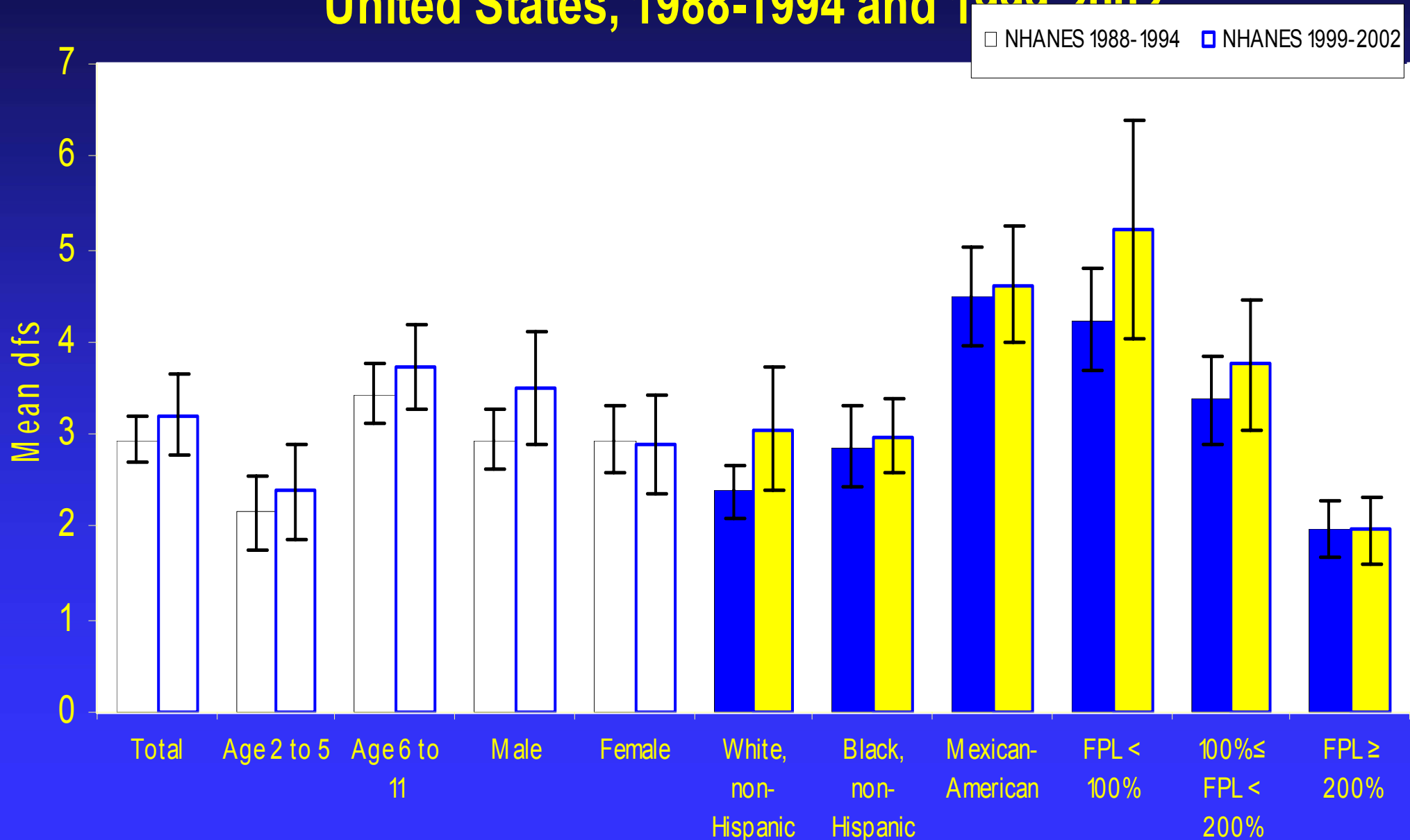
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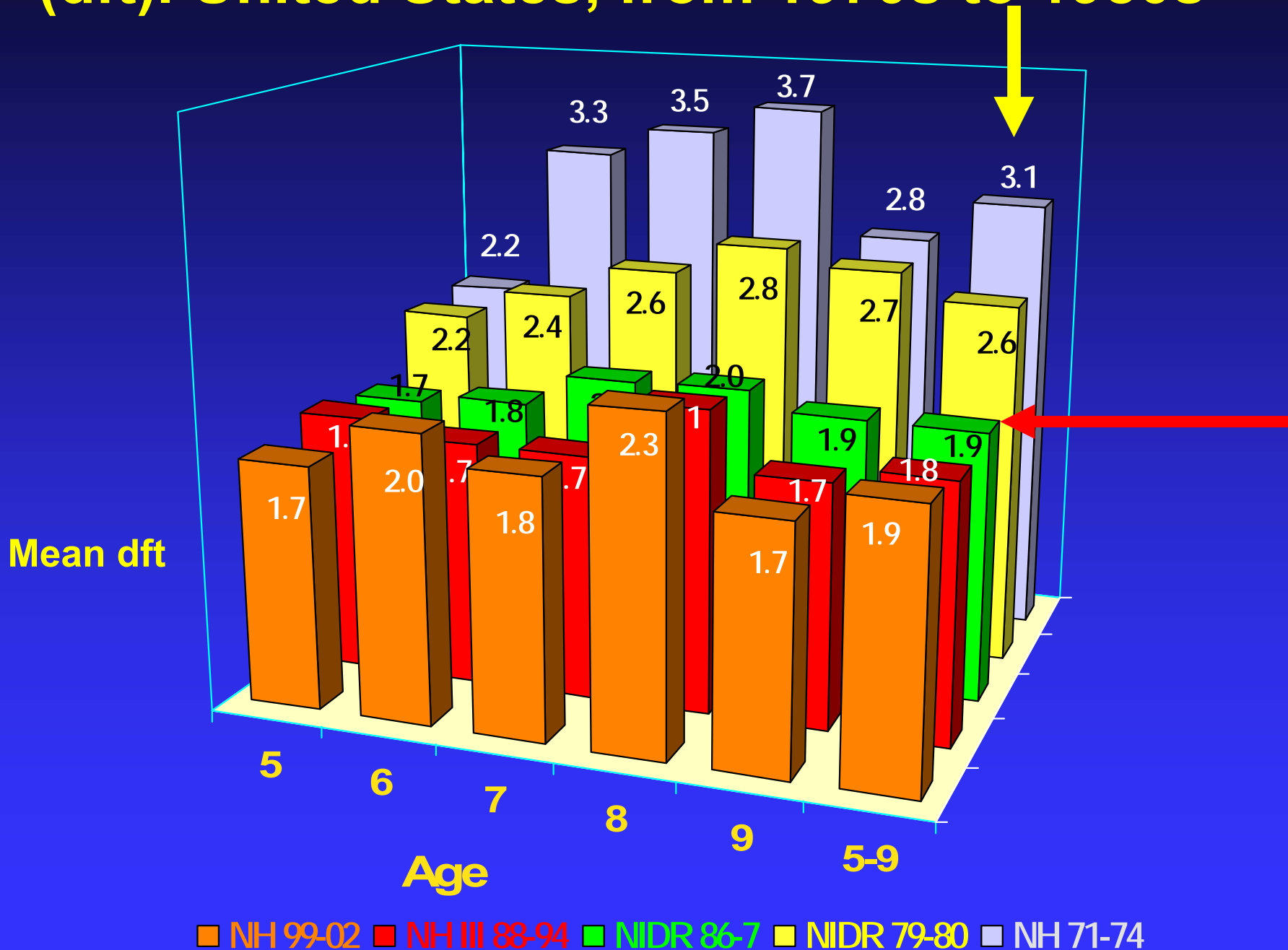
Mean number of decayed and filled surfaces in primary teeth (dfs)* among children aged 2-11 yrs United States, 1988-1994 and 1999-2002



