



Published in final edited form as:

Am J Cardiol. 2015 April 1; 115(7): 895–900. doi:10.1016/j.amjcard.2015.01.014.

Use of Low-dose Aspirin as Secondary Prevention of Atherosclerotic Cardiovascular Disease Among US Adults (From the National Health Interview Survey, 2012)

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Abstract

Current guidelines recommend that adults with atherosclerotic cardiovascular disease take low-dose aspirin or other antiplatelet medications as secondary prevention of recurrent cardiovascular events. Yet, no national level assessment of low-dose aspirin use for secondary prevention of cardiovascular disease has been reported among a community-based population. Using data from the 2012 National Health Interview Survey, we assessed low-dose aspirin use among those with atherosclerotic cardiovascular disease. We estimated the prevalence ratios of low-dose aspirin use, adjusting for sociodemographic status, health insurance, and cardiovascular risk factors. Among those with atherosclerotic cardiovascular disease (n=3,068), 76% had been instructed to take aspirin, and 88% of those were following this advice. Of those not advised, 11% took aspirin on their own. Overall, 70% were taking aspirin (including those who followed their health care provider's advice and those who were not advised but took aspirin on their own). Logistic regression models showed that women, non-Hispanic blacks and Hispanics, those aged 40–64 years, with a high school education or with some college, or with fewer cardiovascular disease risk factors were less likely to take aspirin than men, non-Hispanic whites, those aged ≥65 years, with a college education or higher, or with all four selected cardiovascular disease risk factors, respectively. Additional analyses conducted among those with coronary heart disease only (n=2,007) showed similar patterns. In conclusion, use of low-dose aspirin for secondary prevention was 70%, with high reported adherence to health care providers' advice to take low-dose aspirin (88%), and significant variability within subgroups.

Keywords

atherosclerotic cardiovascular disease; low-dose-aspirin; cardiovascular prevention; surveillance

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Introduction

The effectiveness of aspirin therapy in reducing risk for myocardial infarction, ischemic stroke, and fatal coronary events among persons with preexisting atherosclerotic cardiovascular disease is well documented.¹² Current guidelines recommend that adults with atherosclerotic cardiovascular disease take 75 to 162 mg of aspirin (low-dose aspirin) daily to prevent recurrence of cardiovascular events.³⁴⁵ However, data on the current use of low-dose aspirin therapy for secondary prevention of cardiovascular disease among community-dwelling adults in the U.S. is limited. Most published studies in the U.S. have focused on clinical inpatient⁶⁷⁸ and outpatient⁹¹⁰¹¹ settings, and are related to aspirin recommendations and use at discharge or after evaluation in outpatient settings. Using data from the 2012 National Health Interview Survey (NHIS), we provide current estimates of self-reported low-dose aspirin use for secondary prevention among community-dwelling adults with atherosclerotic cardiovascular disease.

Methods

The NHIS is a multipurpose health survey conducted continuously throughout the year by the Centers for Disease Control and Prevention's (CDC), and is the principal source of information on the health of the civilian, non-institutionalized population of the United States. The NHIS has been conducted continuously since 1957, and contains four main modules: Household, Family and Sample Adult, and Sample Child. In 2012, supplemental questions on aspirin use were included in the Sample Adult questionnaire. Data from the Household, Family, and Sample Adult sections were used in this analysis. The response rate for the Sample Adult component in 2012 was 61.2%. Detailed information on the survey design and methods can be found at the NHIS Web site (<http://www.cdc.gov/nchs/nhis.htm>).

Low-dose aspirin use was asked of all adults aged ≥40 years. There were four questions related to low-dose aspirin use: 1) "Has a doctor or other health professional ever told you to take a low-dose aspirin each day to prevent or control heart disease?"; 2) those who answered "yes" to this question were asked, "Are you now following this advice?"; 3) those who were not following the advice were asked, "Did a doctor or other health professional advise you to stop taking a low-dose aspirin every day?"; and 4) those who had not been advised (or those who didn't know if they had been advised to take low-dose aspirin) were asked "On your own, are you now taking a low-dose aspirin each day to prevent or control heart disease?".

