

HOLLERAN

Community Health Research & Strategic Planning

**Anne Arundel
Department of Health**

**Behavioral Risk Factor Surveillance
System Study**

October 18, 2004

BACKGROUND & METHODOLOGY

The Anne Arundel Department of Health, located in Annapolis, Maryland, requested that Holleran conduct a Behavioral Risk Factor Surveillance System (BRFSS) study among its adult community using the CDC BRFSS tool. The BRFSS is a national initiative, headed by the Centers for Disease Control and Prevention (CDC) that assesses the health status and risk factors among U.S. citizens. The current assessment is a follow-up to a BRFSS study conducted in 2001.

The Anne Arundel Department of Health, in coordination with representatives from Holleran, personalized the BRFSS tool to meet the needs of Anne Arundel County. The tool was developed by selecting various core sections and modules from the BRFSS tool and adding individualized questions specific to the Anne Arundel County area. Attempts were also made to include similar questions from the 2001 BRFSS study. Prior to the start of data collection, the survey tool was tested for length and clarity with a sampling of respondents. Depending upon respondents' answers to questions regarding diabetes, smoking, suicide, etc., interviews were 12 to 15 minutes in length.

A sampling strategy was developed by Holleran and approved by the Anne Arundel Department of Health. The sampling strategy identified the number of completed surveys needed within each zip code within the county. The strategy was driven by the population statistics gathered from the 2000 U.S. Census, with some zip codes over-represented to capture minority respondents. The final sample (1,102) yields an overall error rate of +/-3% at the 95% confidence level. Data collection took place between August 16 and September 17, 2004.

The calculated response rate for the study is 25.3%. Holleran is a member of the Council of American Survey Research Organizations (CASRO) and follows the guidelines for survey research quality established by the organization. Likewise, Holleran calculates response rates according to the definition established by CASRO as outlined in the document, "On the Definition of Response Rates." The response rate is equal to the number of completed interviews divided by the number of eligible respondents. The

number of eligible respondents is the total number of potential respondents minus wrong numbers, disconnects, ineligible respondents, and an estimate of disqualified respondents among those on the list who were not contacted. For a more detailed description of the determination of response rates, refer to the CASRO article “On the Definition of Response Rates.”

RESEARCH OBJECTIVES

The research objectives of the assessment were as follows:

1. To gather statistically valid information on the health status of Anne Arundel County residents.
2. To accurately represent all ethnic populations within Anne Arundel County.
3. To develop accurate comparisons to the state and national baseline of health and quality of life measures to provide trending information for the future.
4. To compare the results to the BRFSS study conducted in 2001.
5. To interpret the meaning of the data collected so that needs are accurately depicted for Anne Arundel County residents.
6. To conduct research in a fully confidential manner consistent with the Code of Standards and Ethics promulgated by the Council of American Survey Research Organizations (CASRO).

EXECUTIVE SUMMARY

Reading the Results

All figures included within the report reflect percentage of respondents. It should be noted that the 2003 Maryland state and 2004 national BRFSS data included in the report were calculated with a weighting variable. The state and national weighting variables correct for any demographic differences that may exist between the sample and the population it represents. The Anne Arundel 2004 data was not statistically weighted.

Tests of significance were conducted to identify differences among various subsets. For example, differences were identified between the Maryland and National responses as well as between the 2001 and 2004 studies. Within the Anne Arundel County dataset, all responses were also analyzed to identify any differences by gender, age, income level and race. All tests of significance were conducted using a nonparametric test called Chi Square. The cutoff used for significance was $p \leq .02$. This cutoff, rather than $p \leq .05$, was used to account for the inability to reliably calculate effect size. Analyses of effect size for nonparametric tests have limited validity as they are highly influenced by a large sample size.

Respondent Demographics

A total of 1,102 residents of Anne Arundel County were interviewed, yielding an overall error rate of +/-3.0% at the 95% confidence level. The respondents represent all geographic areas throughout Anne Arundel County. The distribution of respondent zip codes is reported in the graphics portion of the report.

The gender breakdown for the sample is 58.7% female and 41.3% male. (*population statistics: 50.2% female; 49.8% male*). All respondents were at least 18 years of age. Although the ages of the respondents are varied, the largest proportion (21.6%) was between 35 and 44 years old. The largest proportion (83.3%) is White, followed by 12.5% Black or African American respondents. The largest proportion of respondents is married (63.3%) and 35.4% have children under the age of 18 in their household. With regard to

education level, roughly 40% responded “College 4 years or more,” with an additional 28.7% responding “College 1 – 3 years.” About half of the sample (48.4%) is “employed for wages.” The residents were also asked to share their annual household income. While some individuals refused to answer this question, the largest proportion (36.6%) reported an income level of “more than \$75,000.” Among the female respondents, 2.3% are currently pregnant.

The final demographic question asked of residents was about their height and weight. Based on the height and weight statistics reported, Body Mass Index (BMI) was calculated for each respondent. Respondents were either categorized as “neither overweight nor obese,” “overweight” or “obese.” Nearly 38% of the Anne Arundel respondents are “overweight.” While this is statistically similar to 2001, the percentage of “obese” residents in Anne Arundel County significantly increased. Additionally, the proportion of “obese” Anne Arundel residents is significantly above both the Maryland and National statistics.

Health Status & Healthy Days

The majority of Anne Arundel County respondents (84.6%) identified their health as “Good,” “Very good” or “Excellent.” This is similar to the 2001 ratings, the Maryland data and the National data.

Respondents were asked about their physical and emotional state in the past 30 days. Sixty-seven percent (67%) of respondents reported “no days” in the past 30 where pain interfered with their usual activities. The percentage reporting “no days” of feeling sad, blue or depressed was lower (57.9%) as was the percentage reporting “no days” of feeling worried, tense or anxious (39%). When asked about whether they had enough rest in the past 30 days, roughly 73% indicated having at least one day where they did not have enough rest of sleep. Interestingly, the largest proportion (32.4%) reported on at least half of the days in the past month they did not get enough rest or sleep. Lastly, respondents were asked to indicate the number of days in the past month where they felt very healthy and full of energy. The majority (65.2%) reported being full of energy and healthy on at least half of the days.

Reactions to Race

Several questions were included to gather feedback about treatment based on race when at work or when seeking health care. When looking at the overall results, the majority of respondents feel they have been treated “the same as other races” when at work or when seeking health care. However, the crosstabulations by race reveal different patterns. Hispanic respondents differ significantly from Non-Hispanic respondents in that Hispanic respondents are less likely to feel they are treated “the same as other races” when at work or when seeking health care. Additionally, White respondents were the least likely to have been emotionally upset because of the manner in which they were treated based on their race.

Health Care Access

Approximately nine out of 10 Anne Arundel County respondents (93.3%) have health care coverage, similar to in the 2001 study (95.6%). This is significantly above the percentage nationally who have coverage (84.6%), but similar to the Maryland percentage (88%).

Seventy-eight percent (78%) of Anne Arundel County residents have one person they think of as their personal doctor or health care provider. This is statistically similar to 2001, but above Maryland and National.

Less than 9% of Anne Arundel residents reported a time during the past 12 months when they needed to see a doctor, but could not because of the cost. The percentage significantly increased from 5.9% in 2001, to 8.9% in 2004. The Anne Arundel percentage is significantly below the percentage in the National dataset (12.9%) who were unable to see a doctor because of the cost.

Asthma

Roughly one in ten (10.7%) Anne Arundel residents has been told by a doctor or health professional that they have asthma. This is similar to the 2001 percentage as well as the Maryland and National percentages. Among those who had been told they have asthma, 65.2% reported still having

asthma. This statistic is also similar to the 2001 dataset and the Maryland and National figures.

Among those who reported still having asthma, 41% have had an episode of asthma or an asthma attack, significantly below the Maryland and National percentages. Roughly 11% had to visit an emergency room in the past year because of their asthma, a statistic equivalent to the Maryland and National figures. When asked how often in the past year they had to seek medical care for urgent treatment of worsening asthma symptoms, the majority (77.3%) did not have to seek urgent care for their asthma. Again, this is similar to the 2001, Maryland and National percentages. Forty-five percent (45%) of the respondents with asthma have been to a doctor or nurse for a routine checkup for their asthma. This is also statistically similar to the Maryland and National data. Lastly, the individuals with asthma were asked to indicate how many times in the past month that they had any symptoms of asthma. Fifty-five percent (55%) reported no symptoms of asthma in the previous month. This is statistically higher than the 2001 study, the Maryland dataset and the National data.

Diabetes

When asked if they have ever been told by a doctor that they have diabetes, 9.4% responded “yes.” An additional 3.6% responded that they had/have gestational diabetes. Fewer respondents in 2004 stated they had never been told they had gestational diabetes compared to 2001. This percentage is also significantly lower than the Maryland and National statistics. The largest proportion of those with diabetes was diagnosed between the ages of 45 and 54. The proportion in this age group (38.2%) is significantly higher than in 2001 (18.9%).

Approximately 23% of those with diabetes are now taking insulin, statistically similar to 2001, Maryland and National. About seven out of ten (70.3%) are now taking diabetes pills, also similar to 2001, Maryland and National. Respondents were most likely to have seen a doctor, nurse or other health professional “3-4 times” in the past year. The largest proportion (49.5%) also responded “3-4 times” in the past year for having a professional check for “A one C.” About half (51%) have taken a course or

class in how to manage their diabetes themselves, similar to across the state and nationally.

Arthritis

The percentage of respondents with arthritis increased from 28% in 2001 to 35.1% in 2004. The percentage for Anne Arundel is also significantly higher than the Maryland and National percentages. Among those with arthritis, 43.2% are currently being treated by a doctor for their arthritis, similar to the percentage in 2001. Anne Arundel was significantly above the Maryland and National statistics with 37.8% being advised by a doctor of health professional to lose weight to help their arthritis or joint symptoms. Anne Arundel also significantly exceeded the Maryland and National percentages with 59.4% being advised to use physical activity or exercise to help their arthritis or joint symptoms. Roughly 13% of those interviewed with arthritis have taken an educational course on how to manage problems related to arthritis or joint symptoms.

Immunizations

More Anne Arundel residents received a flu shot in the past year (49.2%) compared to in 2001 (37.7%). This percentage is also statistically higher than the percentage of residents throughout Maryland and the nation who received a flu shot last year. Anne Arundel residents were most likely to receive their flu shot in a doctor's office or HMO office.

Anne Arundel 2004 was similar to the 2001 study in the percentage of respondents who have had a pneumonia shot (25.3%). This is also statistically similar to Maryland and National.

Tobacco Use

Roughly 18% of Anne Arundel respondents smoke cigarettes "some days" or "every day." The comparison to the 2001 study, and the Maryland and National datasets is not an exact comparison because in the 2004 Anne Arundel study, this question was asked of all respondents, not just those who have smoked at least 100 cigarettes in their lifetime.

Among current smokers, about 52% have stopped smoking for one day or longer in the past year because they were trying to quit smoking. This is statistically similar to 2001 and the Maryland and National data.

Alcohol Consumption

Significantly more respondents in 2004 (46.6%) than in 2001 (35.9%) indicated they had no alcoholic drinks in the past month. This is also significantly higher than the percentage in the Maryland and National datasets. On days when they drank, the majority of Anne Arundel residents (76.2%) drank 1-2 drinks. This is similar to the pattern in 2001 and throughout Maryland. Nationally, those who consumed at least one alcoholic drink in the past month were more likely to have a higher number of drinks. When asked about binge drinking (5 or more drinks on an occasion), about 21% reported at least one episode in the previous month. While this is similar to 2001, it is below the percentage reporting a binge-drinking episode nationwide (28.3%). About 1.5% of those interviewed indicated they drove after having too much to drink in the past month.

Weight Control

About half of those interviewed (49.7%) are now trying to lose weight. While statistically similar to 2001, this is above the percentage trying to lose weight throughout Maryland (41.2%) and Nationally (40%). Among those not trying to lose weight, 67.7% are trying to maintain their current weight, or keep from gaining weight. This is 10.1% below 2001, but 7.2% above the national percentage. Four out of ten (40%) are eating fewer calories and less fat to lose weight/keep from gaining weight, above the percentage nationally (30.1%). When asked about carbohydrate consumption, 46.3% indicated they are eating fewer carbohydrates to lose weight or keep from gaining weight. Additionally, nearly 66% are using physical activity to lose/keep from gaining weight.

Exercise and Physical Activity

Among employed respondents, the majority (72.4%) mostly sit or stand while at work. This is similar to the 2001 study, but significantly above the national percentage (63.1%).

Up 6.7% from 2001, 87.3% of those interviewed participate in moderate physical activities. This is also significantly higher than the national percentage (81.7%). Approximately half of the respondents (49.1%) participate in moderate activities five to seven days per week and between 20 and 30 minutes in duration.

The percentage engaging in vigorous physical activity (43.4%) is nearly half of the percentage that engage in moderate activity. Anne Arundel residents are most likely to participate in vigorous physical activities three to four days a week and between 45 minutes and one hour.

Nutrition

When asked about consumption of food prepared in restaurants (other than fast food restaurants), the largest proportion (32%) responded they eat in restaurants two to three times per month. Taking fast food consumption into consideration, the largest proportion (47.4%) reported eating fast food once a month or less.

Fruit and Vegetable Consumption

Residents were asked to share the amount of fruits and vegetables they consume every day. Approximately 29% indicated they consume one serving of fruit or fruit juices every day, with an additional 27.9% eating two servings a day. The largest proportion (35.7%) consumes two servings of vegetables every day.

Folic Acid

About half of those interviewed (51.5%) take a vitamin pill or supplement that contains folic acid. Respondents were asked why health experts

recommend that women take 400 micrograms of B vitamin folic acid. The response option elected the most, identified by 49.8% of those interviewed, was “to prevent birth defects.”

Colorectal Cancer Screening

Nearly 69% of the respondents in Anne Arundel age 50 and over have had a sigmoidoscopy or colonoscopy. This is significantly above the national data at 51.5%. Also, the younger the respondent, the less likely they are to have had a colonoscopy or sigmoidoscopy.

Of those respondents who have had a colonoscopy or sigmoidoscopy, 10.4% had a sigmoidoscopy, 68.8% had a colonoscopy, and 20.8% had both exams. Significantly more people in 2001 have had a sigmoidoscopy (24.5%) compared to 2004 and significantly less people in 2001 (48.7%) had a colonoscopy compared to 2004.

A total of 35% of the people who have had a colonoscopy or sigmoidoscopy had the exam within the last year. Significantly fewer people in 2004 (19%) had a colonoscopy or sigmoidoscopy within the past two years compared to 2001 (27.1%). On the contrary, significantly more people in 2004 (37.7%) had a colonoscopy or sigmoidoscopy within the past five years compared to 2001 (23.6%). 8.3% of the respondents have had a sigmoidoscopy or colonoscopy five or more years ago.

Women's Health

About 78% of Anne Arundel females have had a mammogram, significantly above the percentage nationally (64.4%). The percentage for women 40 and over (95.6%) is also above the national statistic (88.5%). Anne Arundel women are most likely to have had their mammogram within the past year, similar to the national statistics.

More Anne Arundel women (95.6% vs. 89.8%) have ever had a clinical breast exam, compared to nationally. The exam is also most likely to have taken place in the past year, and Anne Arundel women are more likely to have had it in the past year than women nationwide.

When asked about having had a pap smear, 97.8% affirmed they have had one. This is significantly above the national percentage (94.8%), but similar to the 2001 percentage (96.9%). About seven out of ten Anne Arundel females have had their pap smear in the previous year, significantly lower than the 78.7% in 2001.

The females were also asked if they have had a hysterectomy. Approximately 28.3% of those surveyed have had a hysterectomy.

Oral Health

Nearly 77% of Anne Arundel respondents have been to the dentist or dental clinic in the past year. This is significantly higher than the percentage with annual visits nationally (71%). Among those who have not been to the dentist in the past year, having “no reason to go” was the primary mention for not going. Additionally, about 53% who hadn’t gone in the previous year do not have dental insurance.

A similar percentage of Anne Arundel residents (76%) have had their teeth cleaned by a dentist or dental hygienist in the past year. This is also significantly above those nationally who have had their teeth cleaned (71.8%).

HIV/AIDS (only asked of respondents less than 65 year of age)

The residents were asked two true-false questions relating to HIV. About 80% responded “true” to the statement “A pregnant woman with HIV can get treatment to help reduce the chances that she will pass the virus on to her baby.” A higher percentage (97.8%) responded, “true” to the statement “There are medical treatments available that are intended to help a person who is infected with HIV live longer.” Both of these percentages are statistically similar to the Maryland and National figures.

Nearly 52% of Anne Arundel residents have been tested for HIV and they were most likely to have had the HIV test in a doctor’s office or HMO

office. When asked if a health professional has talked to them about preventing STDs through condom use, 14% affirmed this has occurred.

Firearms

About one quarter of respondents (24.3%) keep a firearm in or around their home.

Sun Safety

Approximately 26% of those surveyed have had sunburn within the past 12 months. While similar to the Maryland percentage (29.5%), this is significantly below the percentage nationally (33.4%). When asked about sunscreen use when outside on a sunny day, 25.7% reported they “always” use sunscreen lotion with a SPF of 15 or higher. This is statistically equivalent to the 2001 study. A similar question was asked of individuals with children under the age of 18. Fifty-four percent (54.1%) “always” put sunscreen on their children when they go outdoors.

Conclusions and Recommendations

It is recommended that action teams be developed within Anne Arundel Health Department to identify areas of opportunity. Each section or module could be assigned to various subcommittees comprised of experts in those areas. Each committee would then be responsible for identifying two to three priorities within their area. All committees could then convene and further prioritize all of the areas of opportunity.

As the Anne Arundel Health Department examines the results, the need may arise for further analyses and crosstabulations of the data. Holleran Consulting will work with the health department in accommodating such requests.

Additionally, it is recommended that Anne Arundel Health Department develop a plan for communicating survey results, priorities and action plans to the public and local community constituents. Other health

departments have used community health forums, newsletters, press releases or health fairs to communicate such information.

Anne Arundel
Department of Health
BRFSS Study

Presented By:
Holleran
October 18, 2004

Methodology

- ① A total of 1,102 residents from Anne Arundel County were interviewed by telephone to assess their health practices and health status. The number of completed interviews yields a response rate of 25.3%*.
- ① Interviews were conducted between August 16 and September 17, 2004. Each interview lasted approximately 12-15 minutes, depending upon what criteria were met by the respondent.

Reading the Results

- ① Both the Maryland and national BRFSS data are statistically weighted to correct for demographic imbalances in those samples.

Respondent Demographics

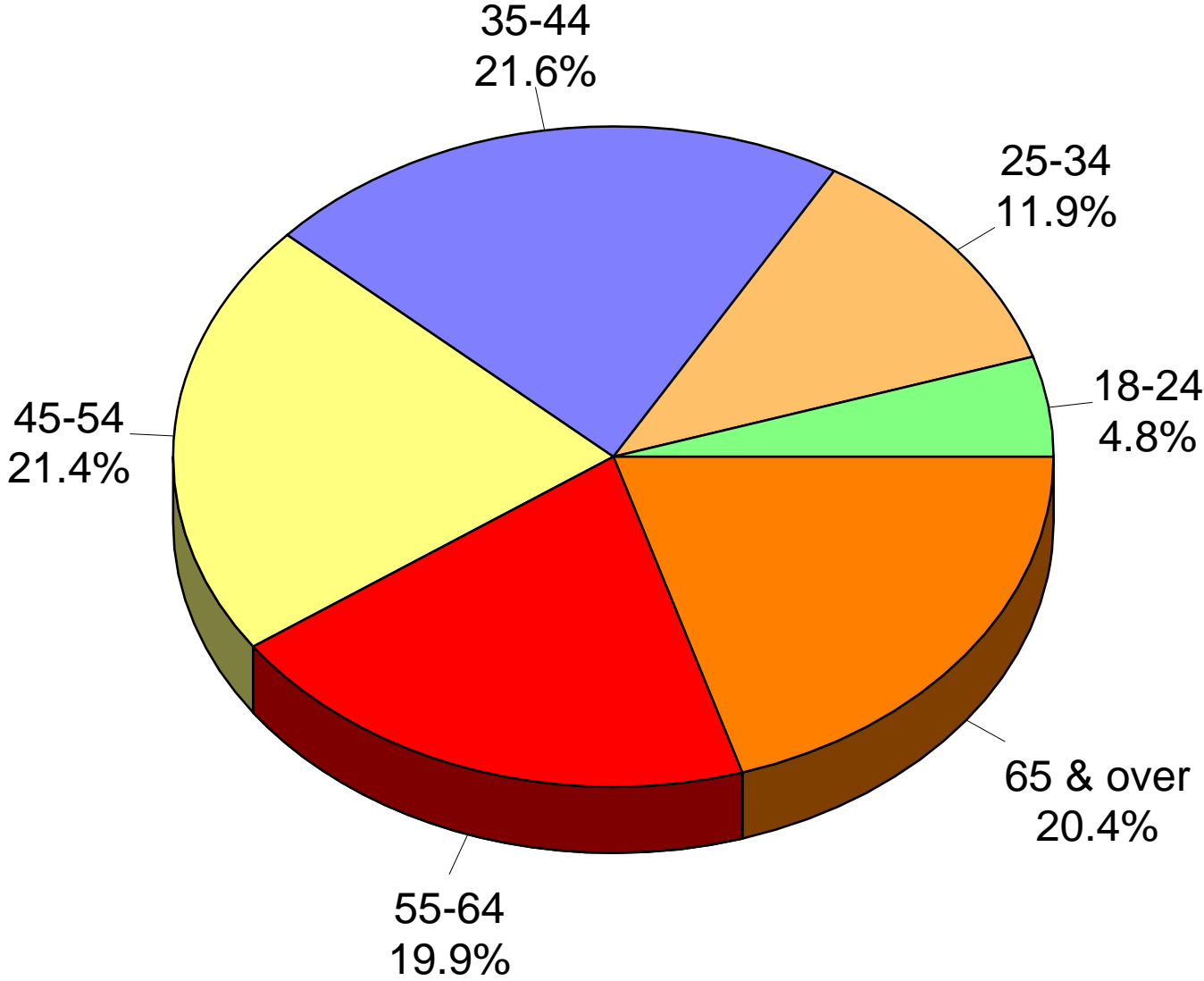
Zip code

Zipcode	Number of Respondents	Zipcode	Number of Respondents	Zipcode	Number of Respondents
20711	14	20794	29	21113	58
20714	1	21012	36	21114	55
20724	40	21032	18	21122	107
20733	6	21035	17	21140	8
20751	5	21037	26	21144	75
20754	3	21054	16	21146	45
20755	33	21056	1	21225	41
20758	2	21060	61	21226	8
20764	9	21061	112	21401	114
20765	2	21076	14	21402	12
20776	8	21077	1	21403	67
20778	4	21090	11	21405	1
20779	2	21108	40	Total	1102

Gender

Gender	Anne Arundel County BRFSS 2004	Anne Arundel County BRFSS 2001	Anne Arundel County 2000 Census
Male	41.3%	34.8%	49.8%
Female	58.7%	65.2%	50.2%

Age of Respondent



N=1,089

Race

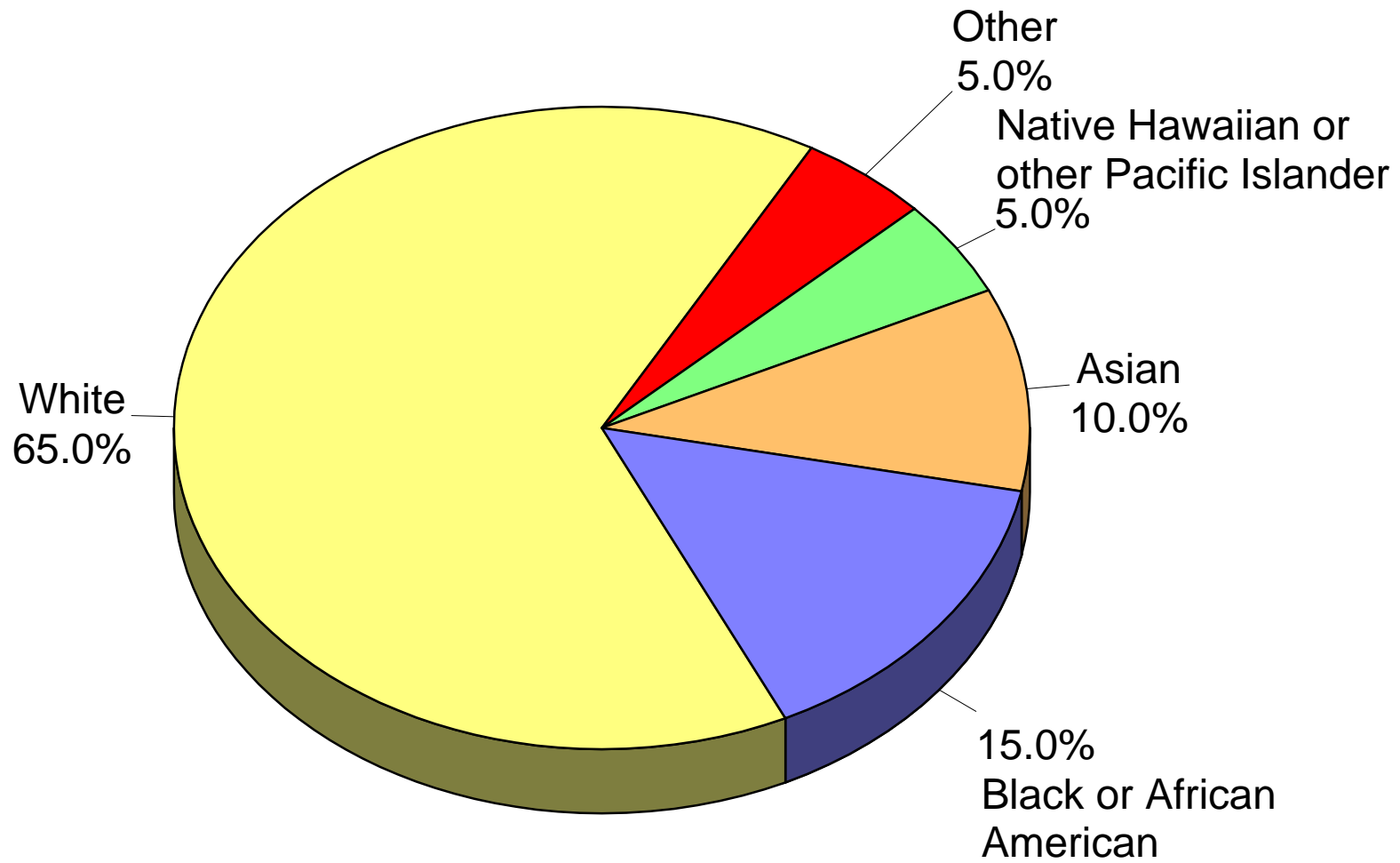
Race*	Anne Arundel County BRFSS 2004	Anne Arundel County BRFSS 2001	Anne Arundel County Census
White	83.3%	89%	81.2%
Black or African American	12.5%	7.7%	13.6%
Asian	1.3%	1.7%	2.3%
Other	3.6%	1.6%	3.0%
Hispanic or Latino**	3.2%	2.9%	2.6%

*Note: Race alone or in combination with one or more other races.

**Note: Can be of any race.

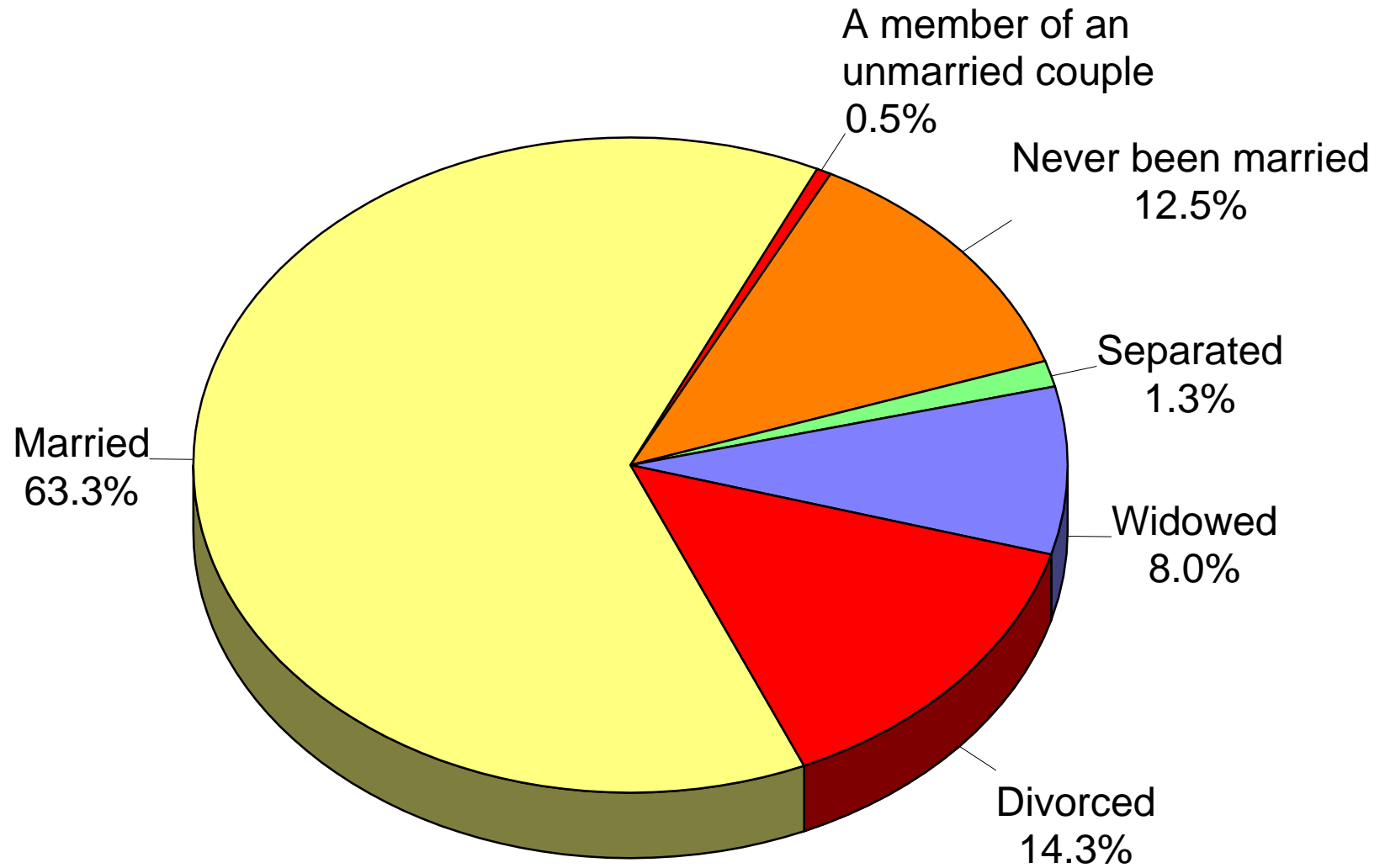
Which one of these groups best represents your race?

