

# BriefTrends: Prevalence of Meeting Physical Activity (PA) Guidelines by Education in Montana Adults, 2019

Peter D. Hart\*

Health Promotion Research, Havre, Montana, USA

\*Corresponding author: [pdhart@outlook.com](mailto:pdhart@outlook.com)

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**Abstract** This BriefTrends first describes the prevalence of meeting physical activity (PA) guidelines (MPAG) by education in Montana adults and second examines the relationship between MPAG and education.

**Keywords:** physical activity, BRFSS, public health, surveillance

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## 1. Purpose

To examine the relationship between meeting physical activity (PA) guidelines and education in Montana adults.

## 2. Data Source

2019 Behavioral Risk Factor Surveillance System (BRFSS).

## 3. Population

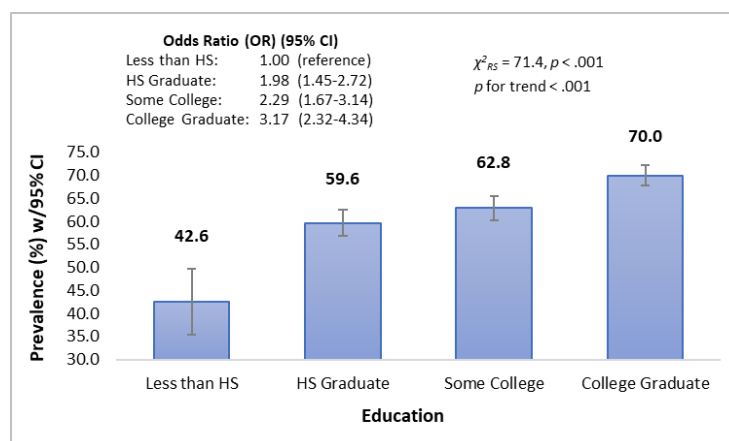
Noninstitutionalized adults 18+ years of age in Montana.

## 4. Variables

1) Meeting physical activity (PA) guidelines (MPAG) (participating in 150+ minutes of aerobic PA per week), 2) Education level ("Less than high school (HS)", "HS Graduate", "Some College", and "College Graduate"), 3) age, and 4) sex.

## 5. Analysis

Crosstabulation of MPAG and Education, Rao-Scott chi-square test of independence, logistic regression with odds ratios (ORs) and 95% confidence intervals (CIs), Cochran-Armitage trend test, and pairwise comparisons of ORs using Tukey-Kramer adjustments. SAS Survey Procedures were used, version 9.4.



**Figure 1.** Prevalence of meeting physical activity (PA) guidelines (participating in 150+ minutes of aerobic PA per week) by education in Montana adults, 2019 (Note.  $N = 5,986$ . OR is odds ratio defined as odds of meeting PA guidelines (compared to not) for each education group over the odds of meeting PA guidelines (compared to not) for those with education "Less than HS". CI is confidence interval. HS is high school. ORs are age and sex adjusted.  $\chi^2_{RS}$  is Rao-Scott chi-square statistic.  $p$  for trend is Cochran-Armitage trend test. All pairwise education group ORs are significantly different except for "HS Graduate" vs "Some College",  $p = .309$  using Tukey-Kramer adjustment)

## 6. Findings

The prevalence of MPAG in 2019 increased from 42.6% (95% CI: 35.4-49.8) in those who have “Less than HS” education to 70.0% (95% CI: 67.7-72.2) in those who are a “College Graduate”. Additionally, PA and education were significantly linearly related,  $p < .001$ . The odds of MPAG were substantially greater (OR = 3.17, 95% CI: 2.32-4.34) among those who are a “College Graduate”, as compared to those who have “Less than HS” education.

## References

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- [3] SAS Institute Inc. 2015. SAS/STAT® 14.1 User's Guide. Cary, NC: SAS Institute Inc.



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