

Monitoring Leisure-Time Physical Activity among U.S. Adults

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The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



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NHIS Leisure-time Physical Activity

- **Collected periodically since 1975 and annually since 1997.**
- **Monitors progress toward National Healthy People (HP) Objectives.**
- **LTPA indicators will change with move from HP 2010 to HP 2020.**

New Directions

- **New Physical Activity Guidelines issued in 2008**
- **Based on comprehensive review of scientific evidence**

NHIS Adult Physical Activity Indicators

- **Healthy People 2010** (2000-2009)
- **2008 PA Guidelines** (2010 - forward)

What is new about the *2008 Physical Activity Guidelines* ?

- **Definition of “aerobically active”**
- **Additional guidelines:**
 - **Highly active level**
 - **Combined muscle-strengthening AND aerobic activity**

Does the transition to the *2008 Guidelines* influence surveillance?

- Prevalence estimates?
- Socio-demographic variations?
- Trends?

The Changing Definition of Aerobically Active for Adults

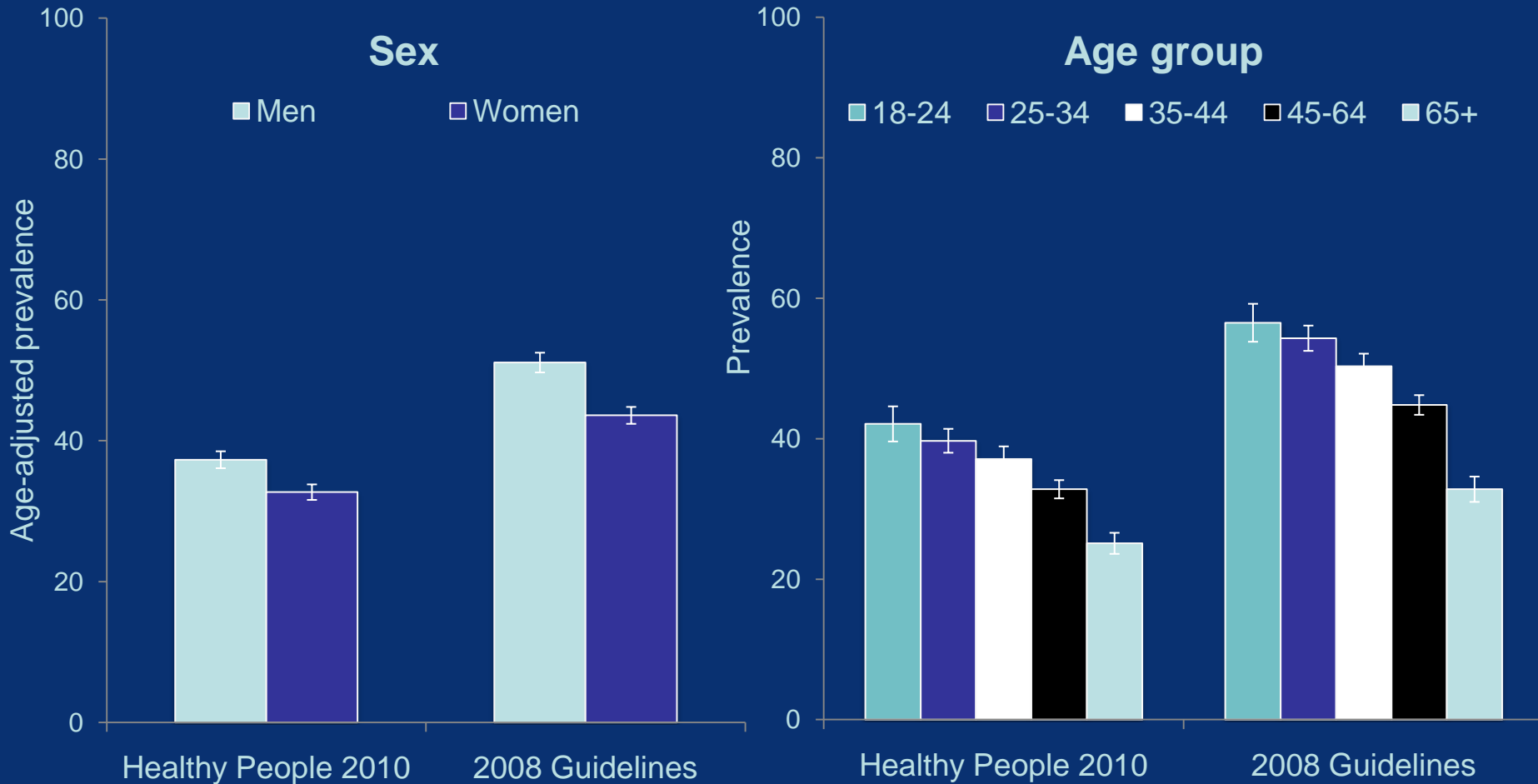
	<i>Healthy People 2010 criteria</i>		<i>2008 Guidelines criteria</i>		
Intensity	Moderate	Vigorous	Moderate	Vigorous	Equivalent Combination
Duration (min/day)	≥ 30	≥ 20			
Frequency (days/week)	5	3			
Volume (min/week)			≥ 150	≥ 75	≥ 150

Prevalence of being aerobically active: *Healthy People 2010* versus *2008 Guidelines*, *NHIS, 2009*