Respondents who initially identified more than one race



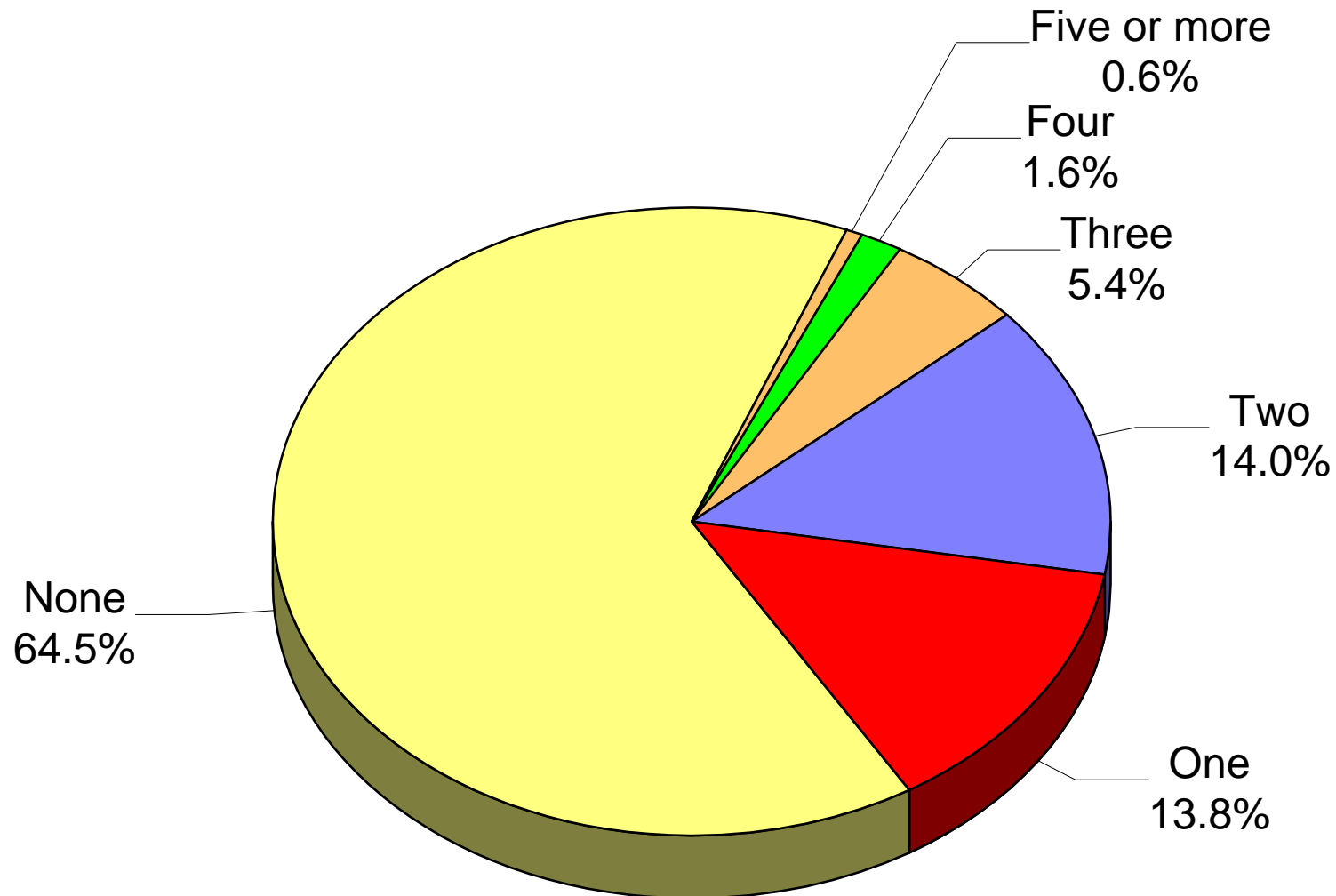
N=20

Marital Status



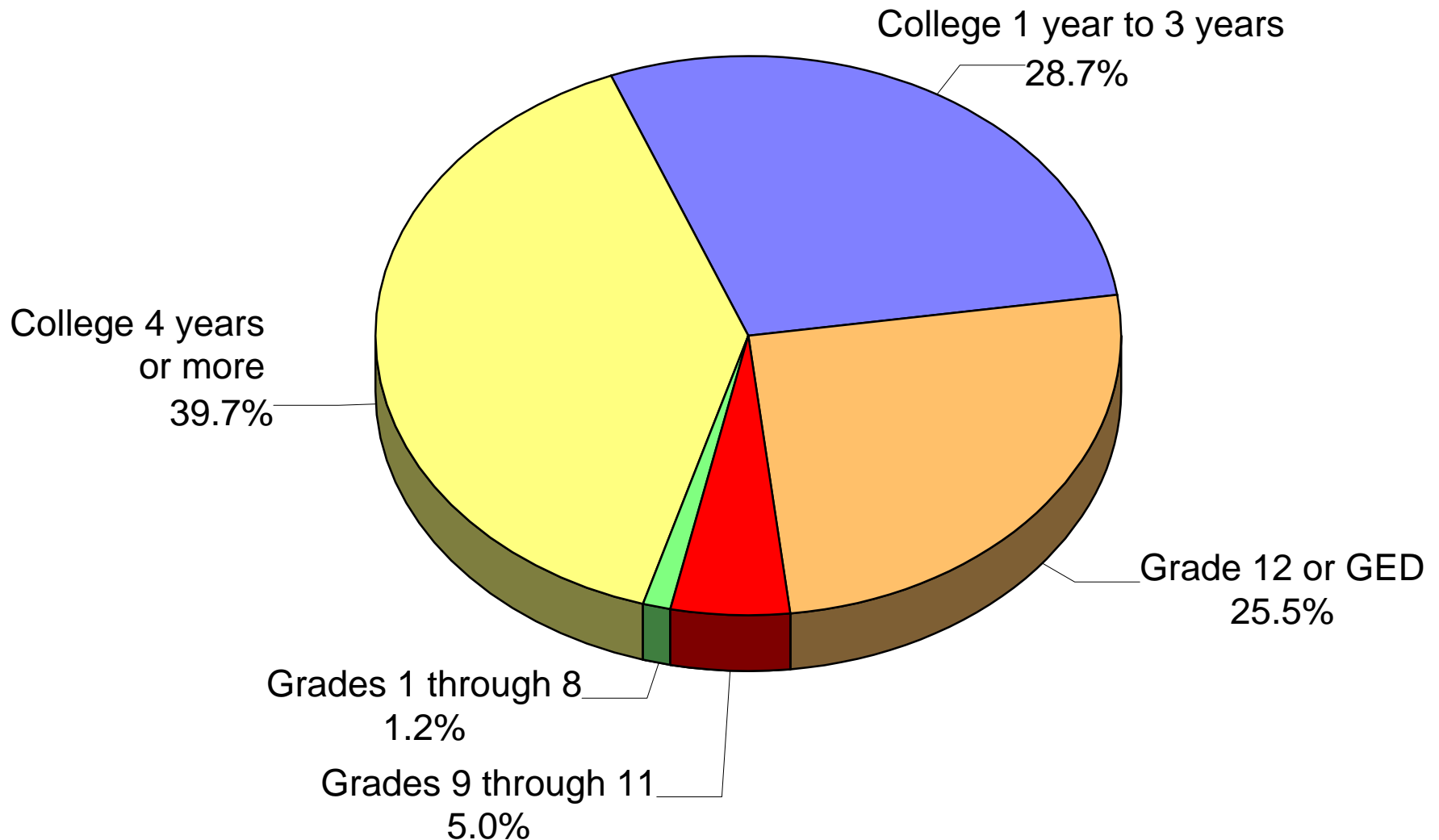
N=1,096

Number of children less than 18 years of age in household



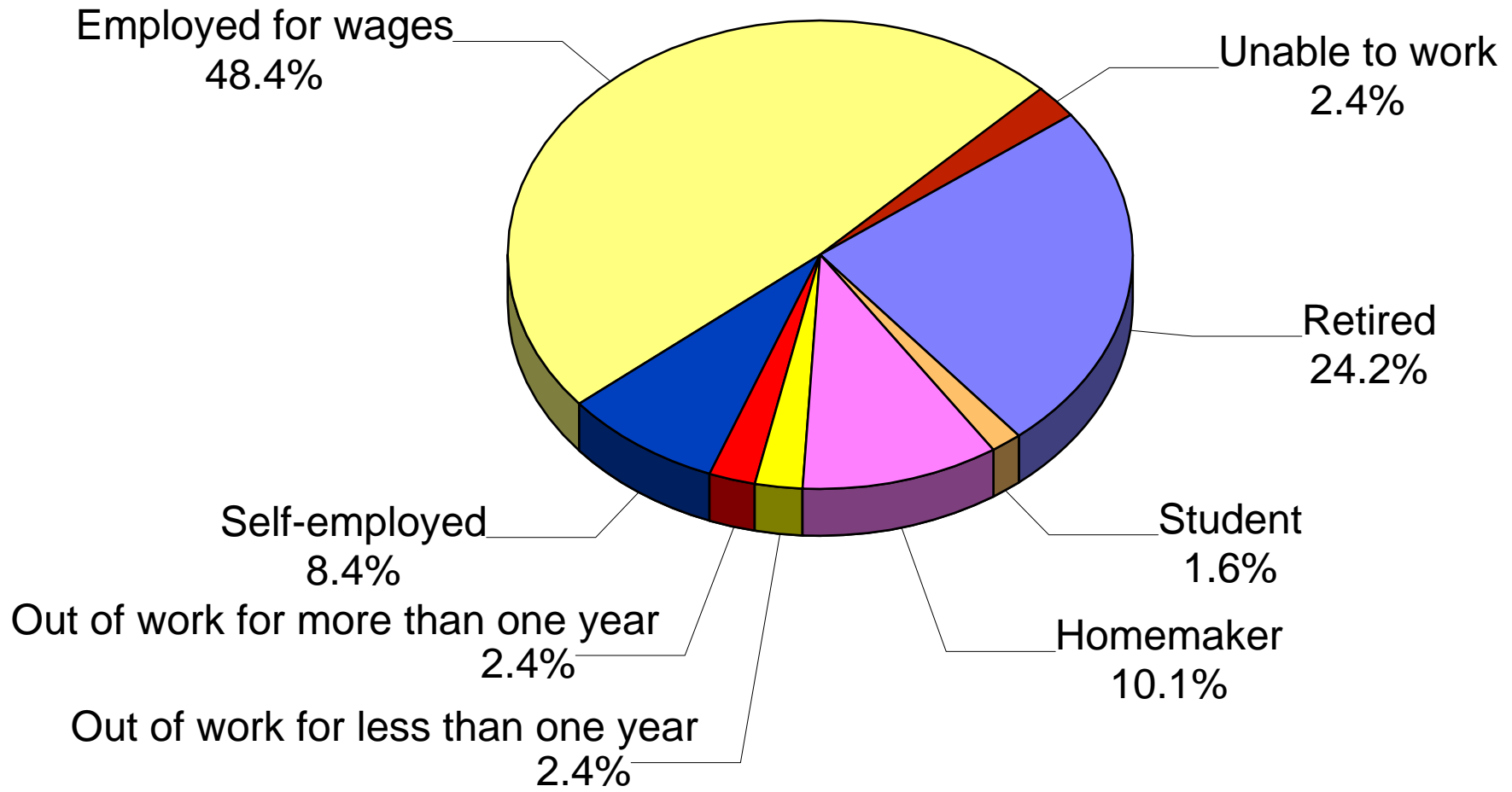
N=1,097

Highest Grade or Year of School Completed



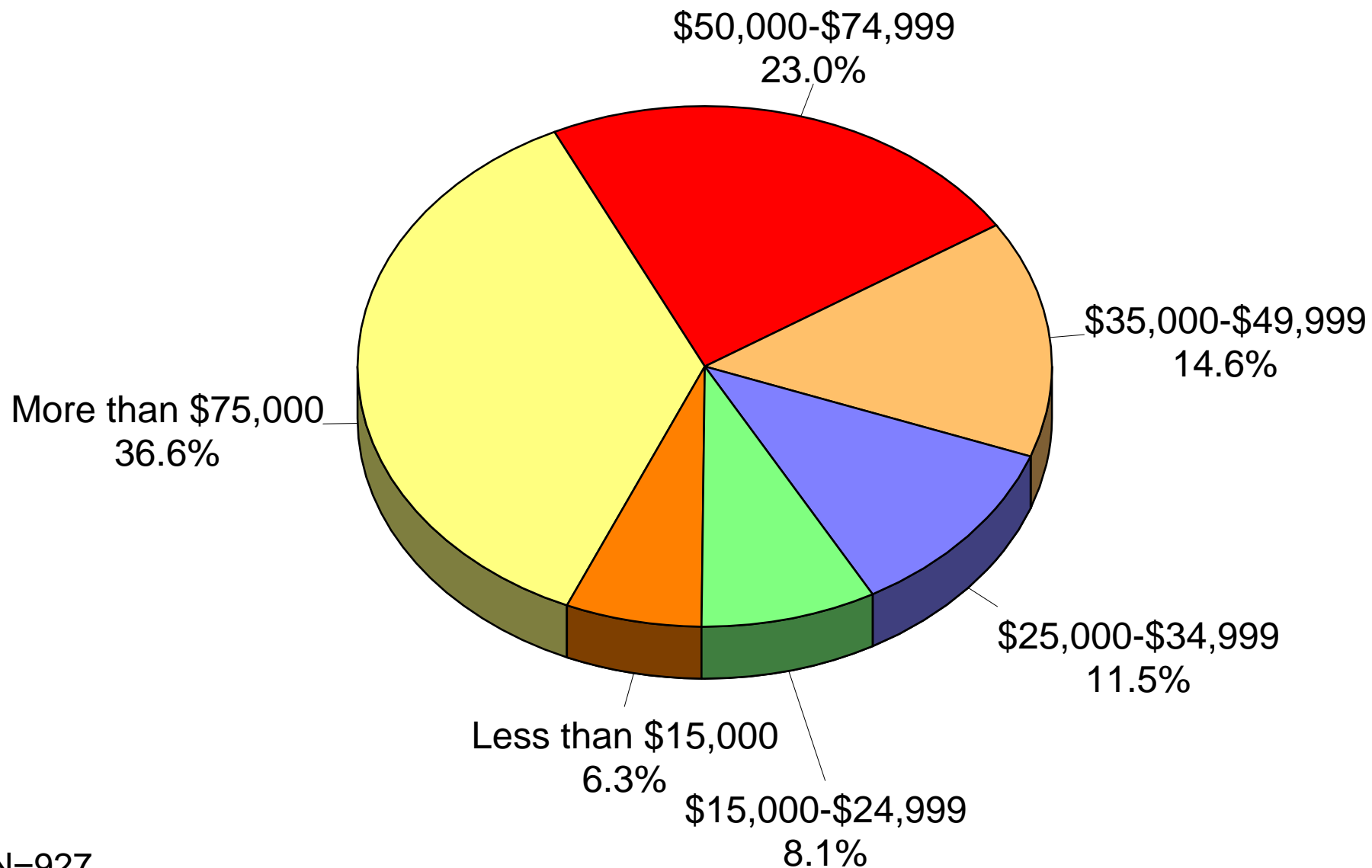
N=1,089

Employment Status



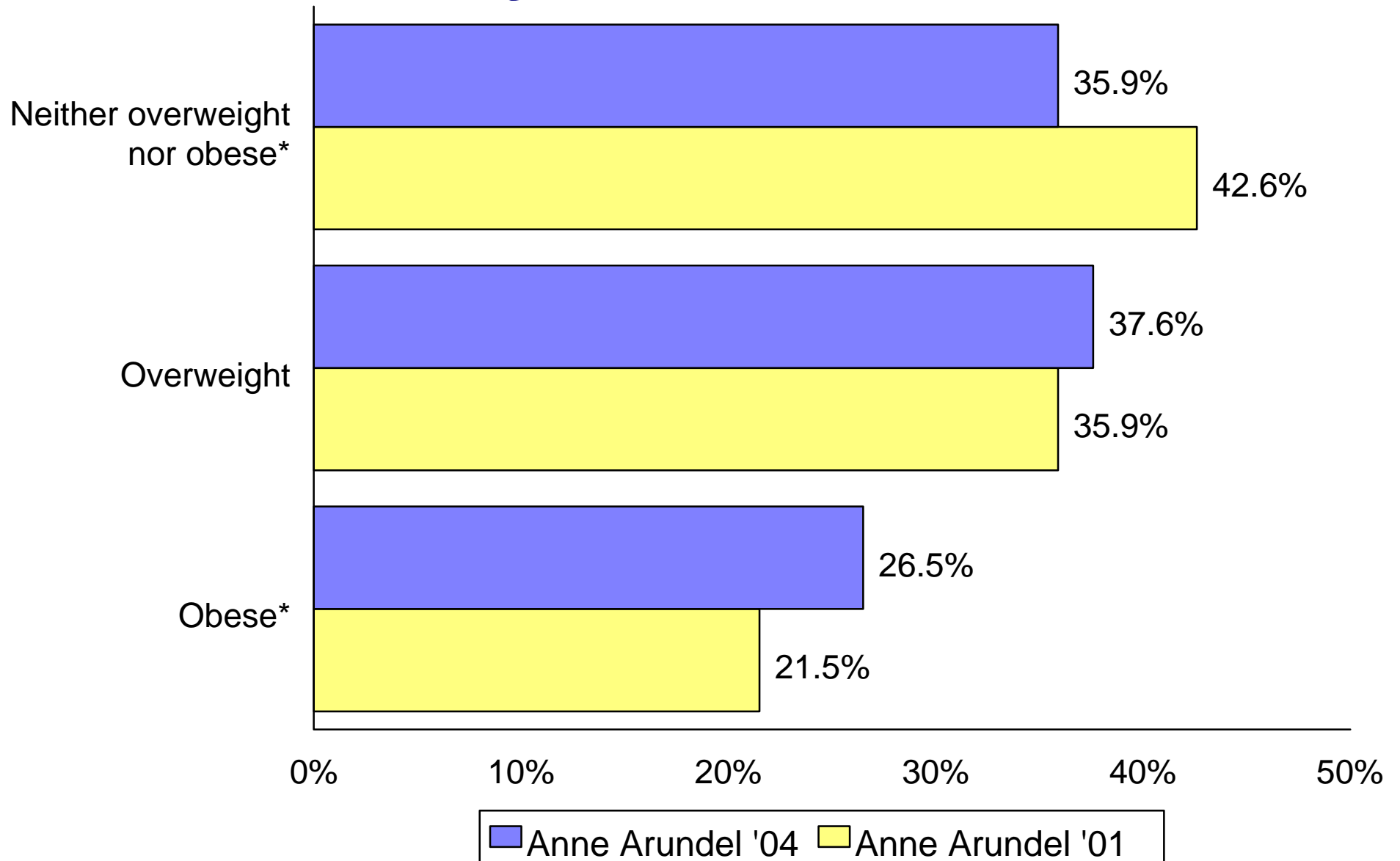
N=1,094

Annual Household Income from All Sources



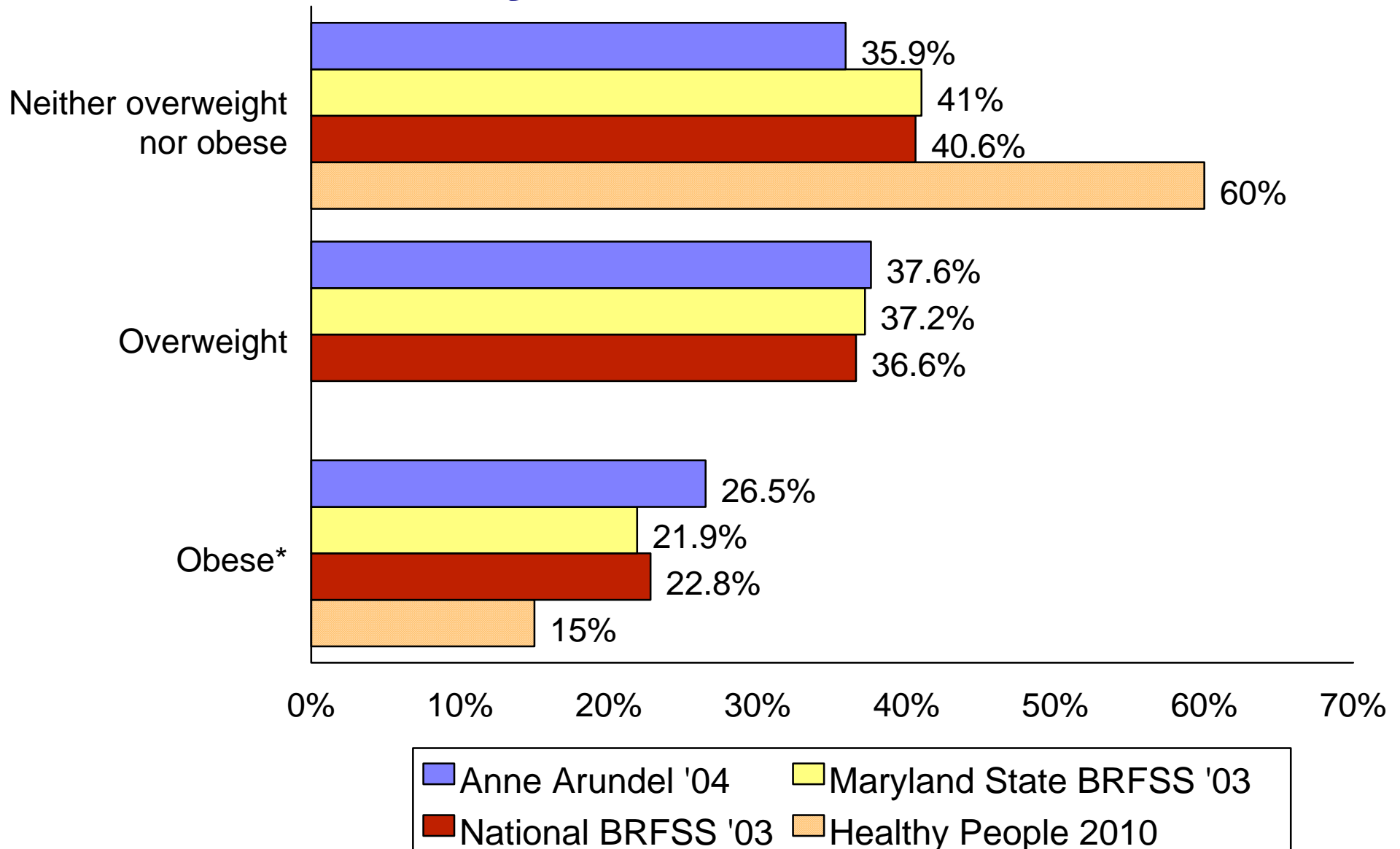
N=927

Body Mass Index



*Note: A statistically significant difference exists between 2004 and 2001.

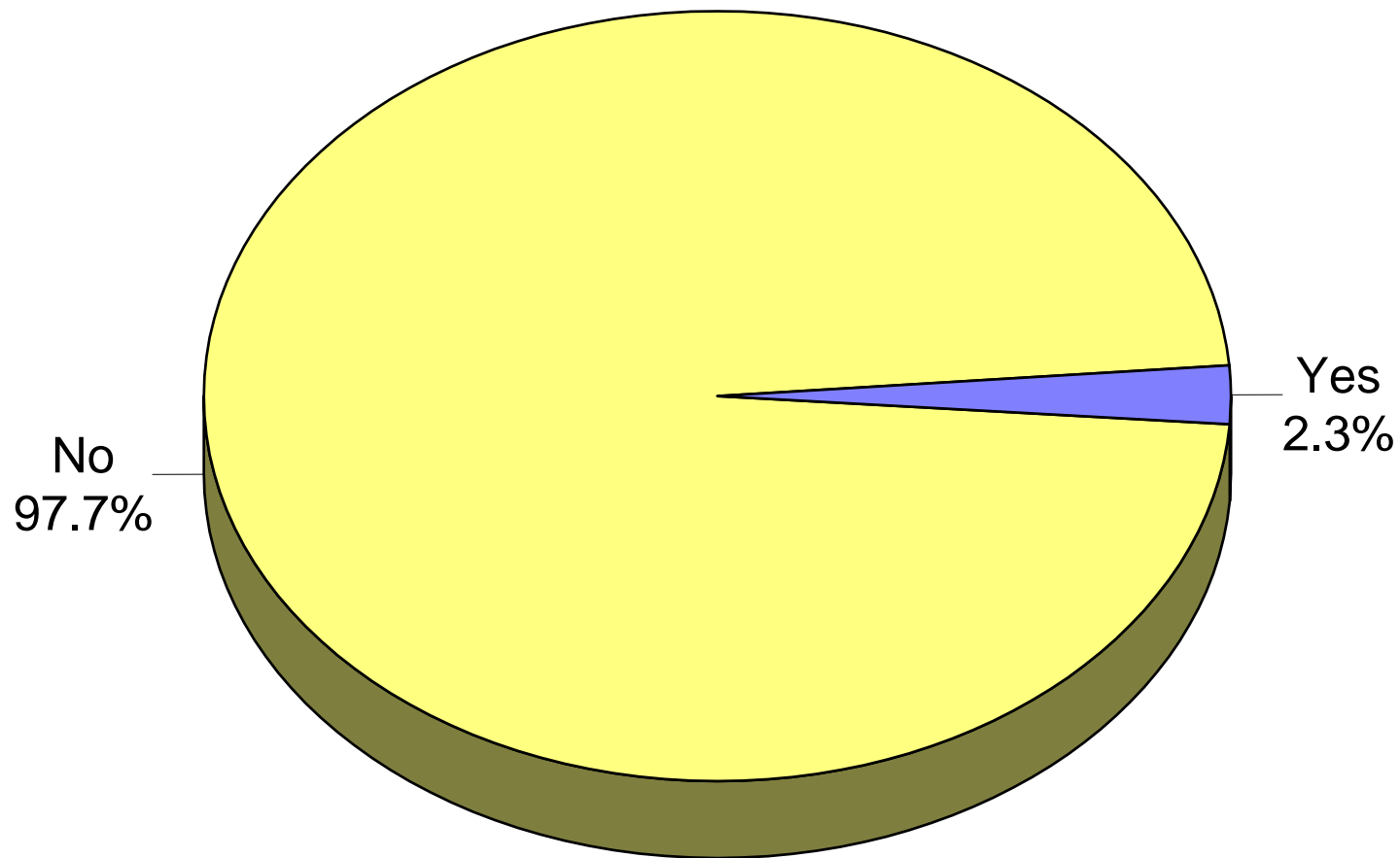
Body Mass Index



*Note: Anne Arundel is significantly different from Maryland and National.

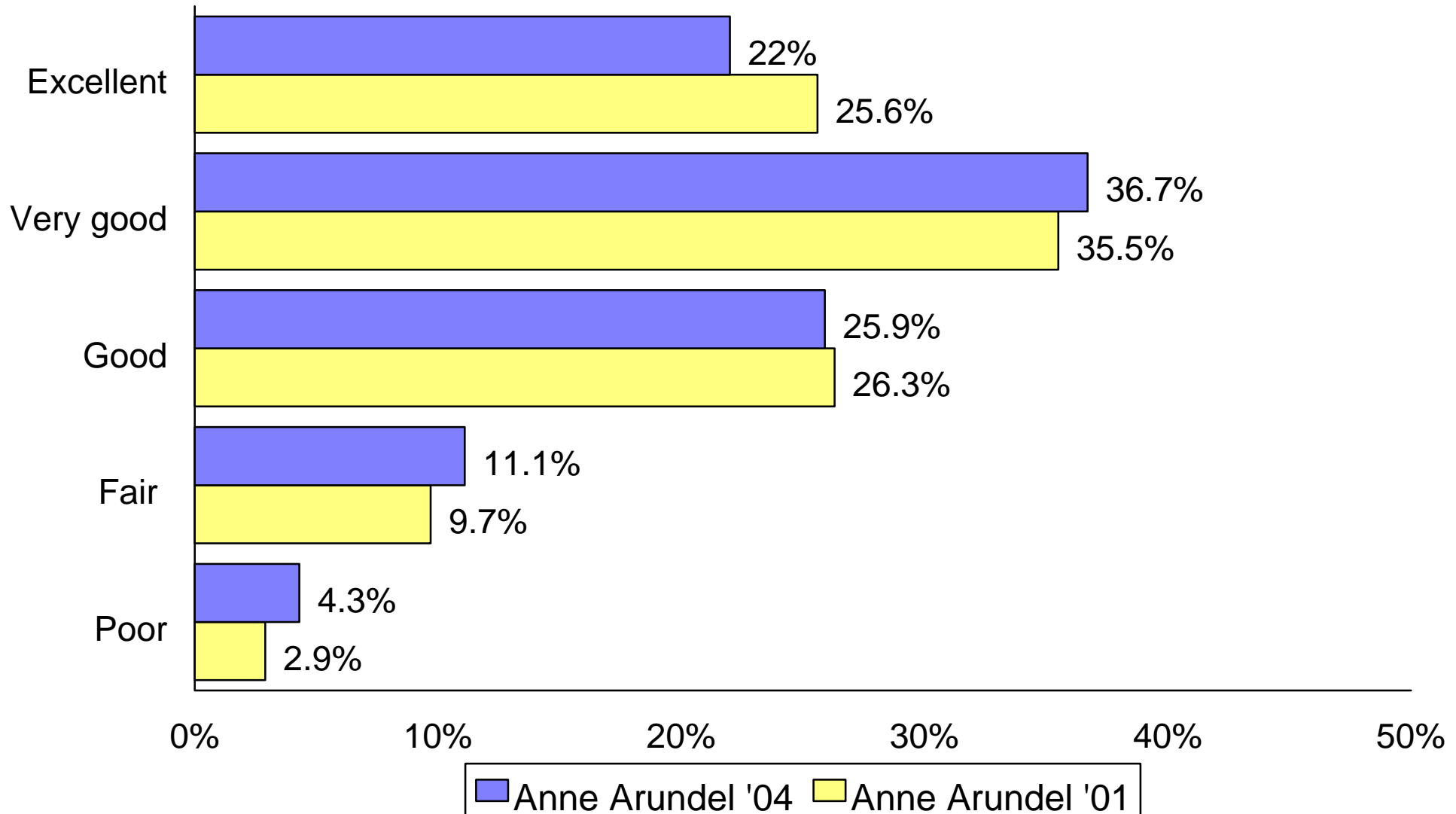
To your knowledge, are you now pregnant?

Asked only of Females who have not had a hysterectomy

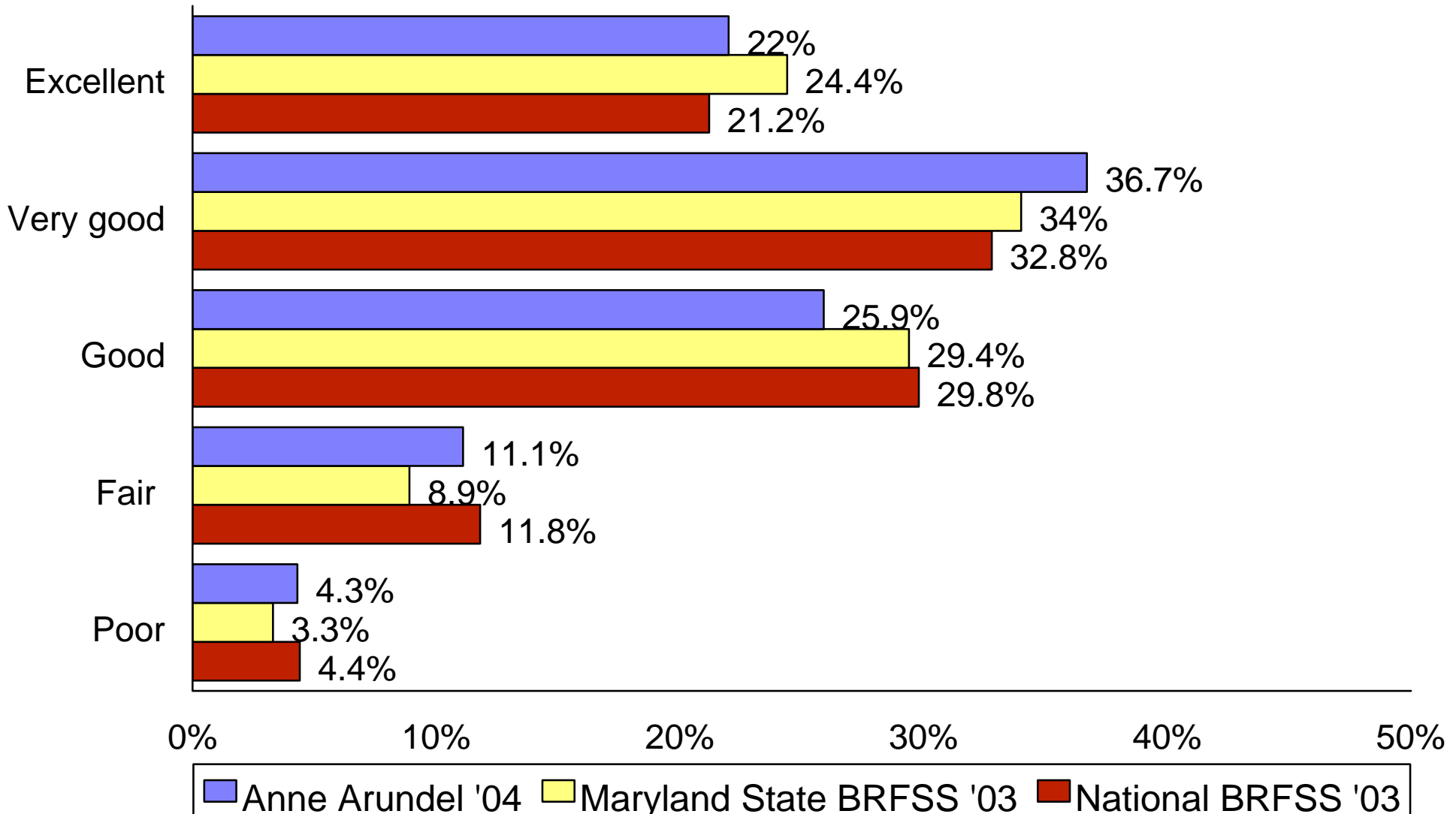


Health Status and Healthy Days

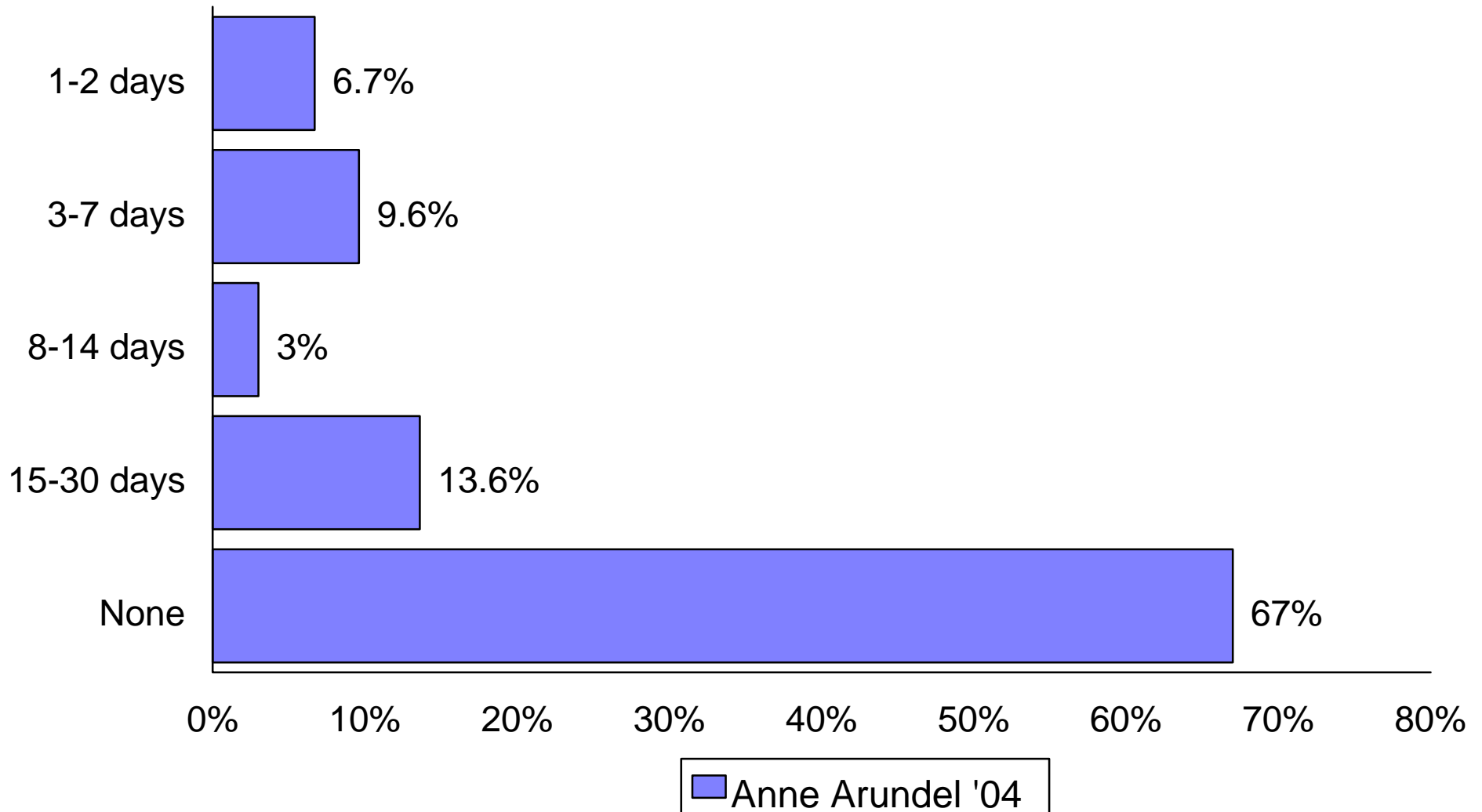
Would you say in general that your health is...?



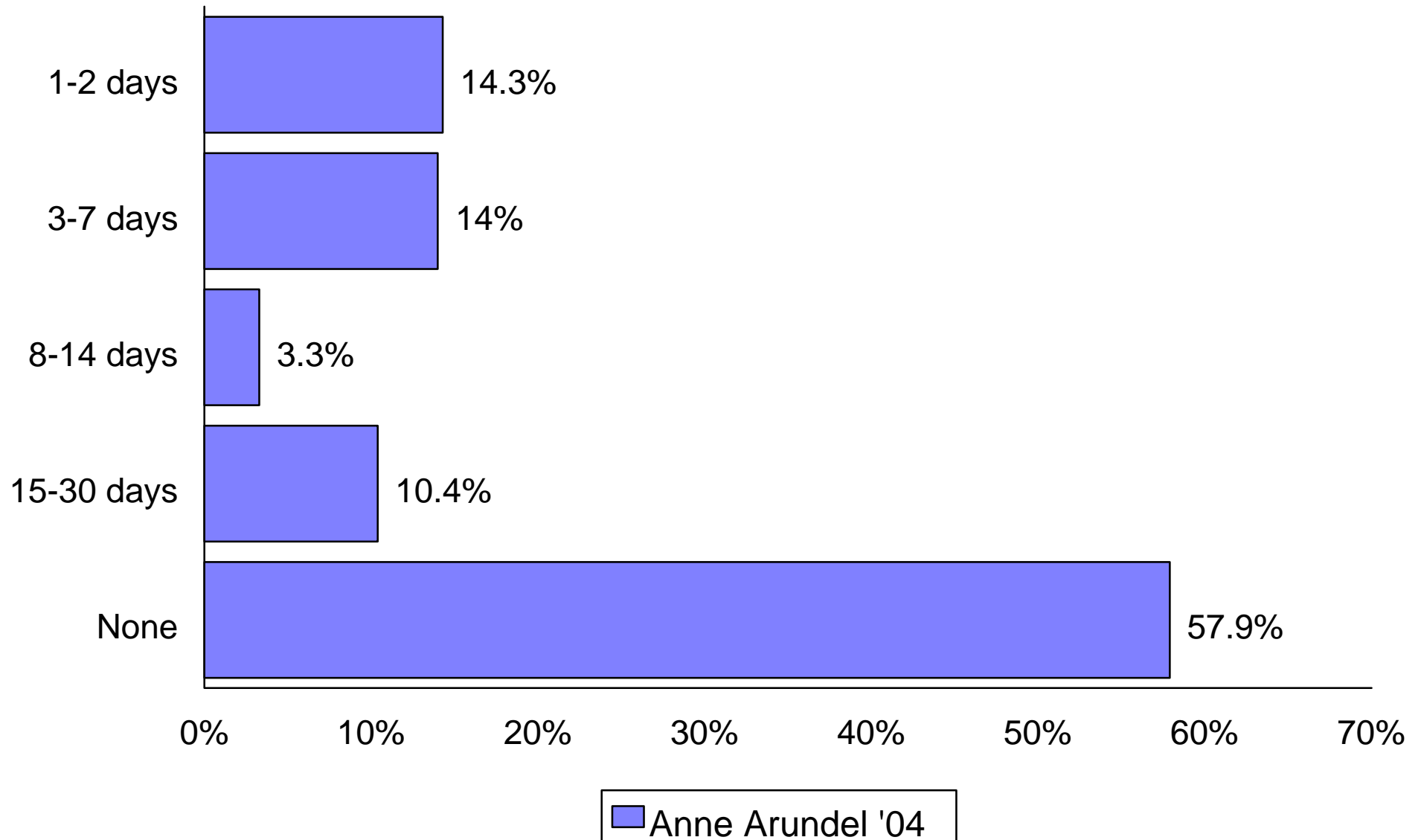
Would you say in general that your health is...?



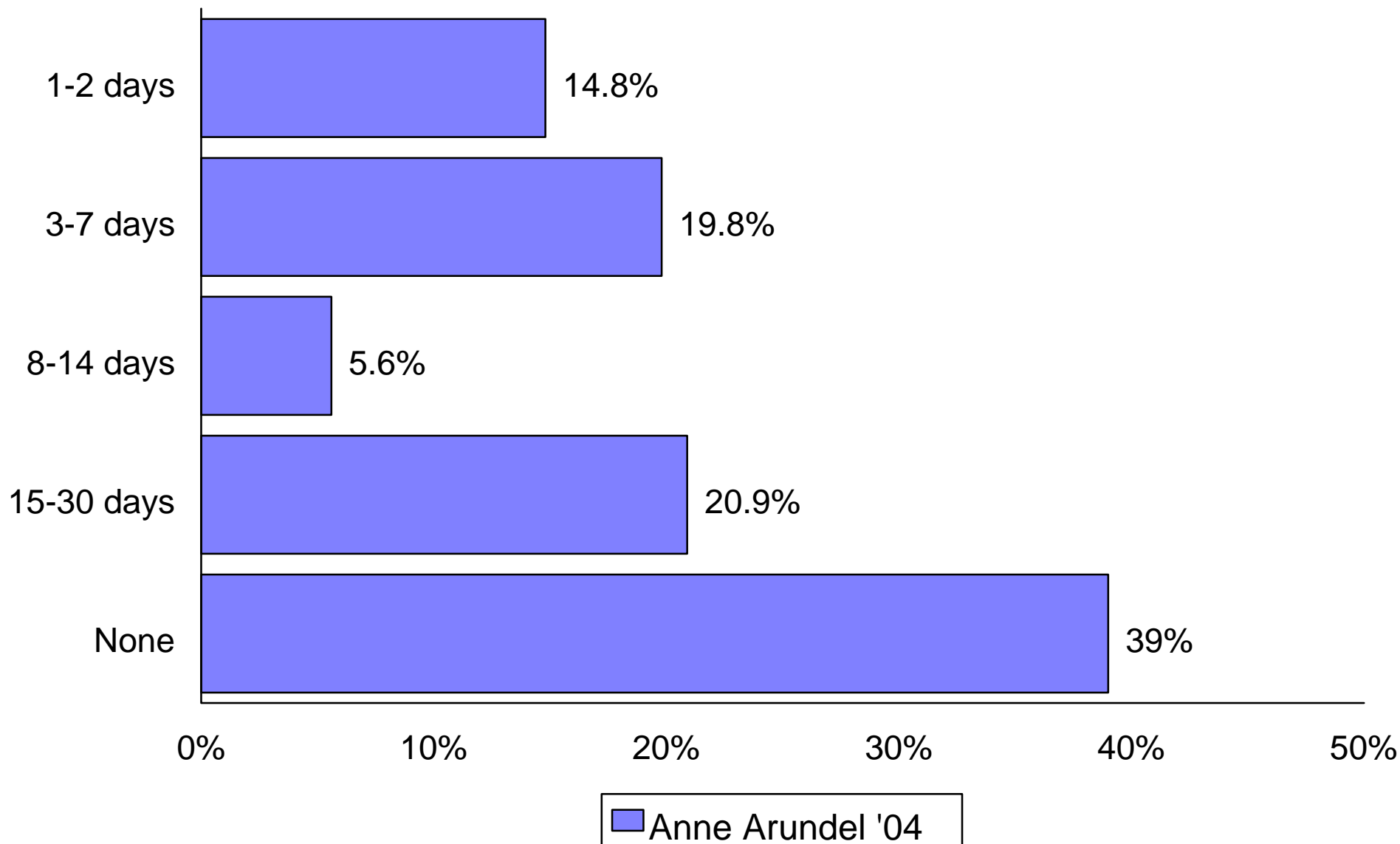
During the past 30 days, for about how many days did pain make it hard for you to do your usual activities?



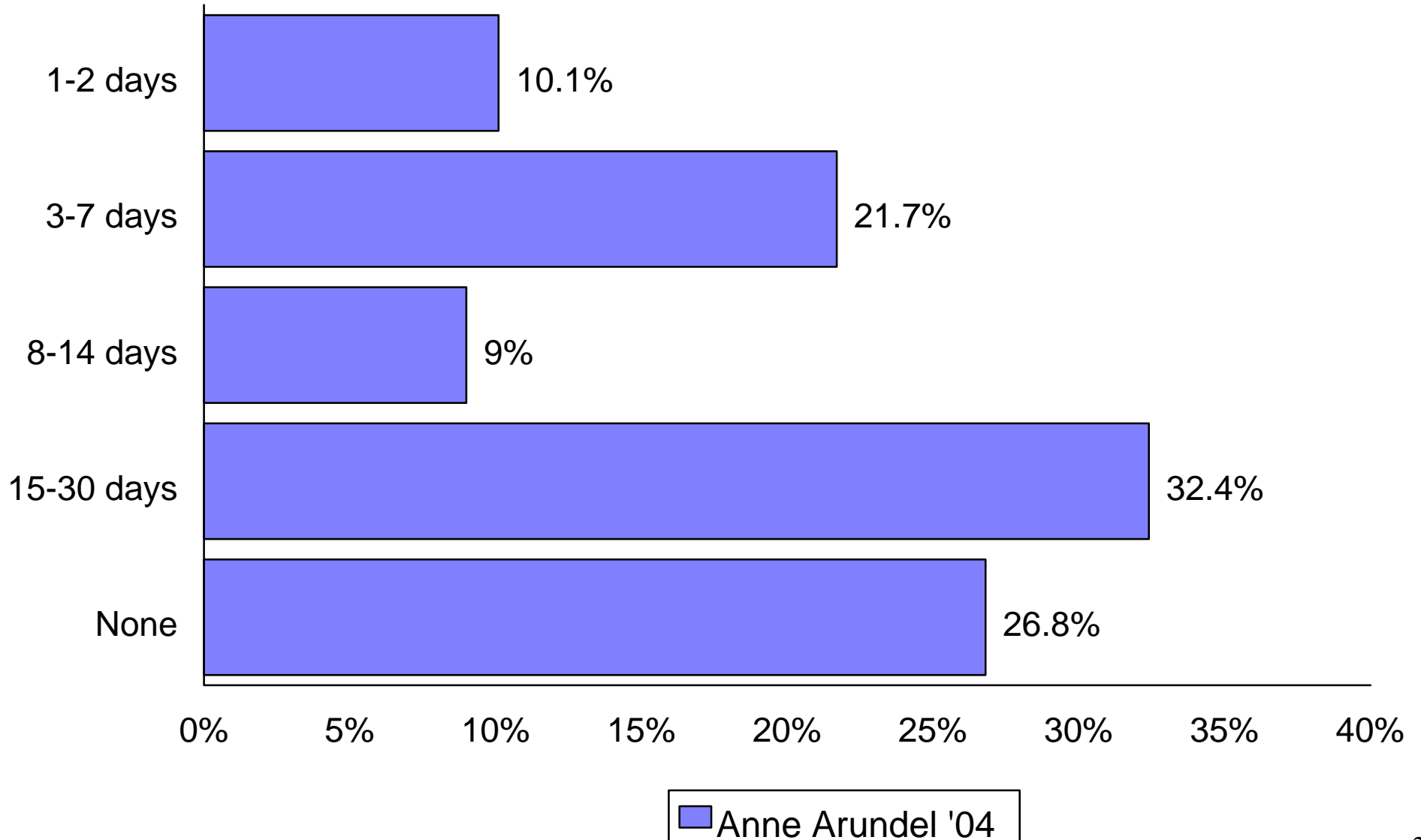
During the past 30 days, for about how many days have you felt sad, blue, or depressed?



