Physical Activity Disparities: Socio-demographic Dimensions

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How social disadvantage limits PA

- Lack of material resources
- Stressful environments
- Segregated neighborhoods
- Reduced access to primary care
Key Dimensions of Disparity
...and disability
Prevalence of obesity across the lifecourse (NHANES)

Ogden et al., 2014.
Prevalence of obesity by race/ethnicity and sex (NHANES)

Racial/Ethnic Group

Kids 2-19

Adults 20+

Males

Females

Children 2-19

Racial/Ethnic Group

White, NH
Black, NH
Asian, NH
Hispanic

White, NH
Black, NH
Asian, NH
Hispanic

Ogden et al. (2014)
Average number of Mintues in MVPA

Belcher et al., 2010

(MVPA) minutes in youth by age, sex, and race/ethnicity
(NHANES)
Percent of adults meeting aerobic and muscle strengthening guidelines*: by race/ethnicity (BRFSS 2013)

*at least 150 min/wk of moderate aerobic physical activity or 75 min/wk of vigorous aerobic physical activity and engage in muscle-strengthening activities on 2+days a week
Percent of adults who engage in no leisure time physical activity by race/ethnicity (BRFSS 2013)
Prevalence of obesity among racial/ethnic groups and people with disabilities (BRFSS)

Prevalence of obesity among children with disabilities (NSCH)

Chen et al., 2009

*adjusted for age, sex, race/ethnicity, income, parental education, family structure, and region
Time in activity for adults with and without mobility disability (NHANES)

![Bar chart showing time in activity (min/day) for adults with and without mobility disability. The chart compares Sedentary, Light, and MVPA activities, with no difference observed in Sedentary and Light activities but a significant decrease in MVPA for those with mobility disability.](chart.png)

Loprinzi et al., 2014
Prevalence of adult obesity by years of residence in US (NHIS)

Singh et al. (2011).
Prevalence of regular PA and lack of sports participation among immigrant and US-born children 6-17 years (NSCH)

Singh et al., 2008
Prevalence of obesity by income for women (NHANES)

Chang & Lauderdale (2005).

Richer
Prevalence of obesity by income for men (NHANES)

Chang & Lauderdale (2005).
Percent of adults meeting aerobic and muscle strengthening guidelines*: by income (BRFSS 2013)

*at least 150 min/wk of moderate aerobic physical activity or 75 min/wk of vigorous aerobic physical activity and engage in muscle-strengthening activities on 2+days a week
Access to “some” recess varies by race/ethnicity and income (ECLS-K)

Barros R et al. (2009)
Prevalence of obesity among adults by state and territory (BRFSS)
Percent of adults meeting aerobic and muscle strengthening guidelines* (BRFSS 2013)

*at least 150 min/wk of moderate aerobic physical activity or 75 min/wk of vigorous aerobic physical activity and engage in muscle-strengthening activities on 2+days a week
Prevalence of obesity among adults by urbanization level (NHIS)

- Metropolitan Counties
  - Large central
  - Large fringe
  - Small metro
- Non-Metropolitan Counties
  - Micropolitan
  - Non-core

Rural Health Policy and Research Center
Prevalence of no leisure time PA among adults by sex and urbanization level (NHIS)

Percent (%)

- Large central
- Large fringe
- Small metro
- Micropolitan
- Non-core

Males
Females

Metropolitan Counties
Non-Metropolitan Counties
Availability of PA Facilities and PA/Overweight (Add Health)

- Odds of having 5 or more bouts of MVPA: Odds Ratio increases with the number of PA facilities per block group.
- Odds of being overweight: Odds Ratio decreases with the number of PA facilities per block group.

Gordon-Larsen et al. (2006)
Achieving PA Equity

• Addressing root causes
• Through intervention at all levels
• Through environmental change
• Through policies and supporting resources