Adults with atherosclerotic cardiovascular disease were defined as those who answered "yes" to any of the following four questions: "Have you ever been told by a doctor or other health professional that you had coronary heart disease?"; "Have you ever been told by a doctor or other health professional that you had angina, also called angina pectoris?"; "Have you ever been told by a doctor or other health professional that you had a heart attack (also called myocardial infarction)?" or "Have you ever been told by a doctor or other health professional that you had a stroke?".

Other characteristics investigated included demographic variables: age (40–64 and 65 years); sex; race/ethnicity (non-Hispanic white, non-Hispanic black, non-Hispanic other, and Hispanic); level of education (less than high school graduate, high school graduate, some college, and college graduate); and health insurance status (any health insurance and no health insurance). Body mass index (BMI) was calculated by using weight and height ($BMI = \text{kg}/\text{m}^2$) and categorized as normal weight (<25), overweight (25–29.9) and obese (≥ 30). The four cardiovascular disease risk factors considered were diabetes (“Have you ever been told by a doctor or other health professional that you have diabetes or sugar diabetes?”, those with borderline diabetes were not considered to have diabetes), hypertension (“Were you told on two or more different visits that you had hypertension, also called high blood pressure?”), high blood cholesterol (“Have you ever been told by a doctor or other health professional that you had high cholesterol?”), and current smoking status (defined as an answer of “yes” to the question “Have you smoked at least 100 cigarettes in your entire life?” and an answer of “every day” or “some days” to the question “Do you now smoke cigarettes every day, some days or not at all?”). Other factors that could affect aspirin use included history of ulcer (“Have you ever been told by a doctor or other health professional that you had an ulcer? This could be a stomach, duodenal, or peptic ulcer.”) or arthritis (“Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?”).

Those with a history of atherosclerotic cardiovascular disease were defined as the population at risk of recurrent cardiovascular events and were eligible for low-dose aspirin use for secondary prevention based on current recommendations³. We determined the distribution of demographic characteristics and cardiovascular disease risk factors among the population at risk. We also estimated the age-standardized percentage of the population using low-dose aspirin for secondary prevention, which included those who followed a health care provider's advice and those who took low-dose aspirin on their own, using the 2000 US Census standard projected population.¹² To determine whether low-dose aspirin use varied by other characteristics, we used logistic regression to calculate prevalence ratios (and 95% confidence intervals [CIs])¹³ of low-dose aspirin use by age, sex, race/ethnicity, levels of education, BMI, health insurance status, history of ulcer and history of arthritis. In addition, we also tested for a linear trend in the relationship between cardiovascular risk and aspirin use by substituting the number of risk factors as a continuous variable in the model.

The primary definition of atherosclerotic cardiovascular disease in this analysis includes both coronary heart disease and stroke. However, aspirin is contraindicated for those who have survived hemorrhagic strokes. The NHIS does not classify strokes as either ischemic or hemorrhagic, and therefore a second definition of atherosclerotic cardiovascular disease including only those with coronary heart disease was used in additional analyses.

Sampling weights were used to produce national estimates that are representative of the adult civilian noninstitutionalized U.S. population.¹⁴ Participants with missing data on coronary heart disease, stroke or aspirin use were excluded. The analyses were performed using SAS version 9.3 and SAS-callable SUDAAN version 10 (Research Triangle Institute, Research Triangle Park, North Carolina)¹⁵ to account for the complex sample design. All statistical tests were 2-tailed, and statistical significance was defined at $P < 0.05$.

Results

The 2012 NHIS Sample Adult file included 34,525 participants, of whom 3,213 had self-reported atherosclerotic cardiovascular disease. Among those ≥ 40 years, 3,068 provided data on their use of low-dose aspirin. Among them, 2,007 had coronary heart disease only.