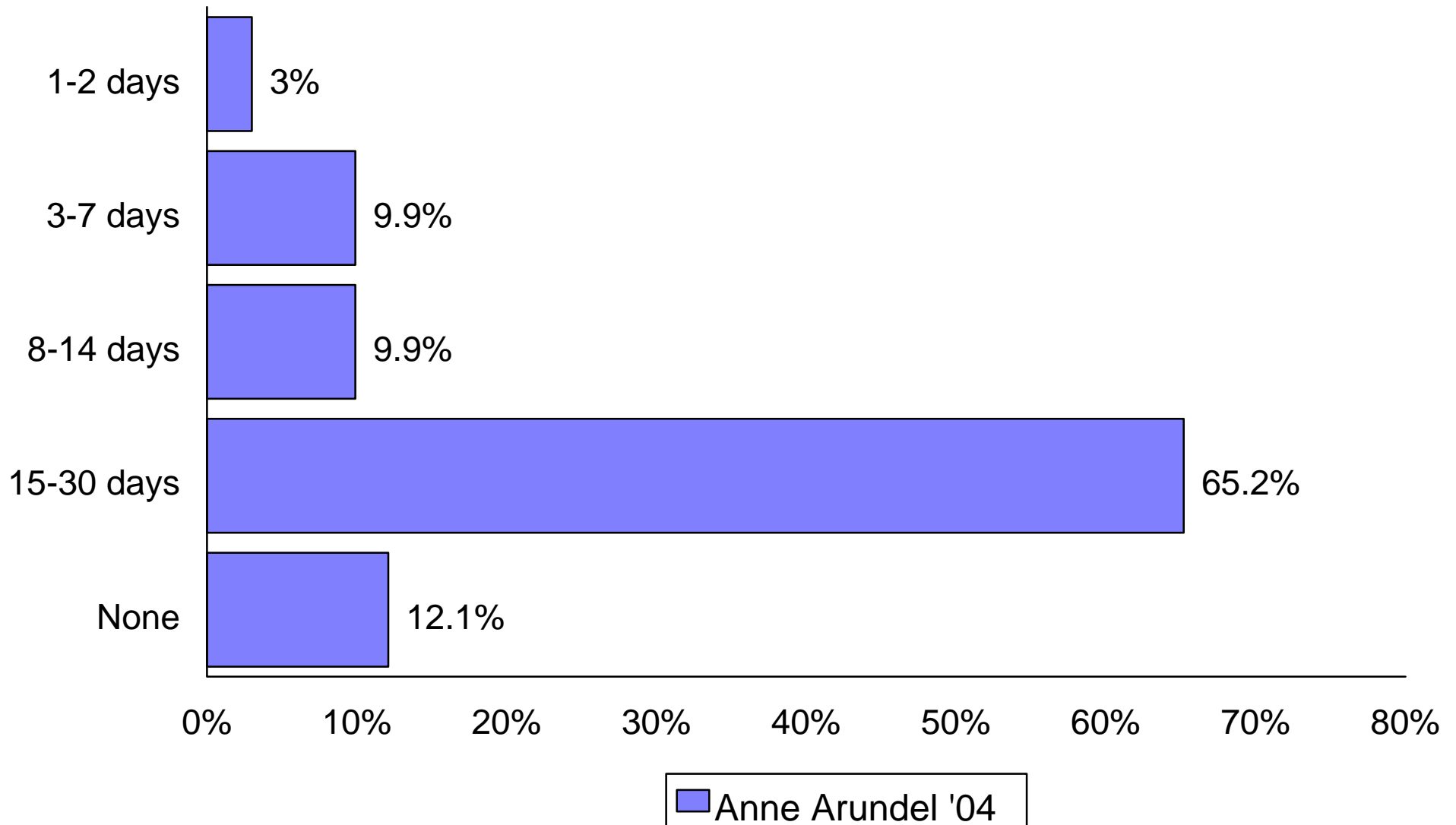
During the past 30 days, for about how many days have you felt worried, tense, or anxious?



During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?



During the past 30 days, for about how many days have you felt very healthy and full of energy?



Statistically Significant Differences

Health Status & Healthy Days

- ① Respondents 65 & over are least likely to rate general health as "Excellent."
- ① Respondents 55 & over are most likely to report days where pain interfered with usual activities.
- ① Respondents 65 & over are least likely to report days when they felt worried, tense or anxious.
- ① Respondents 65 & over are most likely to get enough rest/sleep, while those age 18-24 are least likely to get enough rest/sleep.
- ① Respondents 65 & over are least likely to feel very healthy and full of energy, while those age 18-24 are most likely to feel very healthy and full of energy.
- ① The higher the income, the higher the rating for general health.
- ① The higher the income, the more likely respondents are to report days where pain interfered with usual activities.

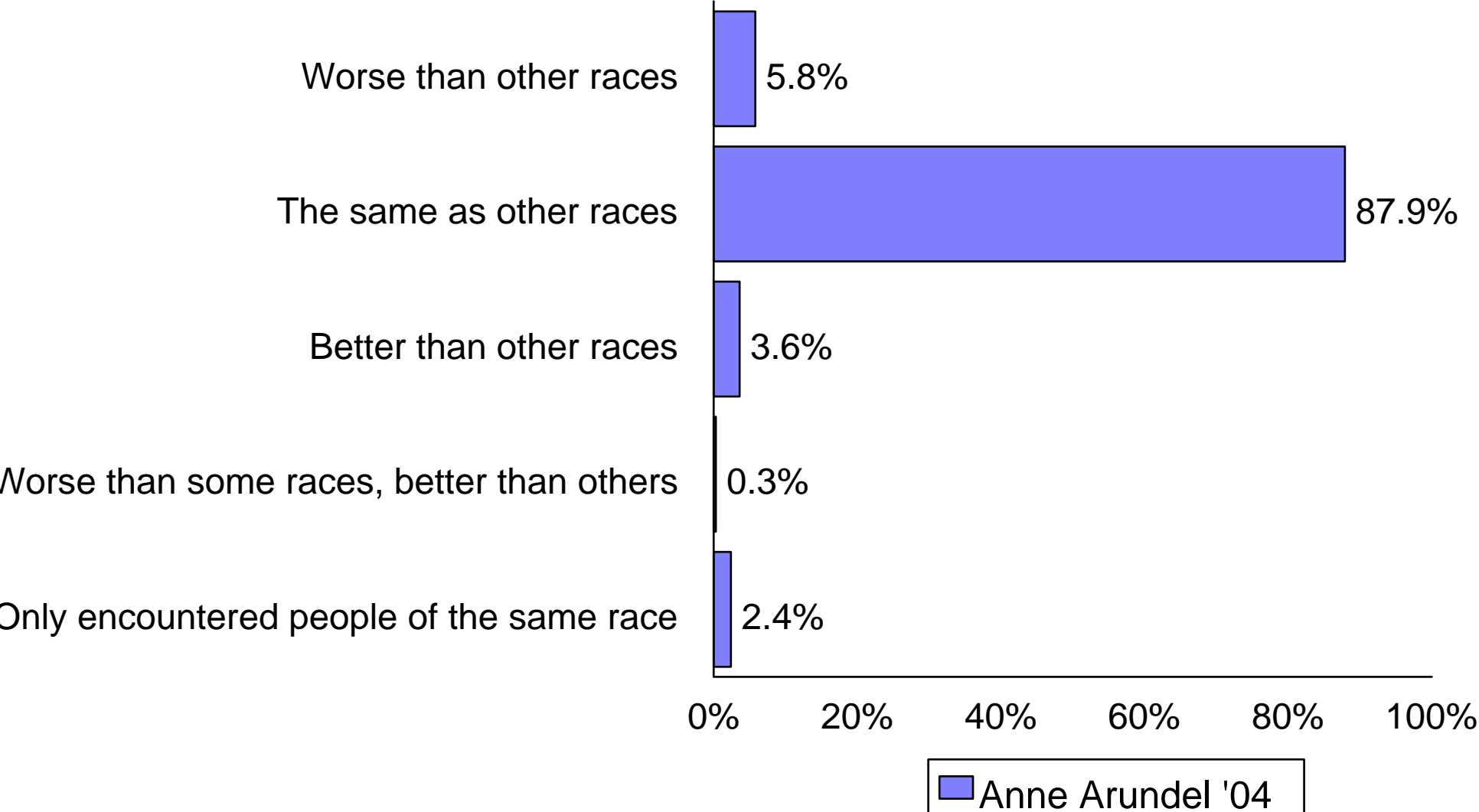
Statistically Significant Differences

Health Status & Healthy Days (cont.)

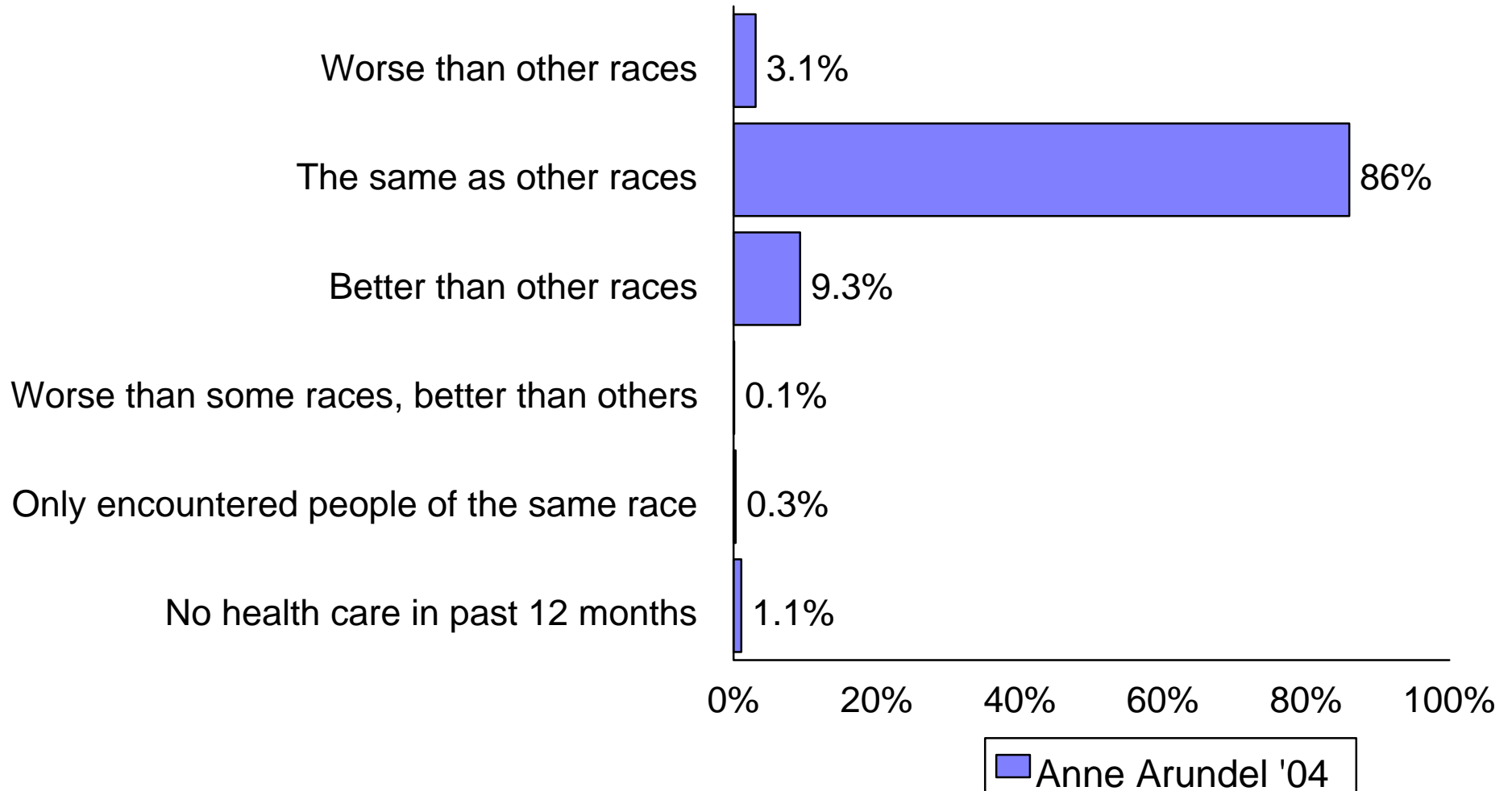
- ① The higher the income, the less likely respondents are to report days when they felt sad, blue or depressed.
- ① The higher the income, the more likely respondents are to report days of feeling very healthy and full of energy.
- ① Females are more likely to report days of feeling sad, blue or depressed.
- ① Females are more likely to report days of feeling worried, tense or anxious.

Reactions To Race

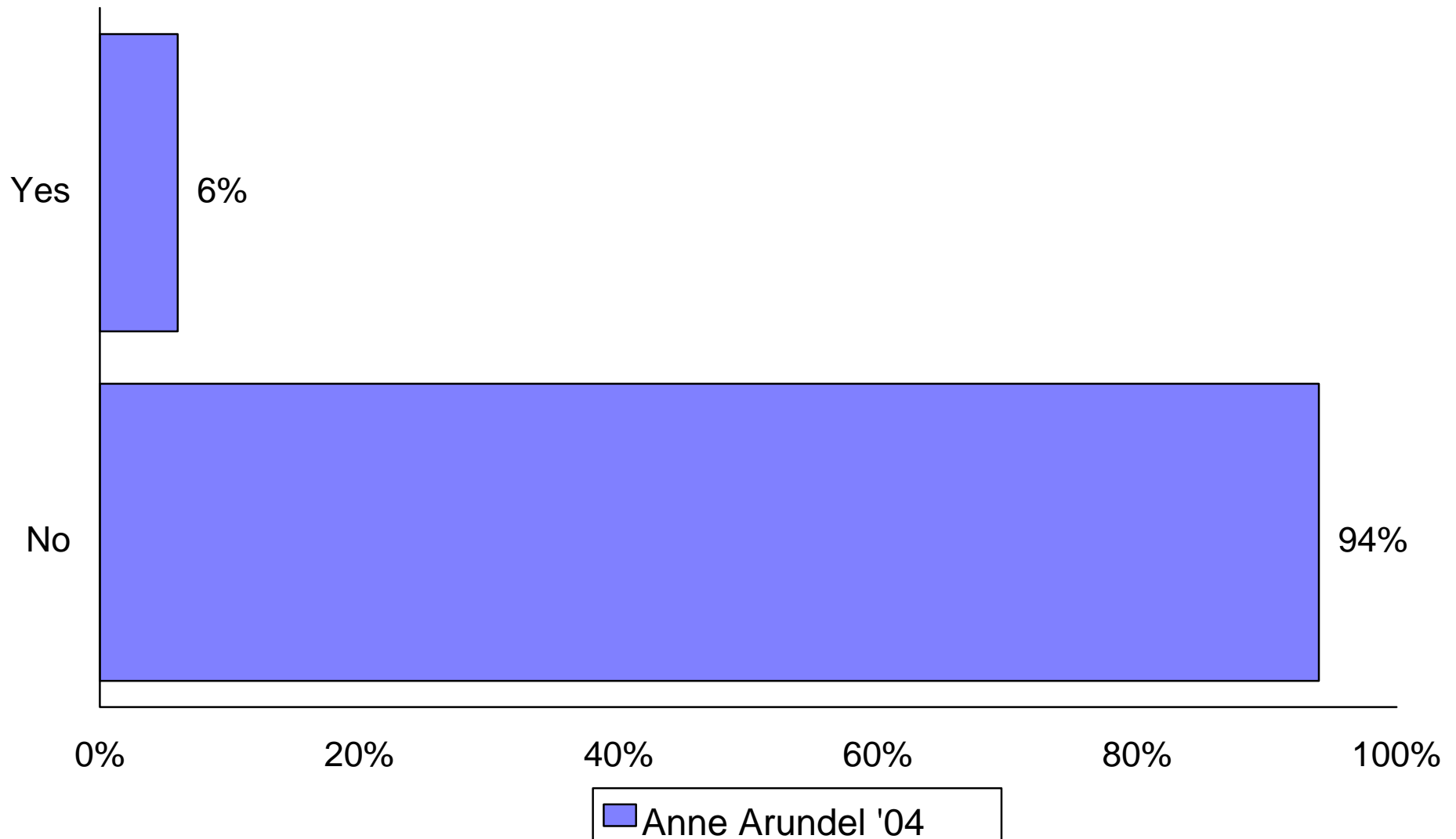
During the past 12 months at work, do you feel you were treated worse than, the same as, or better than people of other races?



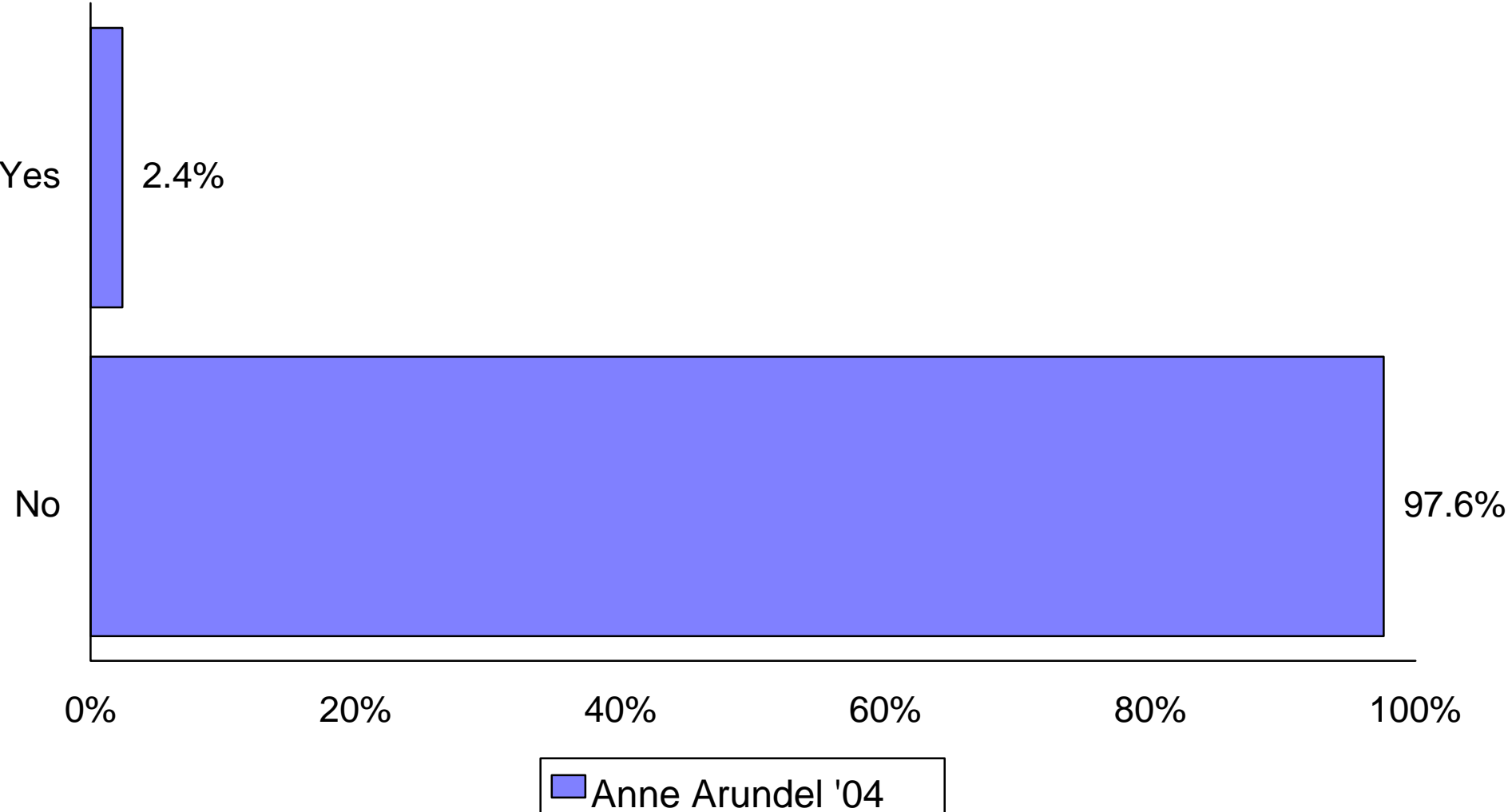
During the past 12 months when seeking health care, do you feel your experiences were worse than, the same as, or better than people of other races?



Within the past 30 days, have you felt emotionally upset, such as angry, sad, or frustrated, as a result of how you were treated based on your race?



Within the past 30 days, have you experienced any physical symptoms, such as, a headache, an upset stomach, tensing of your muscles, or a pounding heart, as a result of how you were treated based on your race?



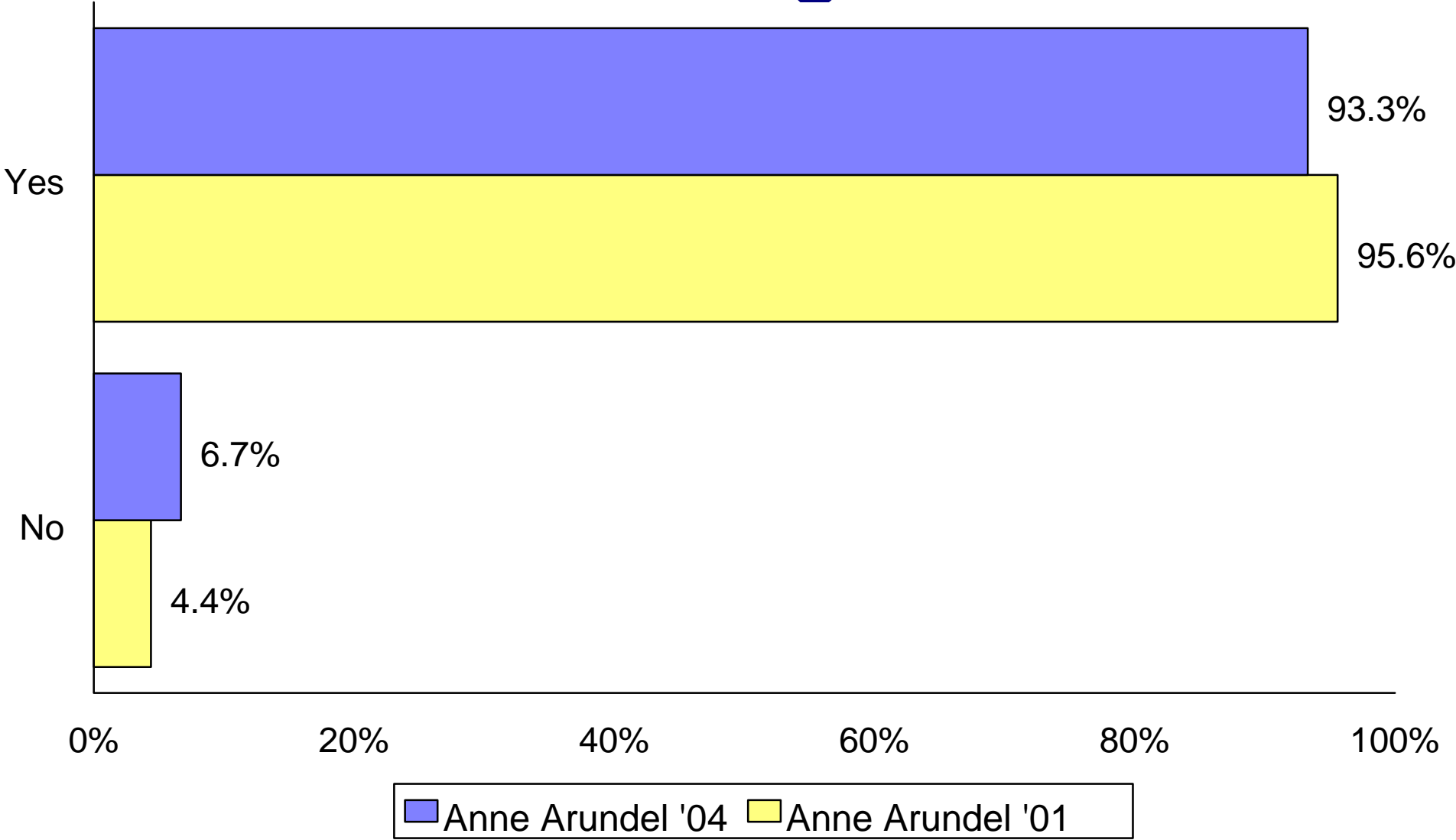
Statistically Significant Differences

Reactions to Race

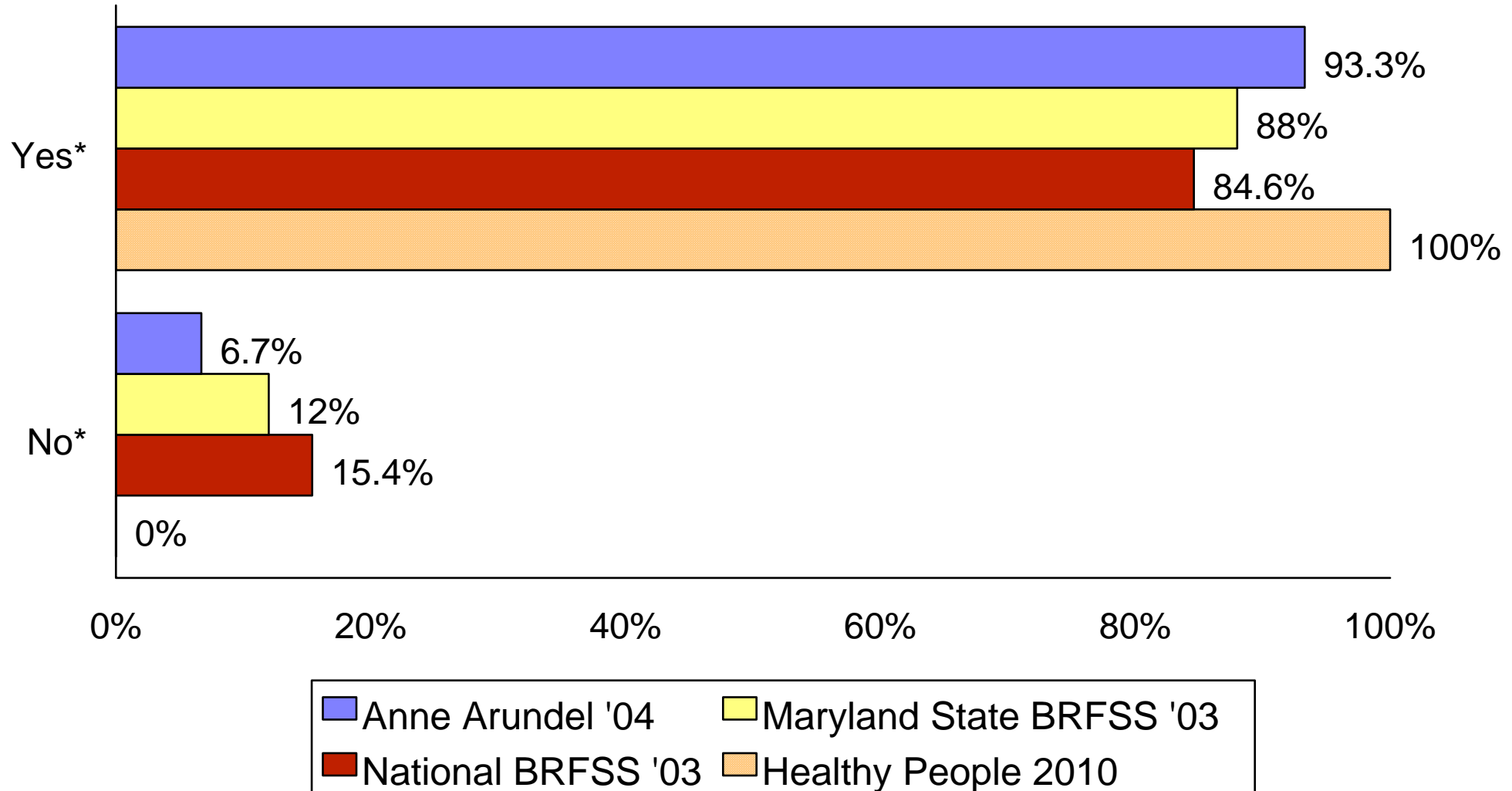
- ① Hispanic respondents are less likely than Non-Hispanic respondents to feel treated "the same as other races" while at work.
- ① Hispanic respondents are less likely than Non-Hispanic respondents to feel treated "better than other races" when seeking health care.
- ① Asian respondents are less likely to feel treated "the same as other races" while at work.
- ① White respondents are less likely than African Americans or Asians to have been emotionally upset because of how they were treated based on their race.
- ① The lower the income, the less likely respondents are to feel treated "the same as other races" while at work.
- ① The lower the income, the less likely respondents are to feel treated "the same as other races" when seeking health care.

Health Care Access

Do you have any kind of health care coverage?

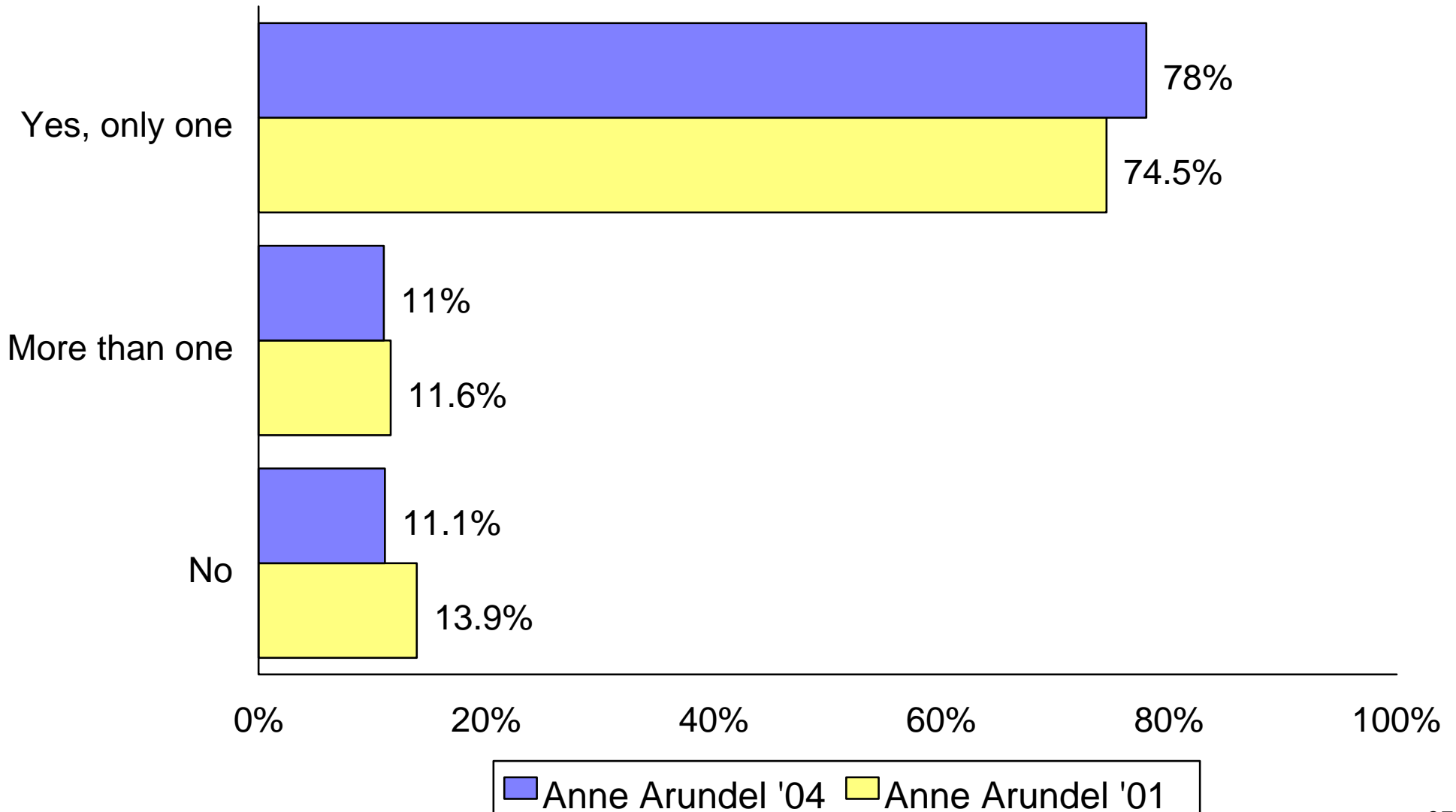


Do you have any kind of health care coverage?

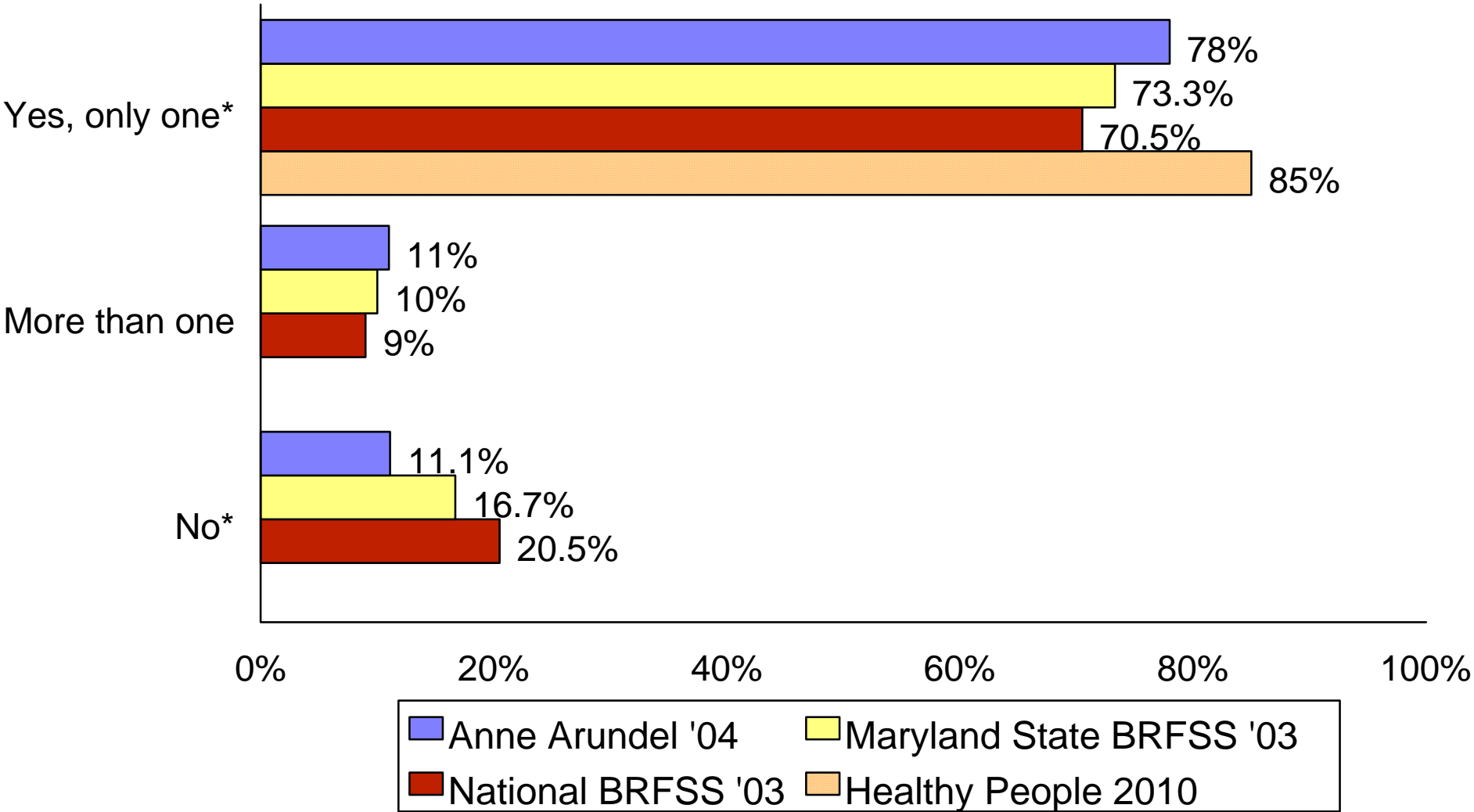


*Note: Anne Arundel is significantly different than National.

Do you have one person you think of as your personal doctor or health care provider?

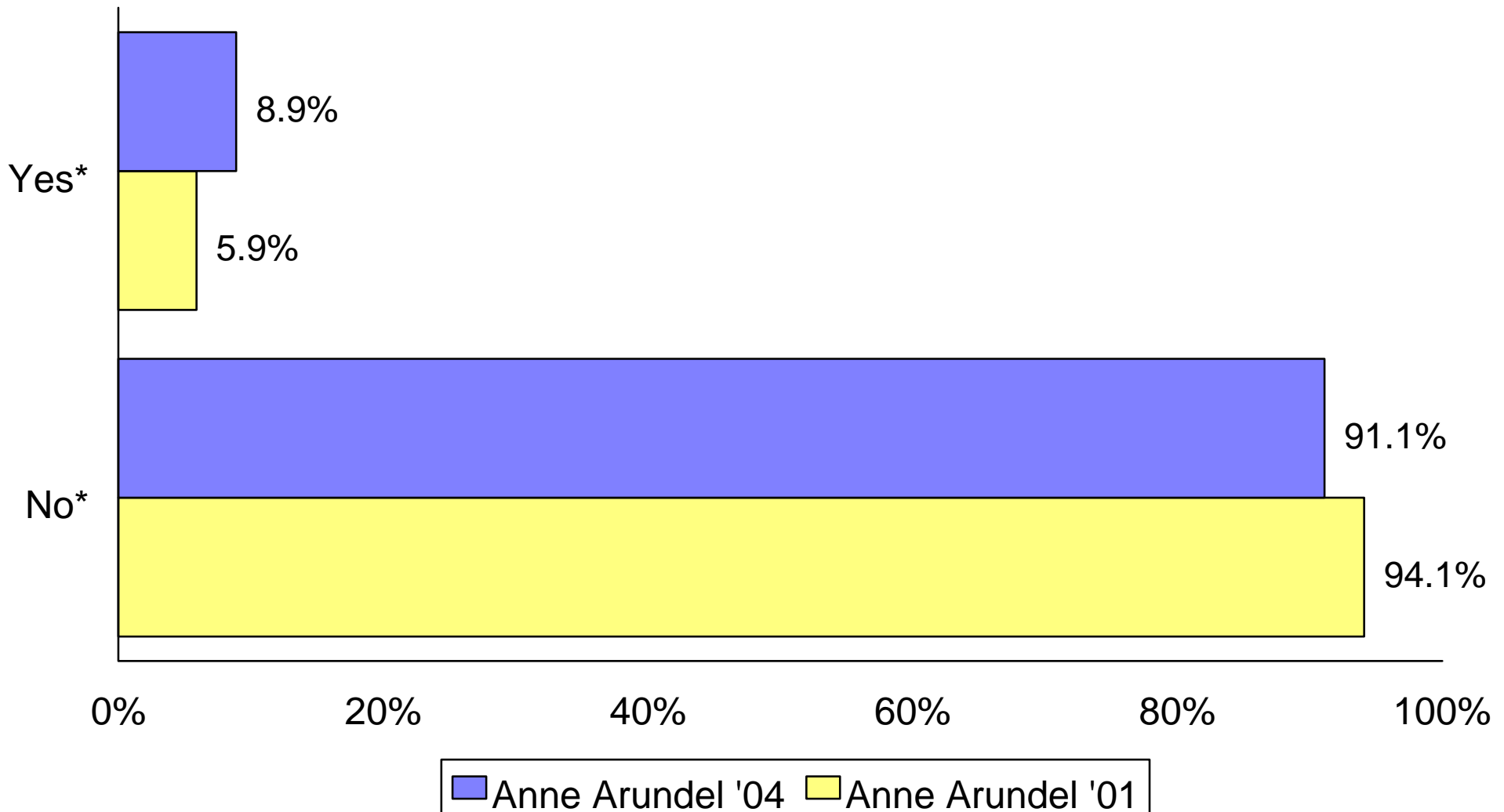


Do you have one person you think of as your personal doctor or health care provider?