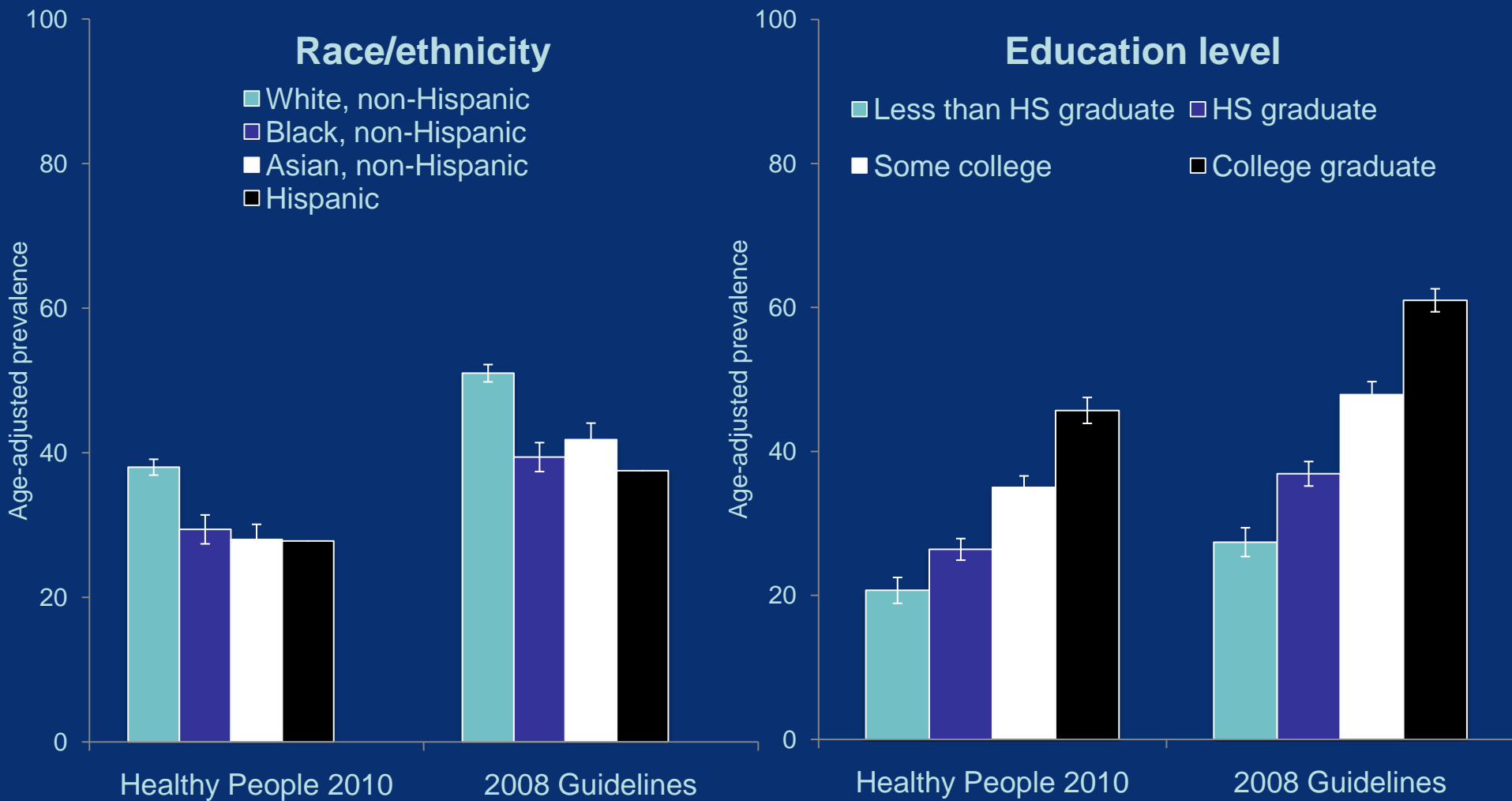
<i>Healthy People 2010</i> criteria		<i>2008 Guidelines</i> criteria	
%	95% CI	%	95% CI
34.9	34.0, 35.8	47.2	46.2, 48.2

Source: National Health Interview Survey, Sample Adult Component, 2009. Unpublished data.

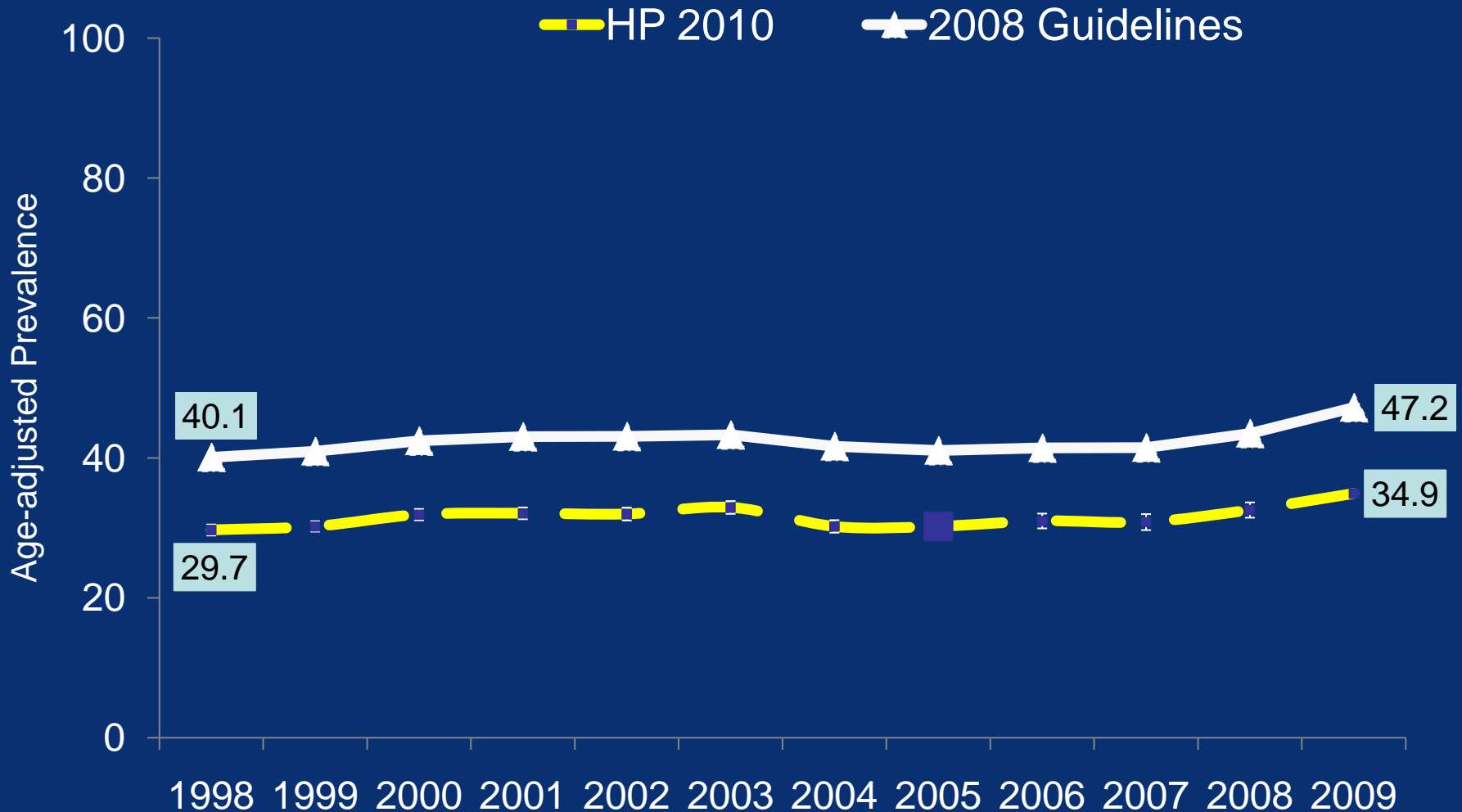
Comparing Healthy People 2010 and 2008 Guidelines criteria for aerobic activity, by sex and age: NHIS 2009