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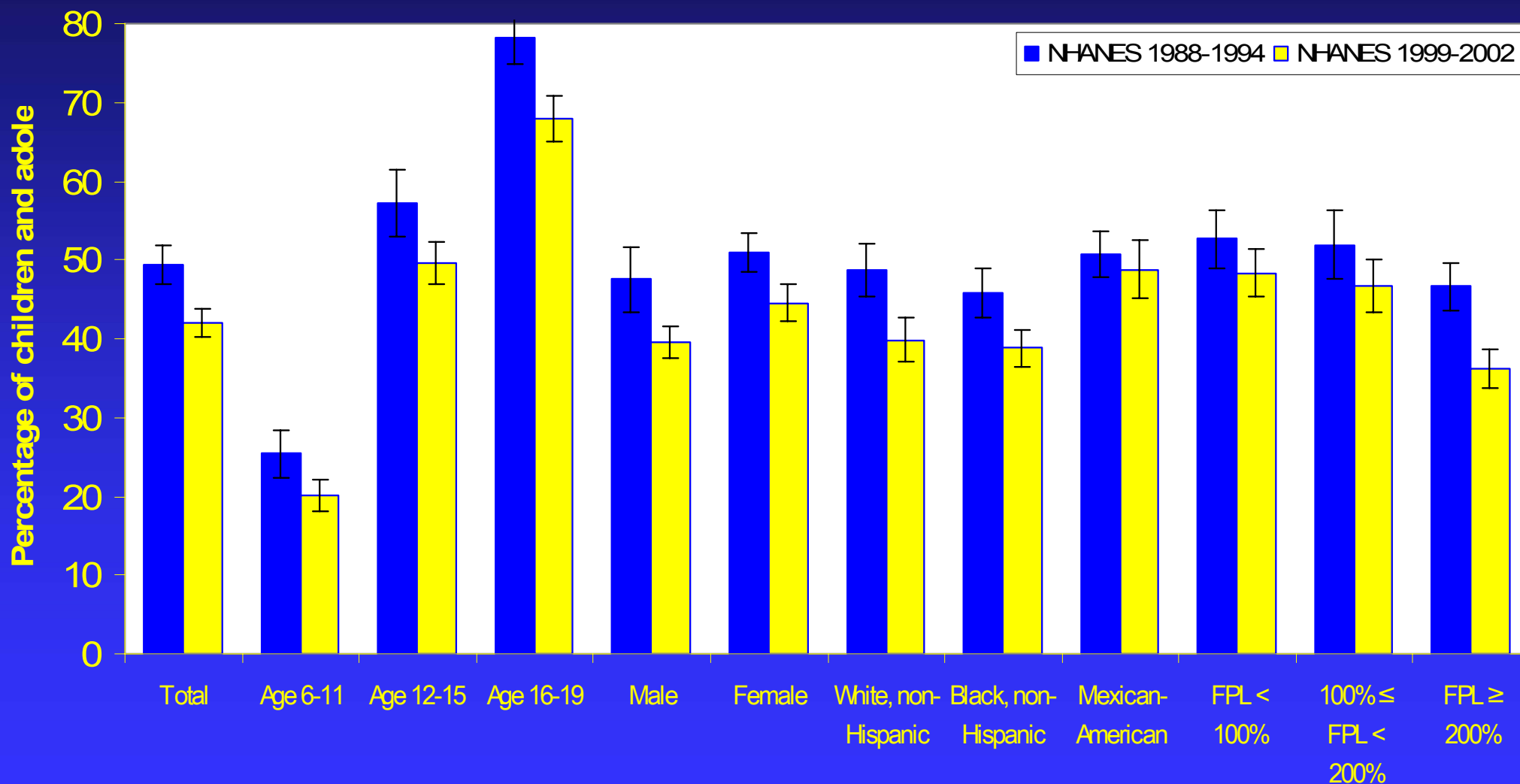


Trends in Dental Caries in the Primary Dentition (dft). United States, from 1970s to 1980s