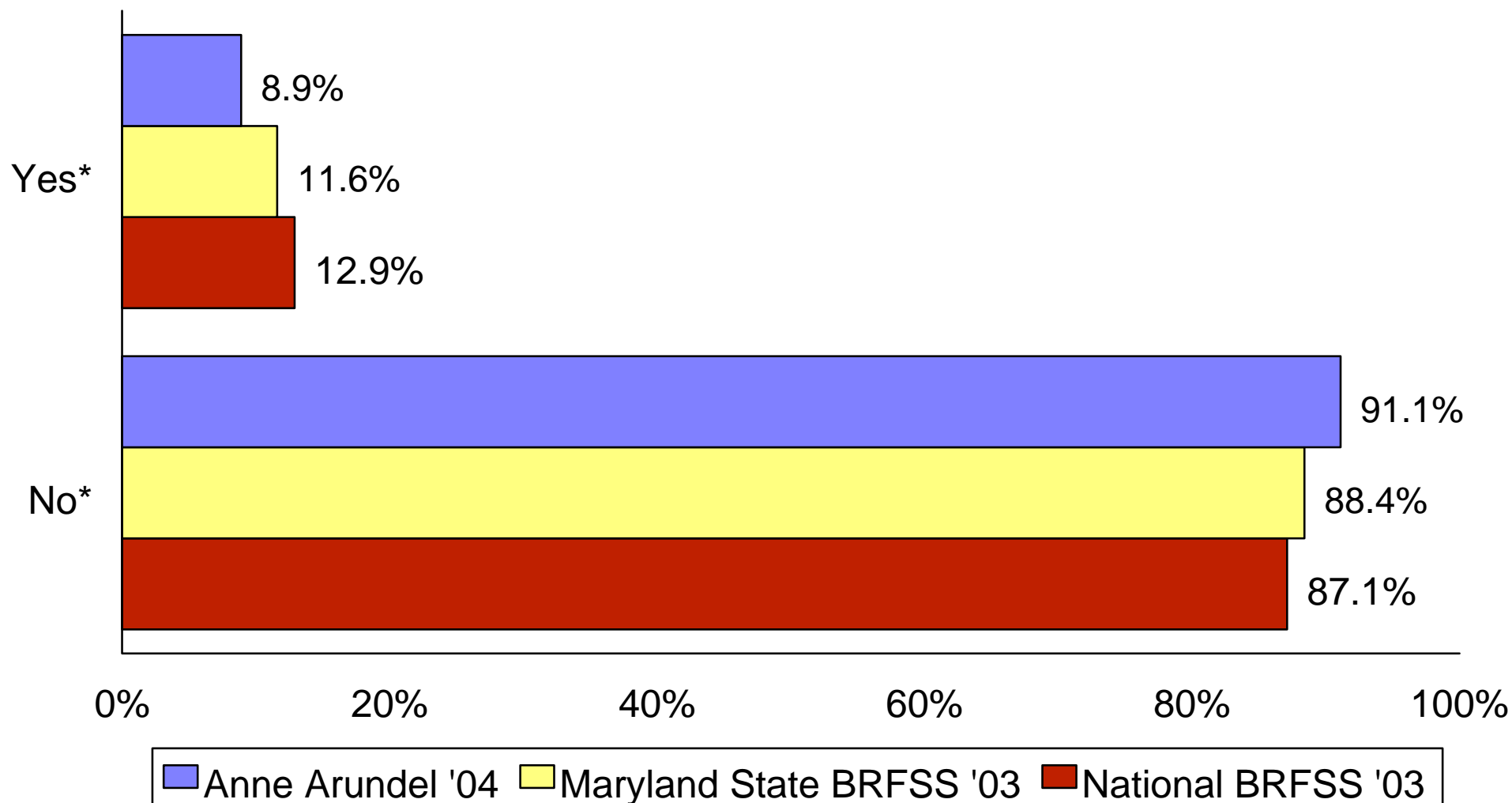
*Note: Anne Arundel is significantly different than Maryland and National.

Was there a time during the past 12 months when you needed to see a doctor but could not because of the cost?



*Note: A statistically significant difference exists between 2004 and 2001.

Was there a time during the past 12 months when you needed to see a doctor but could not because of the cost?



*Note: Anne Arundel is significantly different than National.

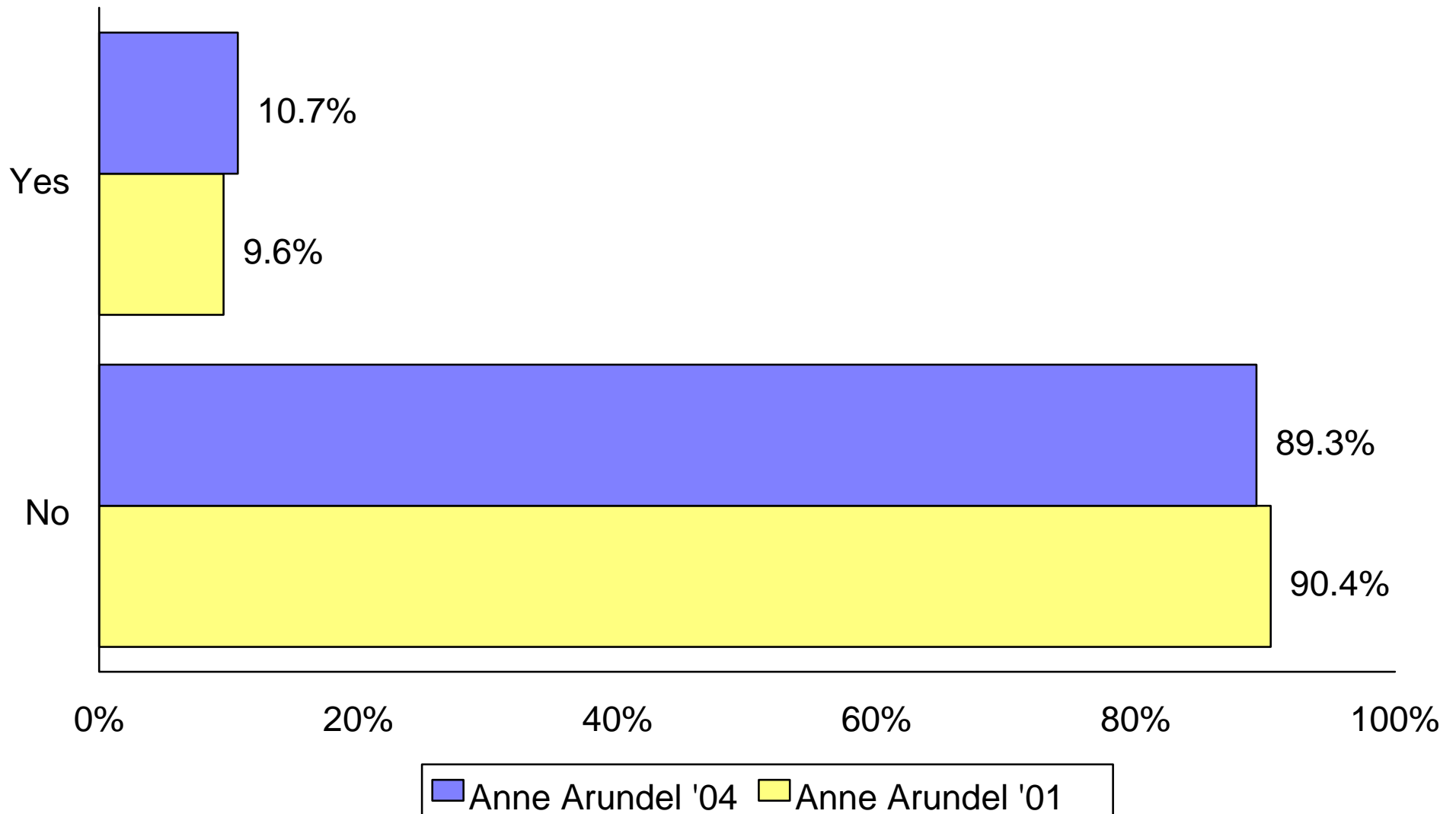
Statistically Significant Differences

Health Care Access

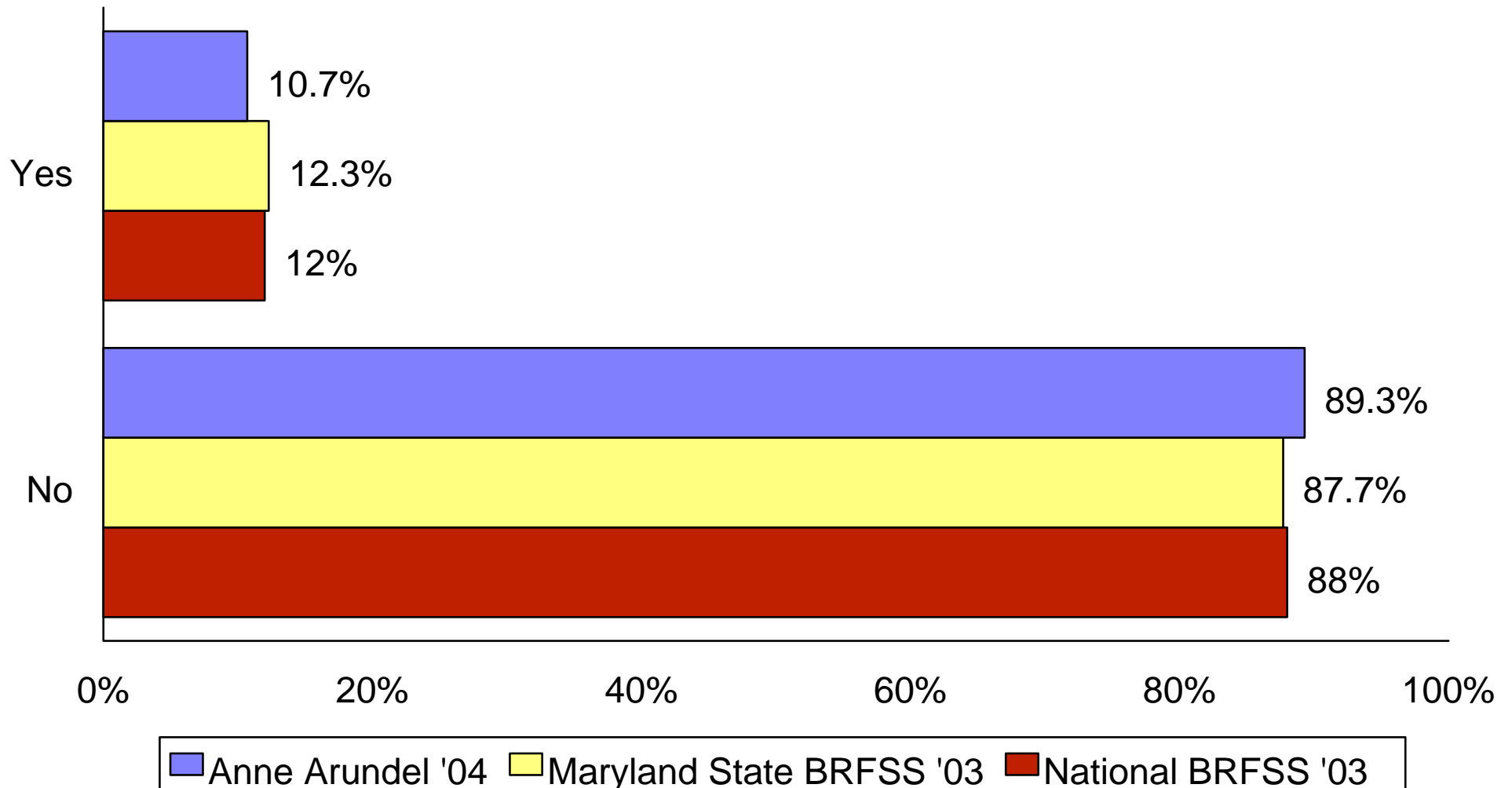
- ① 18-24 year olds are least likely to have health care coverage.
- ① The younger the respondent, the less likely to have one person thought of as personal doctor.
- ① The lower the income, the less likely respondents are to have health care coverage.
- ① "Less than \$15,000" income group is least likely to have one person thought of as personal doctor.
- ① "Under \$25,000" income group is more likely to have needed to see a doctor, but could not because of the cost.
- ① Males are less likely than females to have one person thought of as their personal doctor.
- ① Females are more likely than males to have needed to see a doctor, but could not because of the cost.

Asthma

Have you ever been told by a doctor, nurse, or other health professional that you have asthma?

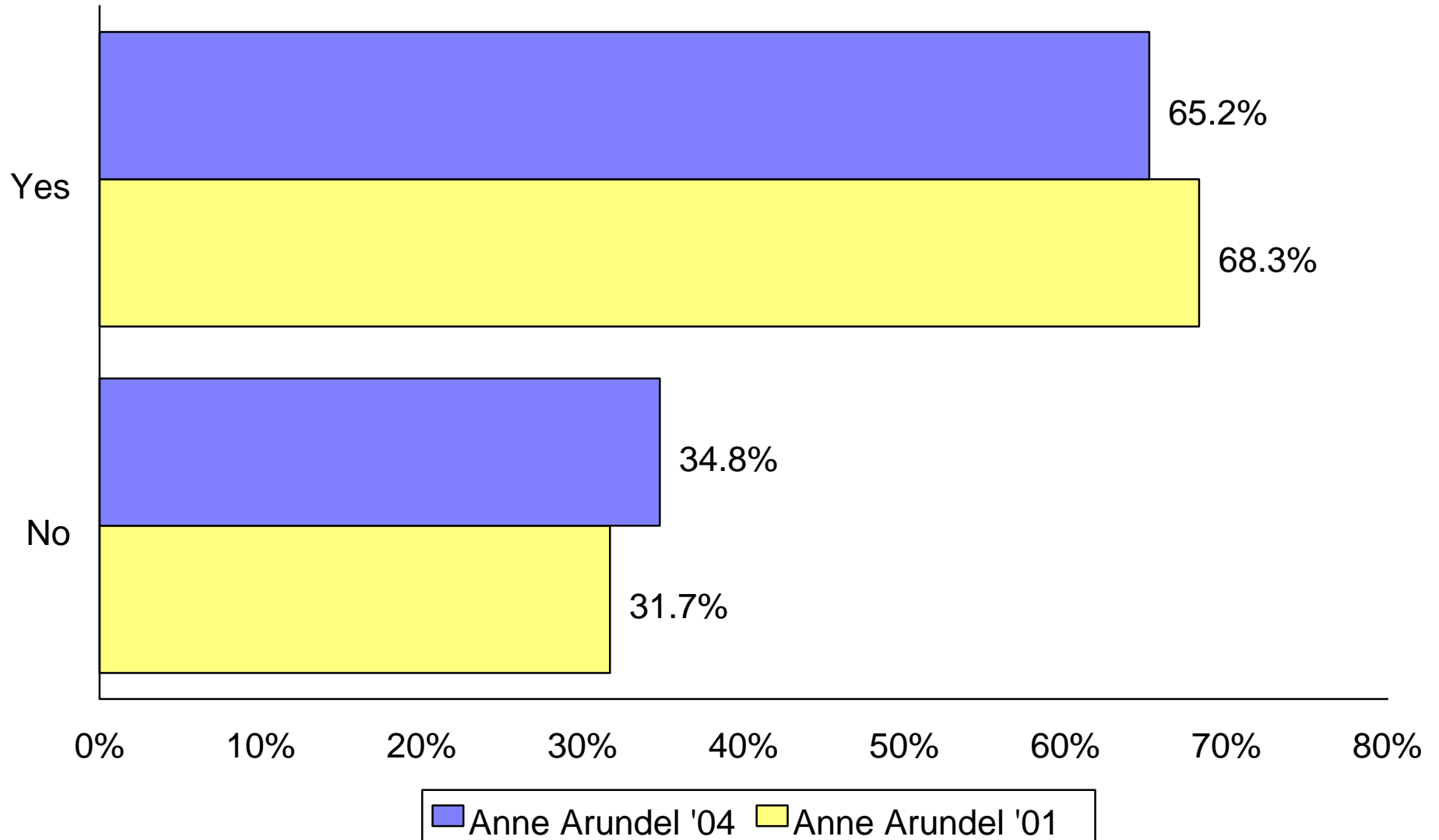


Have you ever been told by a doctor, nurse, or other health professional that you have asthma?



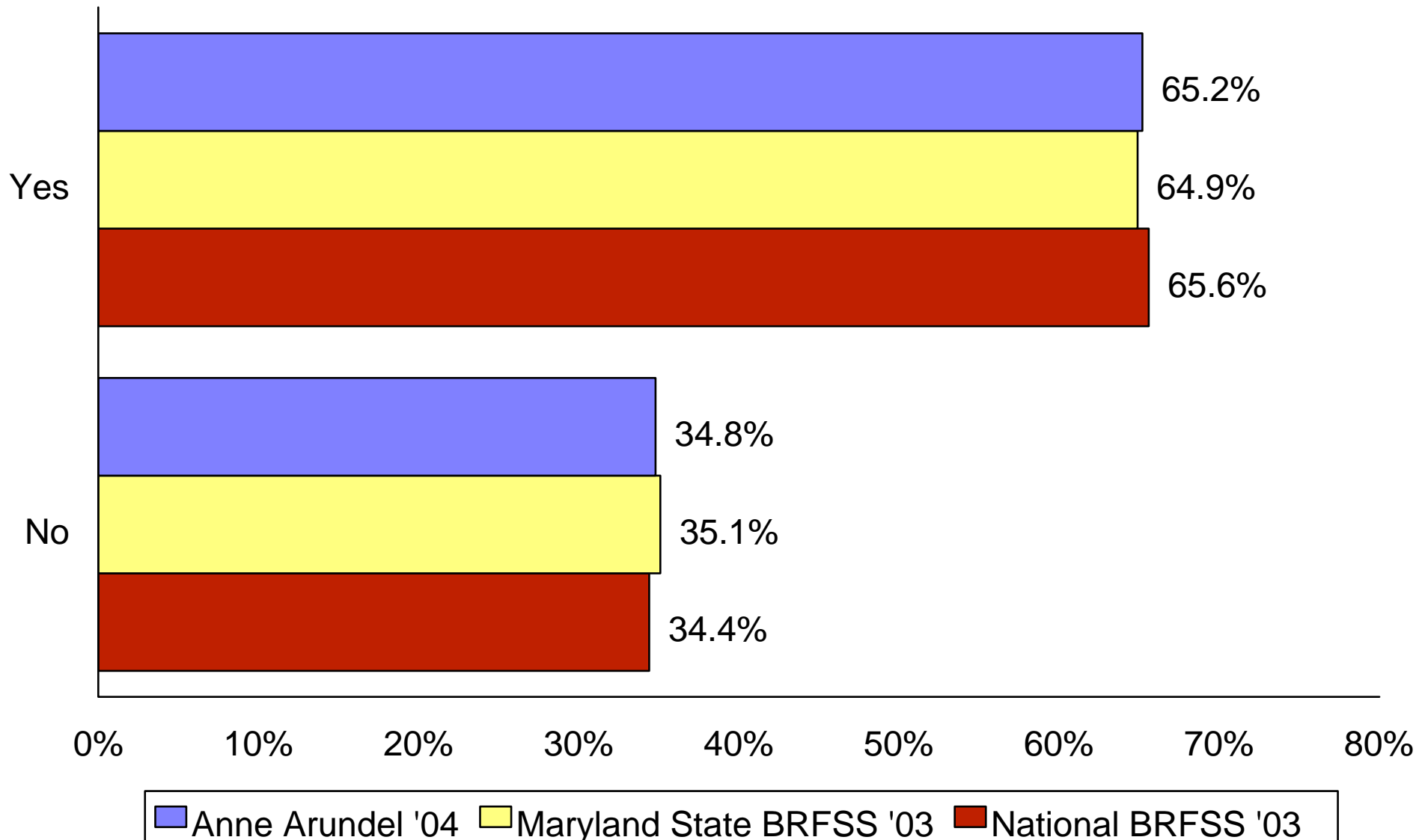
Do you still have asthma?

Respondents who have ever had asthma



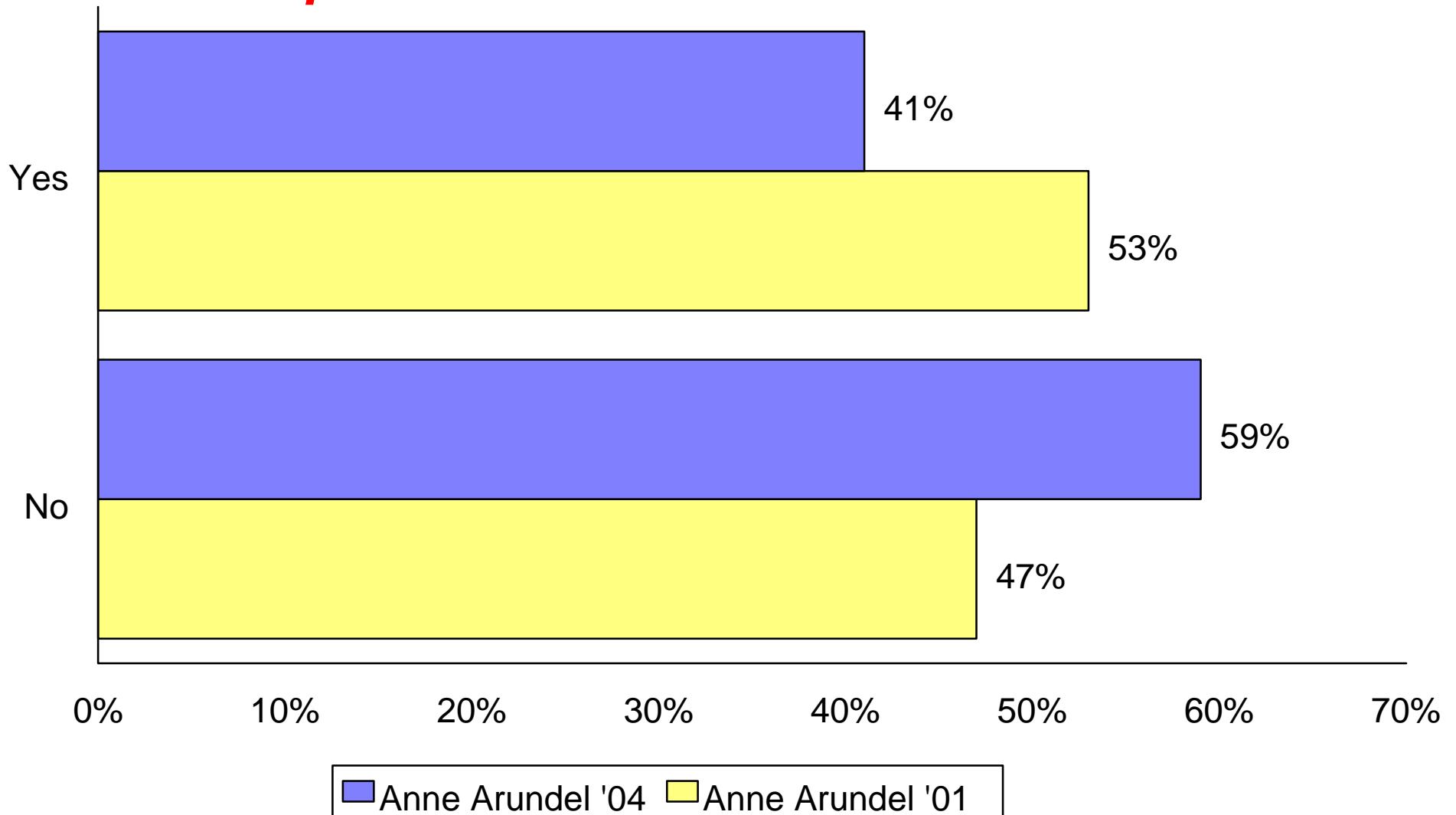
Do you still have asthma?

Respondents who have ever had asthma



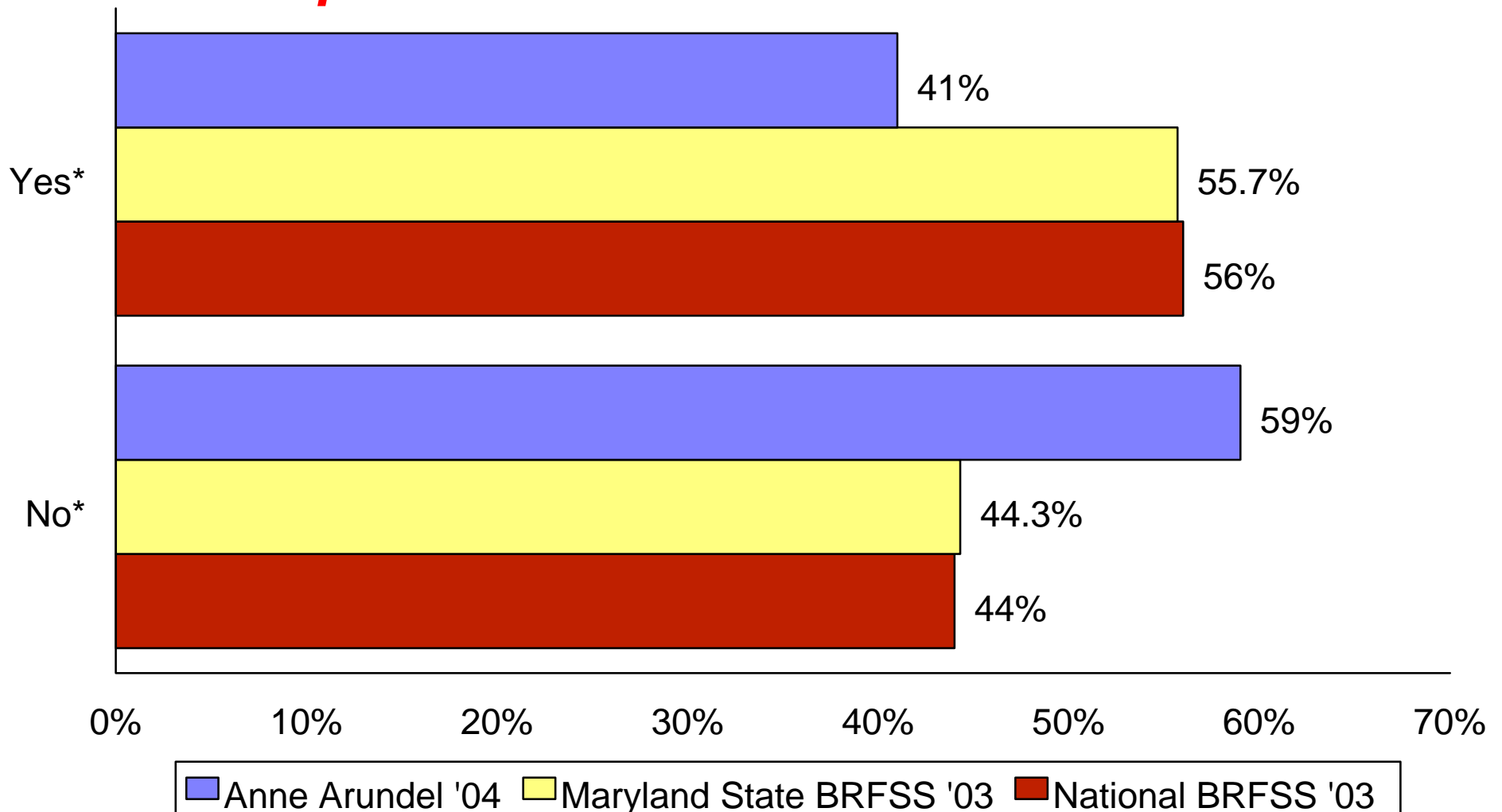
During the past 12 months, have you had an episode of asthma or an asthma attack?

Respondents who have ever had asthma



During the past 12 months, have you had an episode of asthma or an asthma attack?

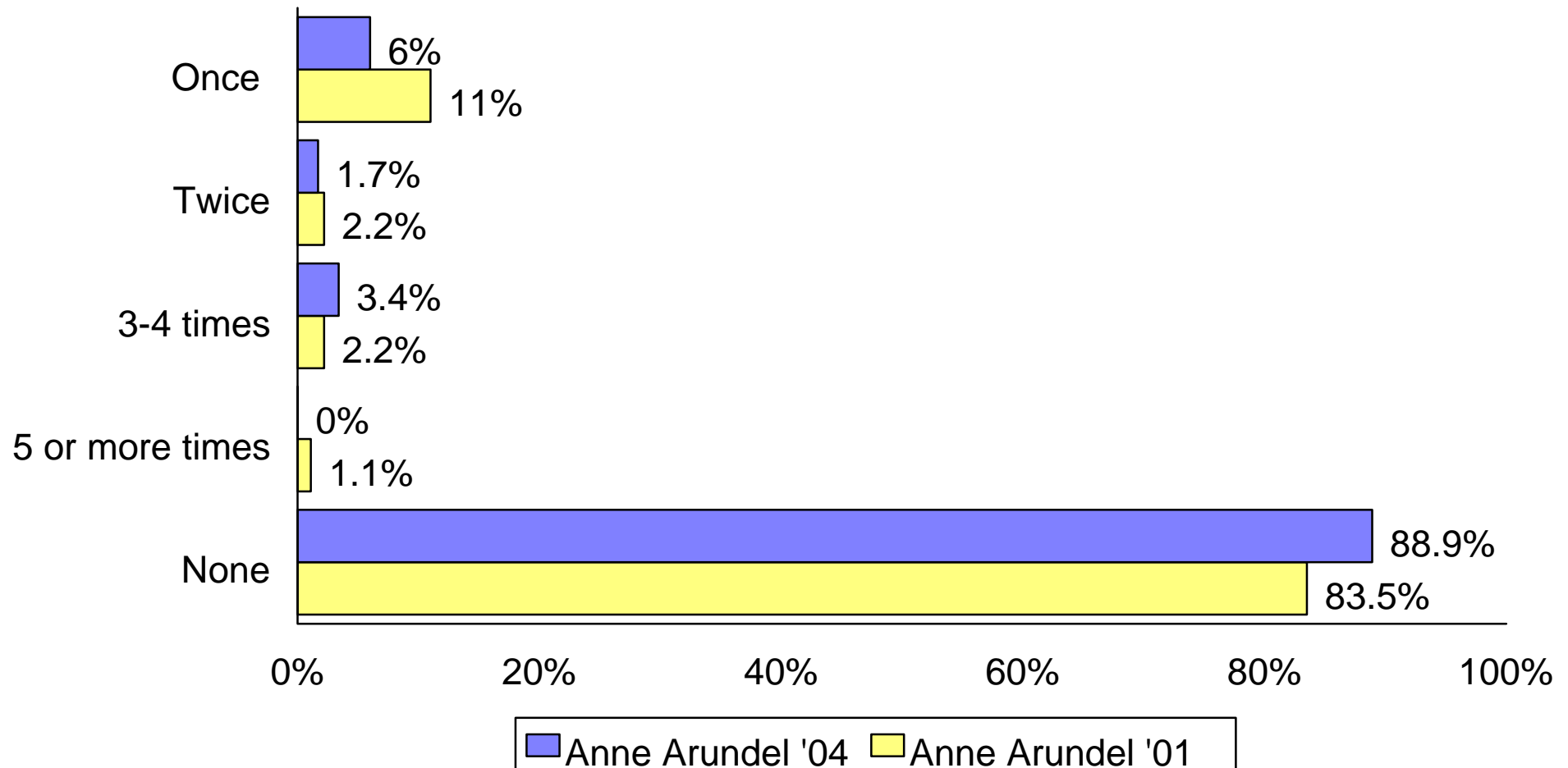
Respondents who have ever had asthma



*Note: Anne Arundel is significantly different than Maryland and National.

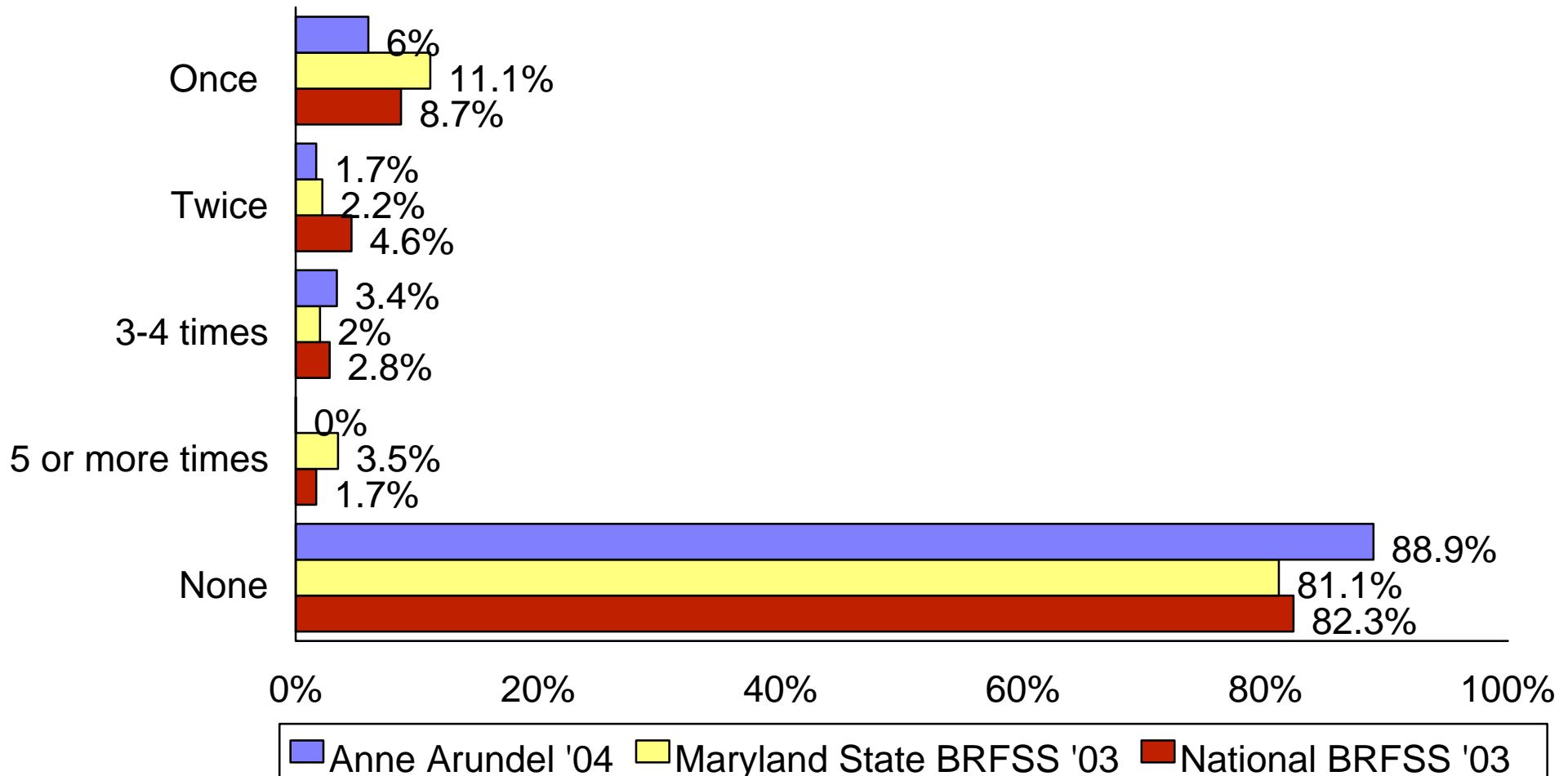
During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma or an asthma attack?

Respondents who have ever had asthma



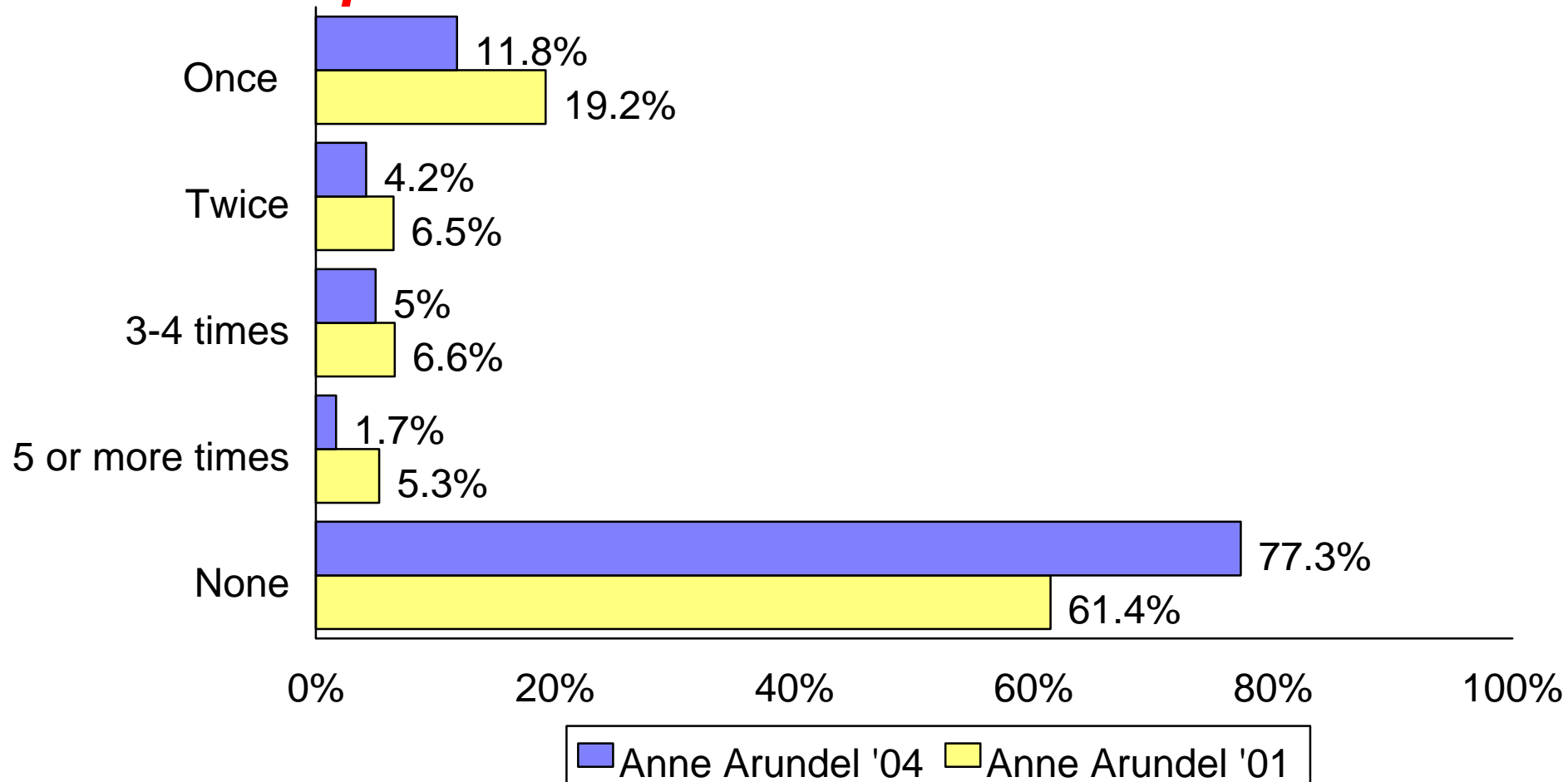
During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma or an asthma attack?

Respondents who have ever had asthma



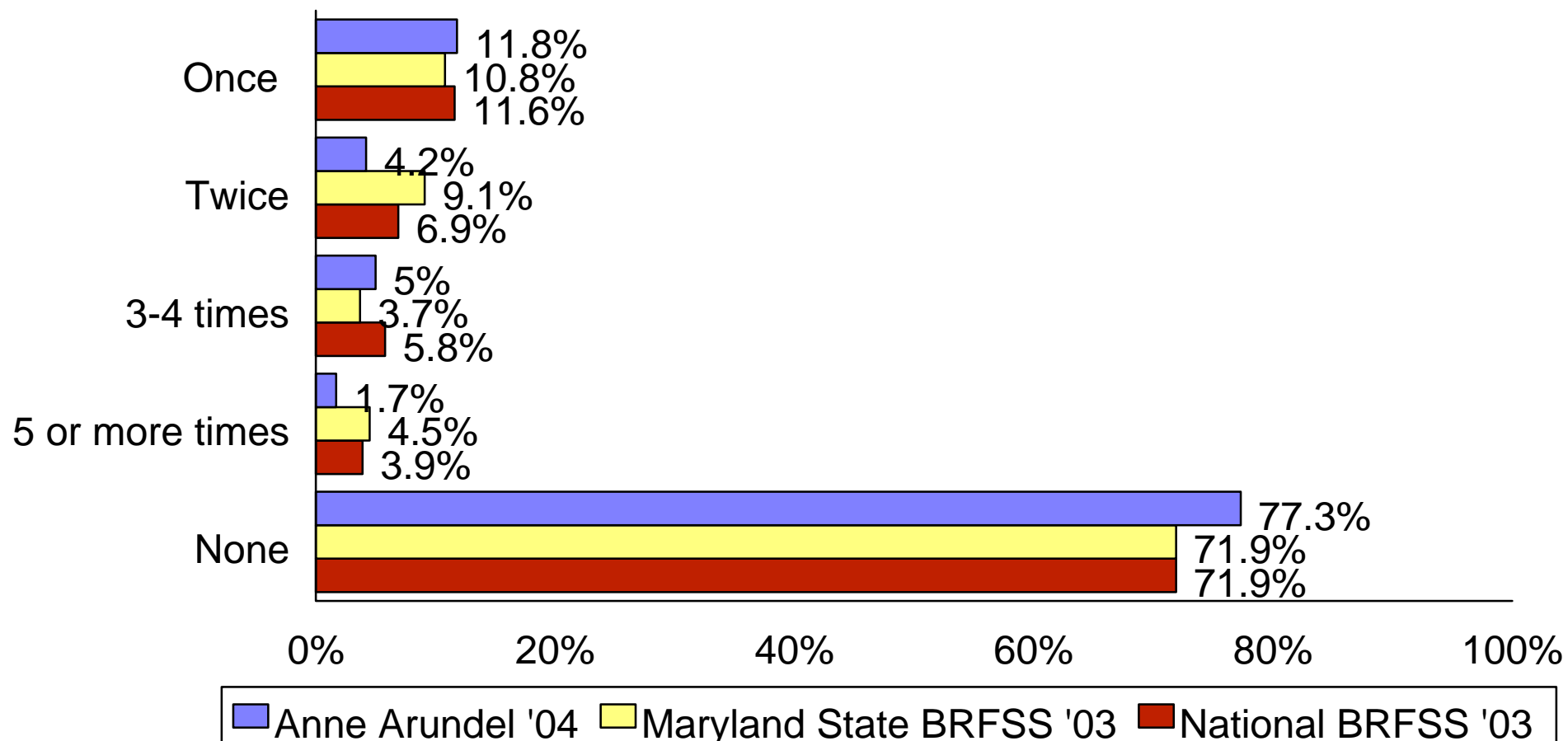
During the past 12 months, how many times did you see a doctor, nurse, or other health care professional for urgent treatment of worsening asthma symptoms?