Characteristics of the population eligible for secondary prevention (those with coronary heart disease and/or stroke, as well as those with coronary heart disease only) are shown in Table 1. The distributions of demographic characteristics were generally the same, regardless of the definition of atherosclerotic cardiovascular disease. Figure 1 provides data on those with coronary heart disease or stroke, the number and percentage of respondents that provided information on low-dose aspirin behaviors. Three-quarters (76%) of adults with coronary heart disease or stroke had been advised by a health professional to take low-dose aspirin. Of these, 88% followed the advice. Among those who did not follow the advice, about half (53%) had been advised to stop taking low-dose aspirin. Among those who were not advised to take low-dose aspirin, 11% were taking it on their own. These percentages were similar for respondents with coronary heart disease only (not shown).

The total percentage of low-dose aspirin use for secondary prevention included those following a health professional's advice to take low-dose aspirin and those taking low-dose aspirin on their own. Overall, crude percentages of low-dose aspirin use were 70% and 73% for those with coronary heart disease and/or stroke and coronary heart disease only, respectively. Table 2 shows the age-standardized percentages of low-dose aspirin use by population characteristics for those with coronary heart disease and/or stroke, as well as those with coronary heart disease only.

Table 3 shows that after controlling for all other demographic and risk factors, low-dose aspirin use was significantly less prevalent among those aged 40–64 years (versus ≥ 65 years), women (versus men), non-Hispanic black and Hispanic (versus non-Hispanic white). The linear relationship between the number of cardiovascular risk factors and low-dose aspirin use persisted after adjusting for other factors (OR=1.39 [95% CI=1.23–1.57], $P<0.001$ for coronary heart disease and stroke) and (OR=1.33 [95% CI=1.16–1.54], $P<0.001$ for coronary heart disease only). Health insurance status, level of education, BMI, and history of ulcers or arthritis were not related to low-dose aspirin use among those with coronary heart disease and/or stroke or coronary heart disease only (Table 3).

Discussion

Current guidelines recommend low-dose aspirin for cardiovascular prevention among those with a history of a previous cardiovascular event.³⁴⁵ Data from this report showed that 76% of adults aged ≥ 40 years with atherosclerotic cardiovascular disease were advised to take low-dose aspirin, and 70% with known atherosclerotic cardiovascular disease were taking low-dose aspirin for secondary prevention. Demographic characteristics and the number of cardiovascular disease risk factors (which included hypertension, diabetes, high blood cholesterol and current smoking) were related to low-dose aspirin use. Those ≥ 65 years, men, and non-Hispanic whites were significantly more likely to take low-dose aspirin for

secondary prevention than younger adults (40–64 years), women, and non-Hispanic blacks or Hispanics. A linear relationship was found between the number of cardiovascular risk factors and low-dose aspirin use.

The benefit of low-dose aspirin in reducing the likelihood of future events among those who have suffered an acute myocardial infarction and stroke has been found in multiple studies. An previous meta-analysis of randomized controlled trials among those with prior myocardial infarction (n=19,791), acute myocardial infarction (n=18,773) and prior stroke (n=11,707), examining the effectiveness of aspirin for prevention of myocardial infarction, stroke or vascular death found that aspirin reduced the risk of a fatal event by 25%, 29% and 24%, respectively.¹ More recently, a meta-analysis based on randomized controlled trials found that aspirin use for secondary prevention reduced coronary heart disease and stroke risk by 20% and 19%, respectively.² In addition to the health benefits found with the use of low-dose aspirin for secondary prevention, other studies have found the recommendations to be cost-effective and to have significant economic benefits.¹⁶ Current American Heart Association and the American College of Cardiology guidelines strongly recommend aspirin use for survivors of acute myocardial infarctions or those with coronary or other atherosclerotic vascular disease to prevent event recurrence or death.^{3,4,5}