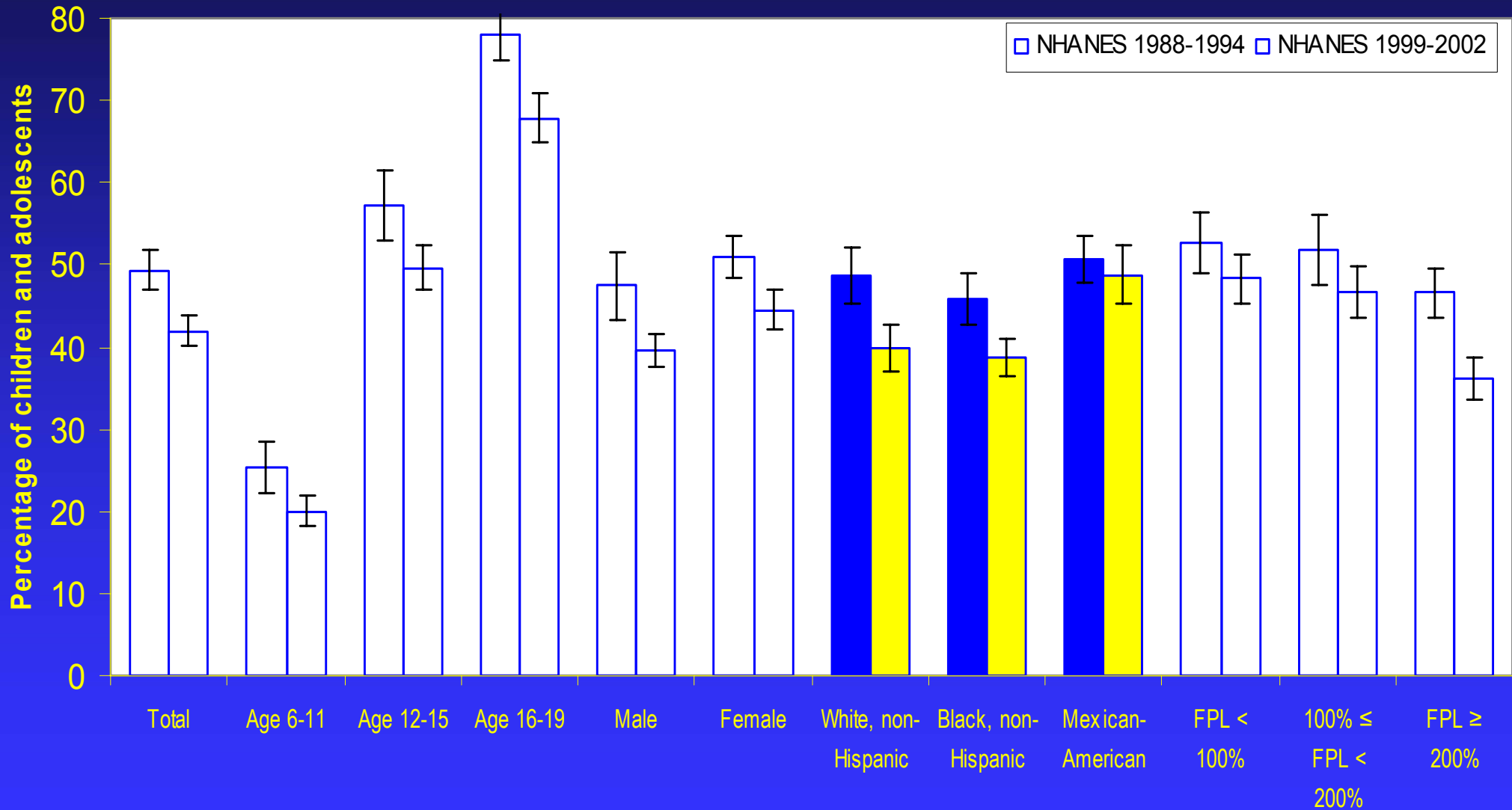


Dental Caries in Permanent Teeth

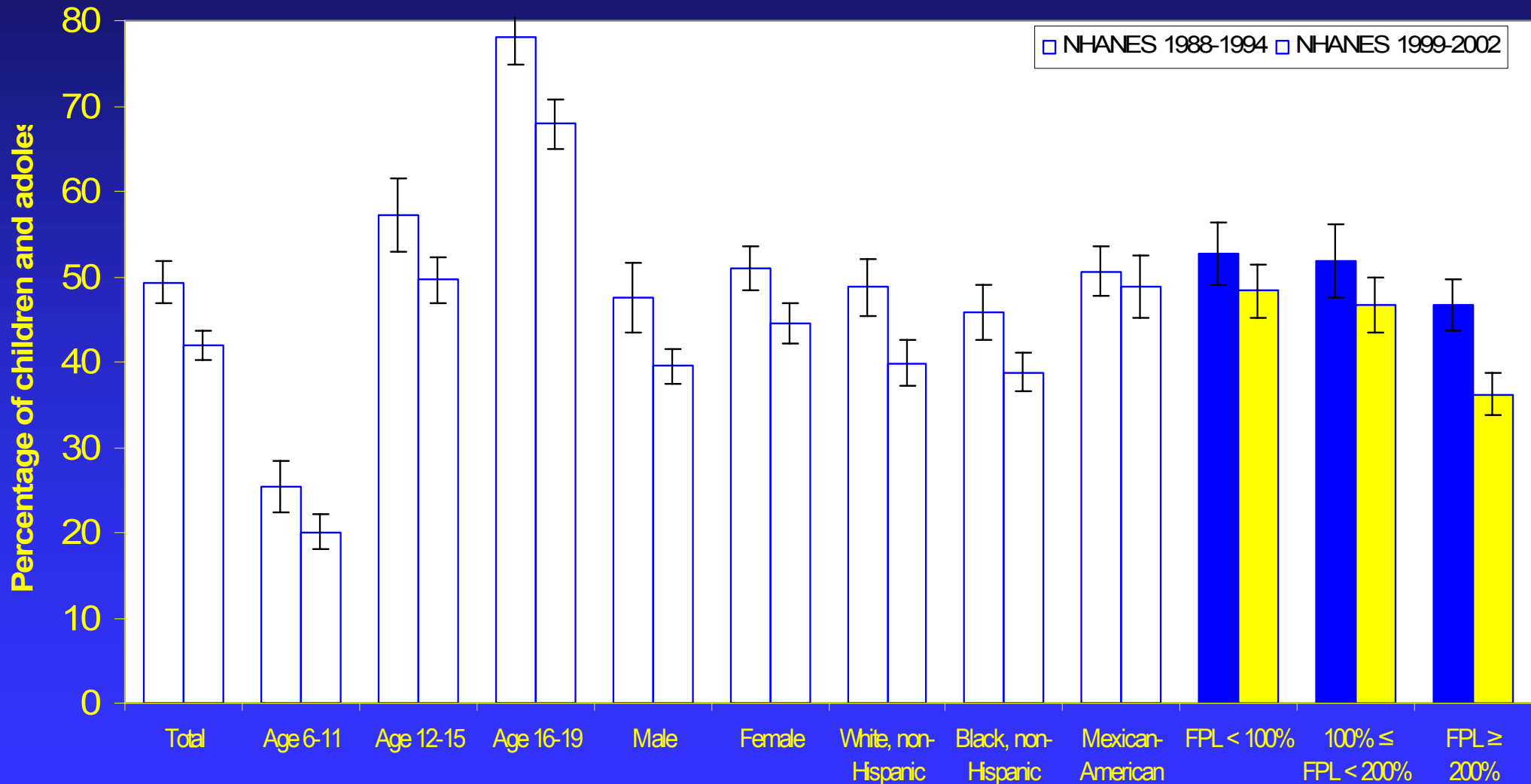
Prevalence of dental caries in permanent teeth* among children and adolescents aged 6-19 years United States, 1988-1994 and 1999-2002



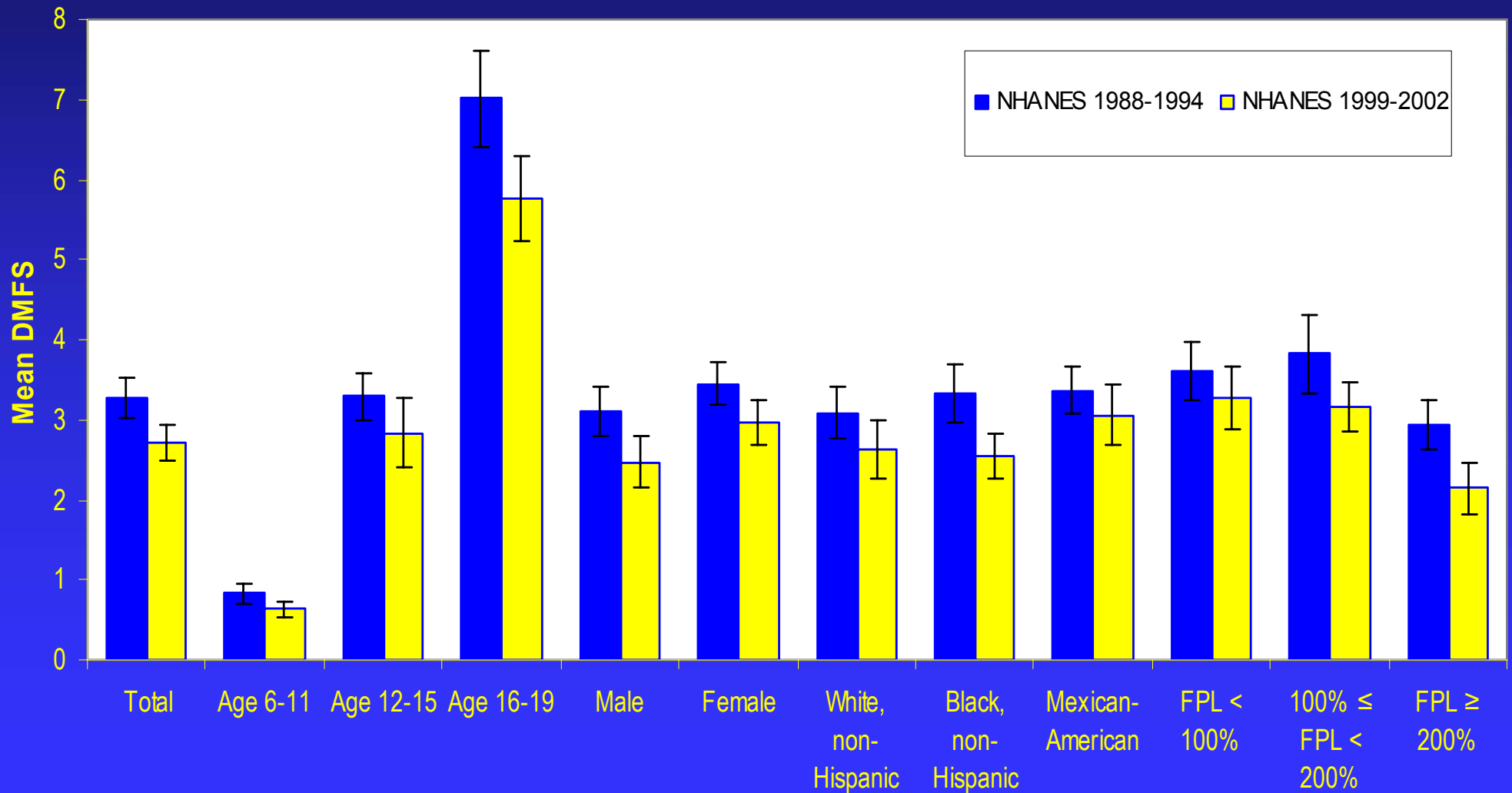
Prevalence of dental caries in permanent teeth* among children and adolescents aged 6-19 years United States, 1988-1994 and 1999-2002