Respondents who have ever had asthma



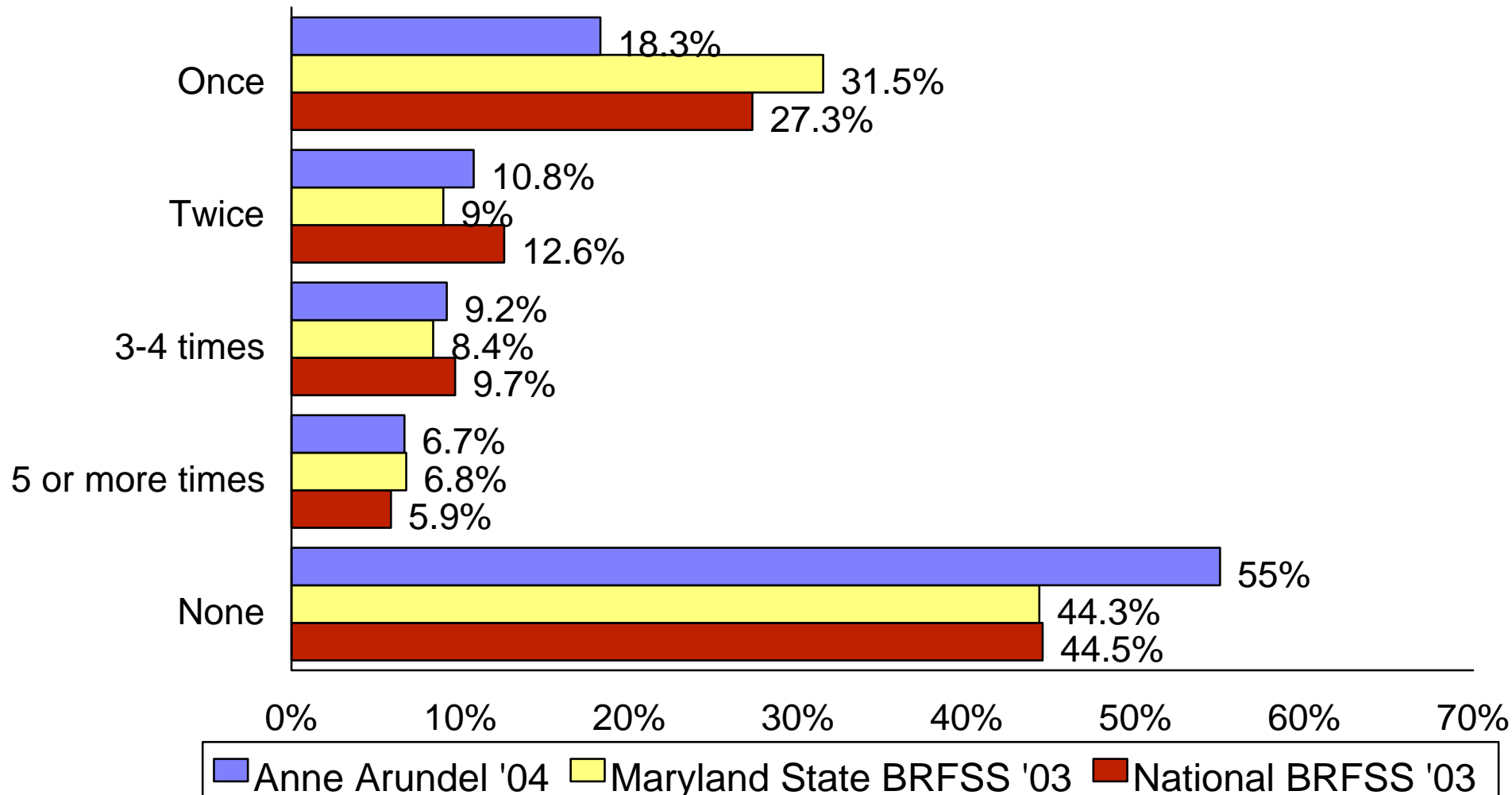
During the past 12 months, how many times did you see a doctor, nurse, or other health care professional for urgent treatment of worsening asthma symptoms?

Respondents who have ever had asthma



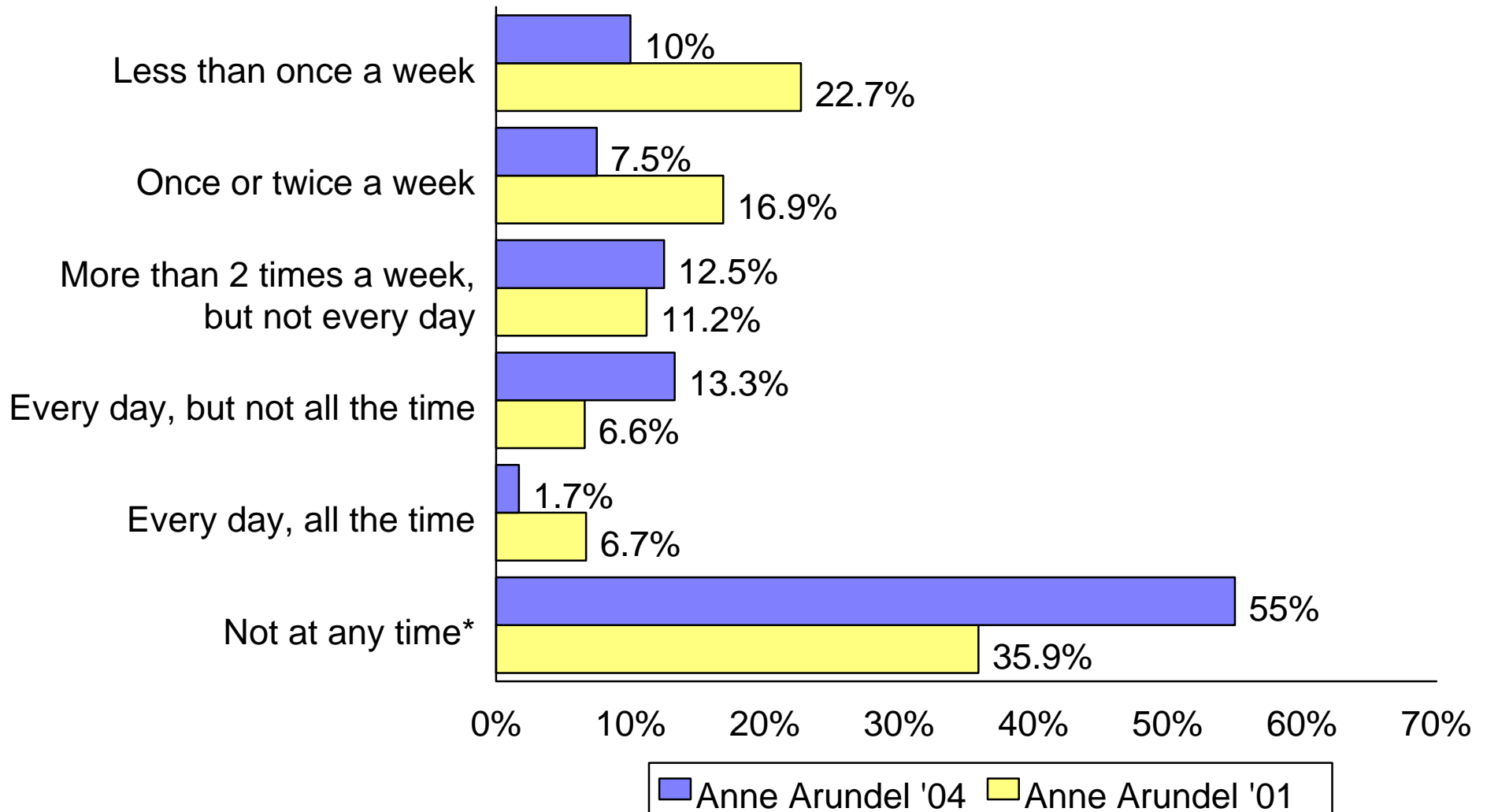
During the past 12 months, how many times did you see a doctor, nurse, or other health professional for a routine checkup for your asthma?

Respondents who have ever had asthma



During the past 30 days, how often did you have any symptoms of asthma?

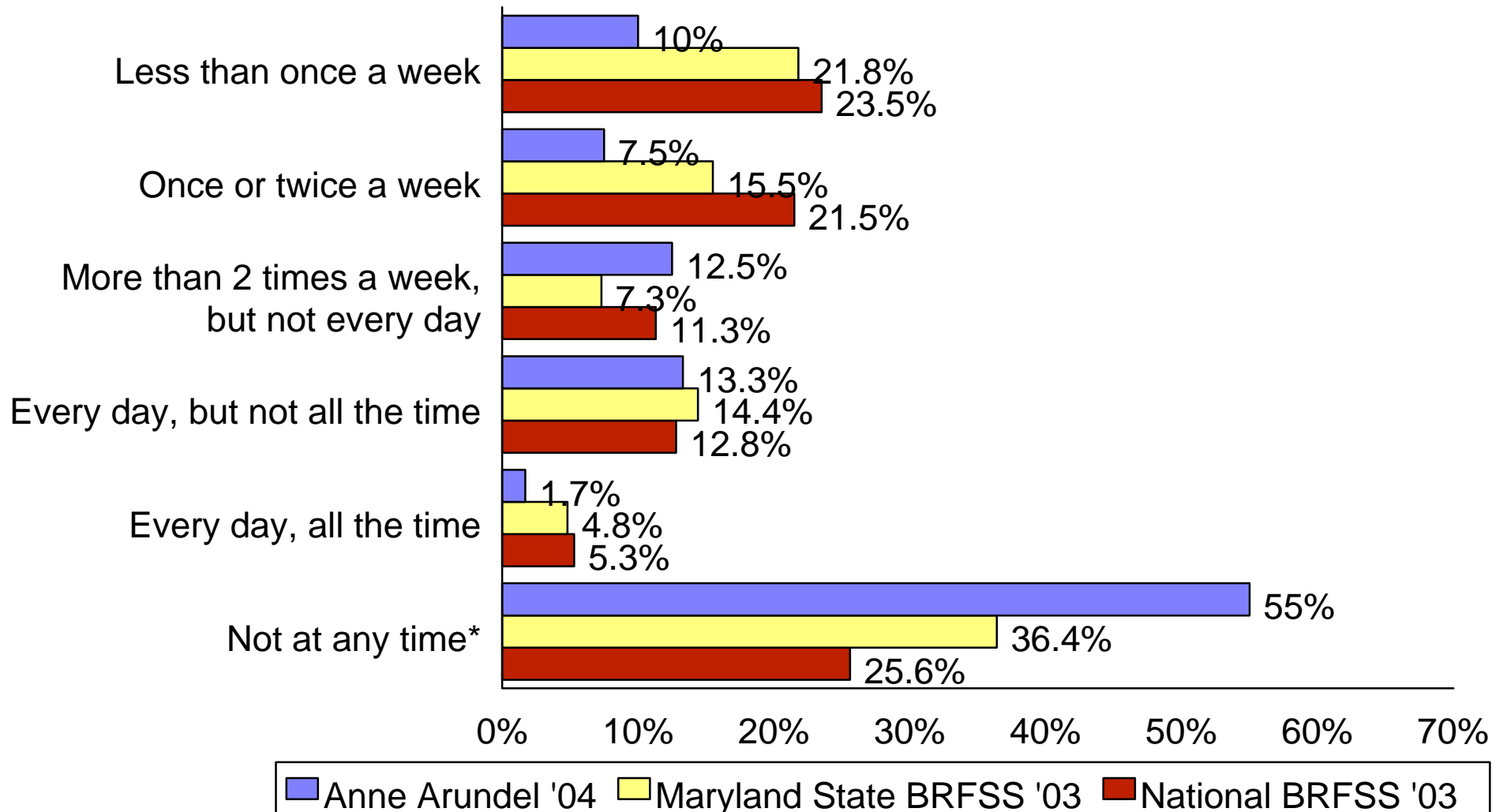
Respondents who have ever had asthma



*Note: A statistically significant difference exists between 2004 and 2001.

During the past 30 days, how often did you have any symptoms of asthma?

Respondents who have ever had asthma



*Note: Anne Arundel is significantly different than Maryland and National.

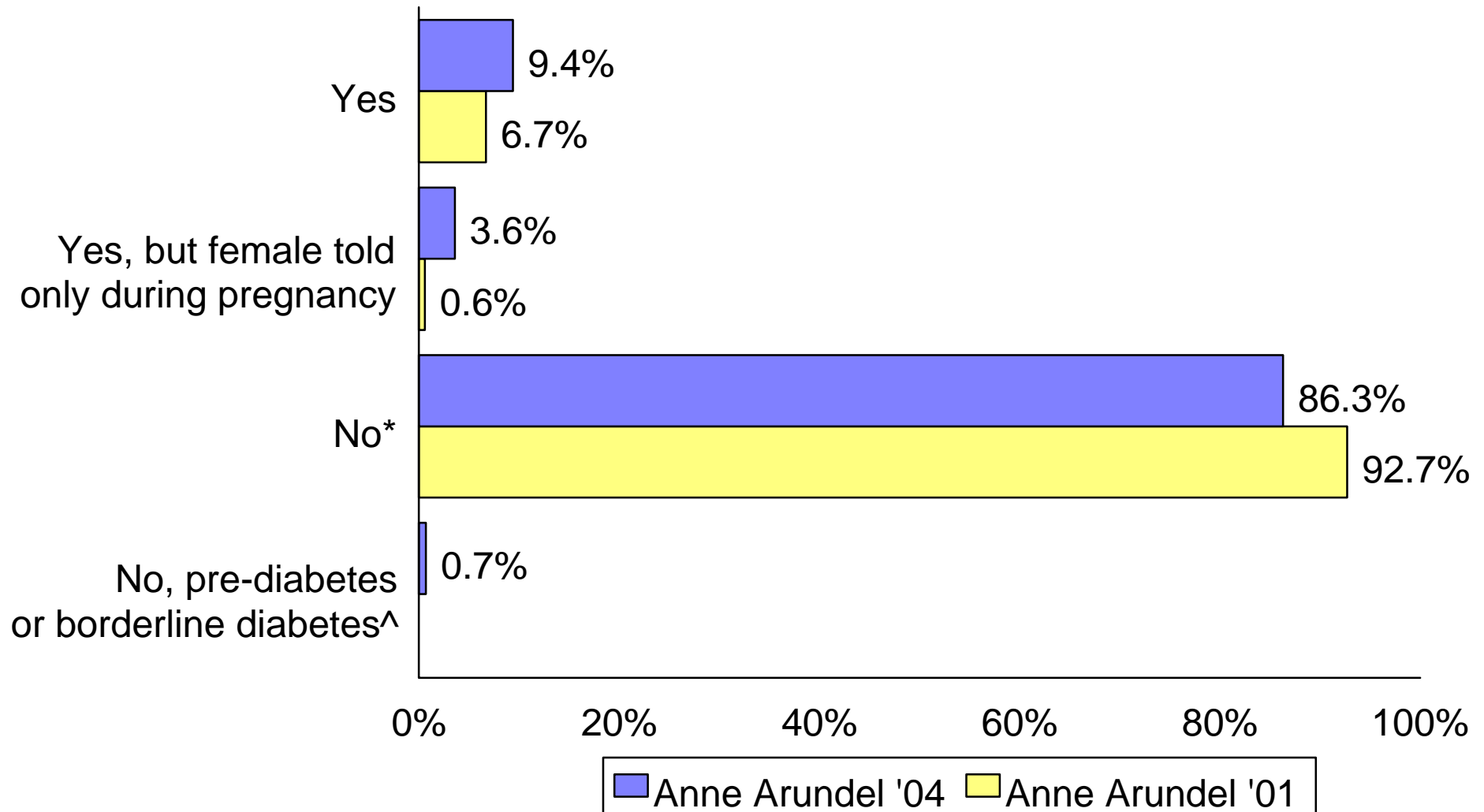
Statistically Significant Differences

Asthma

- ① Females are more likely than males to still have asthma and also more likely to have had an episode of asthma or asthma attack in past year.

Diabetes

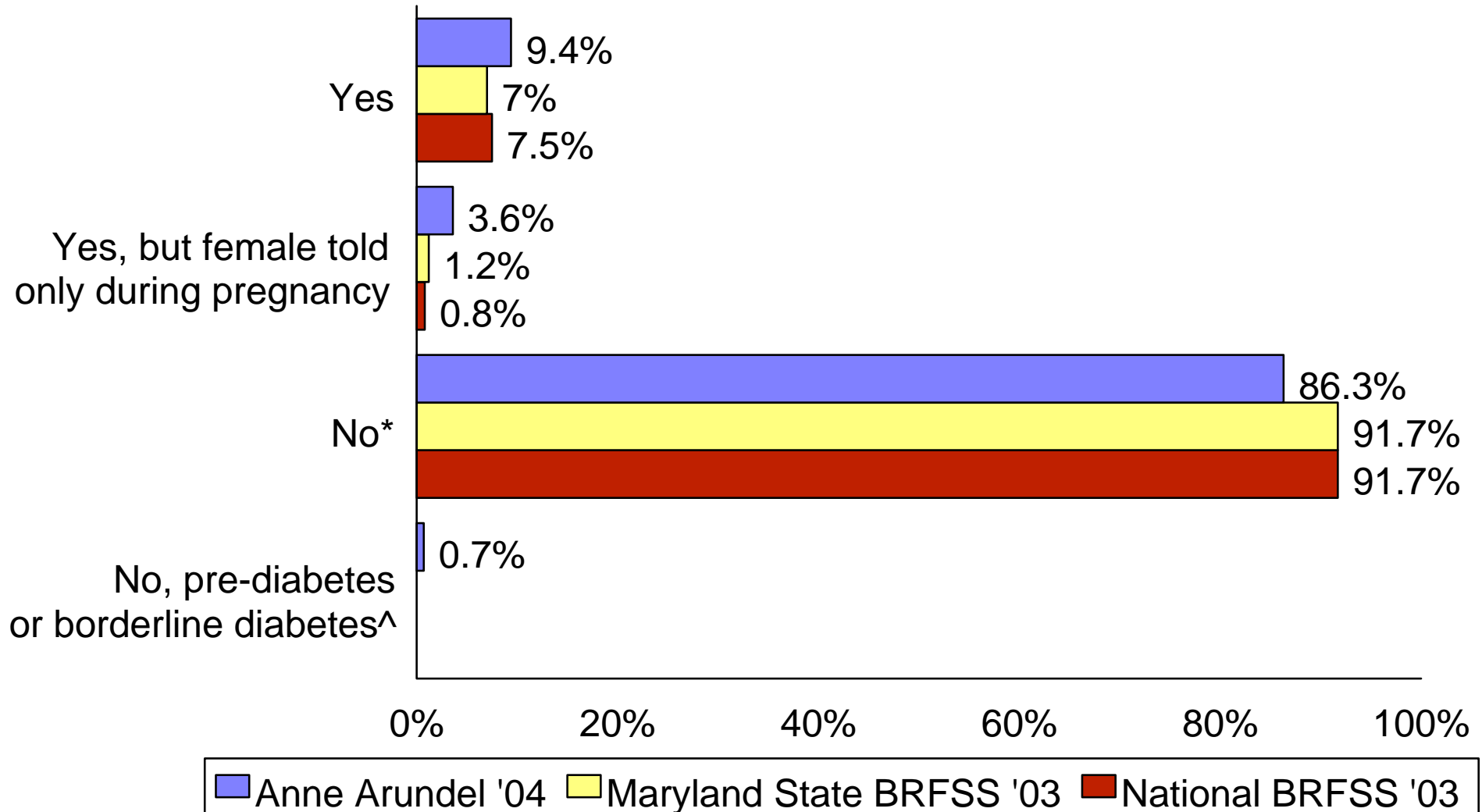
Have you ever been told by a doctor that you have diabetes?



^Note: This was not a response option in the 2001 BRFSS.

*Note: A statistically significant difference exists between 2004 and 2001.

Have you ever been told by a doctor that you have diabetes?

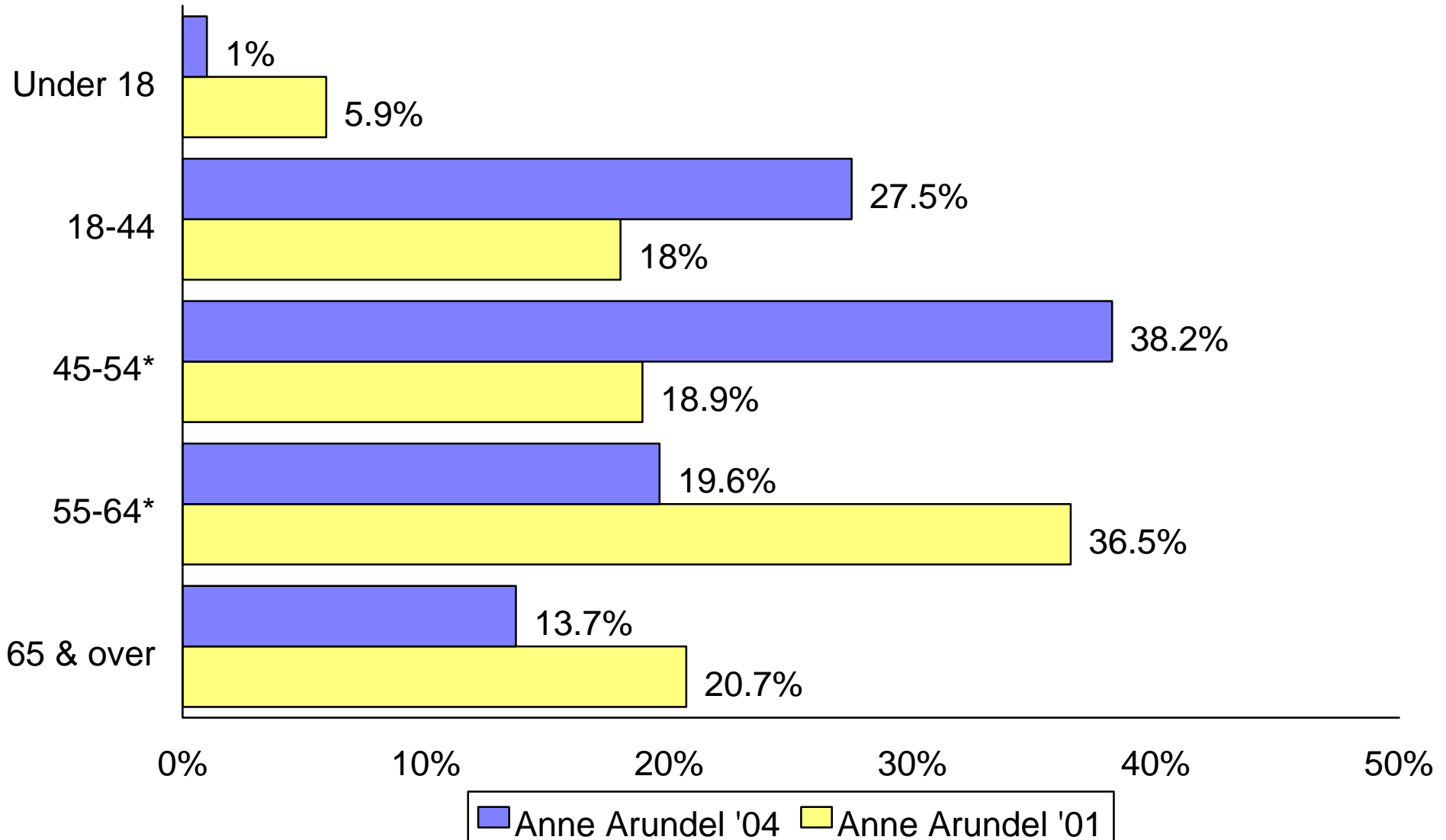


^Note: This was not a response option in previous BRFSS studies.

*Note: Anne Arundel is significantly different than Maryland and National.

Age when diagnosed with diabetes

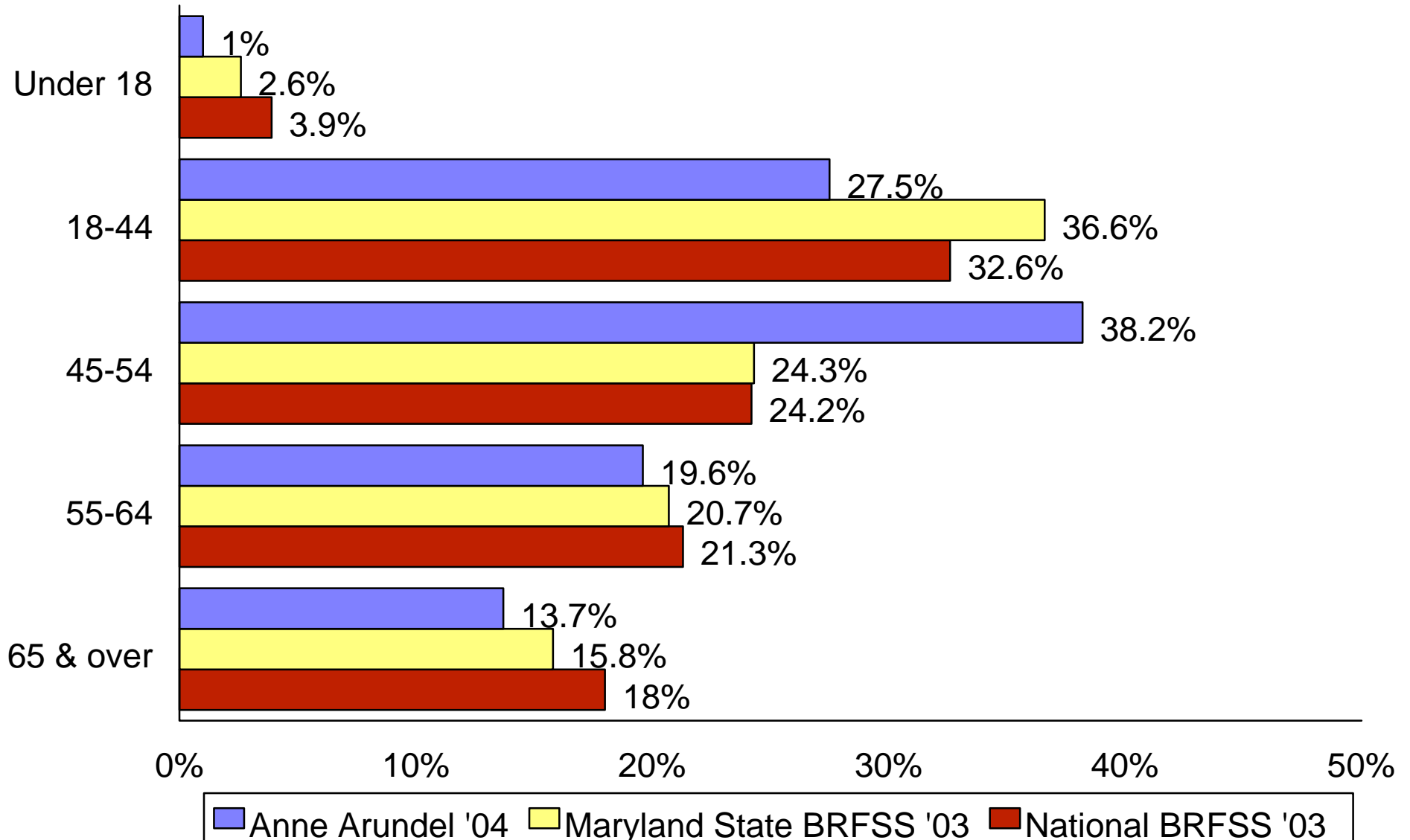
Respondents with diabetes



*Note: A statistically significant difference exists between 2004 and 2001.

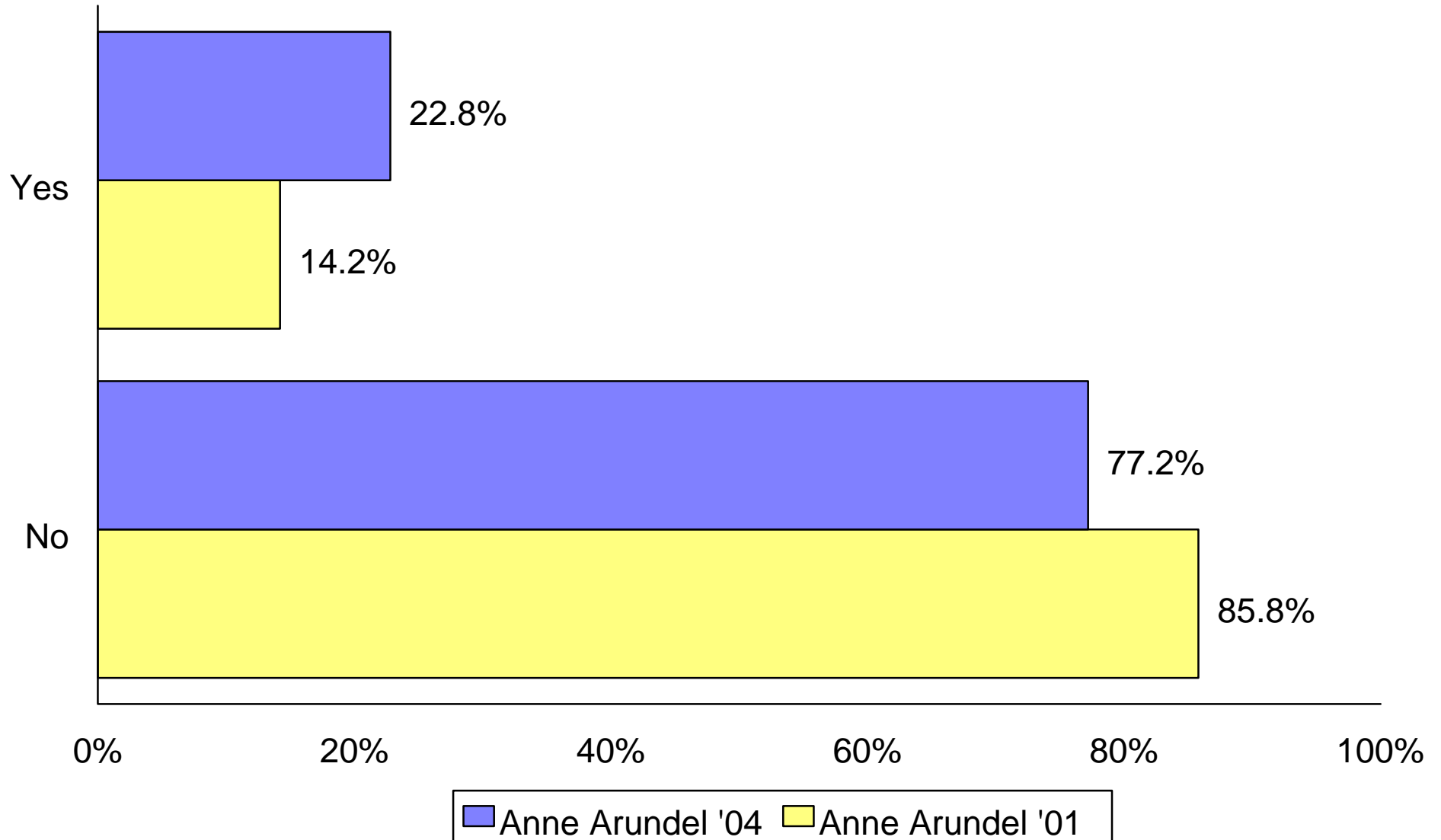
Age when diagnosed with diabetes

Respondents with diabetes



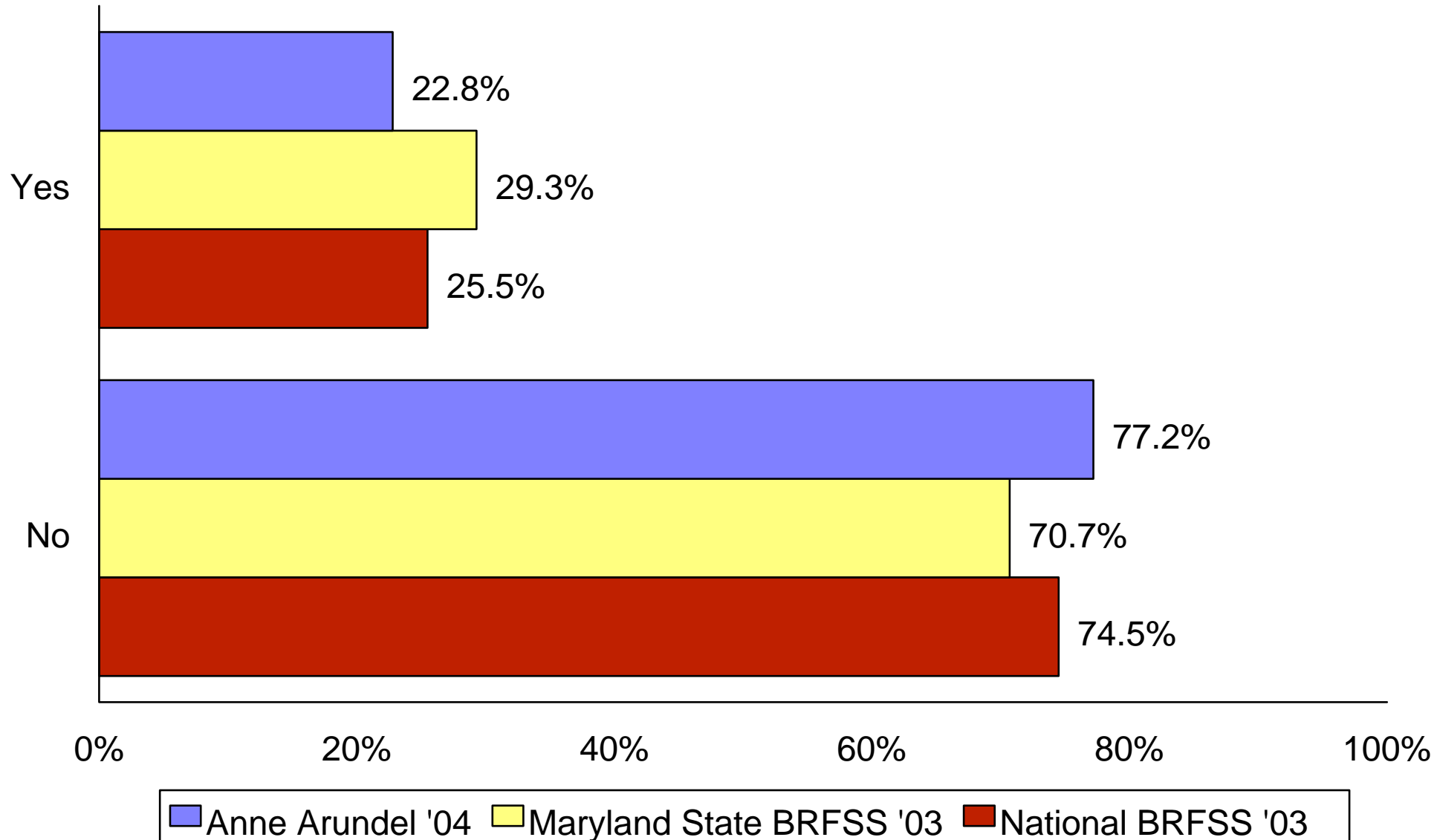
Are you now taking insulin?

Respondents with diabetes



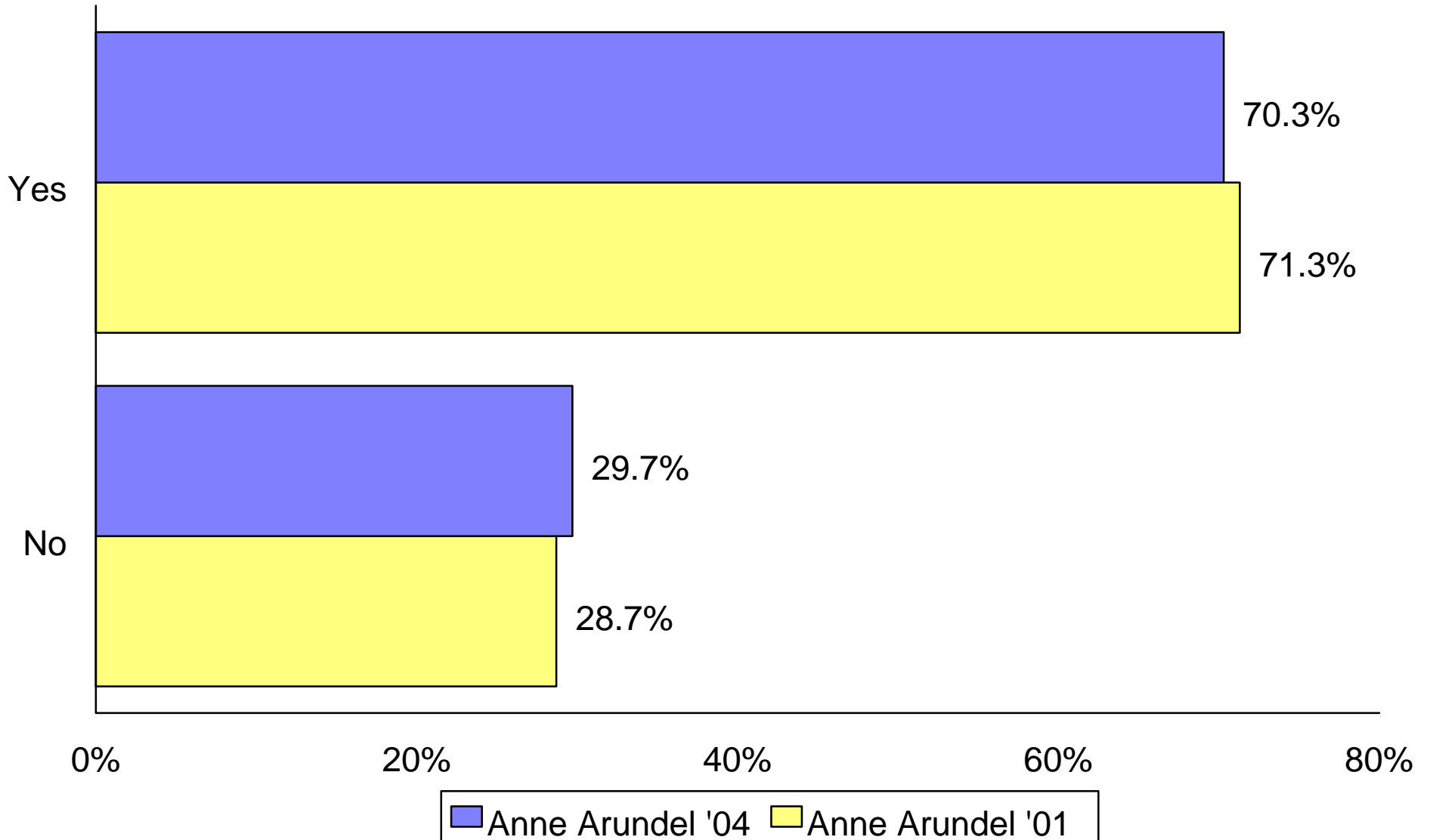
Are you now taking insulin?