Comparing Healthy People 2010 and 2008 Guidelines criteria for aerobic activity, by race/ethnicity and education: NHIS 2009



Trends in aerobic activity 1998-2009: Healthy People 2010 versus 2008 Guidelines



Source: CDC/NCHS: National Health Interview Survey

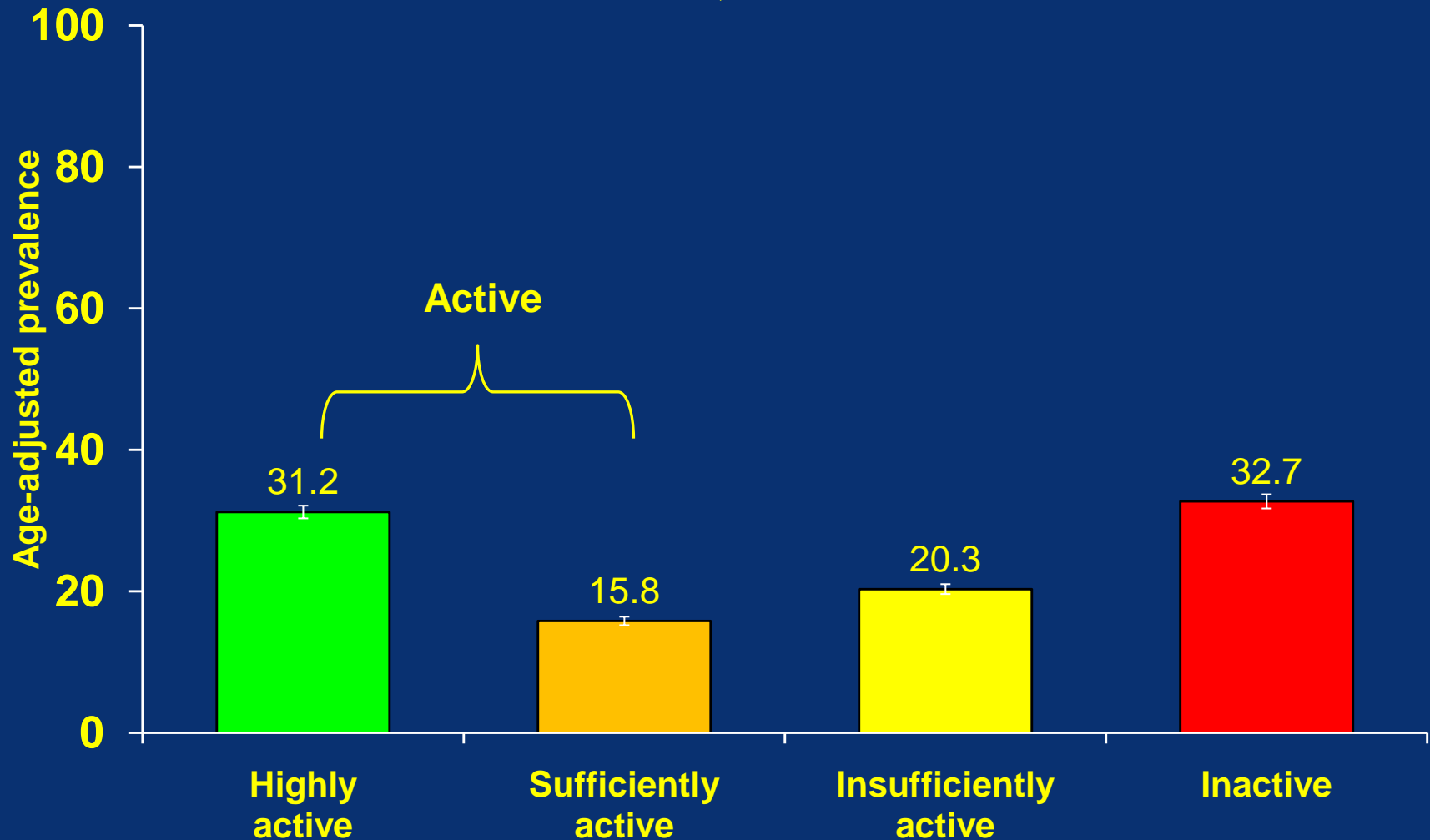


Highly Active Level



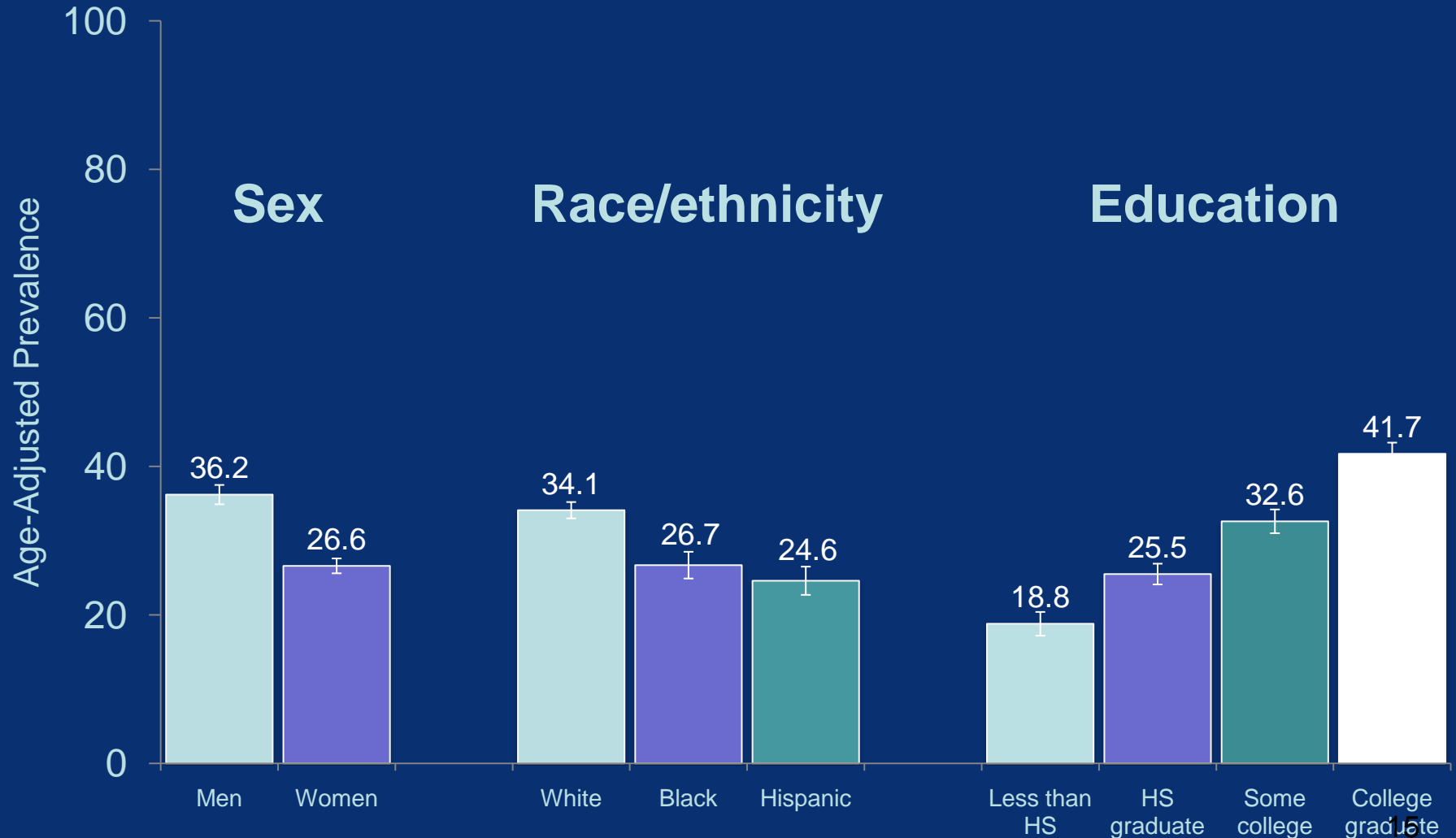
- Level new with 2008 Guidelines
- Aerobic physical activity for:
 - > 300 min/week moderate-intensity
 - > 150 min/week vigorous-intensity
 - Equivalent combination

Prevalence of aerobic physical activity in four levels, NHIS 2009



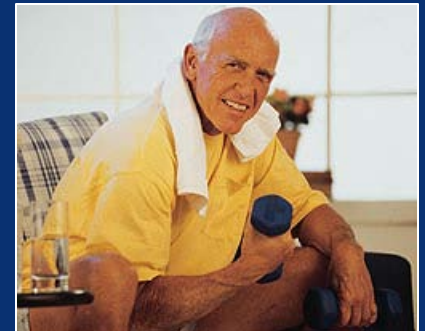
Highly active (>300 min/wk moderate-intensity activity, >150 min/wk vigorous-intensity activity, or equivalent combination), sufficiently active (150-300 min/wk moderate-intensity activity, 75-150 min/wk vigorous-intensity activity, or equivalent combination), insufficiently active (some activity but not enough to meet active definition), and inactive (no activity of at least 10 min/time).

Percentage of adults who were highly active according to the 2008 Guidelines: NHIS 2009