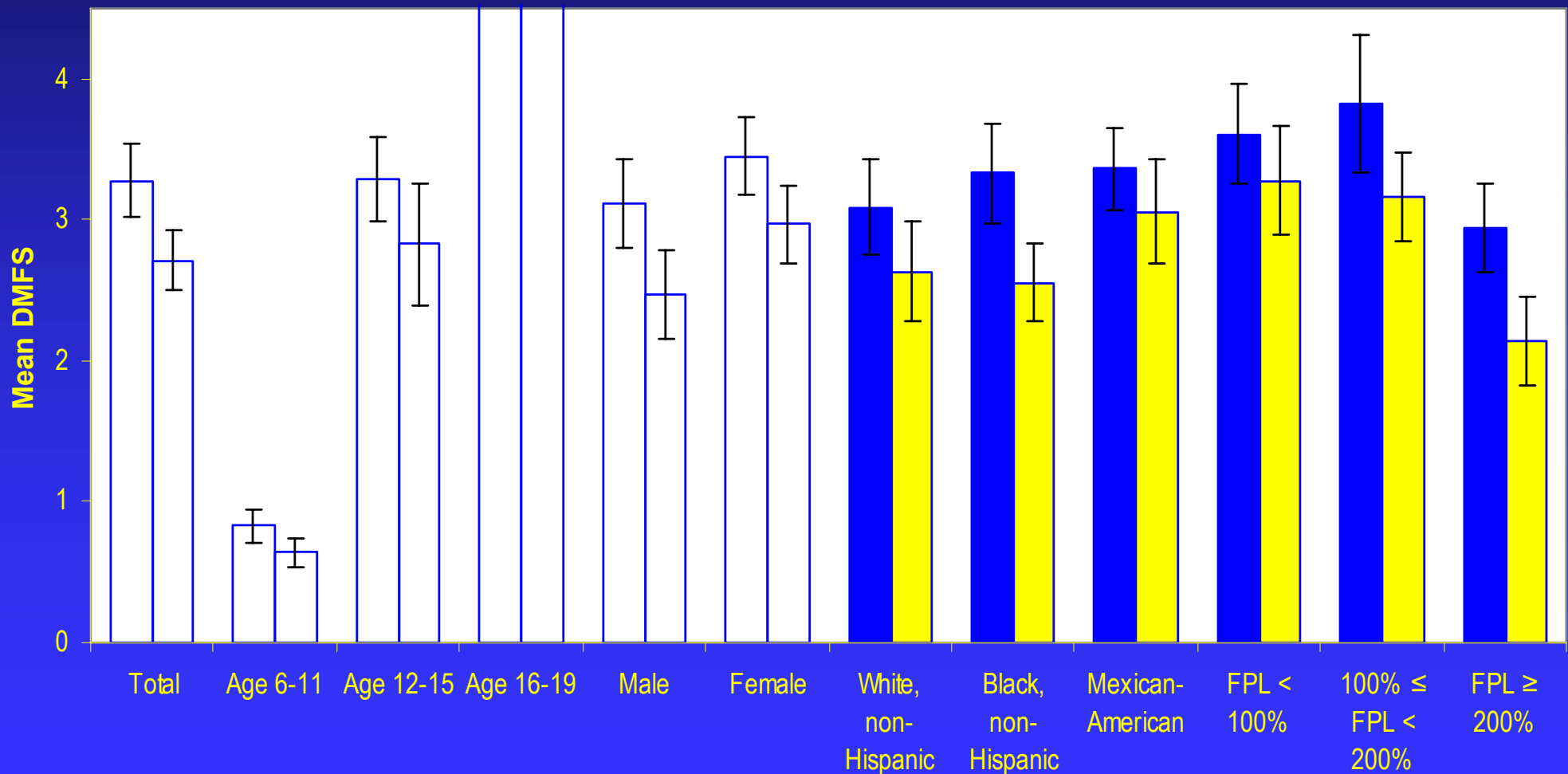
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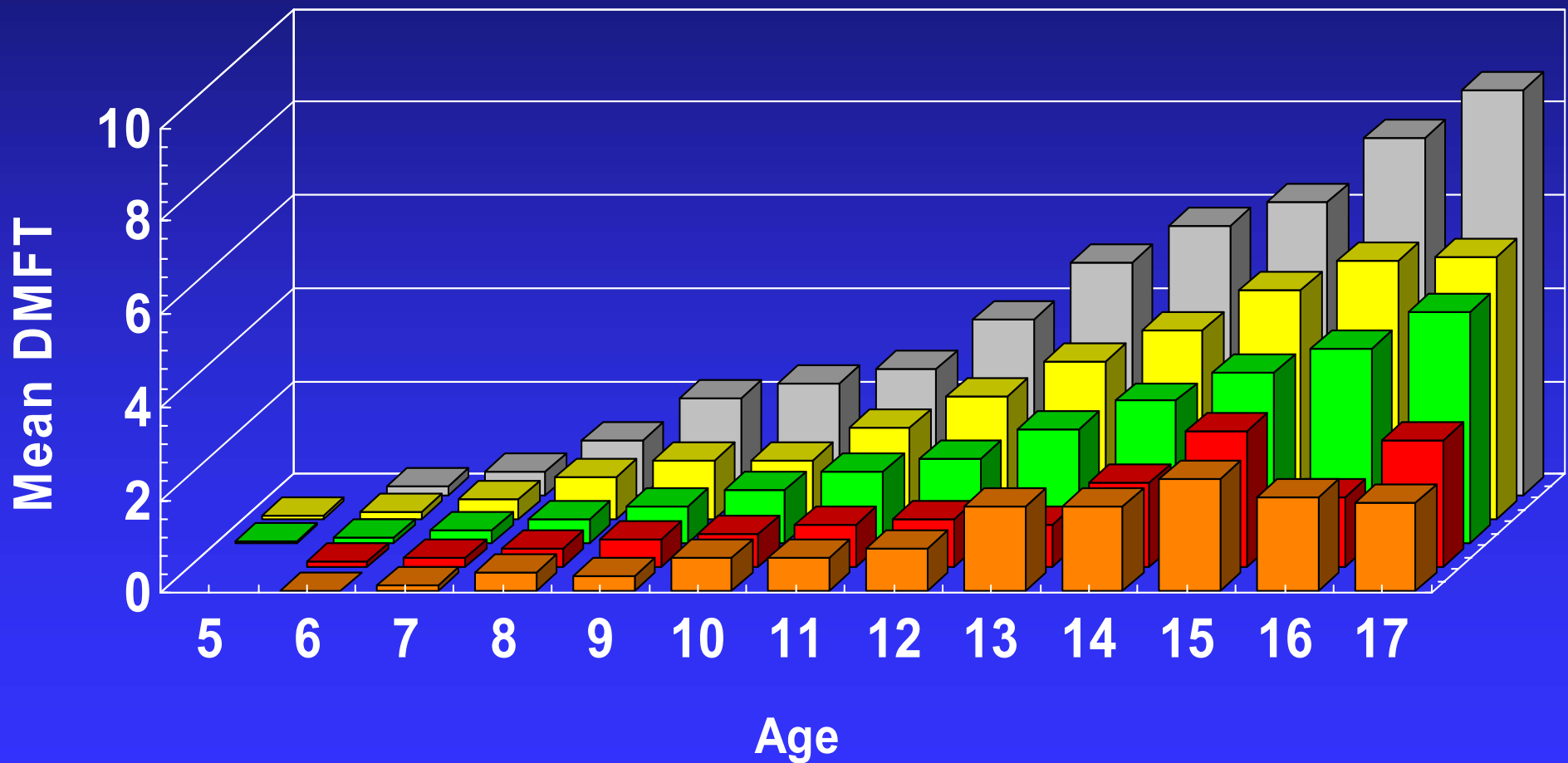
Mean number of decayed, missing, and filled surfaces (DMFS)* in permanent teeth among children and adolescents aged 6-19 years United States, 1988-1994 and 1999-2002



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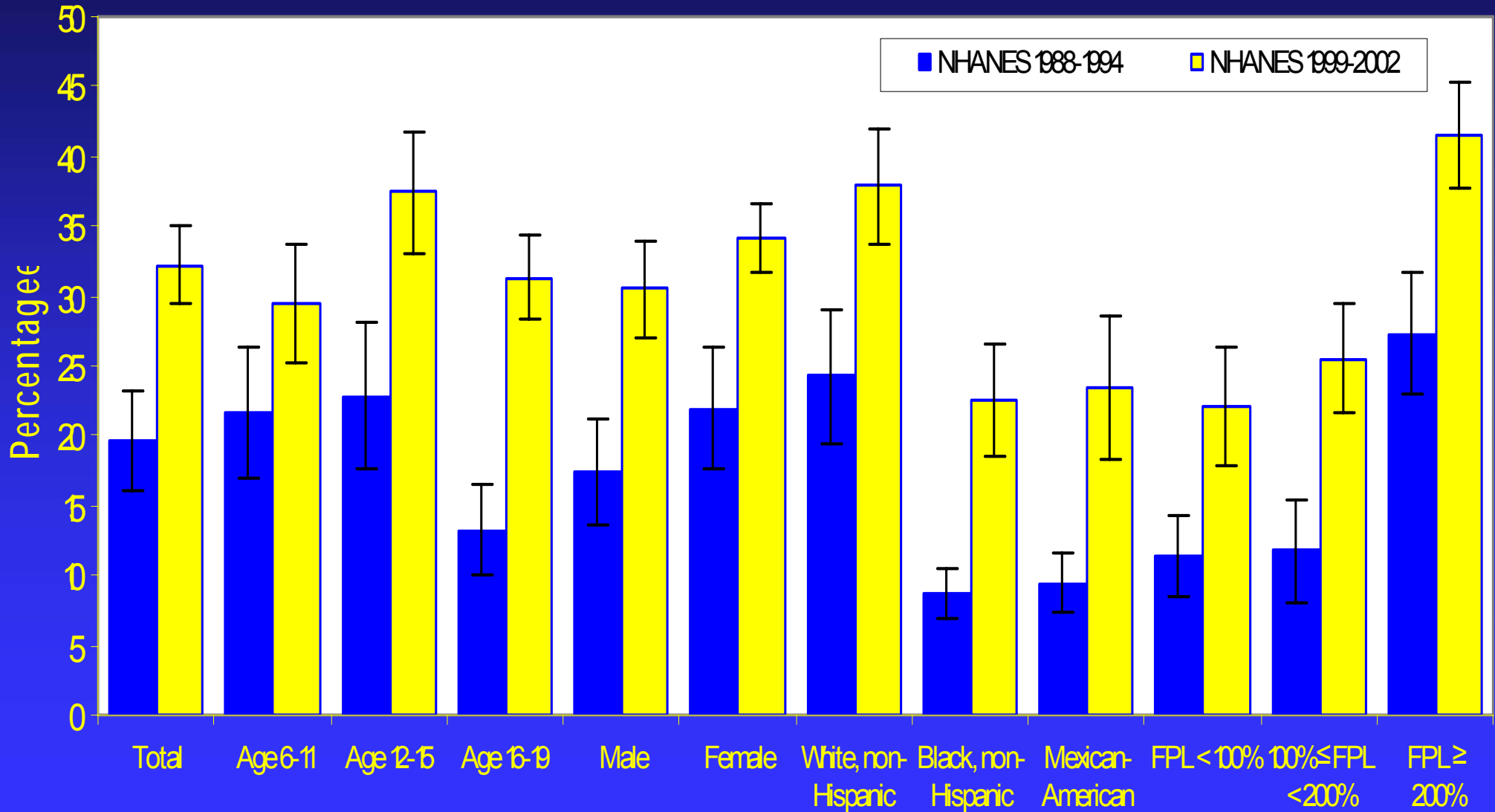
Trends in Dental Caries Prevalence in the Permanent Dentition (DMFT). United States 1970s to 1990s