In this study, the prevalence of overall low-dose aspirin use for secondary prevention among adults with coronary heart disease and/or stroke was 70%, and was slightly higher among those with coronary heart disease only (73%). Other studies have found varying levels of aspirin use for secondary prevention, depending on the health care setting surveyed. A recent report from an international outpatient registry (REduction of Atherothrombosis for Continued Health [REACH]) found that about 70% of patients with established atherothrombotic disease were using aspirin⁹, and among those not using aspirin, 50% were using anticoagulants or other antiplatelet agents.⁹ A clinical database of patients who had undergone a cardiac procedure and documented coronary heart disease found “consistent use” of aspirin to be 71% in 2002.¹⁷ A recent reported based on national survey found that among office visits to primary care physicians and cardiologists where aspirin or other antiplatelet medication was eligible to adults aged 18 years with ischemic vascular disease, 54% had documented prescriptions for aspirin or other antiplatelet medications.¹⁸ Of note, estimates of low-dose aspirin use immediately after cardiovascular disease event have been found to be significantly higher. For example, the American Heart Association's Get With the Guidelines-Coronary Artery Disease and American College of Cardiology's Acute Coronary Treatment and Intervention Outcomes Network registry found that prescribed of recommended aspirin use at hospital discharge for acute coronary syndrome increased from 94% in 2006 to 98% in 2012.¹⁹ However, each of these reports has used data from healthcare settings, and limited information is available on the general U.S. population, highlighting the importance of this study.

An important finding from our study was the impact of the health professional's advice on low-dose aspirin use. Among those with atherosclerotic cardiovascular disease who were advised to take low-dose aspirin, nearly 90% reported following the advice. Among those who were not following the advice, about half had been advised to stop taking low-dose aspirin. In contrast, among those who were not advised to take low-dose aspirin, but were

potentially eligible for it (about 24% of the eligible population), only about one in ten were taking low-dose aspirin on their own. This suggests that there is opportunity for healthcare providers to reassess the use of low-dose aspirin in patients with a history of cardiovascular disease.

Several prevalent conditions are potential contraindications for low-dose aspirin use. For those with arthritis, who are likely to utilize non-steroidal anti-inflammatory drugs for their condition, previous data have shown they may be less likely to have aspirin prescribed due to potential medication interactions.²⁰²¹ Those with a history of ulcers may also be less likely to take low-dose aspirin due to the negative gastric effects.²²²³ However, our analyses found no significant differences in the percentages of low-dose aspirin use between adults with and without a history of these conditions.

There were several limitations identified in this study. First, all data were obtained by self-report, and there could be potential recall bias. This may be particularly relevant for a non-prescription medication such as aspirin, as those with a history of cardiovascular disease may have a complex medical regimen and recall of a non-prescription medication may present a challenge. In addition, the chance of recall bias increases when asking to recall whether he/she was advised to take aspirin – the patients might not recall what their doctors told them, or on purpose to deny that they were told to avoid the embracement of not doing what they were advised by their doctors. Second, the NHIS does not collect information about the type of stroke (hemorrhagic or ischemic). It is possible that the prevalence of low-dose aspirin use in the eligible population is underestimated when the eligible population includes adults who have had a hemorrhagic stroke, for which aspirin is not recommended. However, it is worth noting that additional analysis including those with coronary heart disease only had similar results. Third, we were not able to assess the use of other antiplatelet medications. Finally, NHIS does not include questions about other types of atherosclerotic cardiovascular disease, such as transient ischemic attack or peripheral vascular disease.

In this survey of community-dwelling adults, about two-thirds of the eligible populations were taking low-dose aspirin. While a portion (approximately 5%) of the population was advised to stop taking low-dose aspirin by their healthcare providers, about 24% of the eligible population had not been advised to take low-dose aspirin. When low-dose aspirin was recommended by a healthcare provider, 9 in 10 adults receiving the recommendations took low-dose aspirin. Improving aspirin use for cardiovascular prevention among those who would benefit from it is one of goals of the Million Hearts® initiative, in which clinical and community-based efforts are needed to enhance the use of aspirin for cardiovascular prevention and reduce mortality from heart disease.