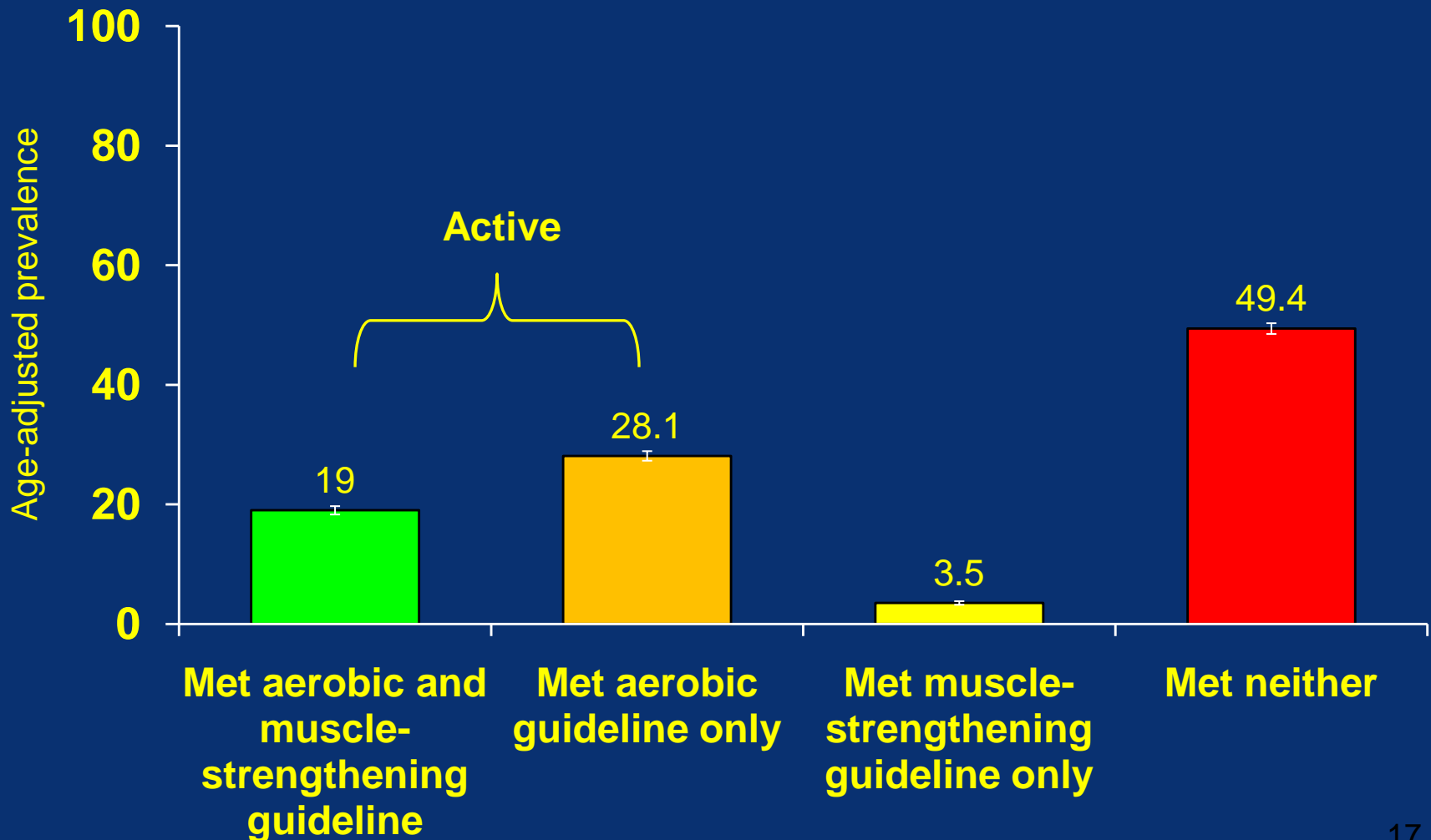


Muscle-strengthening and aerobic activity

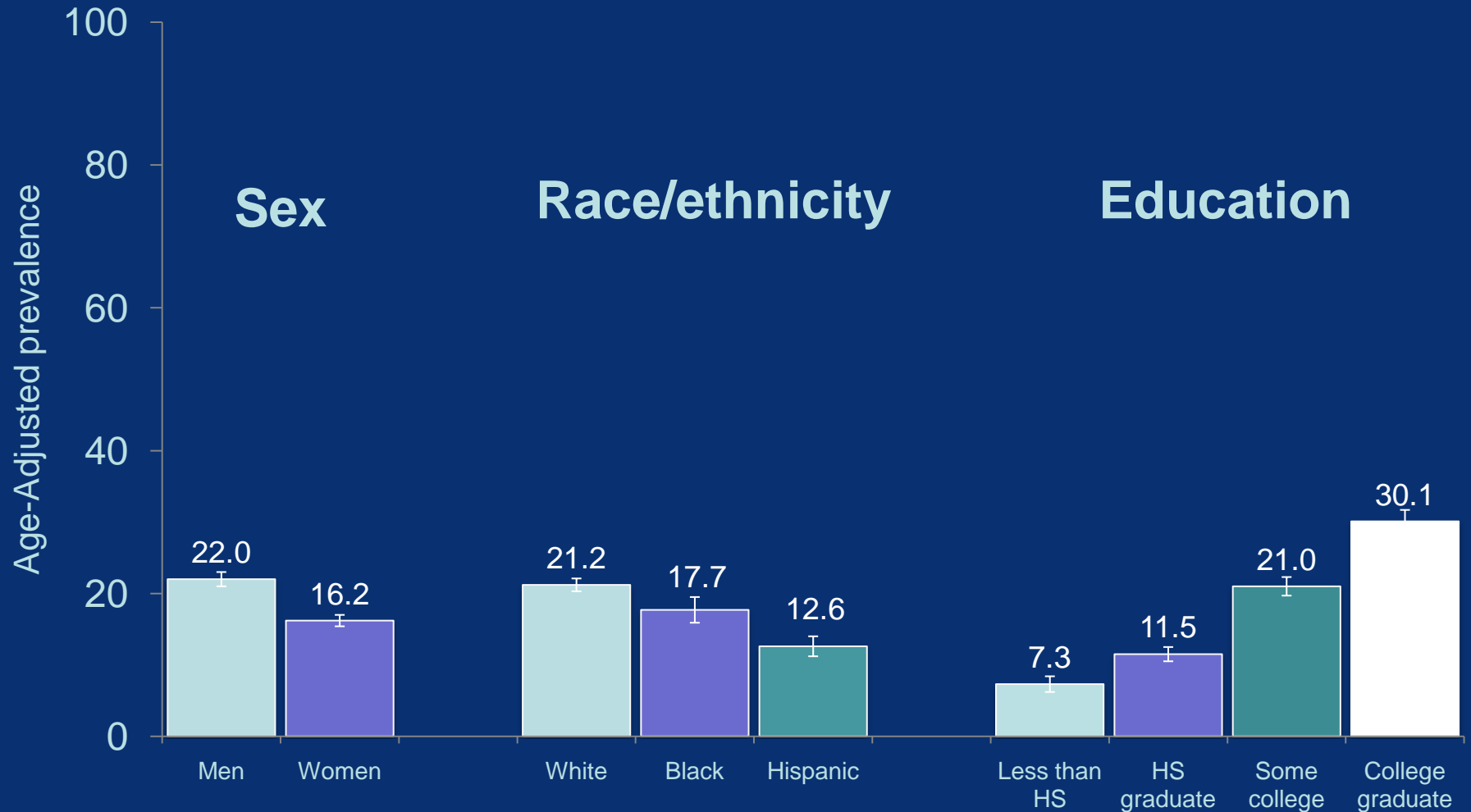
- **HP 2010: Separate muscle-strengthening objective**
- ***2008 Guidelines: Combine muscle-strengthening with aerobic activity***