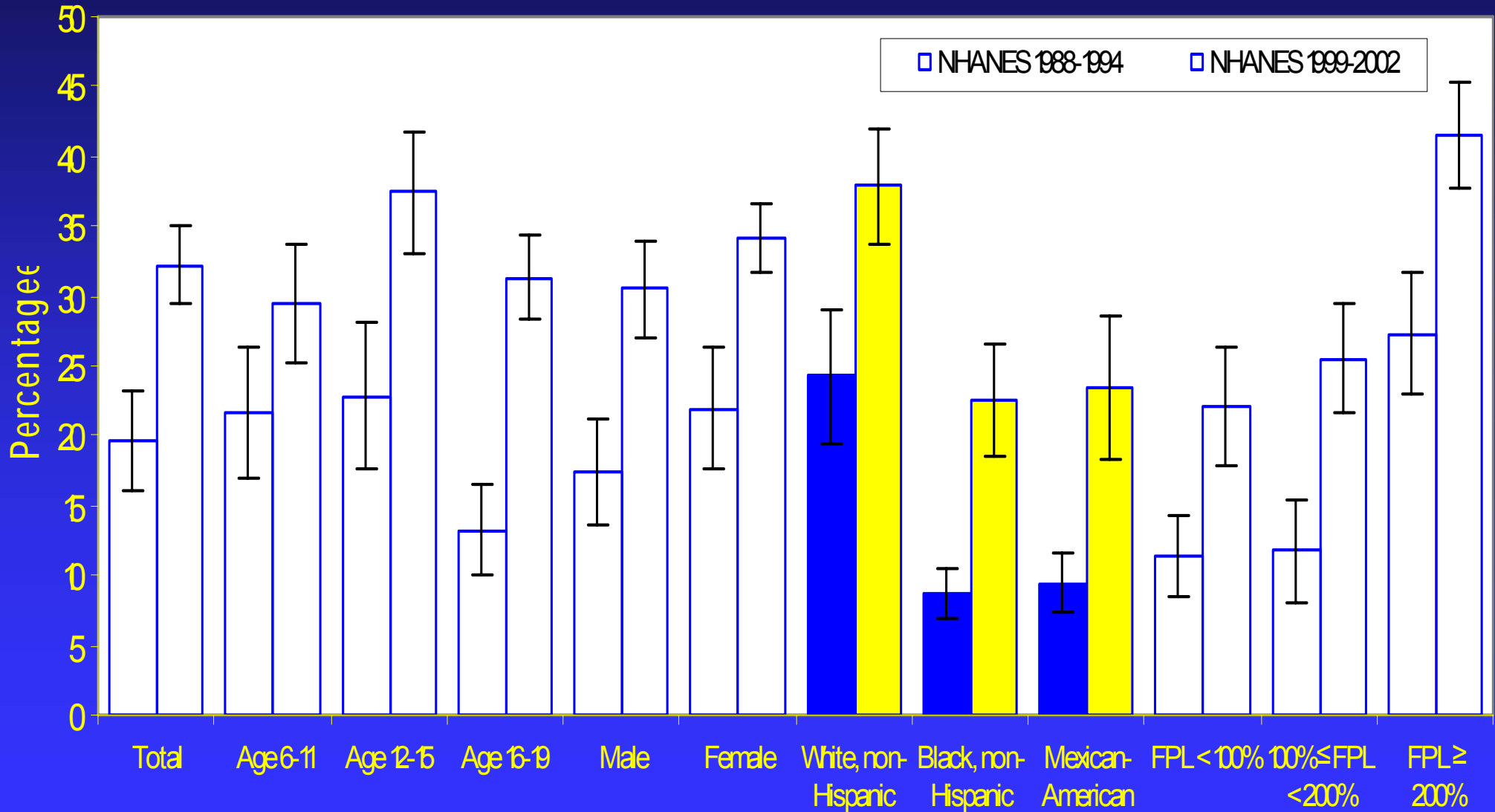
Legend: NH 99-02 (orange), NH 88-94 (red), NIDR 86-87 (green), NIDR 79-80 (yellow), NH 71-73 (grey)

Dental Sealants

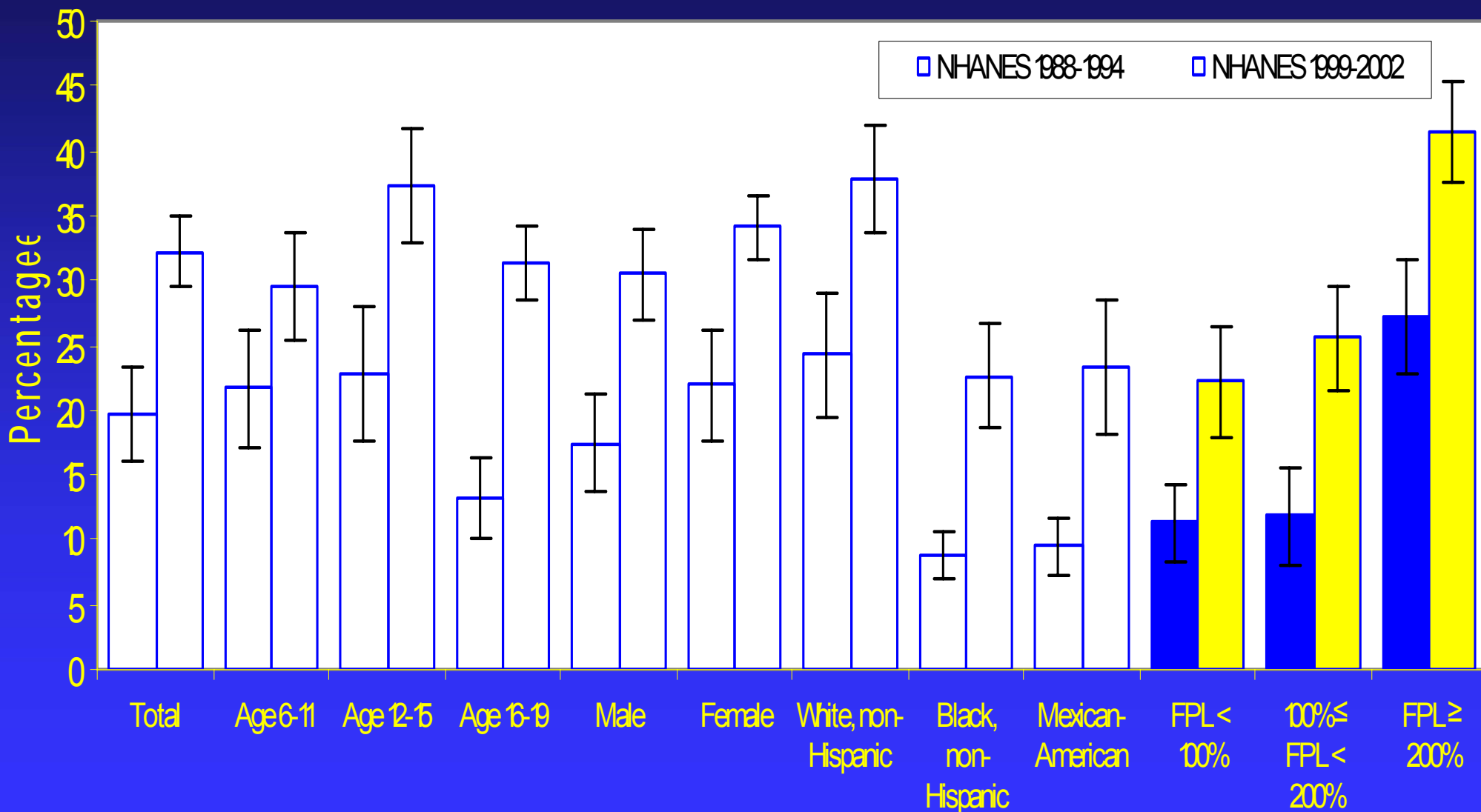
Percentage of children and adolescents aged 6-19 years with one or more dental sealants* United States, 1988-1994 and 1999-2002