Respondents with diabetes



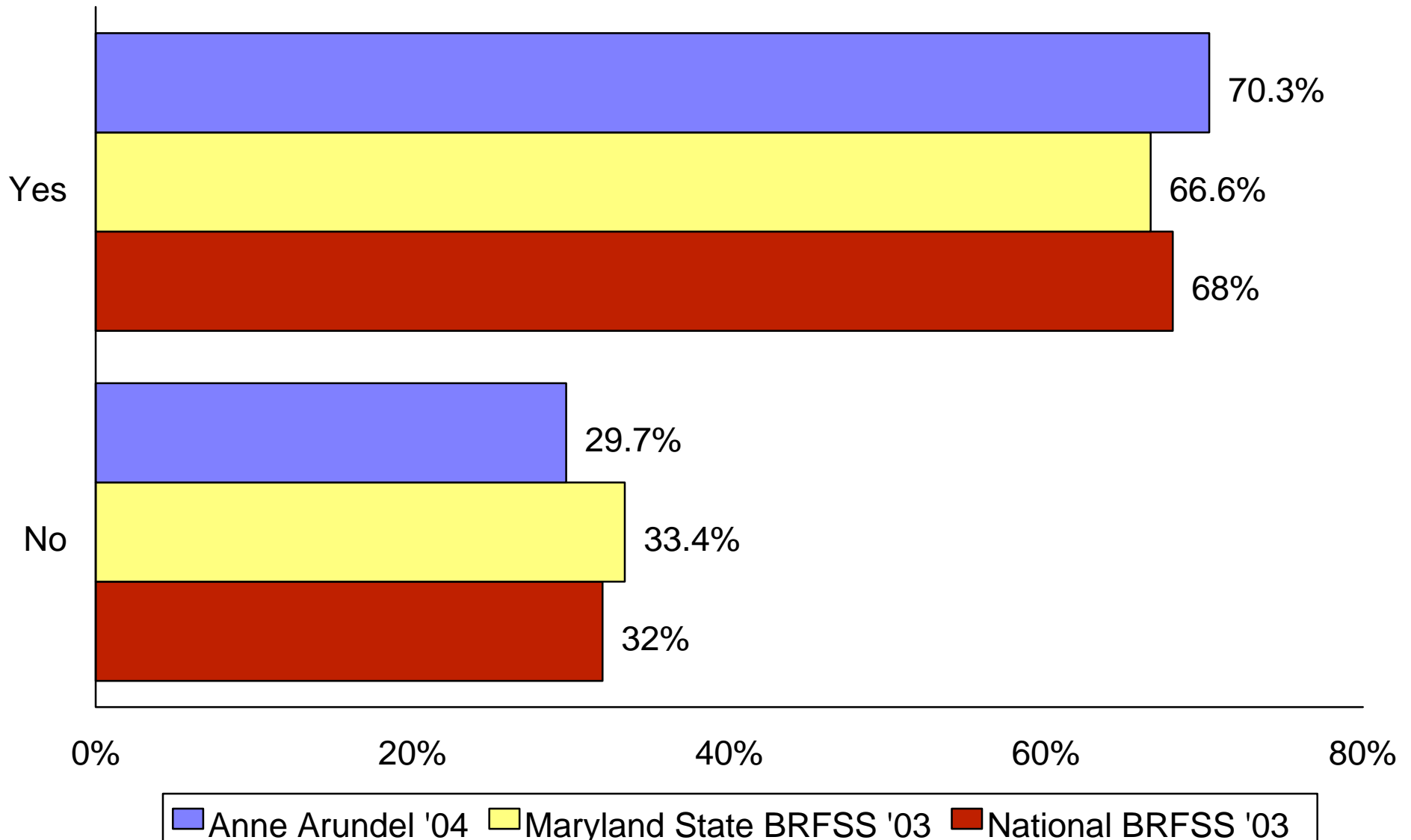
Are you now taking diabetes pills?

Respondents with diabetes



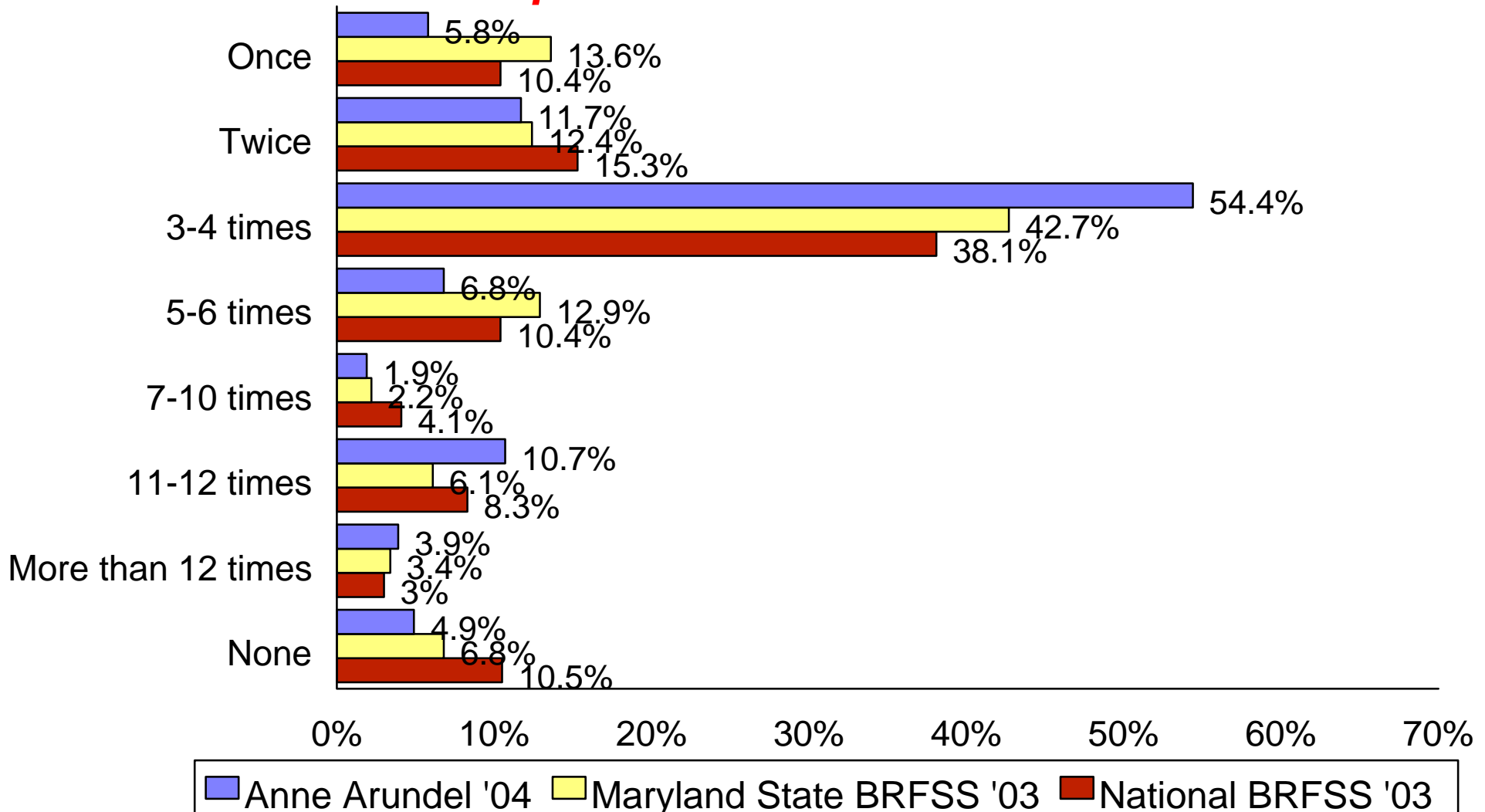
Are you now taking diabetes pills?

Respondents with diabetes



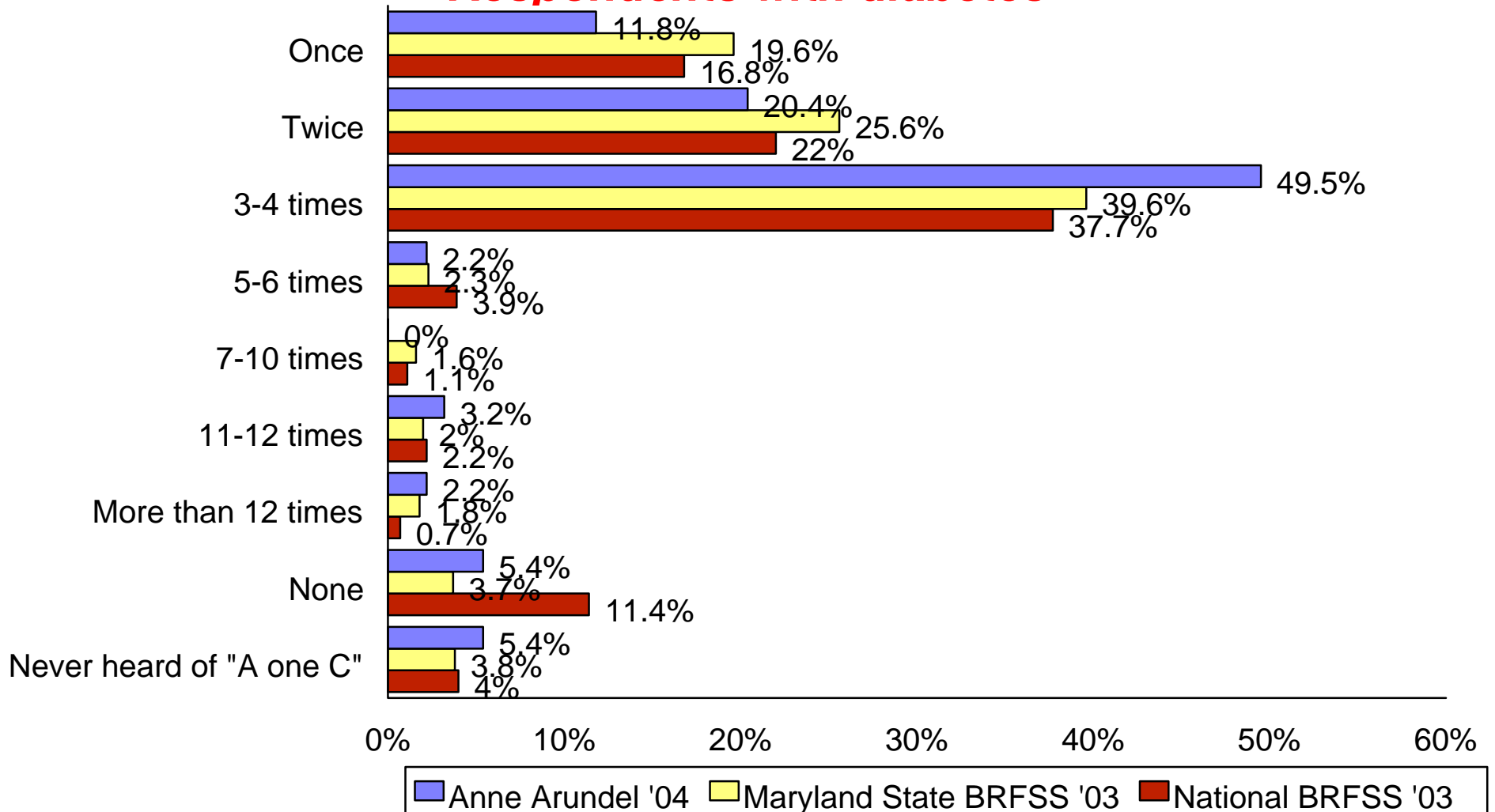
About how many times in the past 12 months, have you seen a doctor, nurse, or other health professional about your diabetes?

Respondents with diabetes



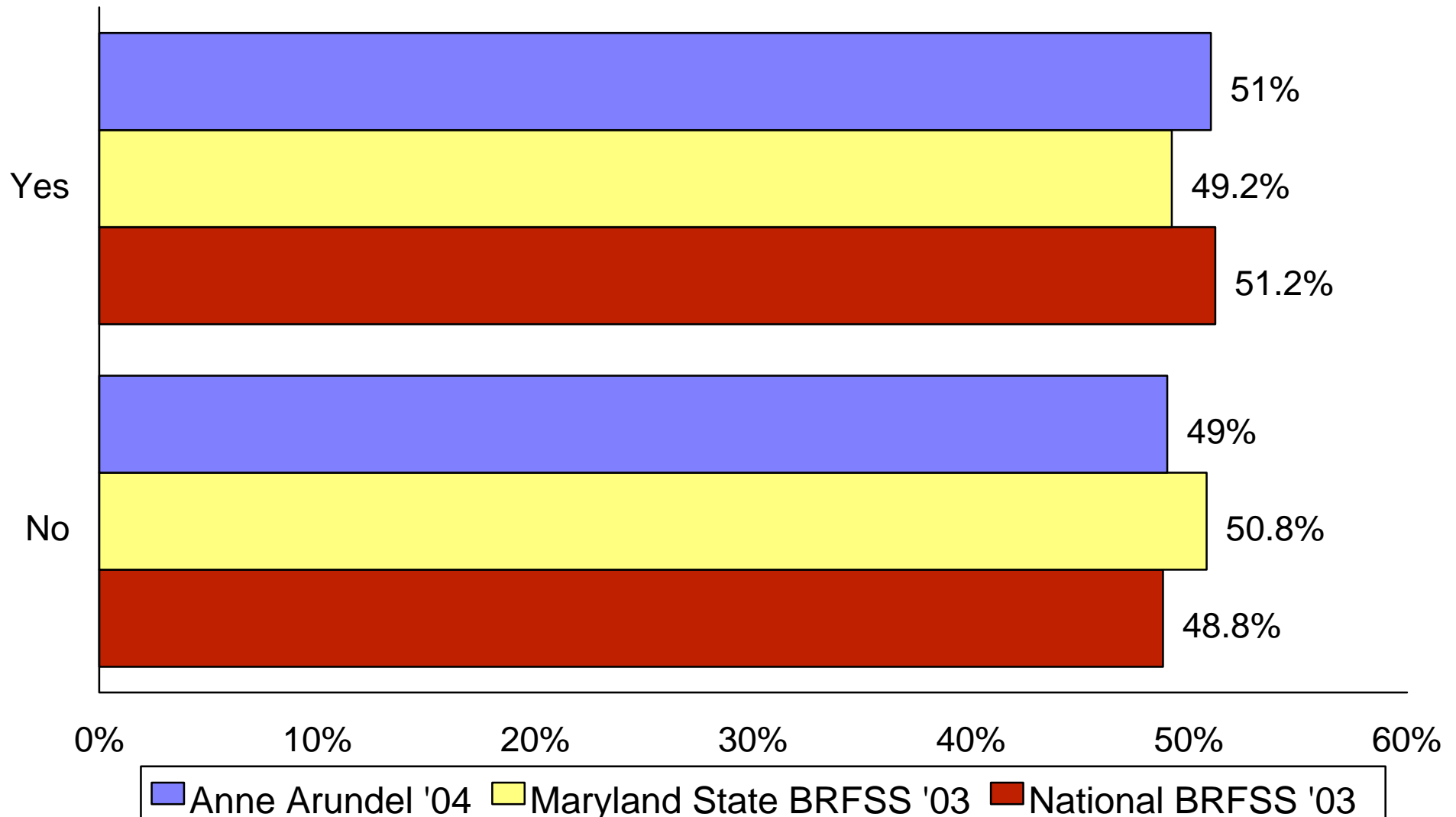
About how many times in the past 12 months, have you seen a doctor, nurse, or other health professional checked you for "A one C"?

Respondents with diabetes

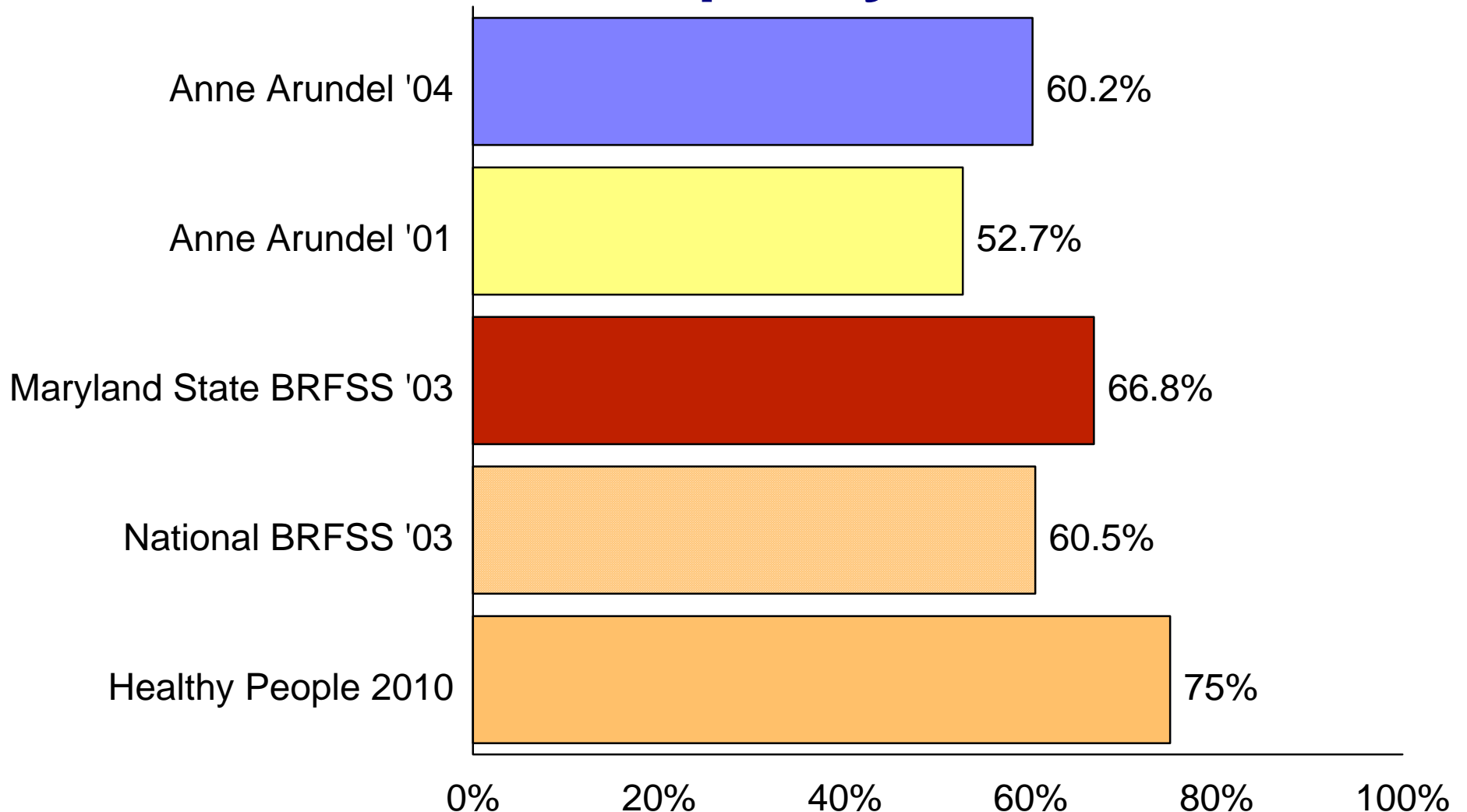


Have you ever taken a course or class in how to manage your diabetes yourself?

Respondents with diabetes



Respondents with diabetes who have visited a dentist or a dental clinic in the past year



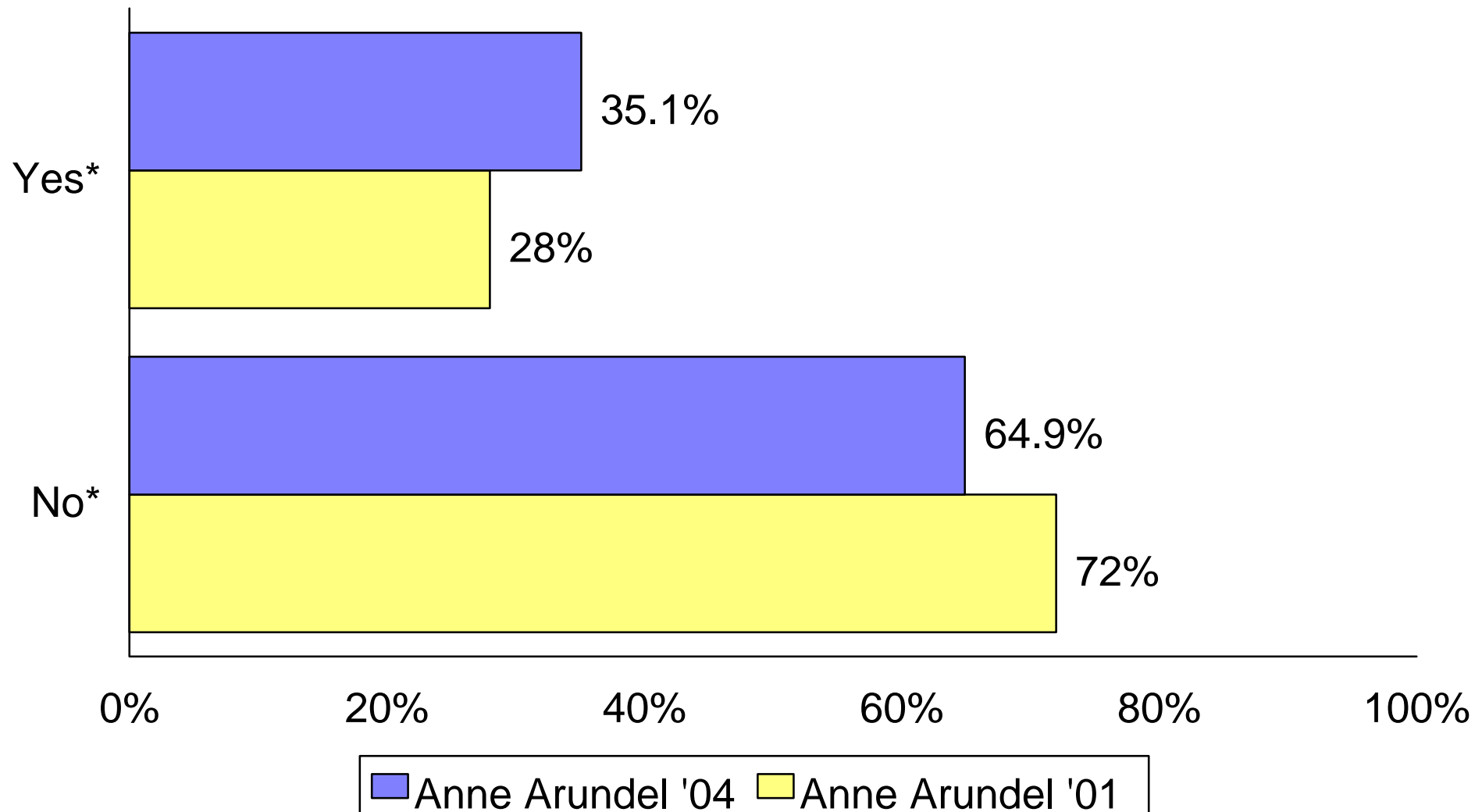
Statistically Significant Differences

Diabetes

- ① Respondents 45 and older are more likely to have diabetes.
- ① "Under \$25,000" income groups are more likely to have diabetes than other income groups.

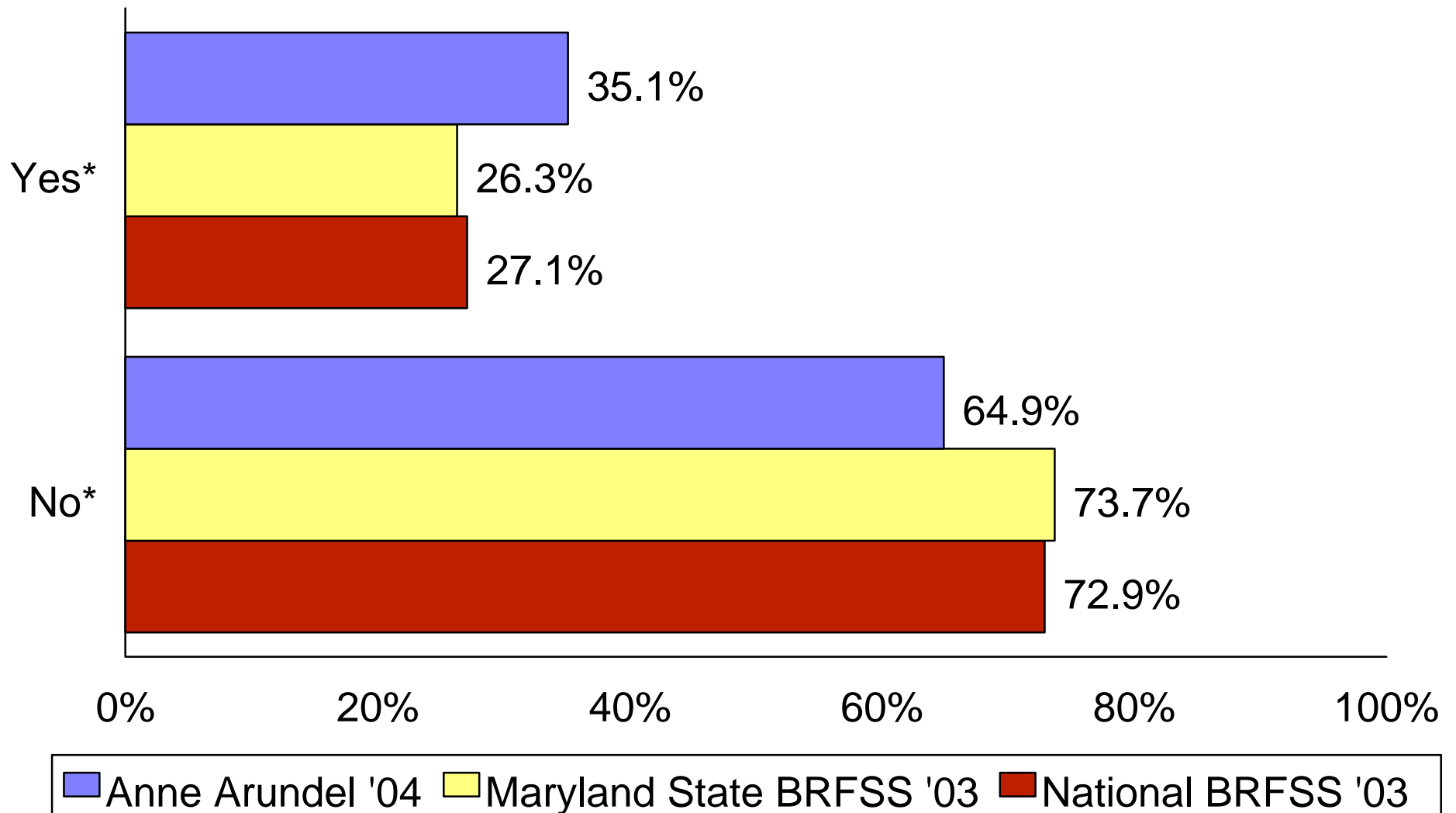
Arthritis

Have you ever been told by a doctor that you have arthritis?



*Note: A statistically significant difference exists between 2004 and 2001.

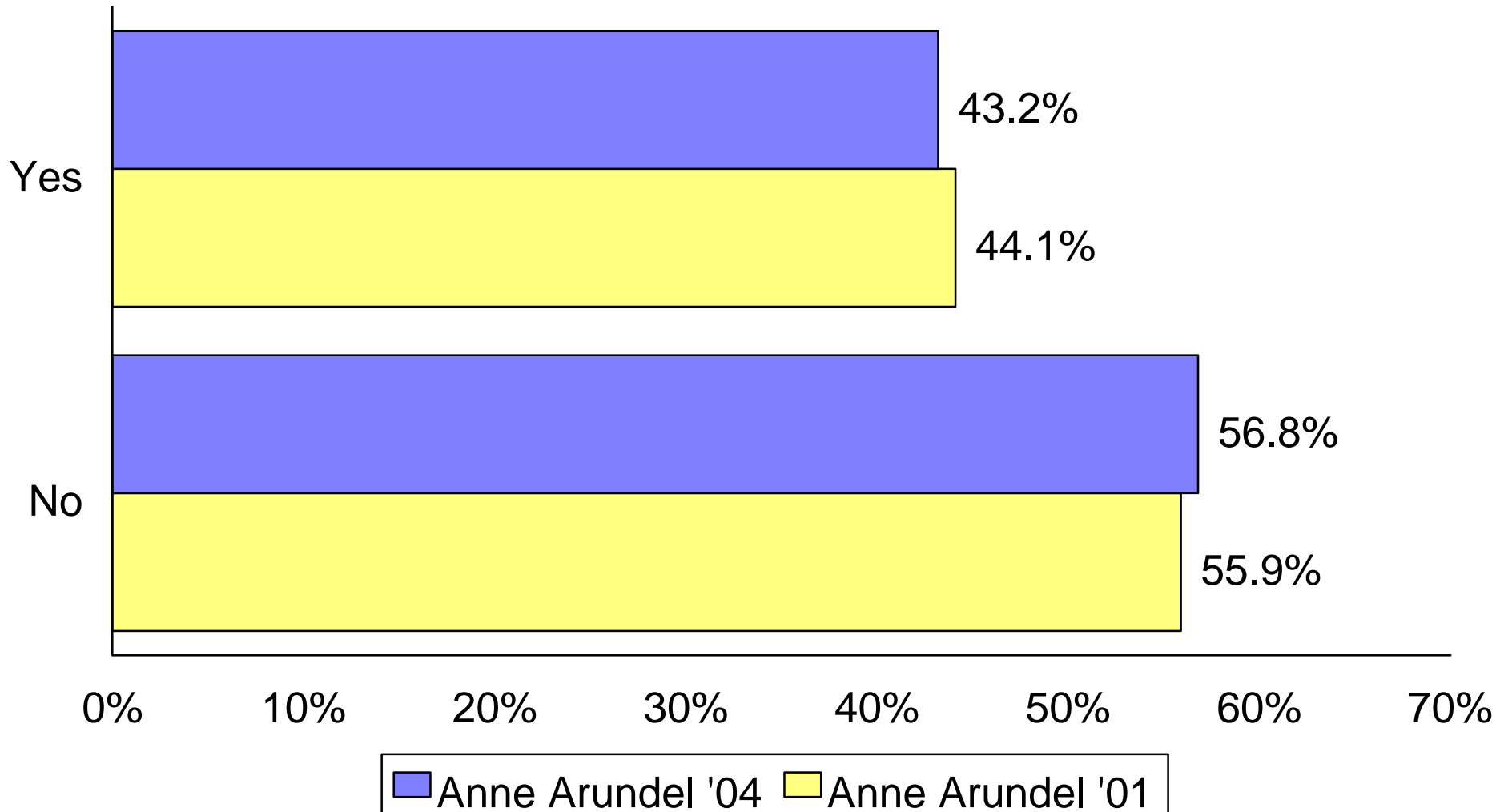
Have you ever been told by a doctor that you have arthritis?



*Note: Anne Arundel is significantly different than Maryland and National.

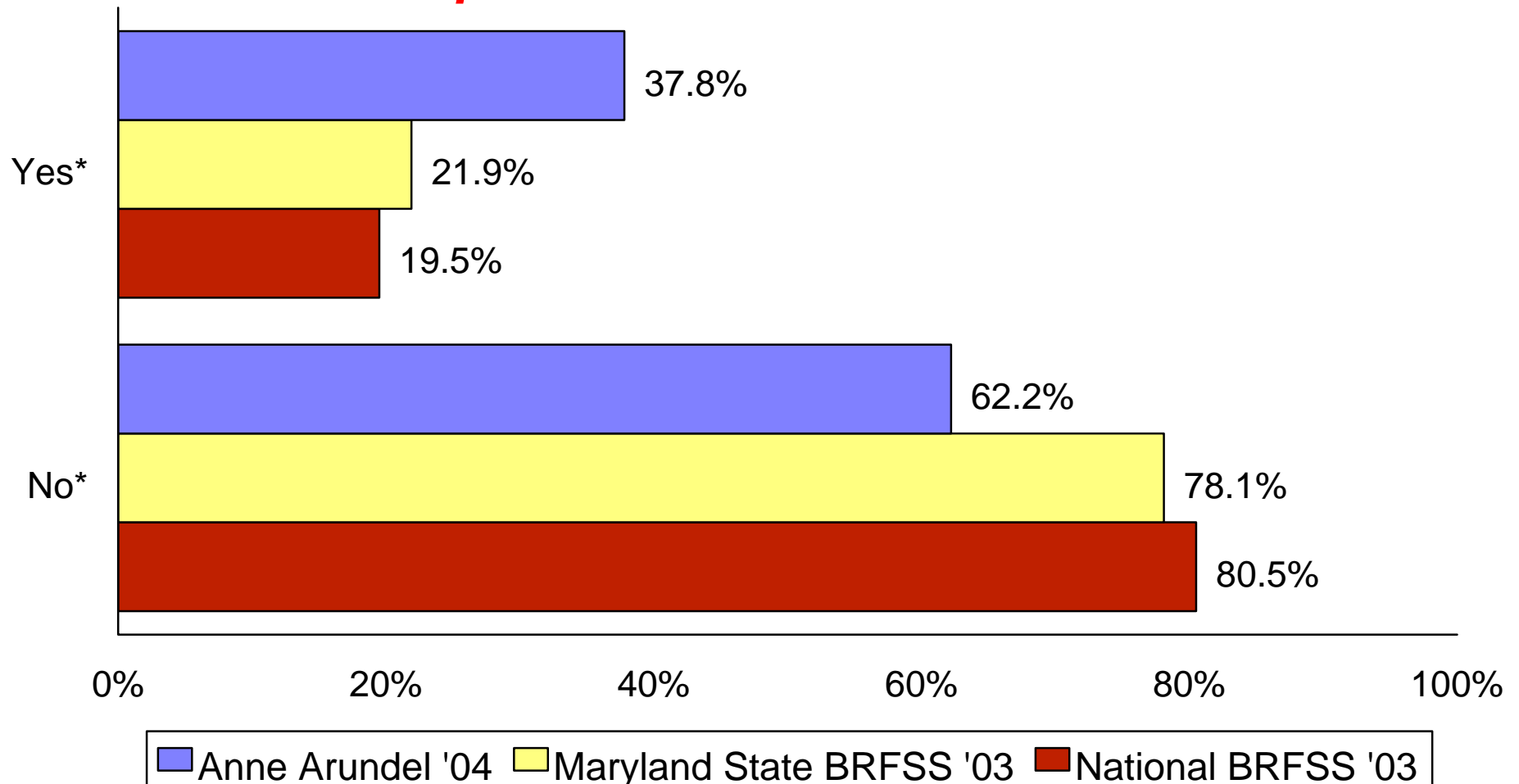
Are you currently being treated by a doctor for arthritis?

Respondents who have arthritis



Has a doctor or other health professional ever suggested losing weight to help your arthritis or joint symptoms?

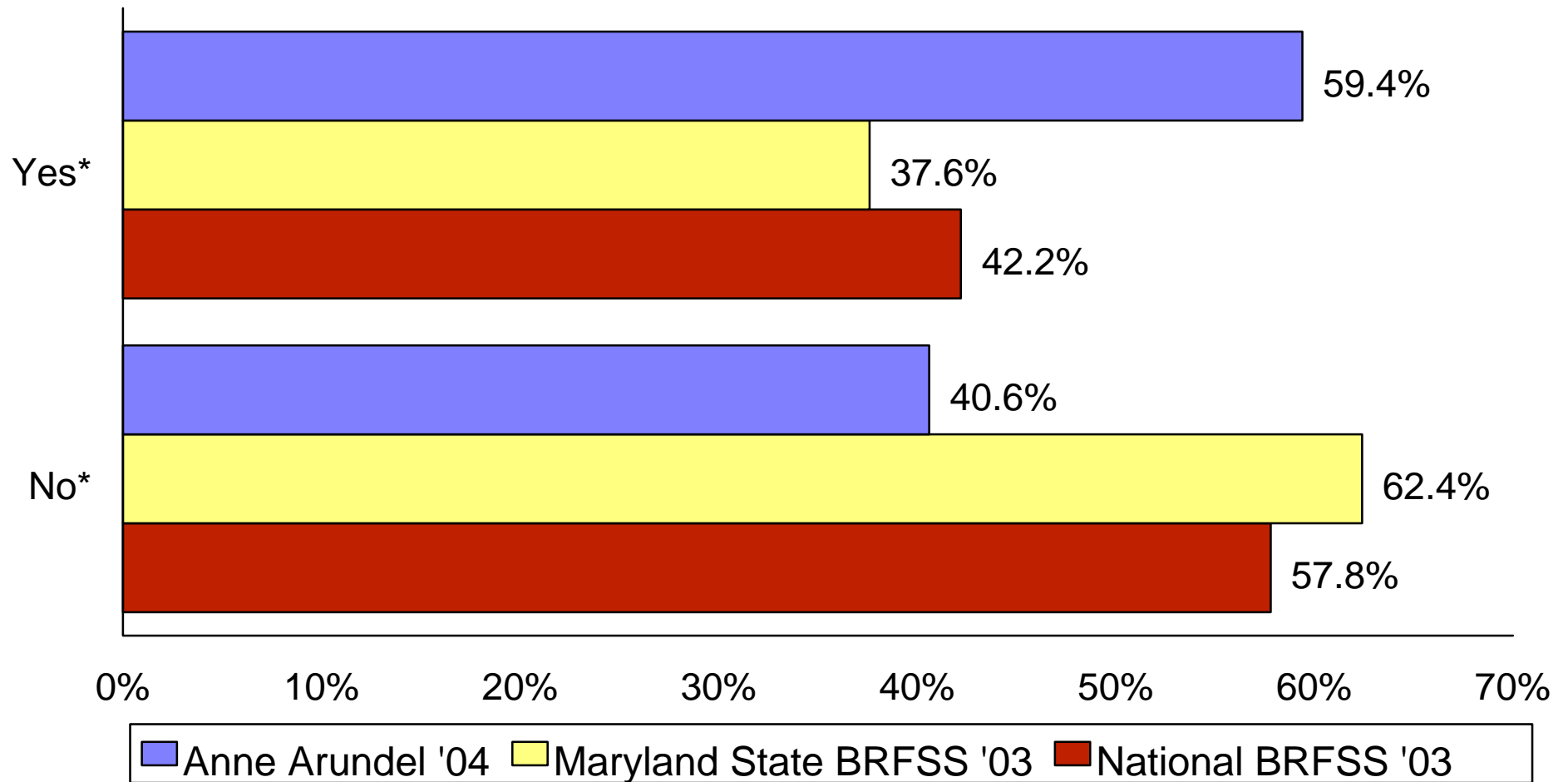
Respondents who have arthritis



*Note: Anne Arundel is significantly different than Maryland and National.

Has a doctor or other health professional ever suggested physical activity or exercise to help your arthritis or joint symptoms?