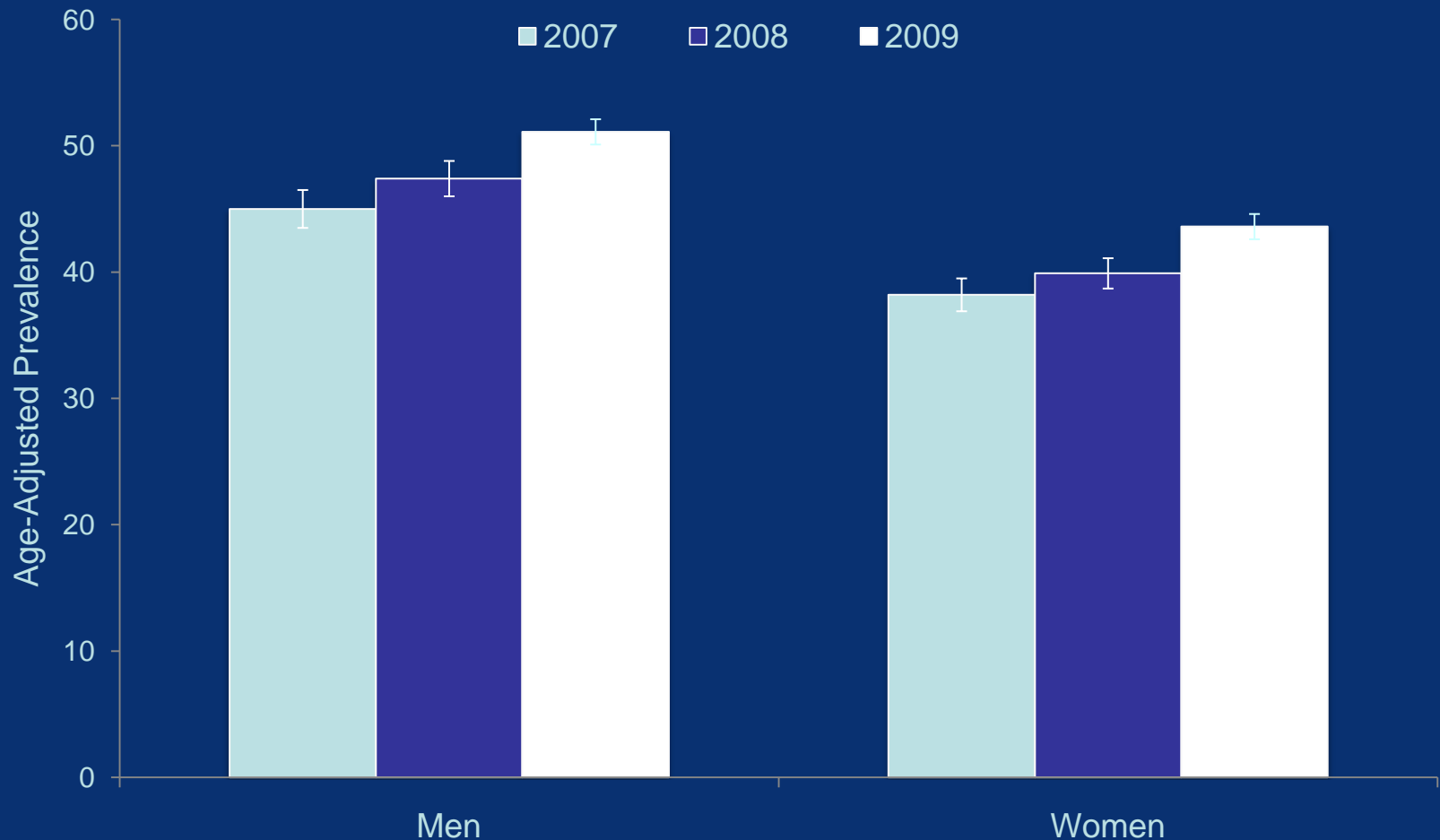
Percentage of adults who met the muscle-strengthening and aerobic guideline, NHIS 2009



Percentage of adults who met the full 2008 Guidelines (aerobic + strength) by selected characteristics, NHIS 2009