Percentage of children and adolescents aged 6-19 years with one or more dental sealants* United States, 1988-1994 and 1999-2002

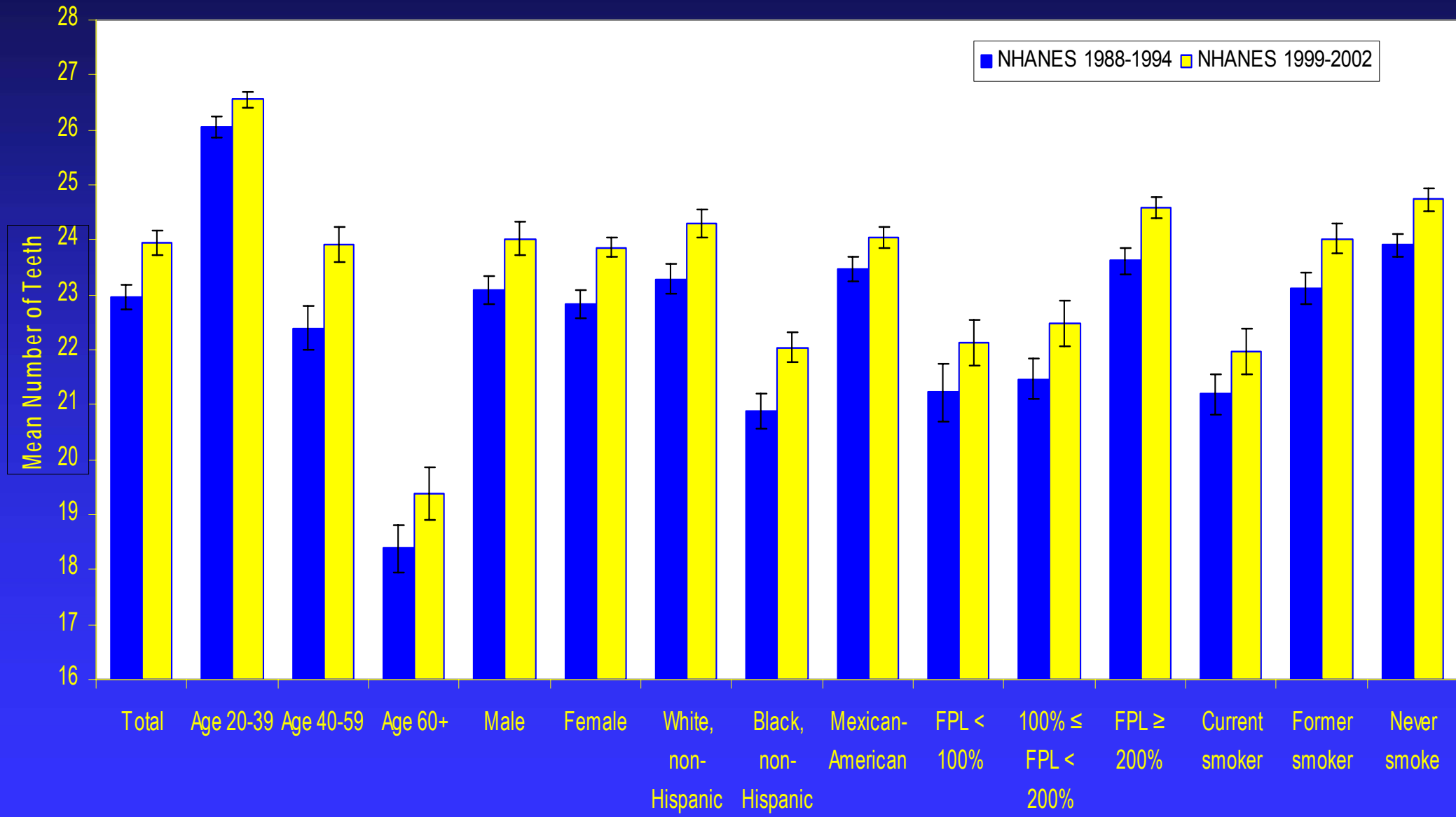


Percentage of children and adolescents aged 6-19 years with one or more dental sealants* United States, 1988-1994 and 1999-2002