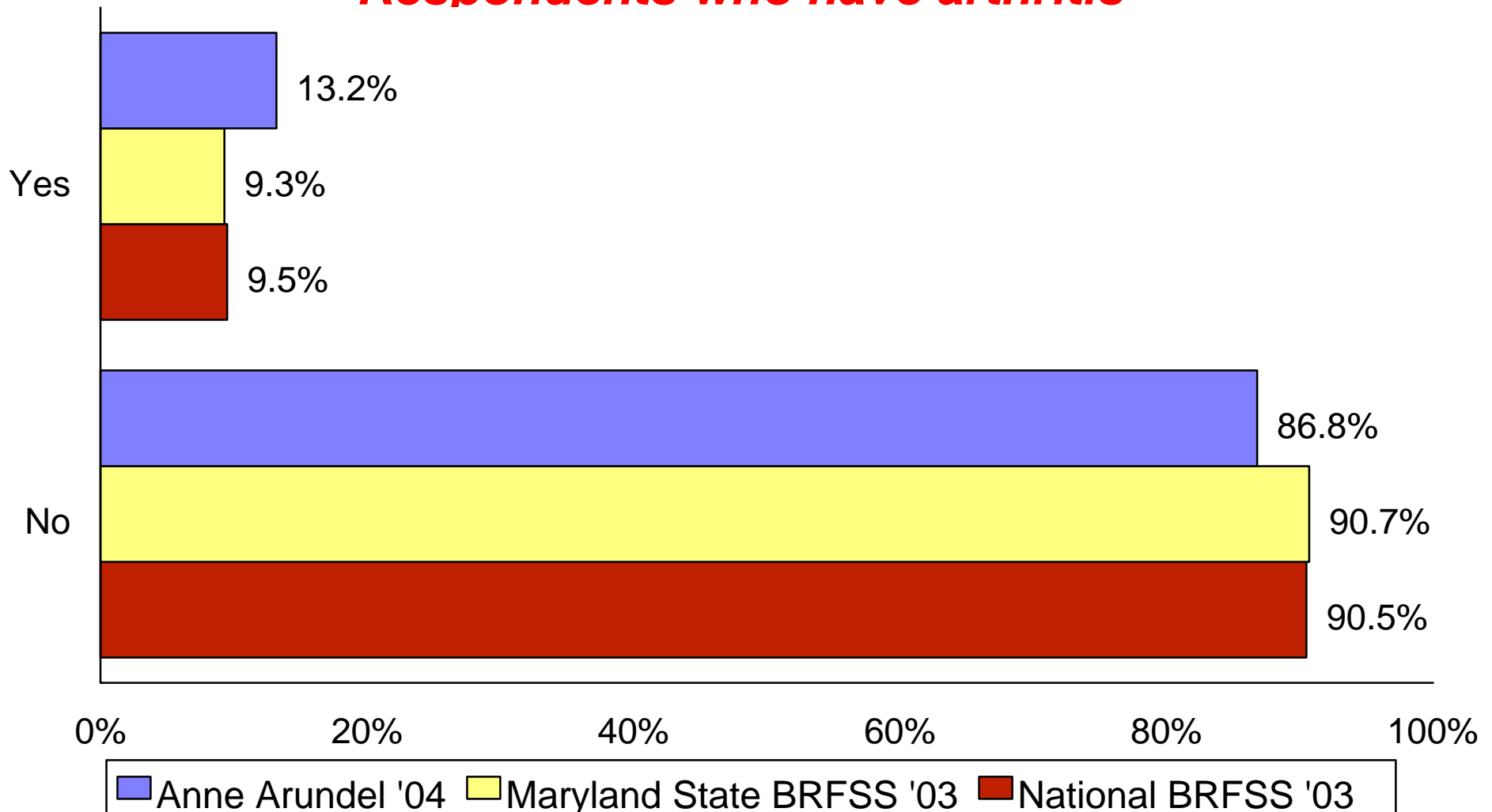
Respondents who have arthritis



*Note: Anne Arundel is significantly different than Maryland and National.

Have you ever taken an educational course or class to teach you how to manage problems related to your arthritis or joint symptoms?

Respondents who have arthritis



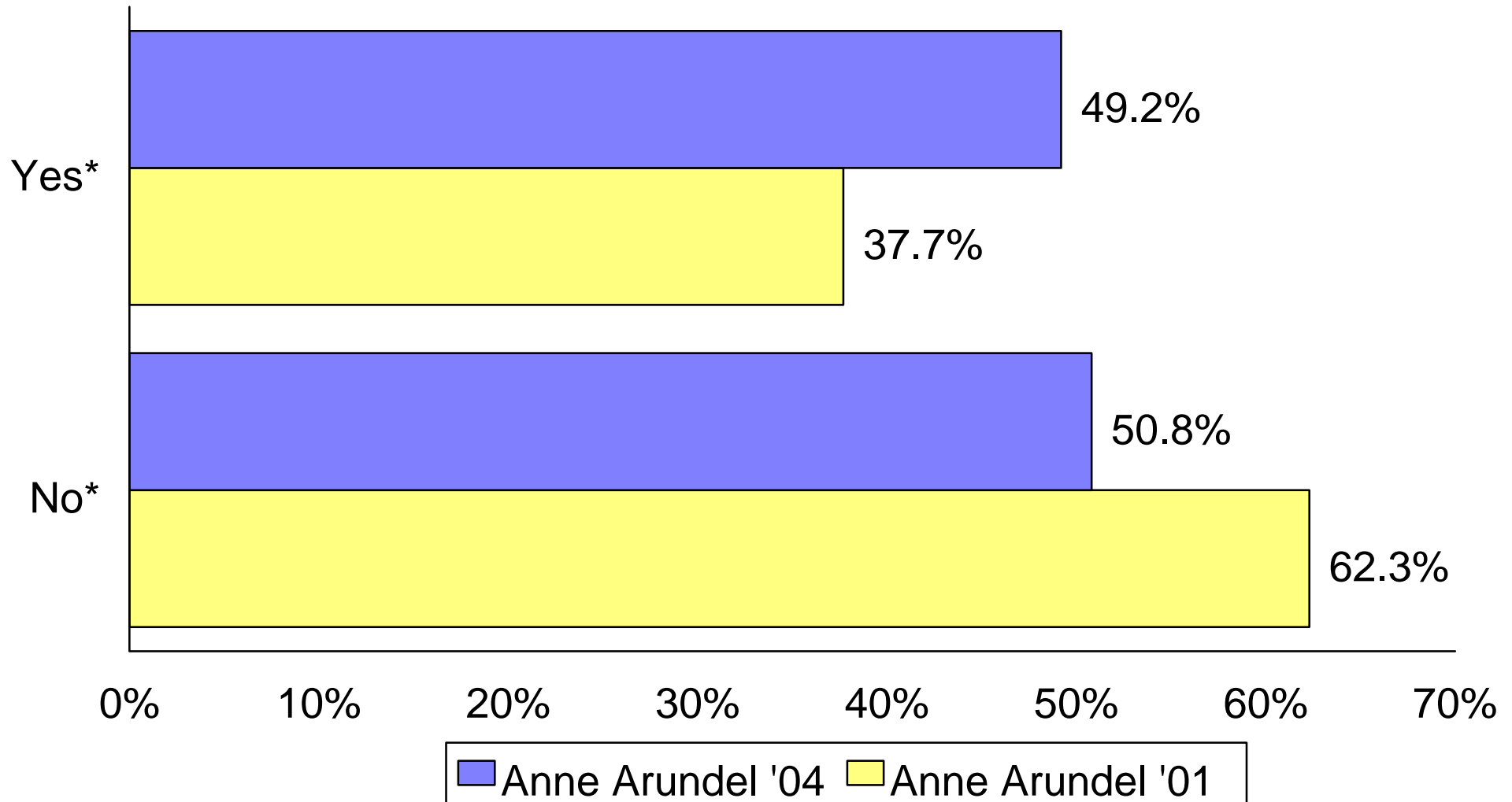
Statistically Significant Differences

Arthritis

- ① Females are more likely than males to have been told by a doctor they have arthritis.
- ① The lower the income, the more likely respondents are to have been told by a doctor they have arthritis.
- ① White respondents are more likely to have been told by a doctor they have arthritis compared to other racial groups.
- ① The older the respondent, the more likely they are to have been told by a doctor they have arthritis.

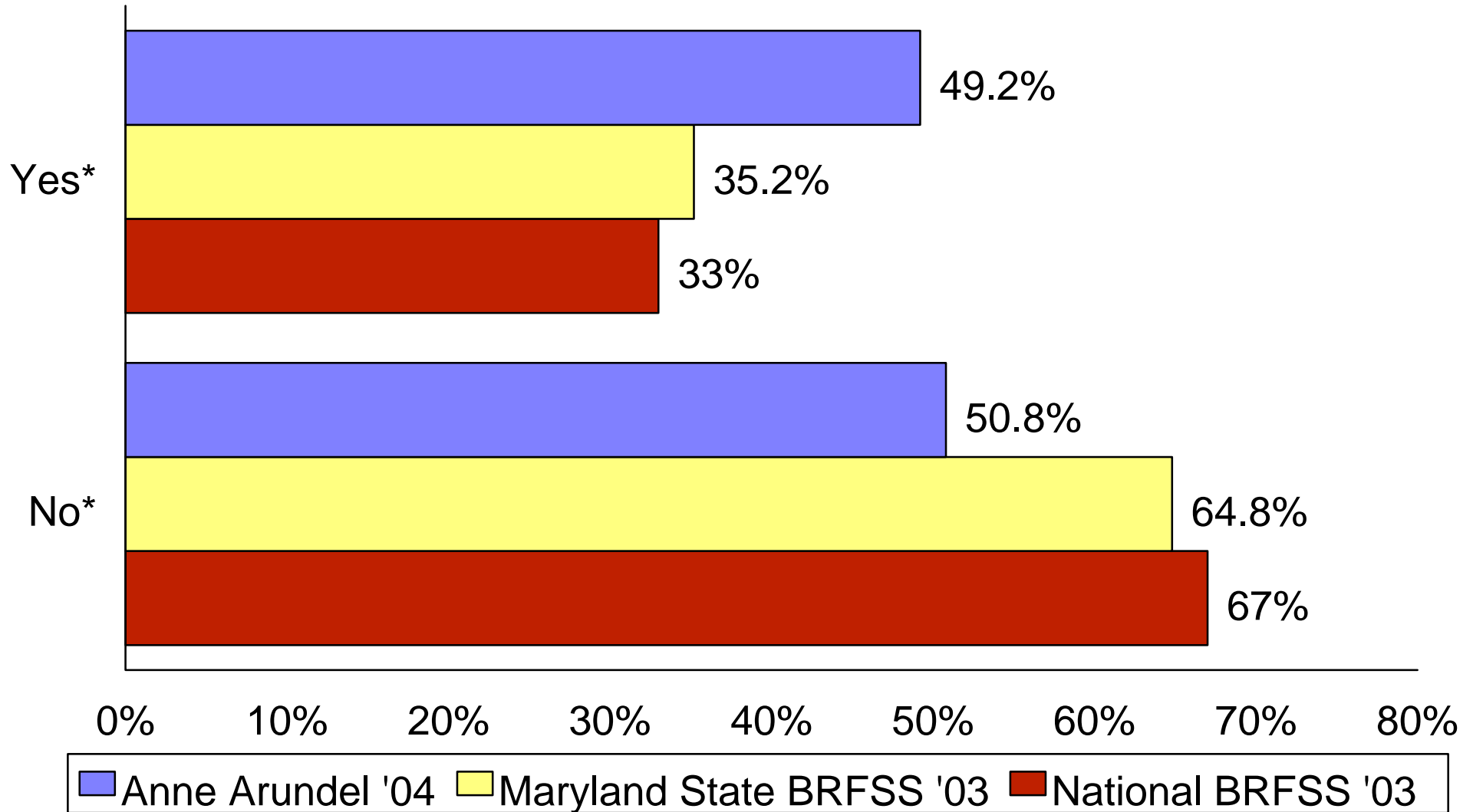
Immunizations

During the past 12 months, have you had a flu shot?



*Note: A statistically significant difference exists between 2004 and 2001.

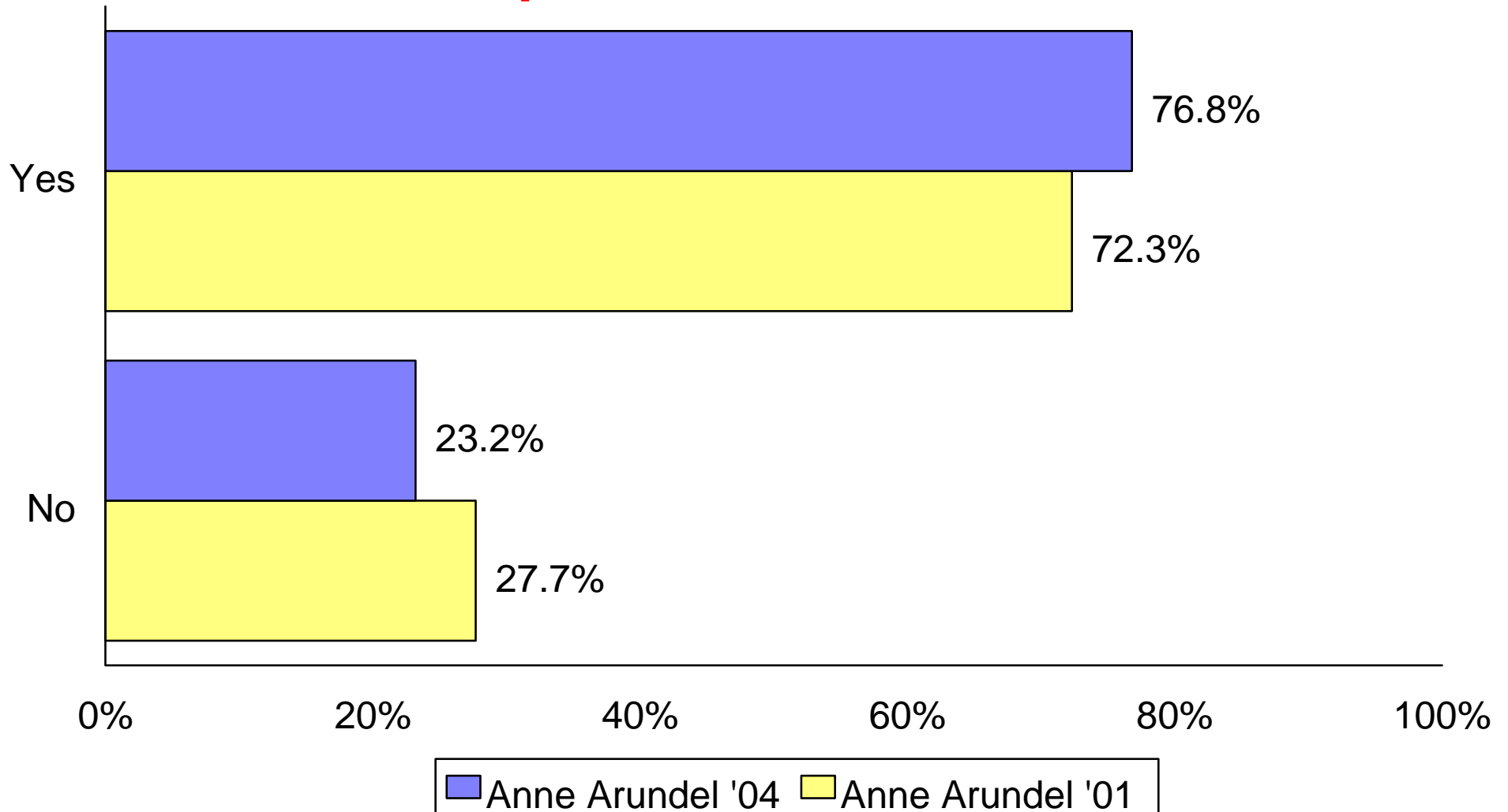
During the past 12 months, have you had a flu shot?



*Note: Anne Arundel is significantly different than Maryland and National.

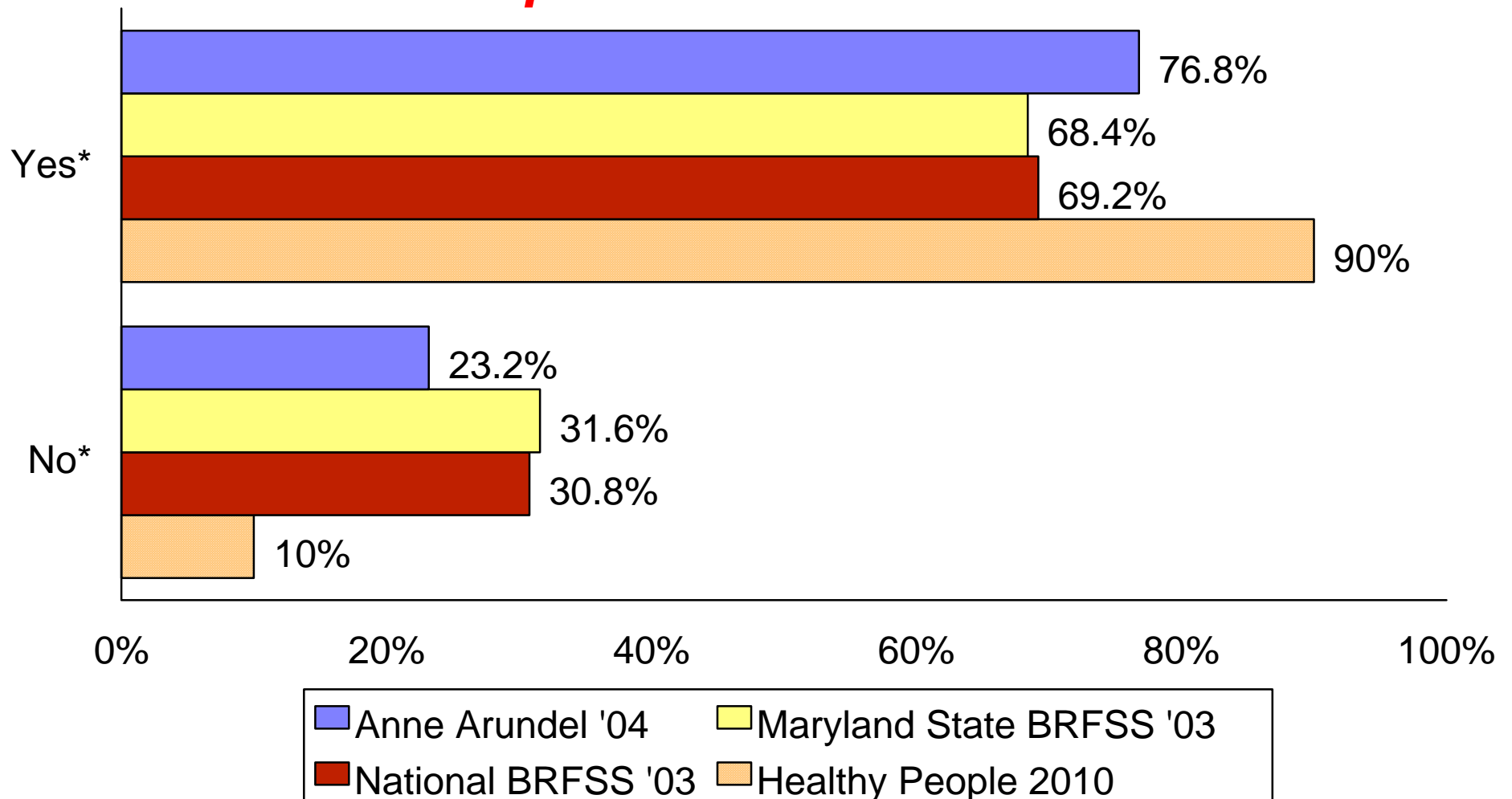
During the past 12 months, have you had a flu shot?

Respondents 65 and over



During the past 12 months, have you had a flu shot?

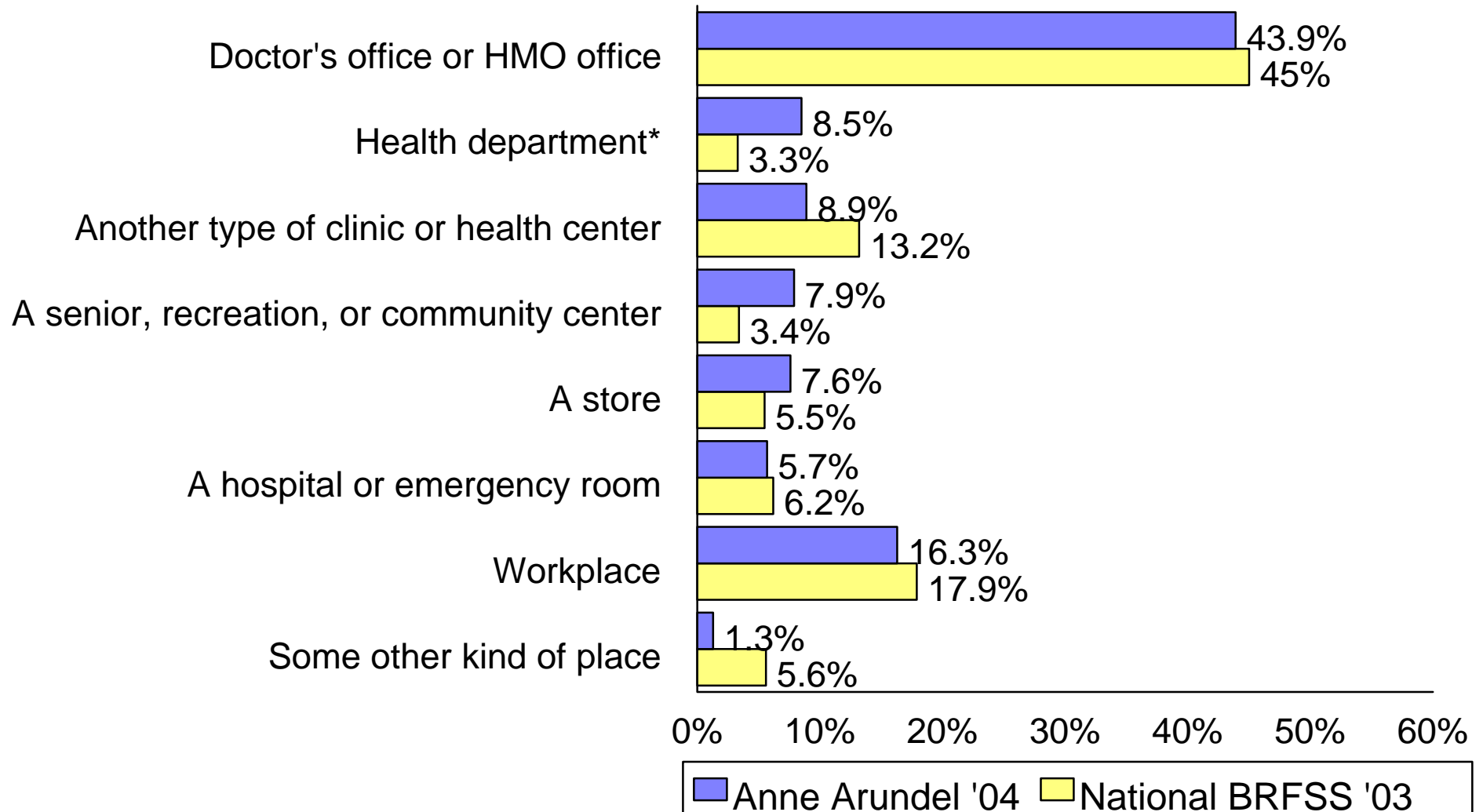
Respondents 65 and over



*Note: Anne Arundel is significantly different than Maryland and National.

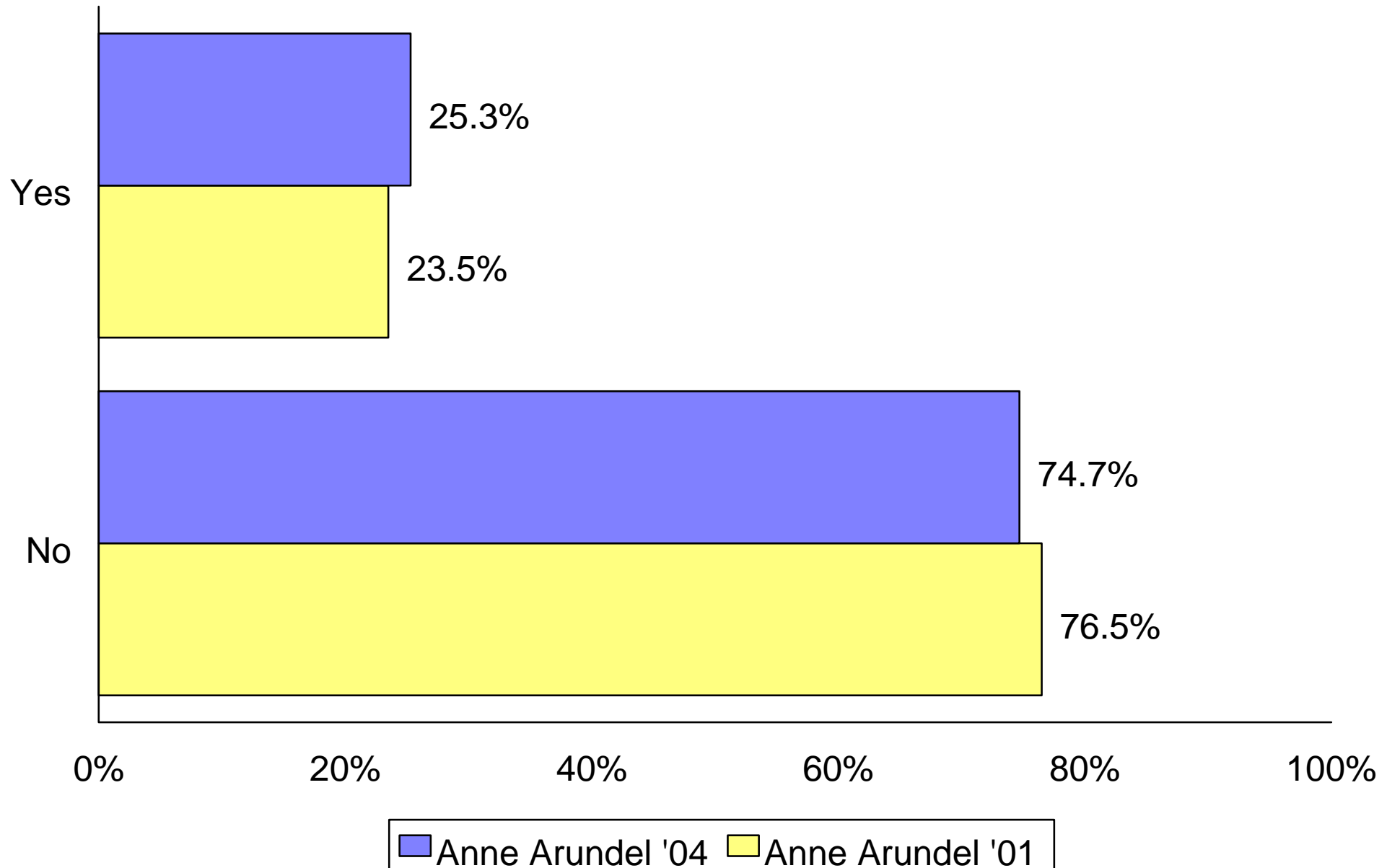
At what kind of place did you get your last flu shot?

Respondents who have had a flu shot in the past year

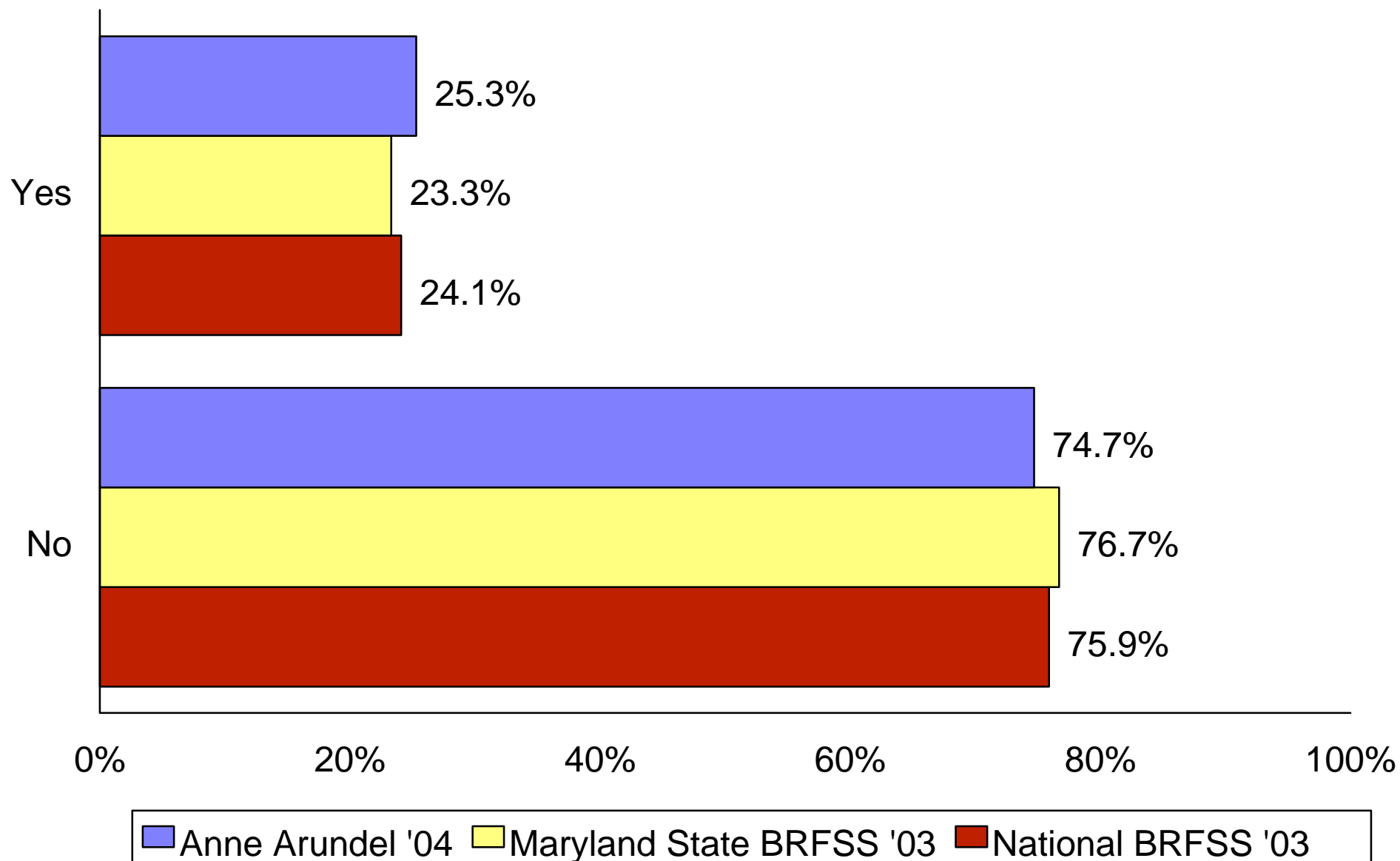


*Note: Anne Arundel is significantly different than National.

Have you ever had a pneumonia shot?

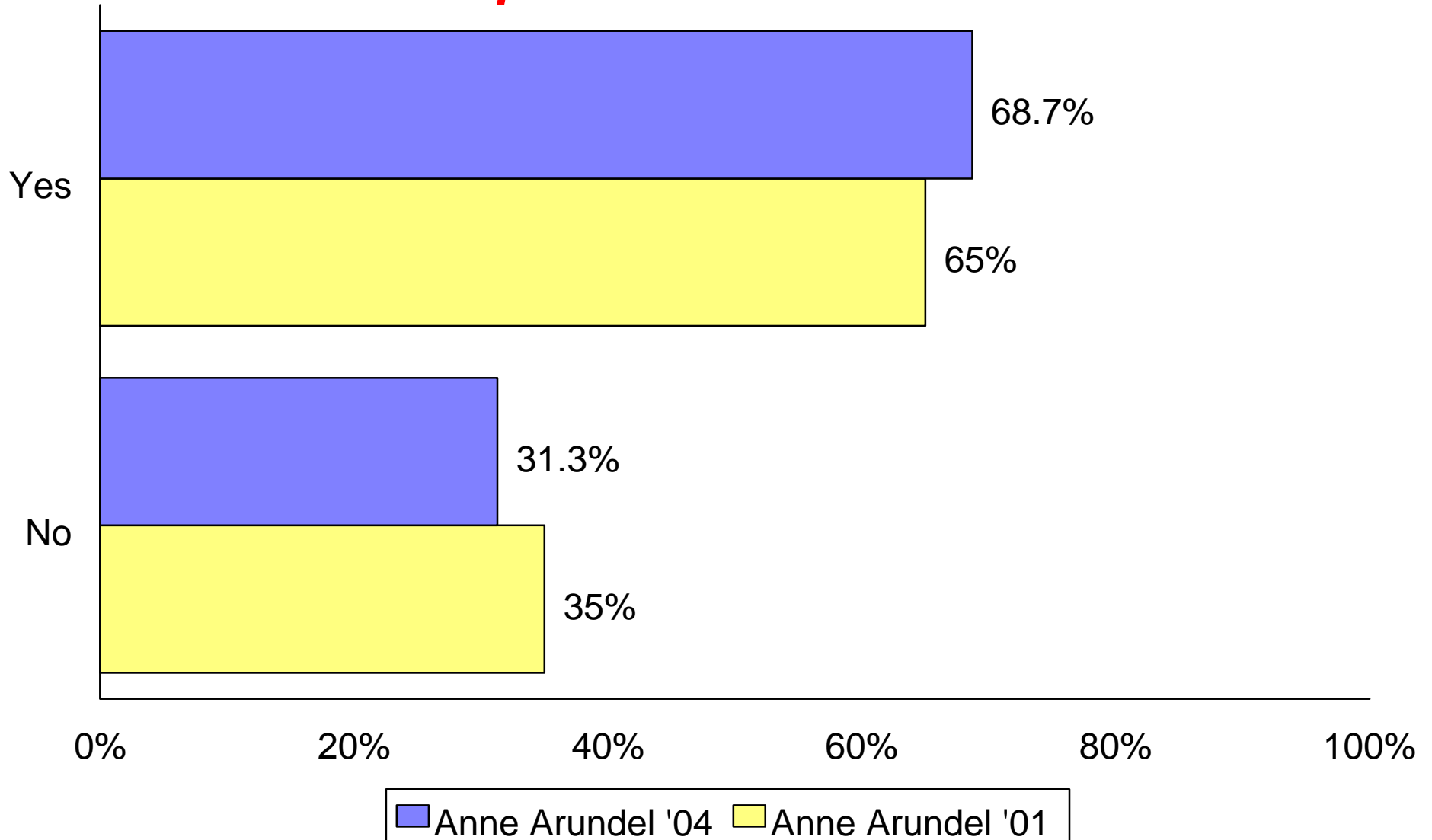


Have you ever had a pneumonia shot?



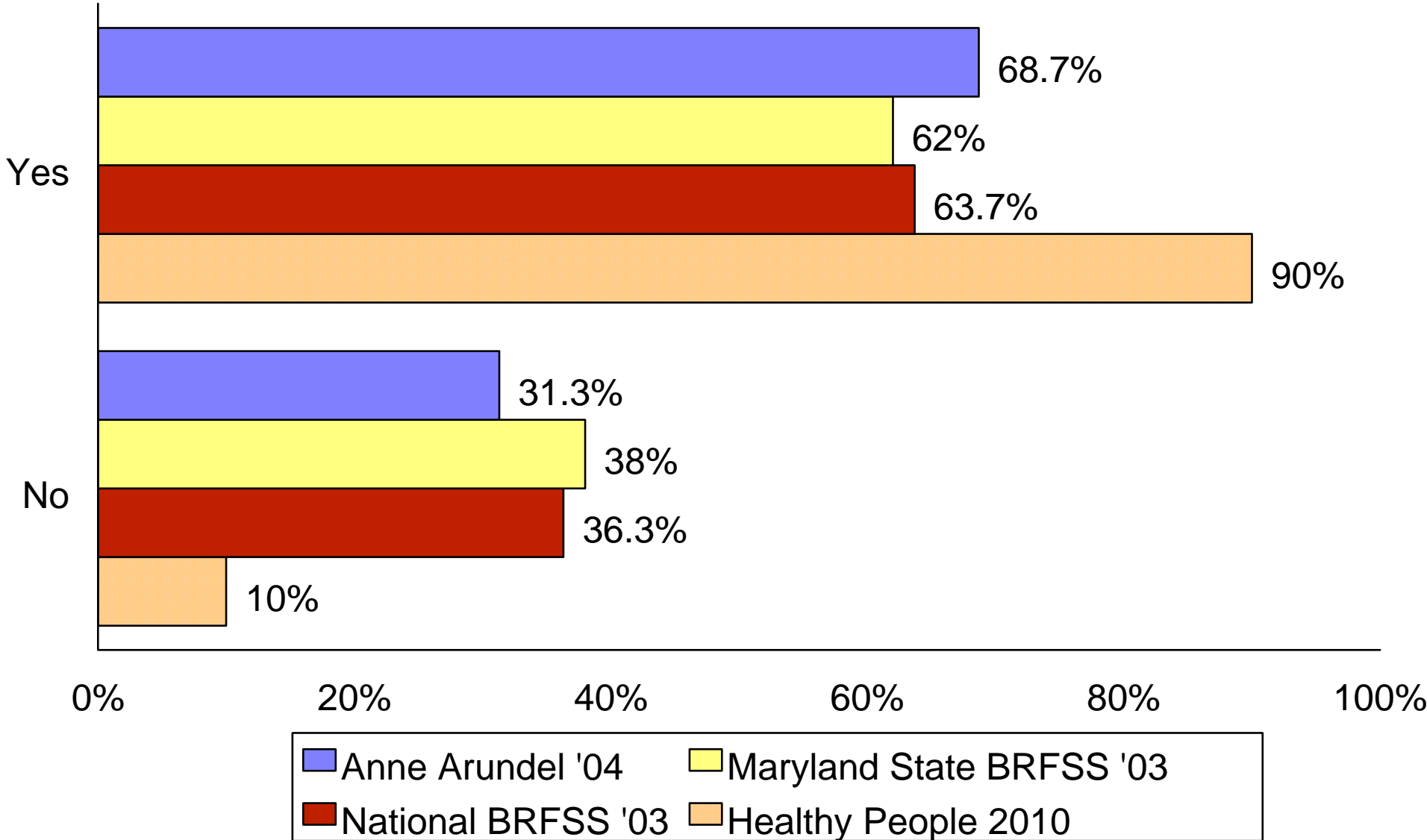
Have you ever had a pneumonia shot?

Respondents 65 and over



Have you ever had a pneumonia shot?

Respondents 65 and over



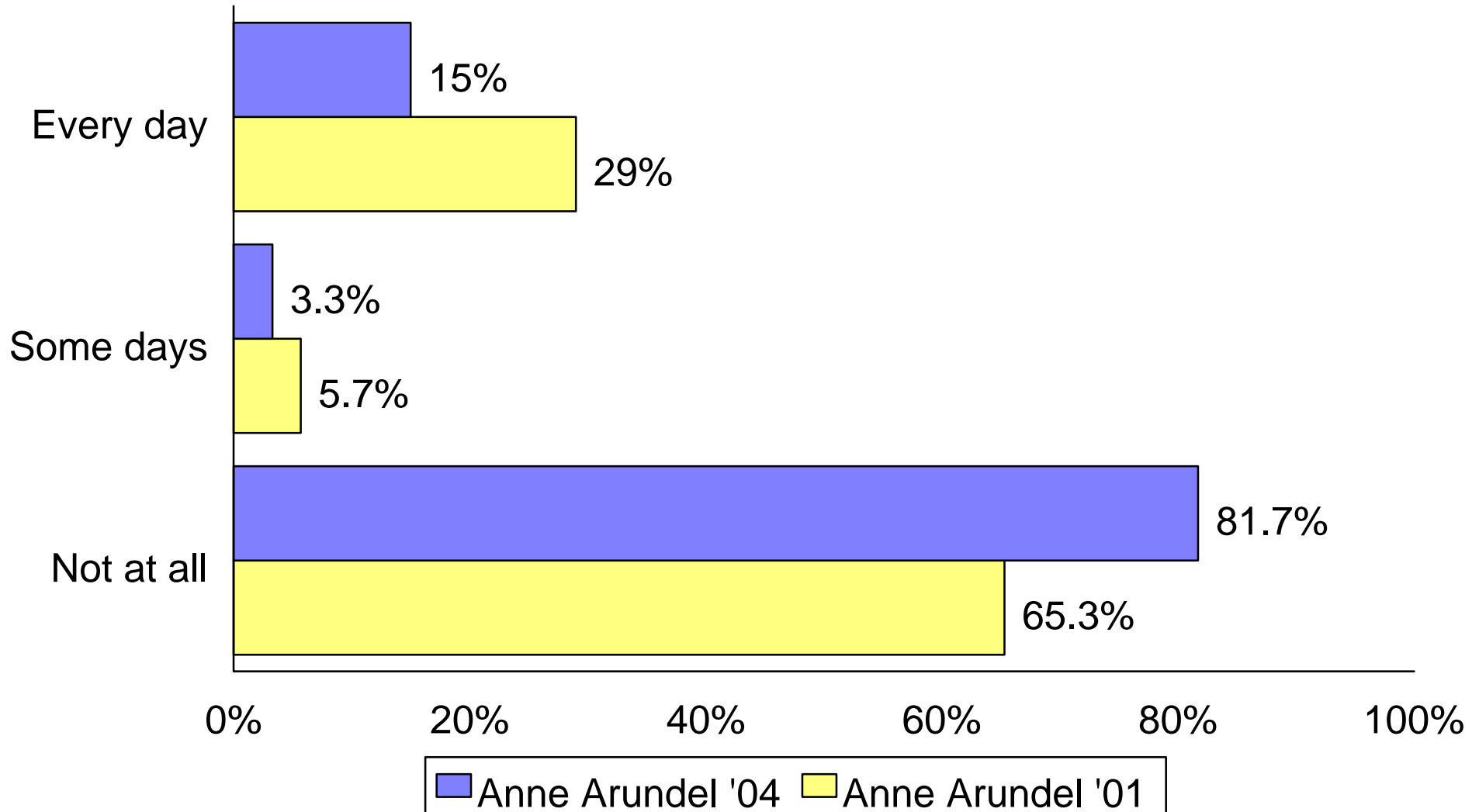
Statistically Significant Differences

Immunizations

- ① "65 & over" age group is more likely than other age groups to have had a flu shot in past year and also more likely to have ever had a pneumonia shot.
- ① The lower the income group, the more likely respondents are to have ever had a pneumonia shot.