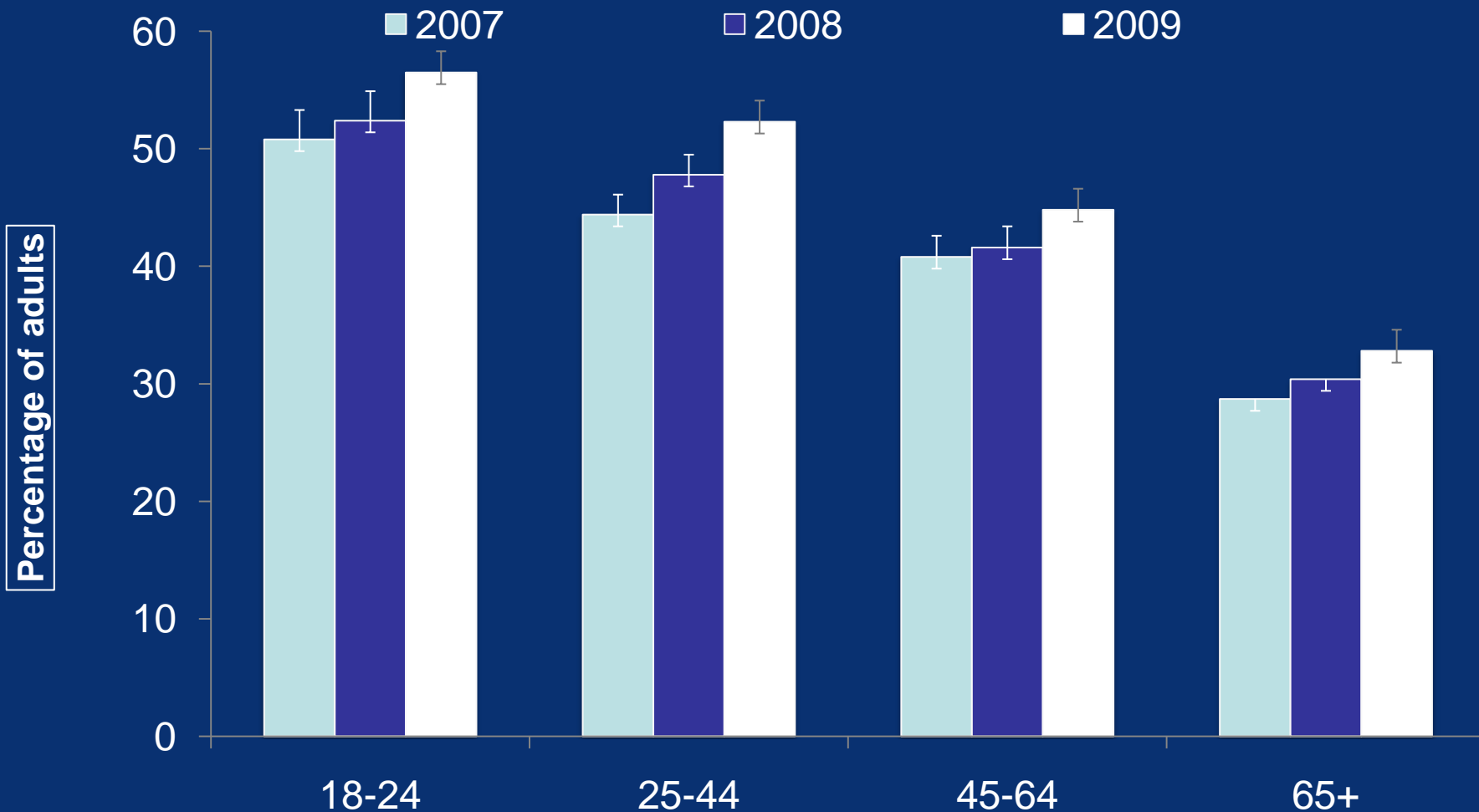


Trends in meeting 2008 Aerobic PA Guideline among U.S. adults, by sex: 2007-2009

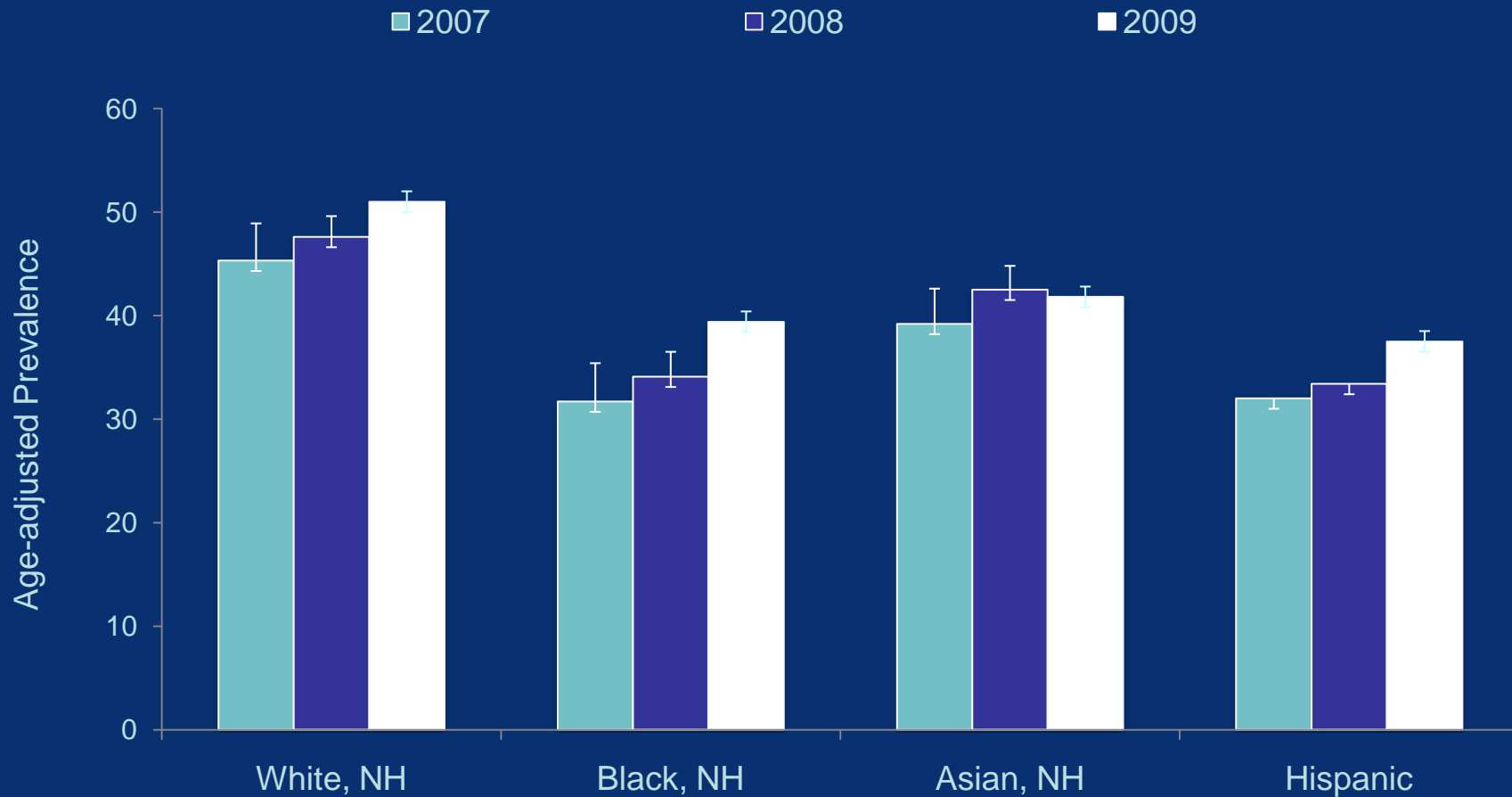


Source: CDC/NCHS: National Health Interview Survey.

Trends in meeting 2008 Aerobic PA Guideline among U.S. adults, by age: 2007-2009

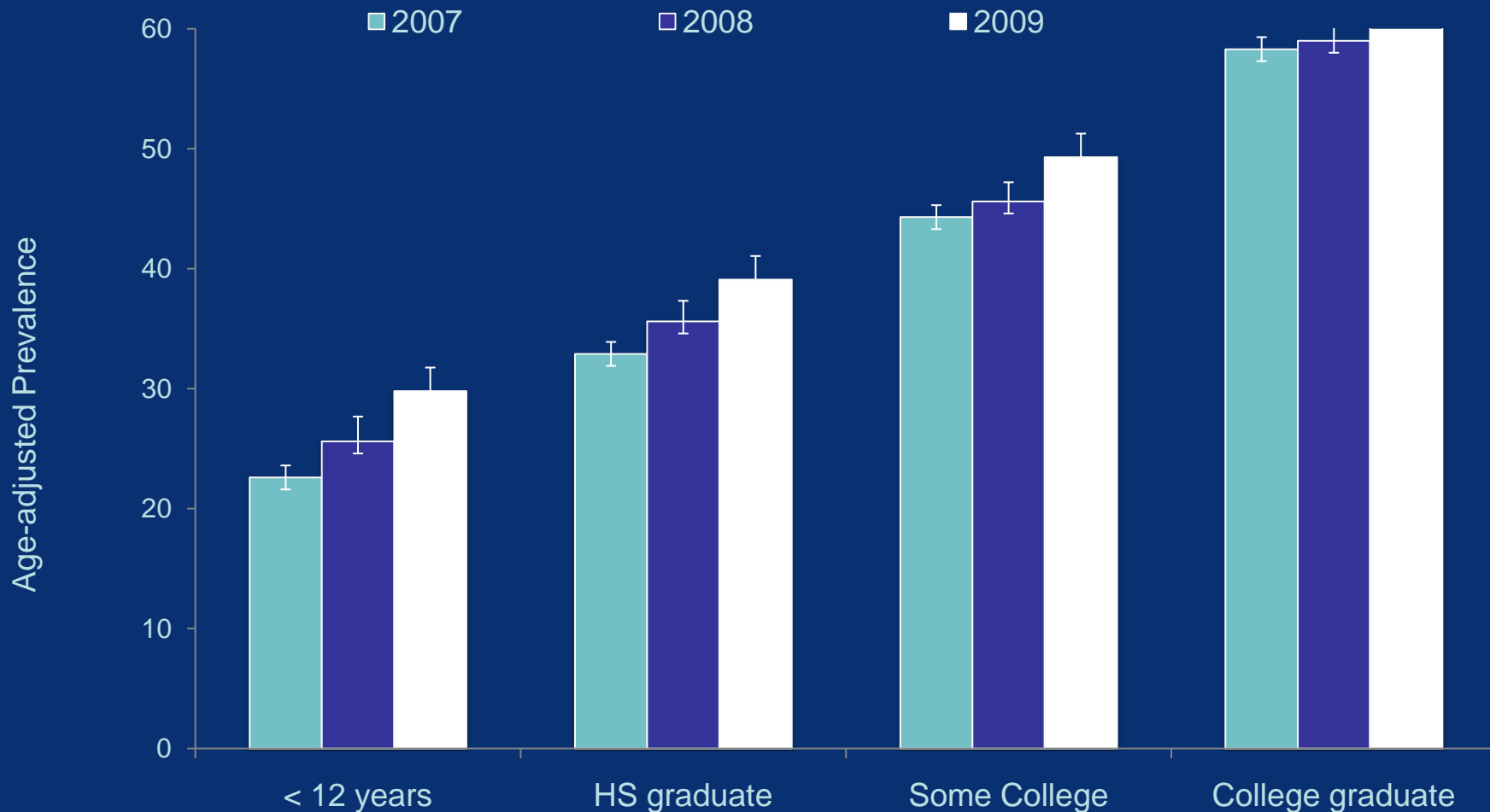


Trends in meeting 2008 Aerobic PA Guideline among U.S. adults, by race/ethnicity: 2007-2009



Source: CDC/NCHS: National Health Interview Survey.

Trends in meeting *PA 2008 Aerobic PA Guideline* among U.S. adults, by education: 2007-2009



Source: CDC/NCHS: National Health Interview Survey.

Conclusions

- Compared with HP 2010 criteria, prevalence estimates shifted to upward by more than 10 percentage points when 2008 Guidelines were applied.
- Disparities and trends over time were similar regardless of the LTPA criteria.
- Leisure-time physical activity prevalence at recommended levels has increased modestly in recent years.

For Further Information

- **NHIS Physical Activity Information Website:** http://www.cdc.gov/nchs/nhis/physical_activity.htm
- **NHIS listserve:** nhislist@cdc.gov
- **For questions about this presentation, feel free to contact me at:** CSchoenborn@cdc.gov

Thank you!