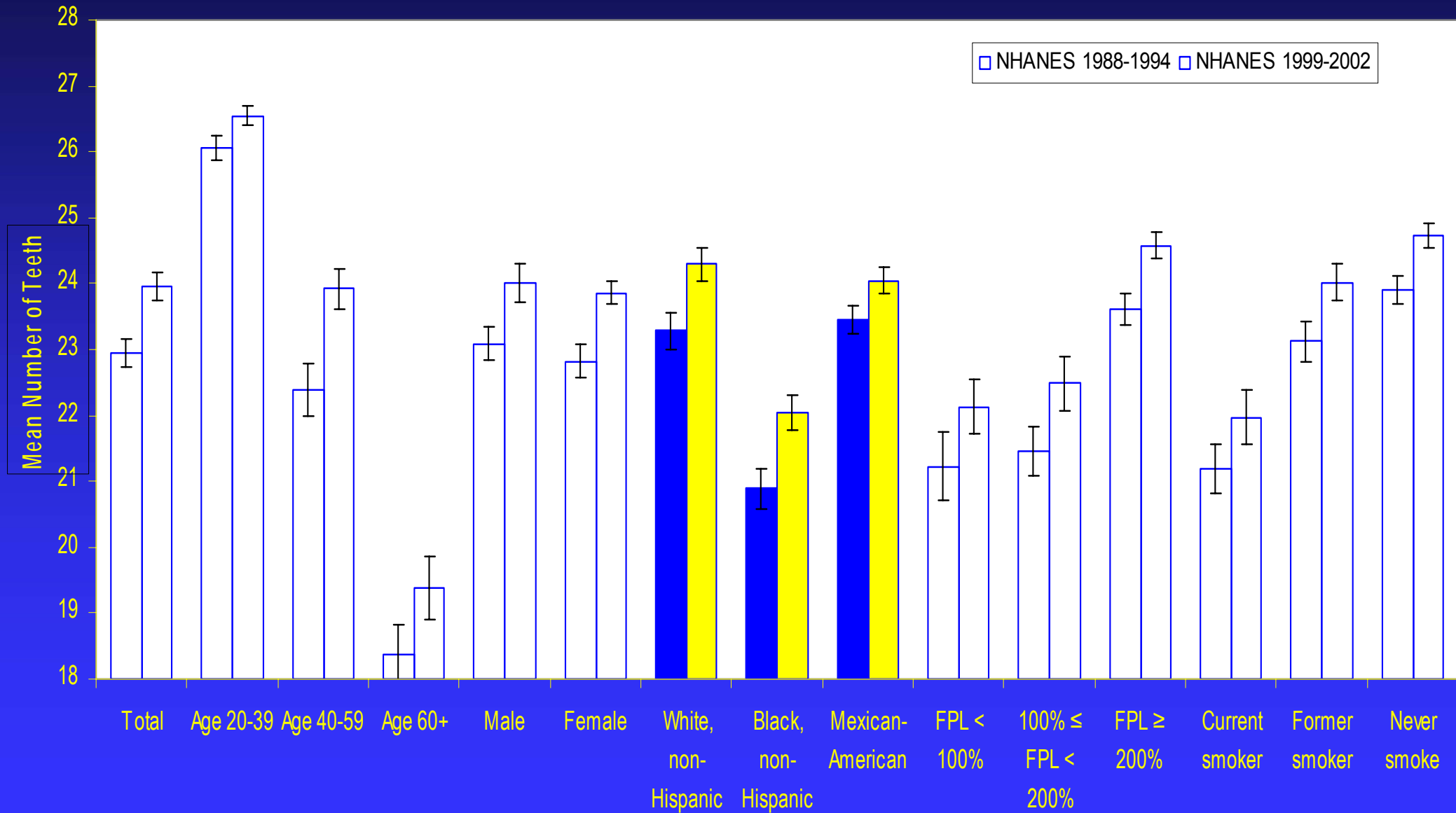


Tooth Retention and Edentulism

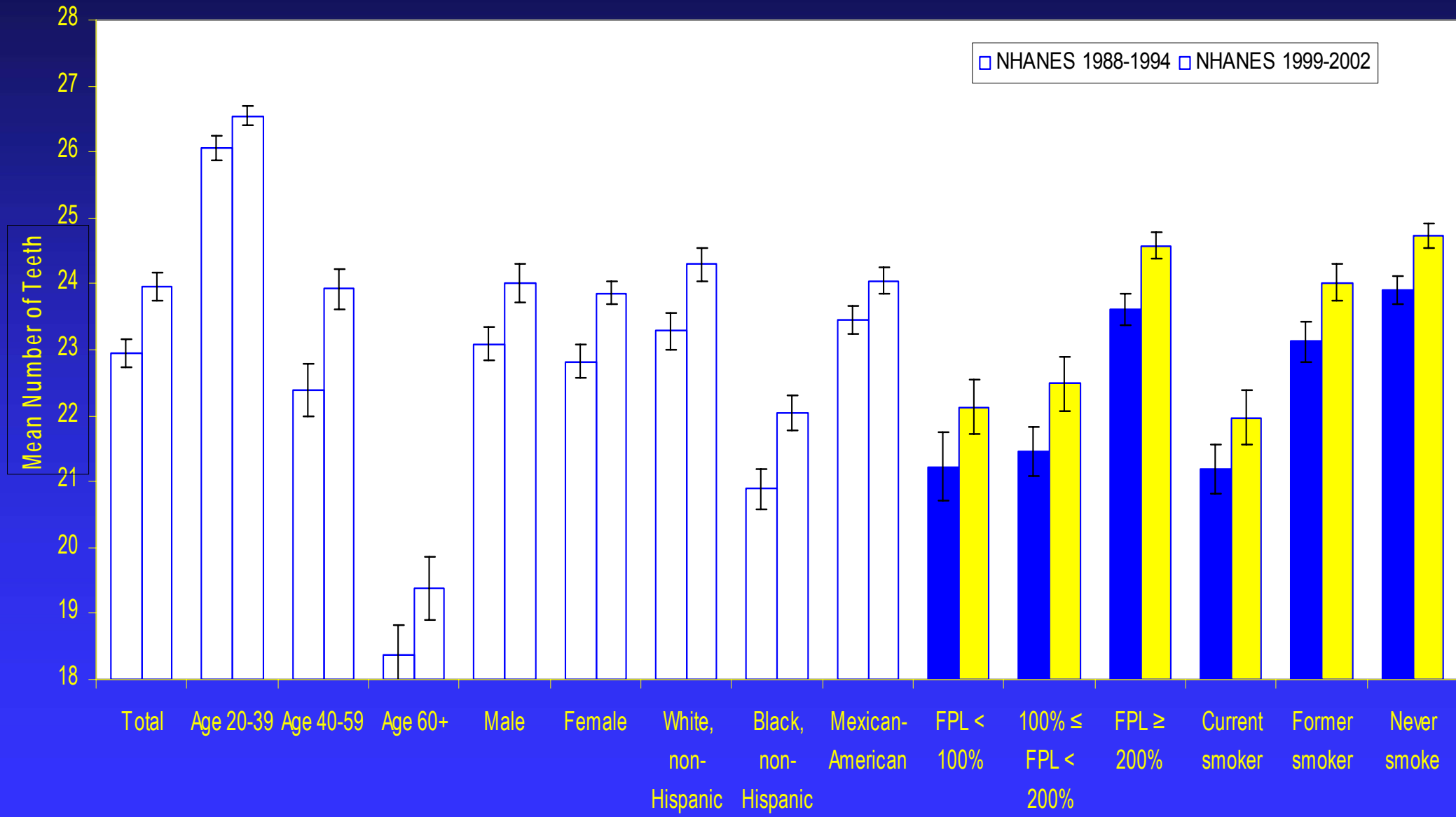
Mean number of permanent teeth among dentate adults* aged 20 years and older -- United States, 1988-1994 and 1999-2002