Acknowledgments

Funding source: N/A

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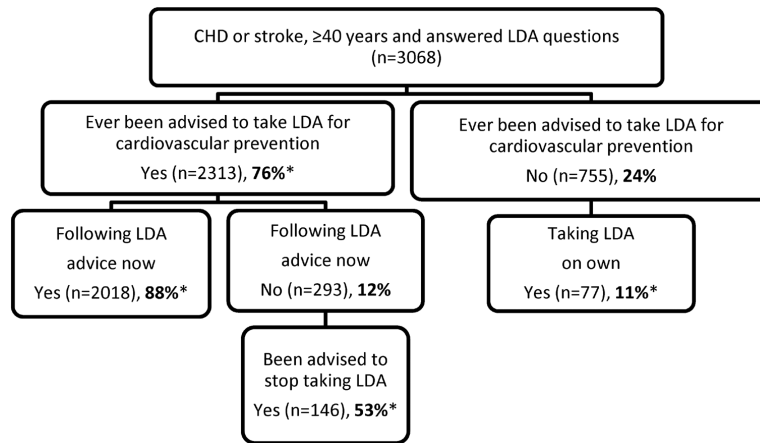


Figure 1.
National Health Interview Survey Low-dose Aspirin Questions and Associated Sample Sizes

CHD: coronary heart disease

LDA: low dose aspirin

*% was estimated based on sampling weight

Table 1

Characteristics of Adults Aged 40 and Over Eligible¹ to Take Low-dose Aspirin for Secondary Prevention of Cardiovascular Disease, by Definition of Atherosclerotic Cardiovascular Disease, United States, 2012²

Variable	Coronary Heart Disease and/or Stroke (n=3,068) % (95% Confidence interval)	Coronary Heart Disease Only (n=2,007) % (95% Confidence interval)
Age (years)		
40–64	46.2% (42.8–49.8)	46.3% (43.6–49.1)
>65	53.8% (51.5–56.1)	53.7% (50.9–56.5)
Sex		
Men	53.9% (51.5–56.4)	58.1% (55.0–61.1)
Women	46.1% (43.6–48.5)	41.9% (38.9–45.0)
Race/Ethnicity		
Non-Hispanic White	74.5% (72.4–76.5)	77.2% (74.8–79.4)
Non-Hispanic Black	12.4% (11.0–14.1)	10.6% (9.1–12.3)
Hispanic	8.9% (7.8–10.2)	8.3% (7.0–9.8)
Other	4.2% (3.4–5.2)	3.9% (3.0–5.1)
Education		
<High school	25.2% (23.4–27.1)	23.6% (21.4–25.9)
High school	26.8% (24.8–28.8)	27.1% (24.9–29.5)
Some college	29.3% (27.2–31.4)	29.5% (27.0–32.2)
College	18.8% (17.0–20.6)	19.7% (17.5–22.1)
Body mass index (Kg/M ²)		
Normal	27.9% (26.0–29.9)	26.9% (24.7–29.3)
Overweight	37.4% (35.3–39.6)	37.4% (35.0–40.0)
Obesity	34.6% (32.6–36.8)	35.6% (32.9–38.4)
Have health insurance		
	92.0% (90.7–93.1)	91.7% (90.0–93.1)
Self-reported ulcer		
	16.6% (15.0–18.3)	16.5% (14.6–18.6)
Self-reported arthritis ³		
	50.7% (48.2–53.1)	50.8% (48.0–53.6)
Self-reported hypertension		
	67.1% (64.9–69.2)	66.1% (63.4–68.7)
Self-reported diabetes mellitus		
	30.4% (28.4–32.6)	29.8% (27.2–32.6)
Self-reported high blood cholesterol		
	66.1% (64.0–68.1)	67.9% (65.4–70.4)
Smoker		
	19.7% (17.9–21.6)	18.1% (16.2–20.2)
Number of risk factors ⁴		
0	10.6% (9.2–12.2)	10.1% (8.5–11.9)
1	25.8% (23.8–27.9)	26.9% (24.5–29.5)
2	36.8% (34.7–38.9)	37.0% (34.5–39.7)
3	23.8% (21.7–25.9)	23.2% (20.7–25.9)