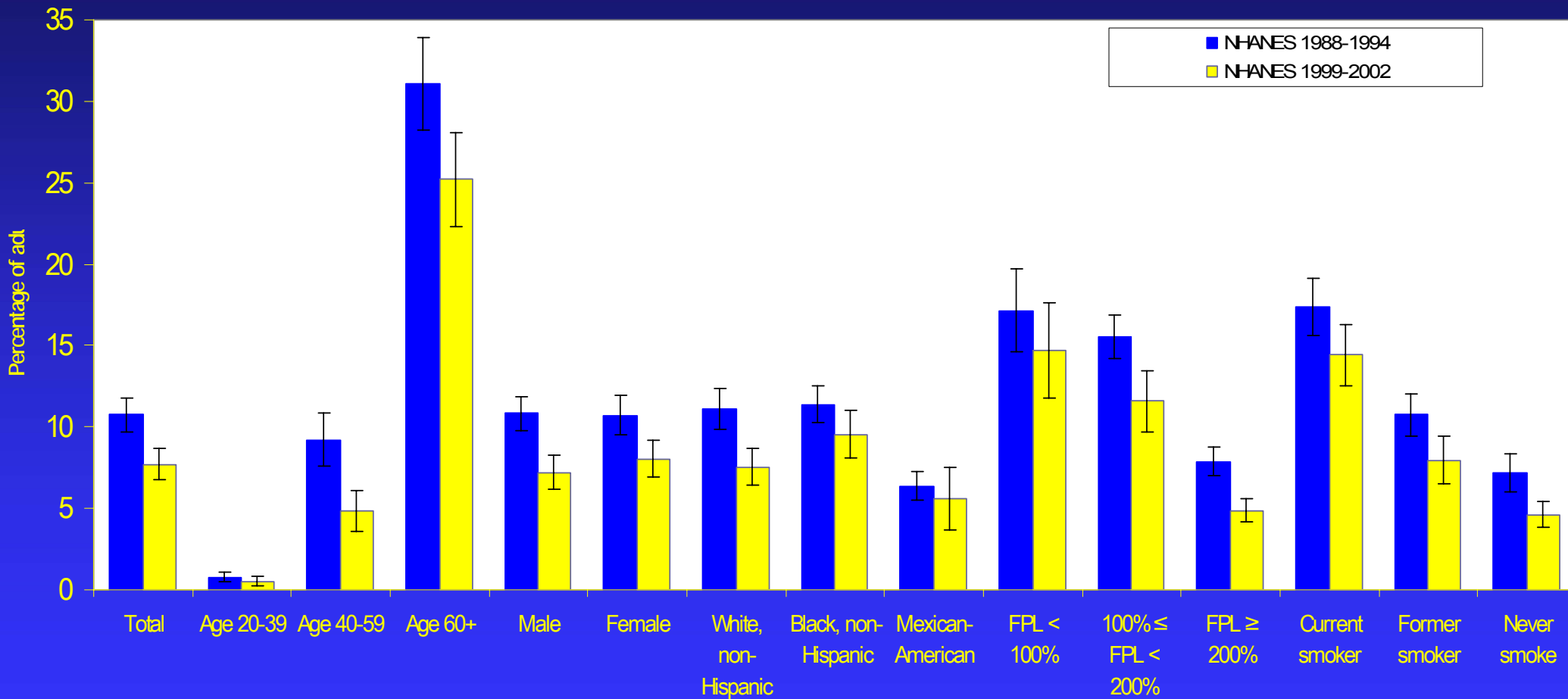
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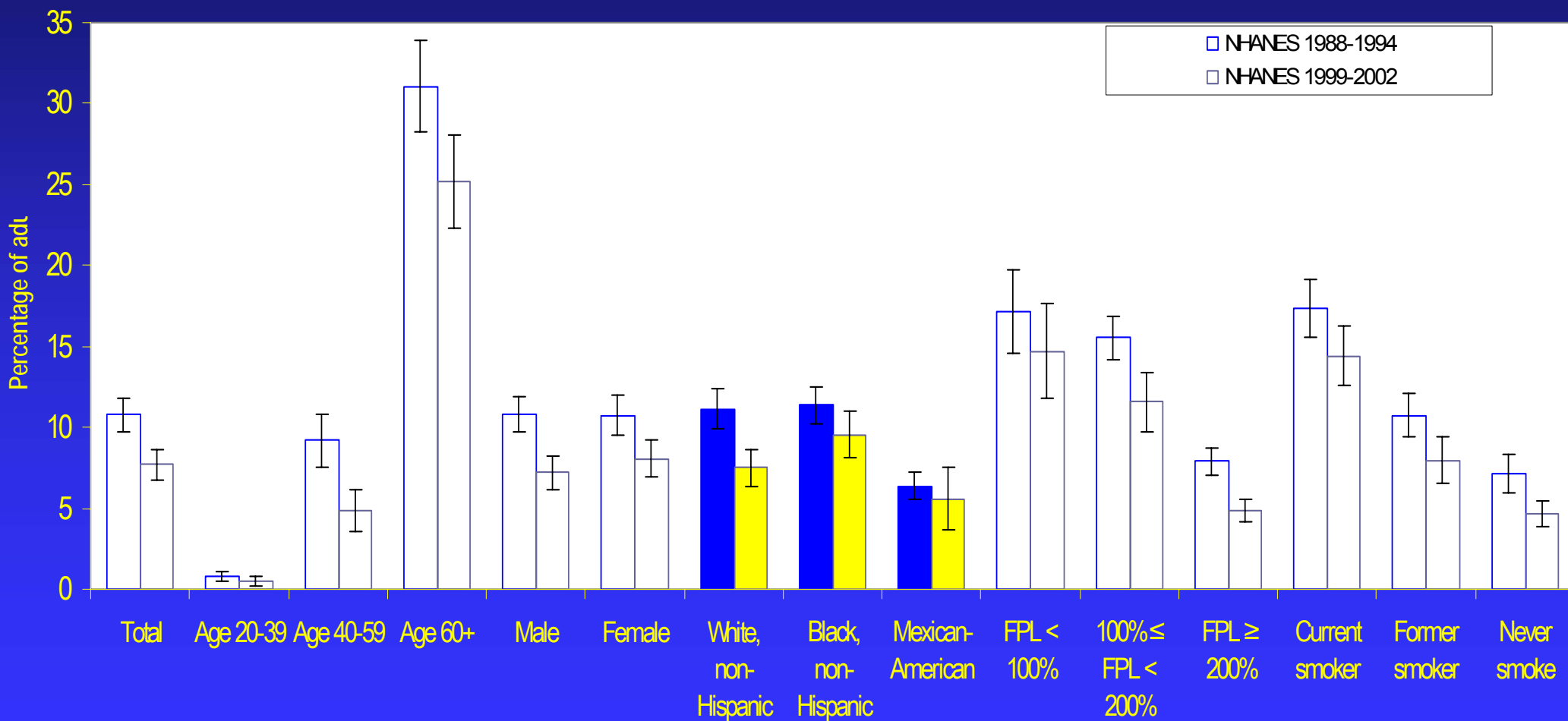
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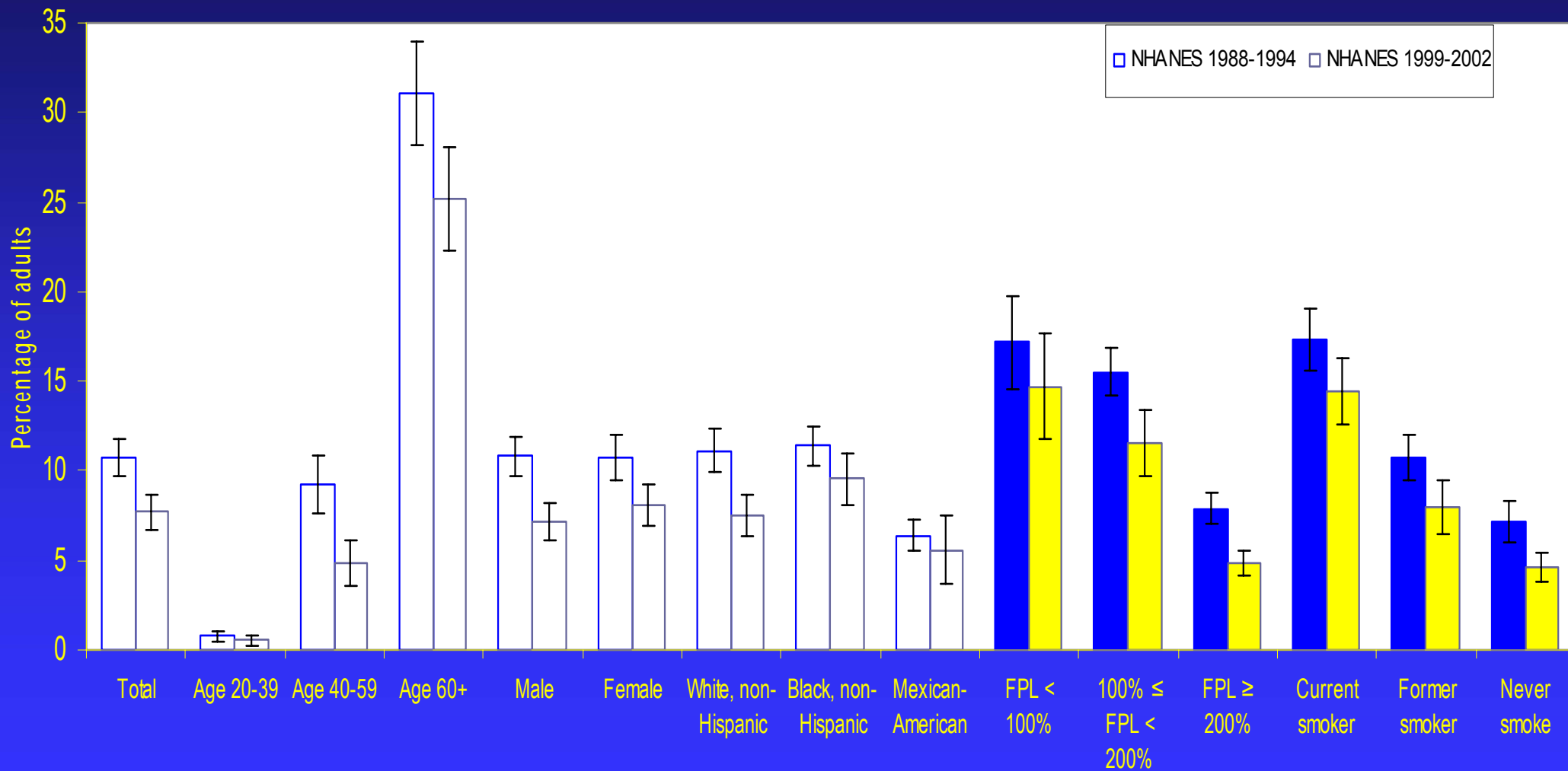
Prevalence of edentulism* among adults aged 20 years or older United States, 1988-1994 and 1999-2002



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Summary of Major Findings

- No change in the prevalence and severity of dental caries in the primary dentition
- Caries in the permanent dentition continued to decline
- Large and important increase in the use of dental sealants
- Despite gains in dental caries, **disparities associated with race/ethnicity, poverty status, level of education and smoking status remain**

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MMWR

Surveillance Summaries

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Surveillance for Dental Caries, Dental Sealants, Tooth Retention, Edentulism, and Enamel Fluorosis --- United States, 1988--1994 and 1999--2002

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Abstract

Problem/Condition: Dental caries is a common chronic disease that causes pain and disability across all age groups. If left untreated, dental caries can lead to pain