Variable	Coronary Heart Disease and/or Stroke (n=3,068) % (95% Confidence interval)	Coronary Heart Disease Only (n=2,007) % (95% Confidence interval)
4	3.1% (2.4–3.9)	2.8% (2.0–3.8)

¹ An adult's eligibility to take low-dose aspirin is determined by either having been told by a health professional that s/he have coronary heart disease and/or stroke, or having been told by a health professional that s/he has coronary heart disease.

² Data source: CDC/NCHS, National Health Interview Survey, 2012

³ Arthritis included arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

⁴ Include hypertension, diabetes, high blood cholesterol and smoking

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Table 2

Age-Standardized Prevalence of Low-dose Aspirin Use¹ Among Adults Aged 40 and Over Eligible² to Take Low-dose Aspirin for Secondary Prevention of Cardiovascular Disease, by Definition of Atherosclerotic Cardiovascular Disease and Demographic and Health Characteristics, United States, 2012³

	Coronary Heart Disease and/or Stroke n=3,068		Coronary Heart Disease Only n=2,007	
	% (95% CI)	p-value ⁴	% (95% CI)	p-value
Total	62.2% (56.0–68.0)		67.3% (59.9–74.0)	
Sex				
Men	69.1% (60.8–76.3)	Reference	73.1% (62.8–81.3)	Reference
Women	55.3% (46.6–63.8)	<0.05	60.5% (50.1–70.0)	<0.05
Race/Ethnicity				
Non-Hispanic White	65.5% (57.0–73.2)	Reference	71.6% (61.2–80.2)	Reference
Non-Hispanic Black	59.3% (47.2–70.3)	NS	55.9% (38.9–71.6)	NS
Hispanic	50.6% (38.6–62.6)	<0.05	53.9% (39.7–67.5)	<0.05
Other	60.2% (37.3–79.4)	NS	77.6% (61.6–88.2)	NS
Education				
<High school	67.6% (58.4–75.6)	Reference	68.6% (55.9–79.1)	Reference
High school	56.1% (43.4–67.9)	NS	67.9% (53.7–79.5)	NS
Some college	56.0% (43.6–67.8)	NS	61.0% (45.5–74.6)	NS
College	72.7% (59.3–83.0)	NS	77.6% (63.8–87.2)	NS
BMI				
Normal	64.8% (52.6–75.4)	Reference	63.4% (46.9–77.2)	Reference
Overweight	65.0% (54.2–74.5)	NS	68.5% (55.5–79.1)	NS
Obesity	58.9% (49.9–67.4)	NS	69.2% (57.3–79.0)	NS
Insurance Status				
Yes	62.6% (55.5–69.2)	Reference	67.6% (59.0–75.2)	Reference
No	56.2% (42.2–69.3)	NS	57.4% (41.7–71.7)	NS
Ulcer				
Yes	61.9% (50.3–72.4)	Reference	73.3% (55.4–85.2)	Reference
No	62.4% (55.2–69.0)	NS	66.2% (57.9–73.7)	NS
Arthritis ⁵				
Yes	61.2% (51.1–70.4)	Reference	67.5% (53.8–78.8)	Reference
No	62.8% (55.2–69.8)	NS	66.9% (57.9–74.7)	NS
Number of cardiovascular disease risk factors ⁶				
0	37.6% (27.9–48.3)	Reference	43.8% (27.5–61.7)	Reference
1	53.5% (43.0–63.8)	<0.05	61.8% (47.7–74.1)	NS

	Coronary Heart Disease and/or Stroke n=3,068		Coronary Heart Disease Only n=2,007	
	% (95% CI)	p-value ⁴	% (95% CI)	p-value
2	64.3% (54.1–73.3)	<0.001	68.7% (56.7–78.9)	<0.05
3	73.9% (61.7–83.2)	<0.001	77.4% (65.0–86.8)	<0.001
4	91.0% (88.4–94.6)	<0.001	94.0% (86.4–97.5)	<0.001

¹Including following health care provider's advice to take low-dose aspirin or independently taking low-dose aspirin

²An adult's eligibility to take low-dose aspirin is determined by either having been told by a health professional that s/he have coronary heart disease and/or stroke, or having been told by a health professional that s/he has coronary heart disease.

³Data source: CDC/NCHS, National Health Interview Survey, 2012

⁴P-values are for comparisons across the categories using reference group, NS – not significant

⁵Arthritis included arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

⁶Included self-reported hypertension, high blood cholesterol, diabetes and smoking

Table 3

Adjusted Prevalence Ratio of Low-dose Aspirin Use Among Adults Aged 40 and Over Eligible¹ to Take Low-dose Aspirin for Secondary Prevention of Cardiovascular Disease, by Definition of Atherosclerotic Cardiovascular Disease and Demographic and Health Characteristics, United States, 2012²

	Coronary Heart Disease and/or Stroke n=3,068 Adjusted prevalence ratio (95% CI)	Coronary Heart Disease Only n=2,007 Adjusted prevalence ratio (95% CI)
Age (years)		
40–64	0.89 (0.82–0.96)	0.87 (0.80–0.95)
65	Reference	Reference
Sex		
Men	Reference	Reference
Women	0.91 (0.85–0.97)	0.90 (0.84–0.98)
Race		
NH-White	Reference	Reference
NH-Black	0.91 (0.83–0.99)	0.88 (0.78–0.99)
Hispanics	0.83 (0.72–0.95)	0.84 (0.72–0.97)
Others	0.90 (0.78–1.05)	1.05 (0.94–1.18)
Education		
<High school	Reference	Reference
High school	0.96 (0.88–1.05)	0.97 (0.88–1.07)
Some college	0.97 (0.88–1.05)	0.99 (0.90–1.09)
College	1.08 (0.99–1.18)	1.07 (0.96–1.18)
BMI		
Normal	Reference	Reference
Overweight	1.07 (0.99–1.16)	1.11 (1.00–1.23)
Obesity	1.07 (0.99–1.15)	1.12 (1.01–1.23)
Have Insurance		
Yes	Reference	Reference
No	0.92 (0.79–1.07)	0.87 (0.74–1.03)
Ulcer		
Yes	Reference	Reference
No	0.97 (0.89–1.04)	0.97 (0.88–1.06)
Arthritis ³		
Yes	Reference	Reference
No	0.99 (0.92–1.06)	1.00 (0.93–1.08)
Number of risk factors ⁴		
0	Reference	Reference

	Coronary Heart Disease and/or Stroke n=3,068 Adjusted prevalence ratio (95% CI)	Coronary Heart Disease Only n=2,007 Adjusted prevalence ratio (95% CI)
1	1.13 (0.96–1.34)	1.09 (0.91–1.31)
2	1.23 (1.05–1.43)	1.19 (1.00–1.41)
3	1.36 (1.15–1.60)	1.26 (1.05–1.53)
4	1.50 (1.28–1.77)	1.42 (1.18–1.71)
Number of risk factor ⁵ odds ratio for linear trend	1.39 (1.23–1.57)	1.33 (1.16–1.54)

¹ An adult's eligibility to take low-dose aspirin is determined by either having been told by a health professional that s/he have coronary heart disease and/or stroke, or having been told by a health professional that s/he has coronary heart disease.

² Data source: CDC/NCHS, National Health Interview Survey, 20121. All covariates were in the models simultaneously

³ Arthritis included arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

⁴ Tested for a linear trend in the relationship between cardiovascular risk and aspirin use by substituting the number of risk factors as a continuous variable in the model

⁵ Tested for a linear trend in the relationship between cardiovascular risk and aspirin use by substituting the number of risk factors as a continuous variable in the model