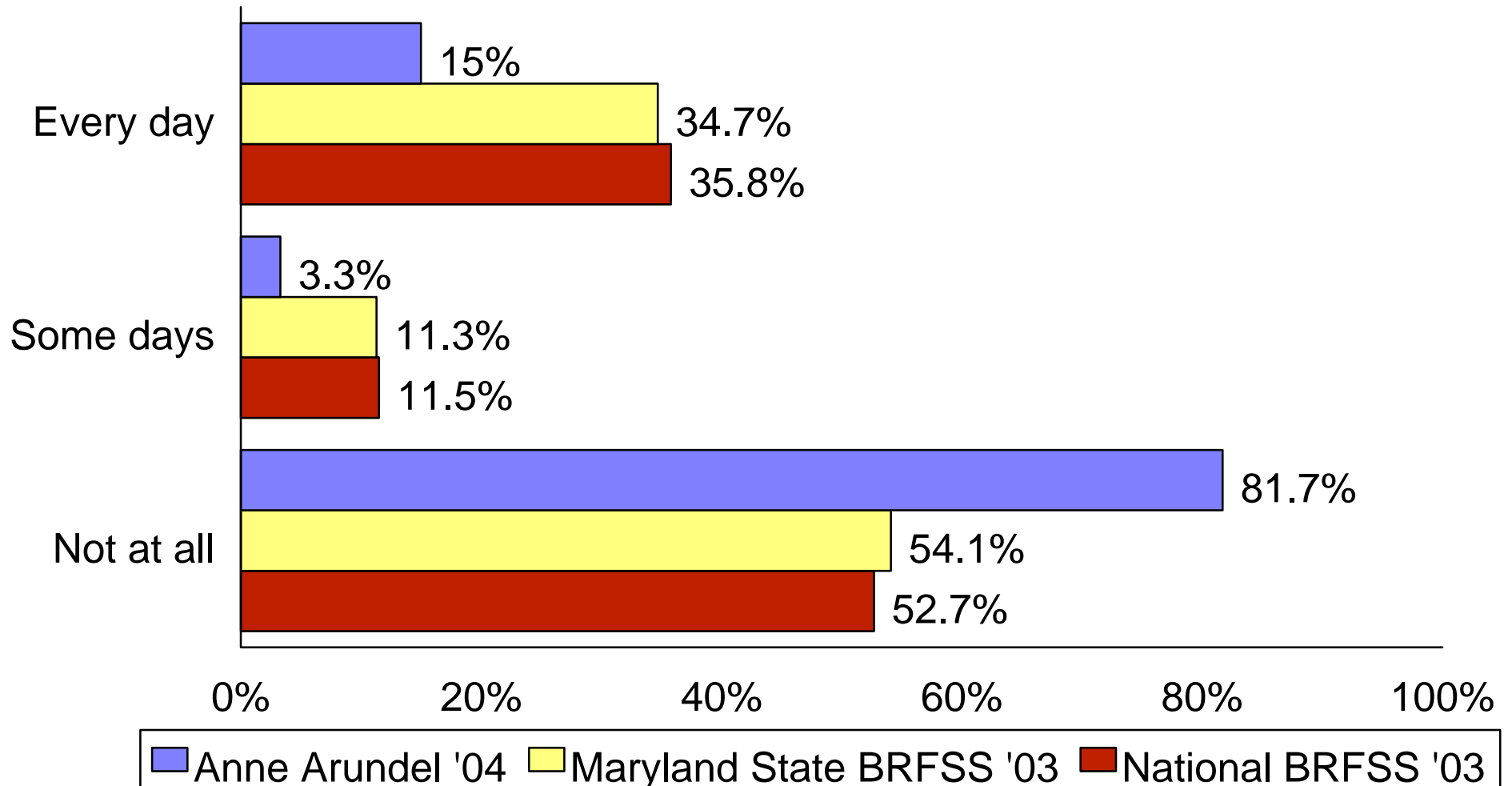
Tobacco Use

Do you now smoke cigarettes every day, some days, or not at all?



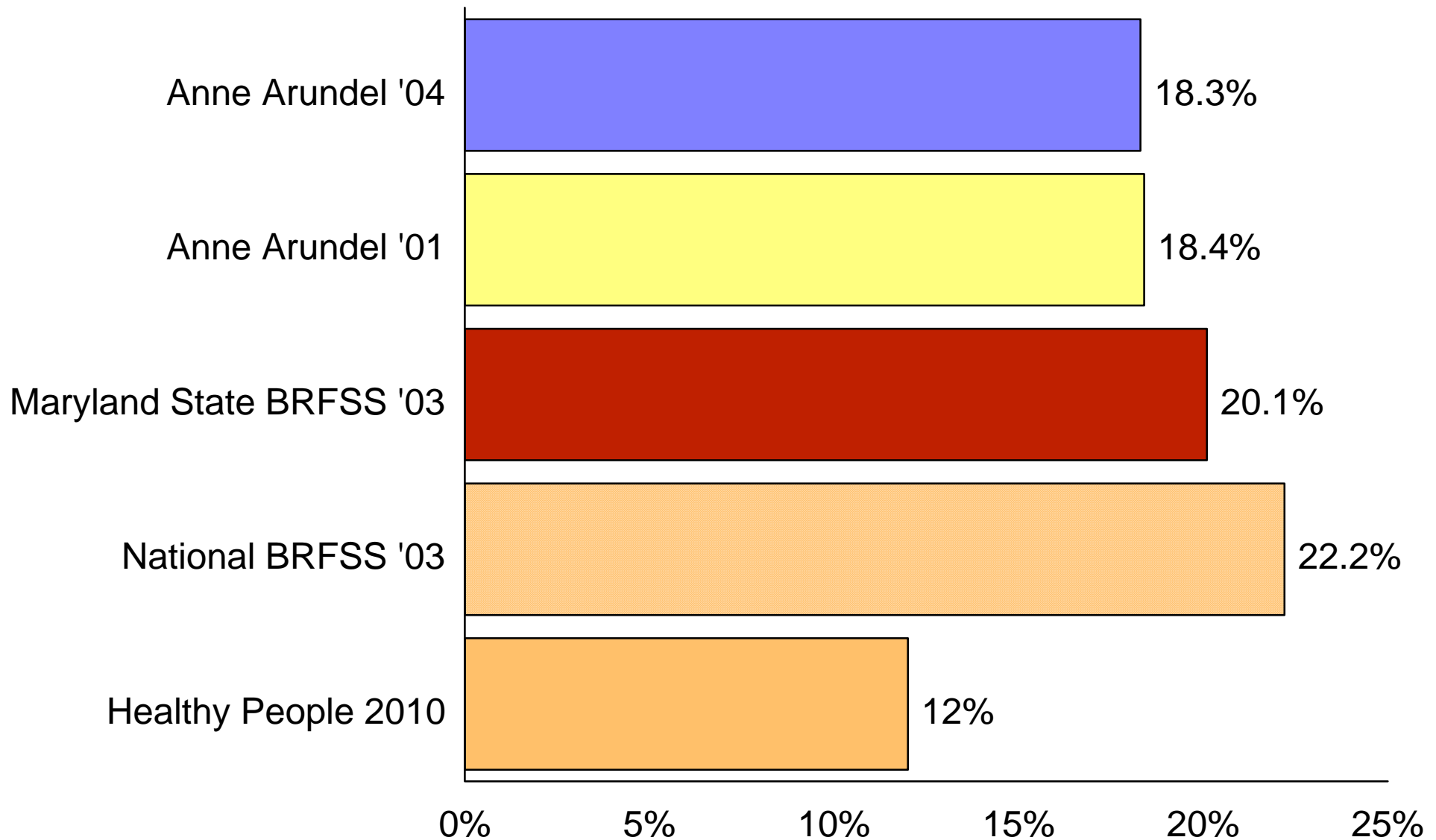
Note: In 2001, only respondents who have smoked at least 100 cigarettes were asked this question. Therefore, this is not a direct comparison between 2004 and 2001.

Do you now smoke cigarettes every day, some days, or not at all?



Note: This question was asked of all respondents in the Anne Arundel study, whereas only respondents who have smoked at least 100 cigarettes were asked this question in the Maryland and National studies. Therefore, this is not a direct comparison.

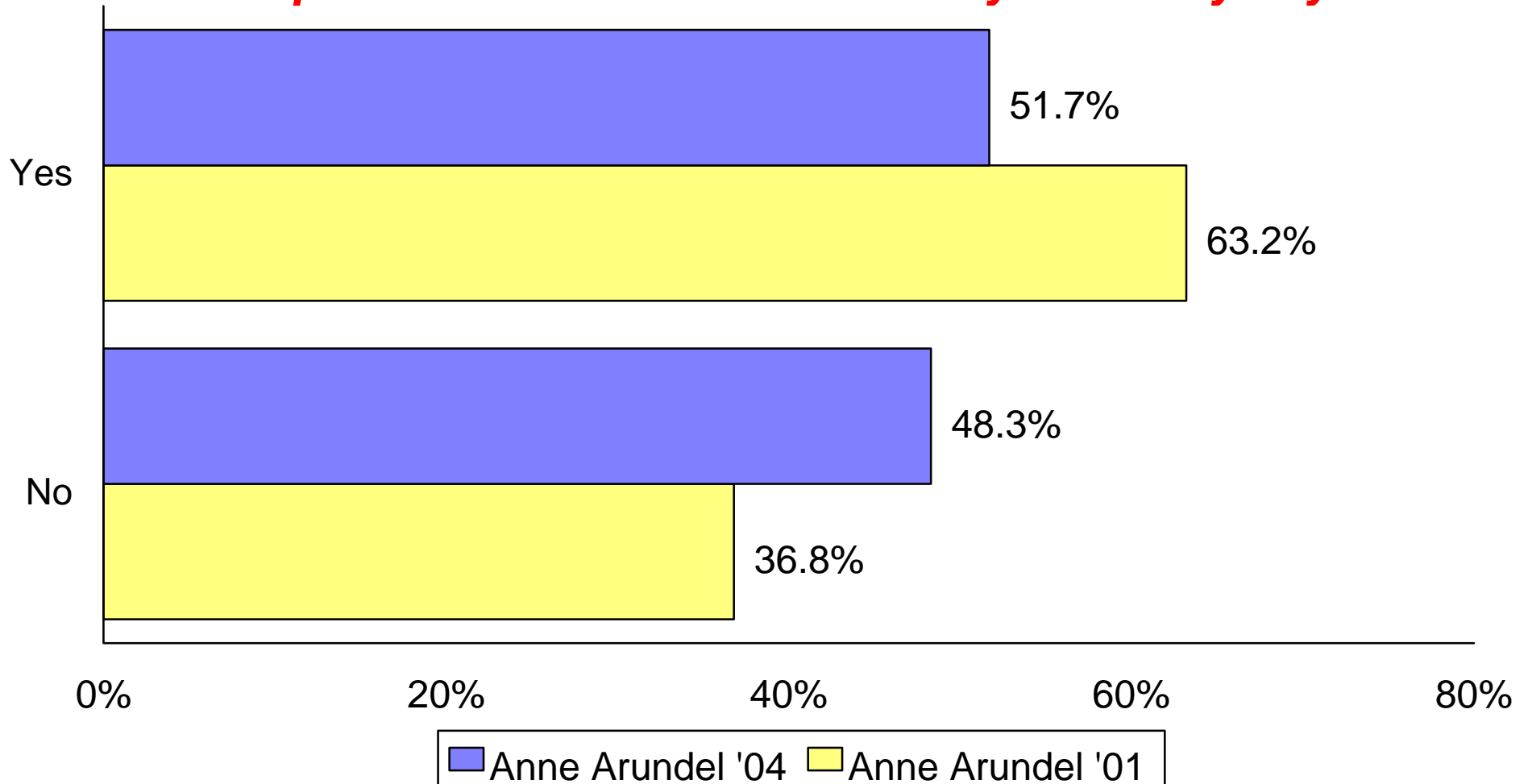
Proportion of adults who are smokers



Smoker defined as those who smoke "Some days" or "Every day"

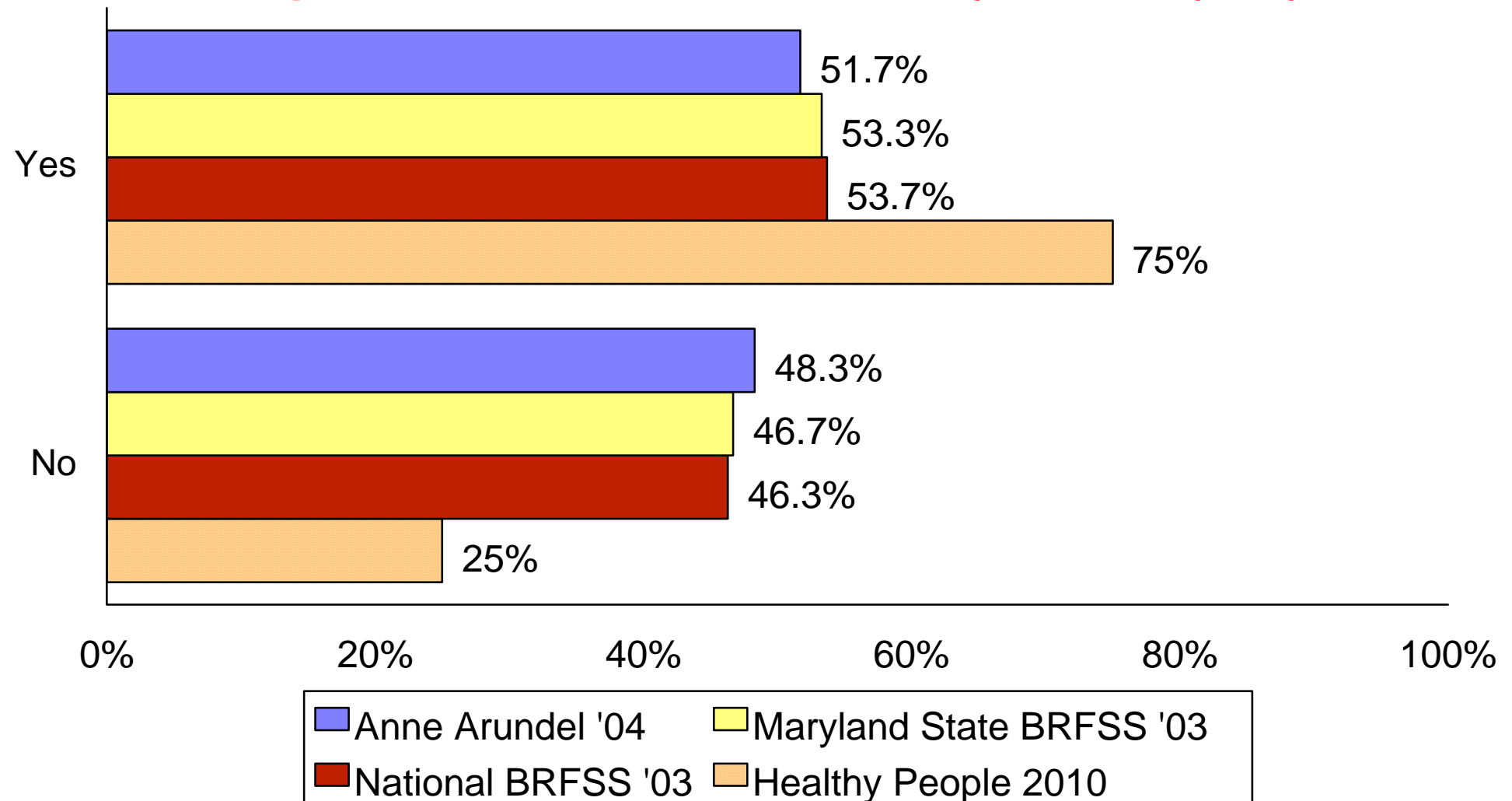
During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Respondents who smoke some days or every day



During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Respondents who smoke some days or every day



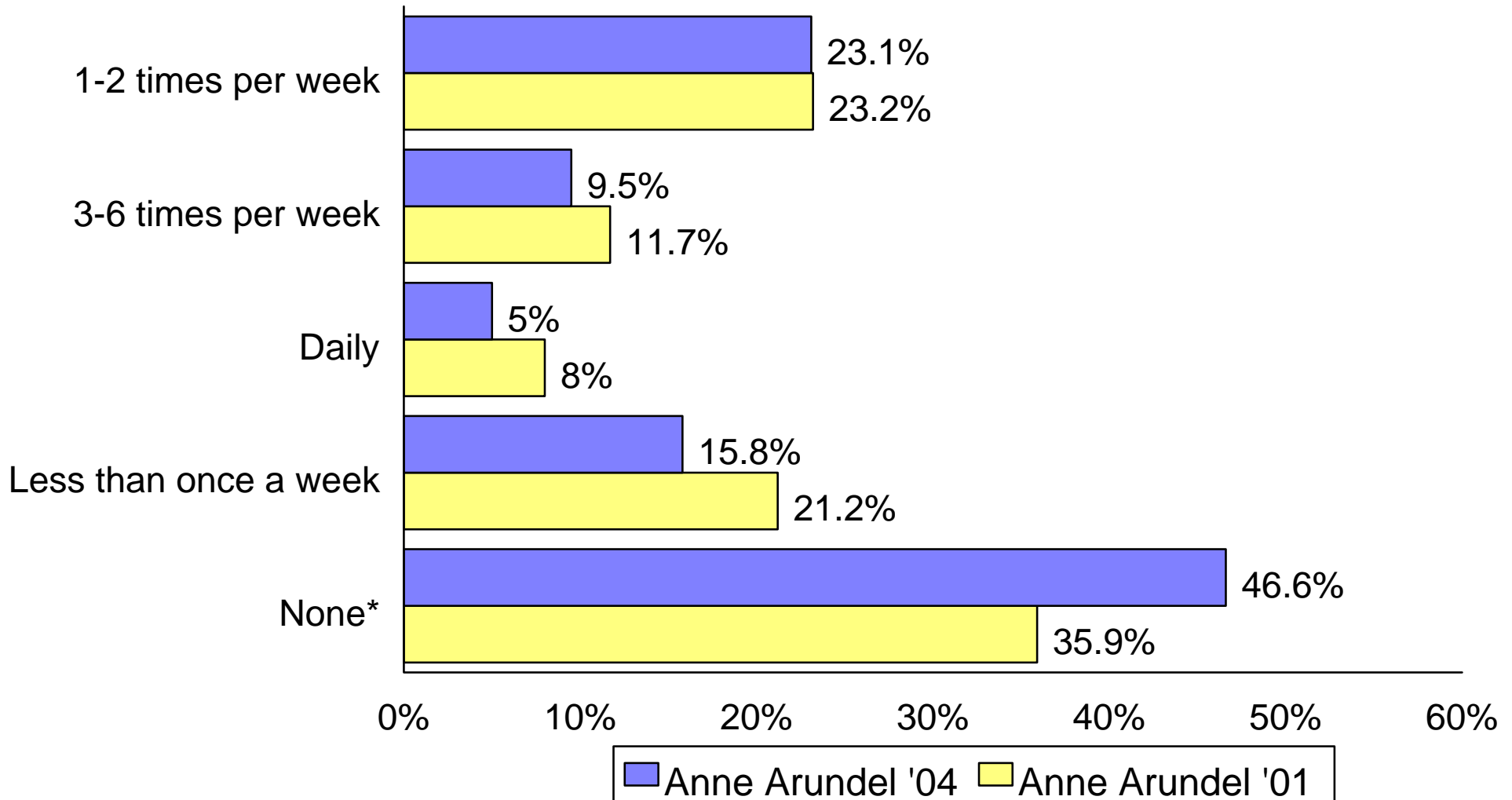
Statistically Significant Differences

Tobacco Use

- ① The lower the income, the more likely respondents are to smoke cigarettes.
- ① White and African American respondents are less likely to smoke than Asian and "Other" racial groups.

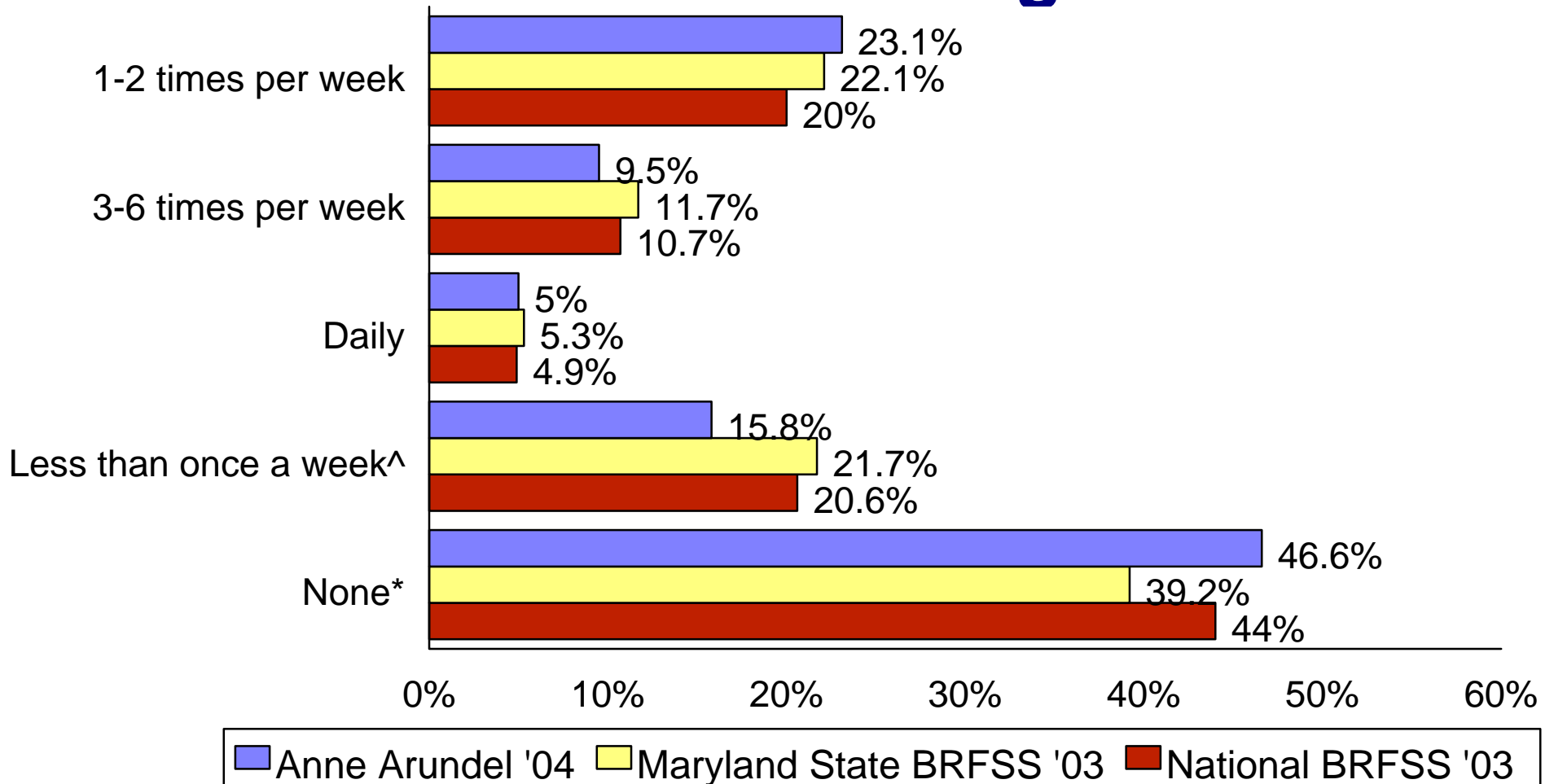
Alcohol Consumption

During the past 30 days, how often have you had at least one drink of any alcoholic beverage?



*Note: A statistically significant difference exists between 2004 and 2001.

During the past 30 days, how often have you had at least one drink of any alcoholic beverage?

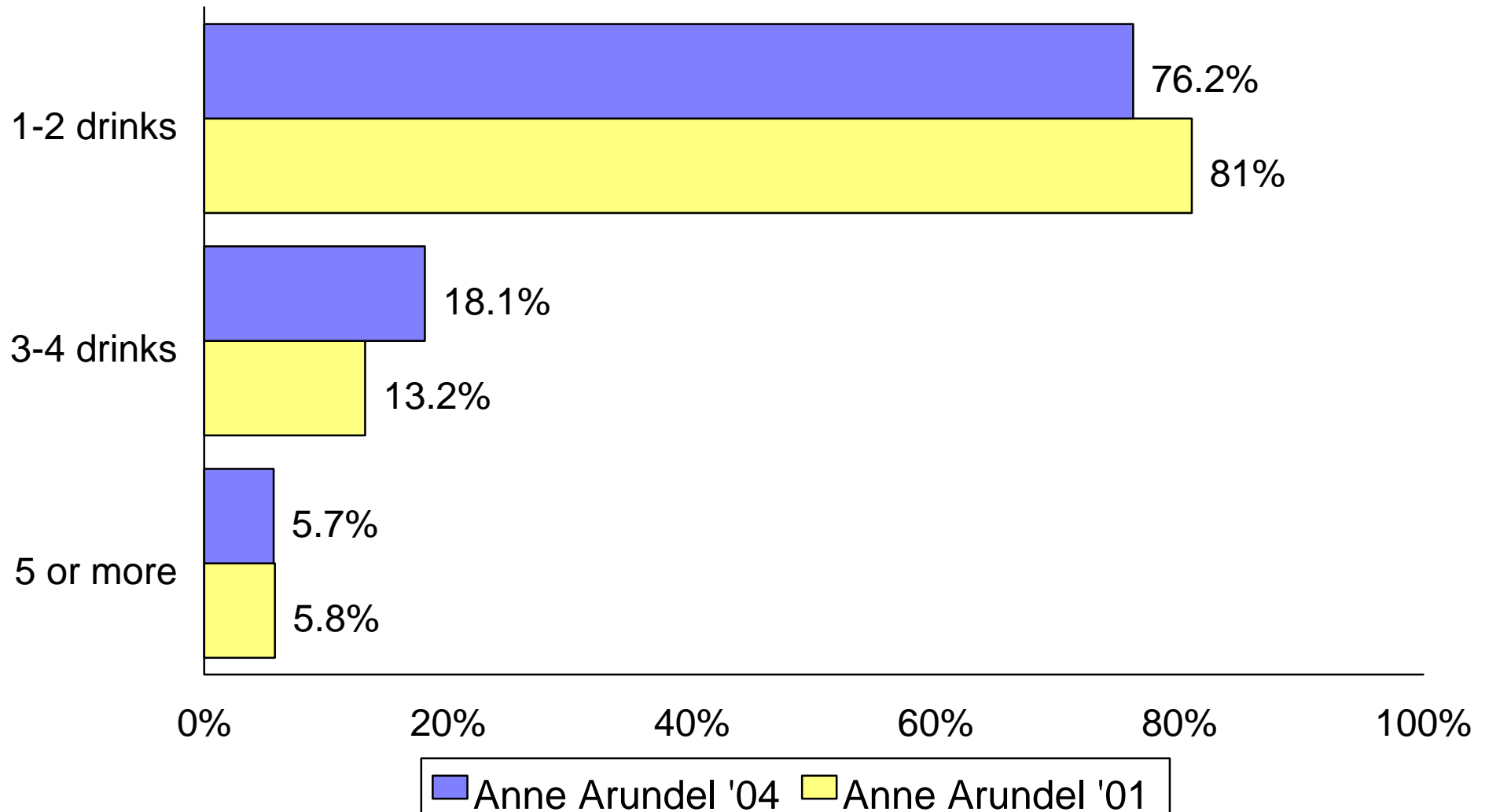


[^]Note: Anne Arundel is significantly different than Maryland.

^{*}Note: Anne Arundel is significantly different than Maryland and National.

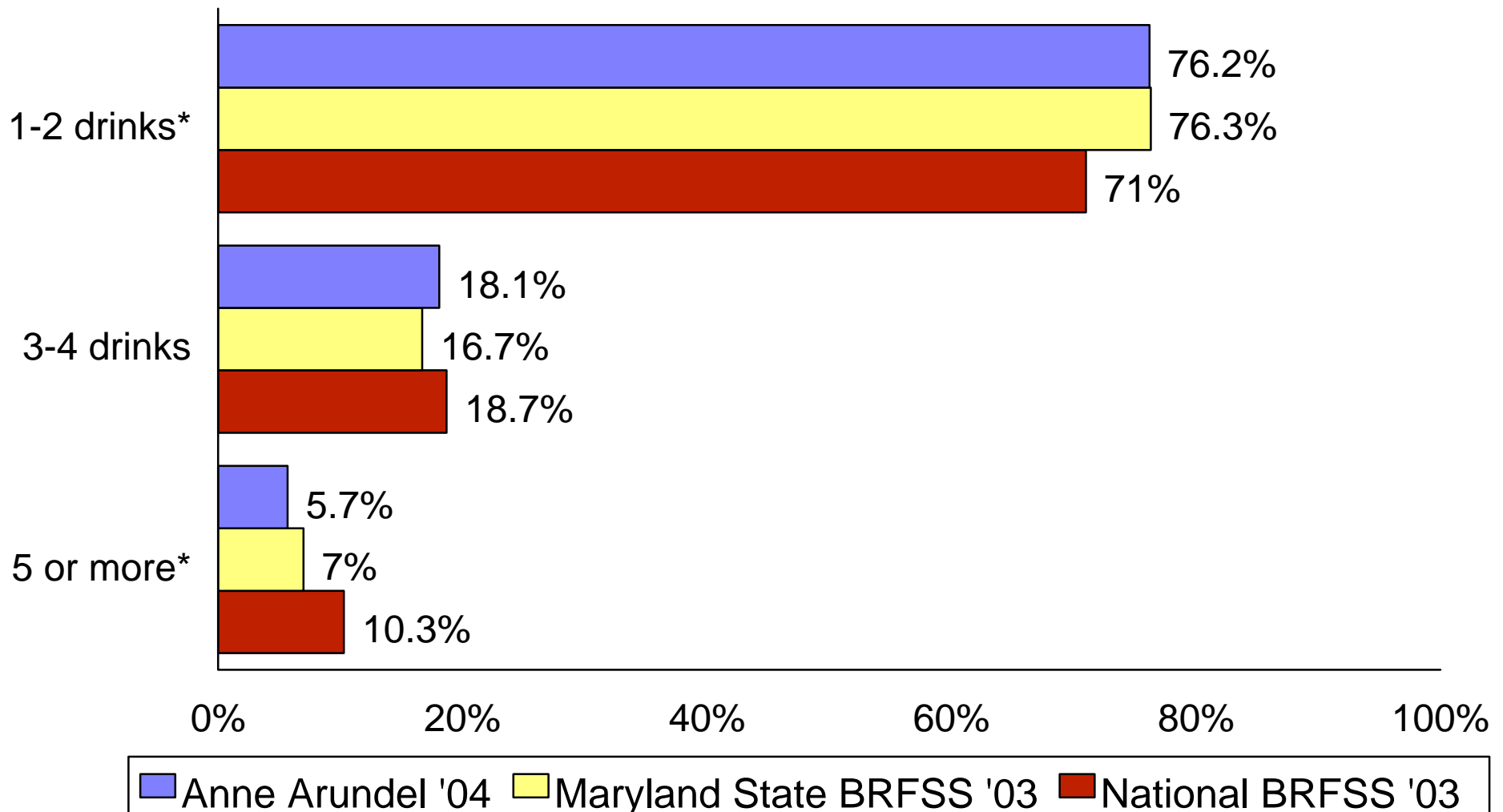
On the days when you drank, about how many drinks did you drink on the average?

Respondents who had an alcoholic drink in the past 30 days



On the days when you drank, about how many drinks did you drink on the average?

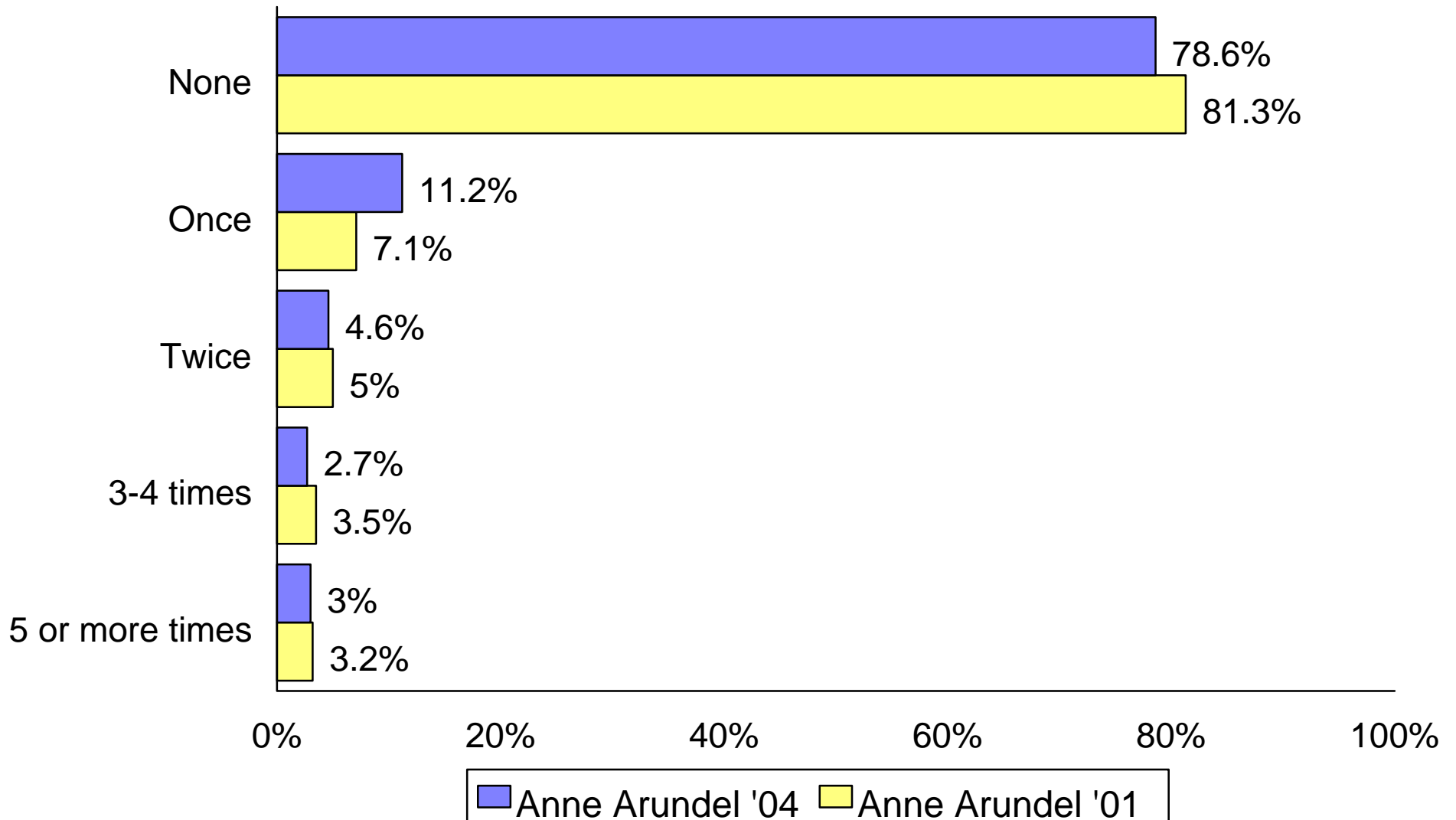
Respondents who had an alcoholic drink in the past 30 days



*Note: Anne Arundel is significantly different than National.

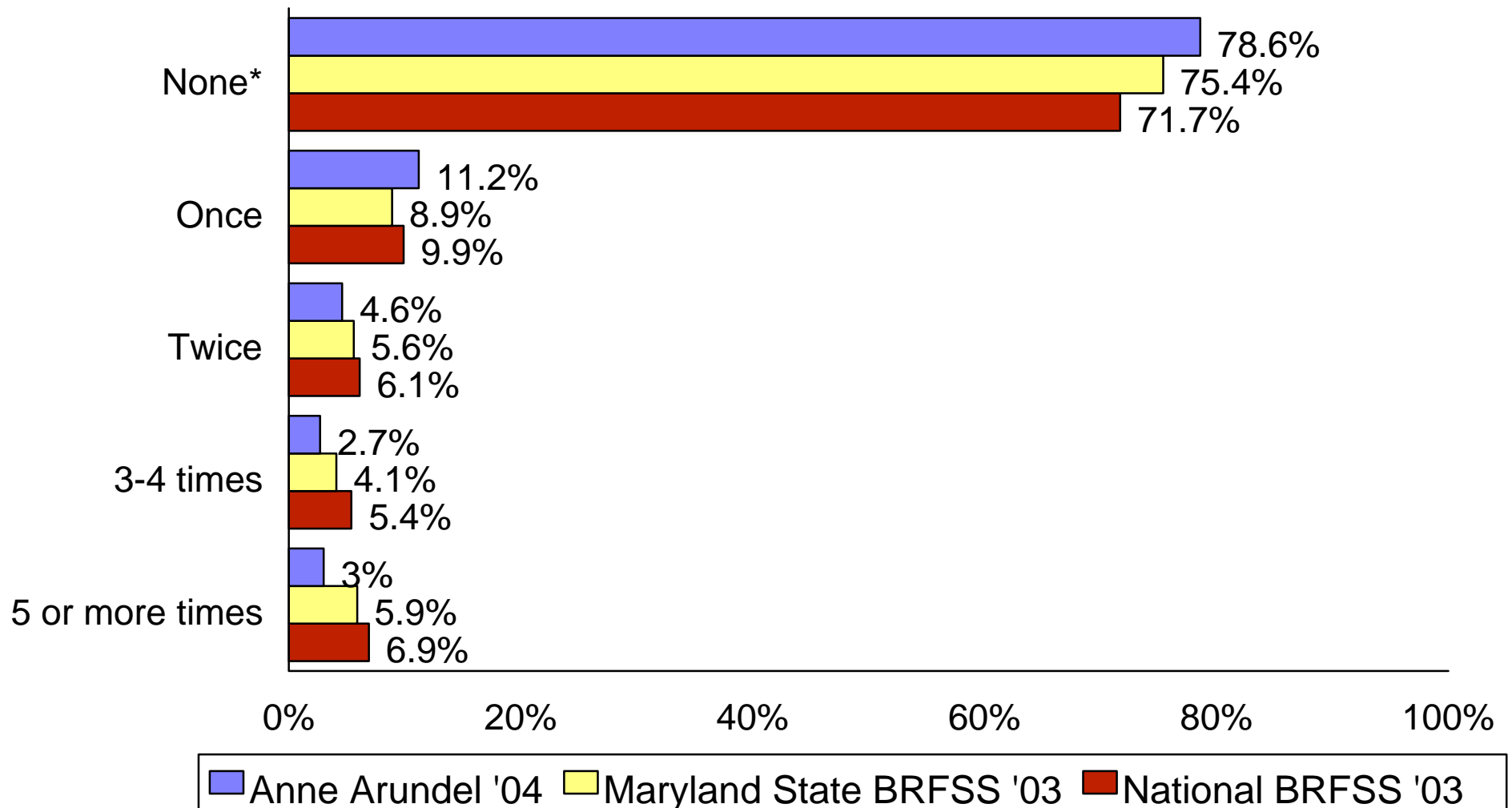
How many times during the past 30 days did you have 5 or more drinks on an occasion?

Respondents who had an alcoholic drink in the past 30 days



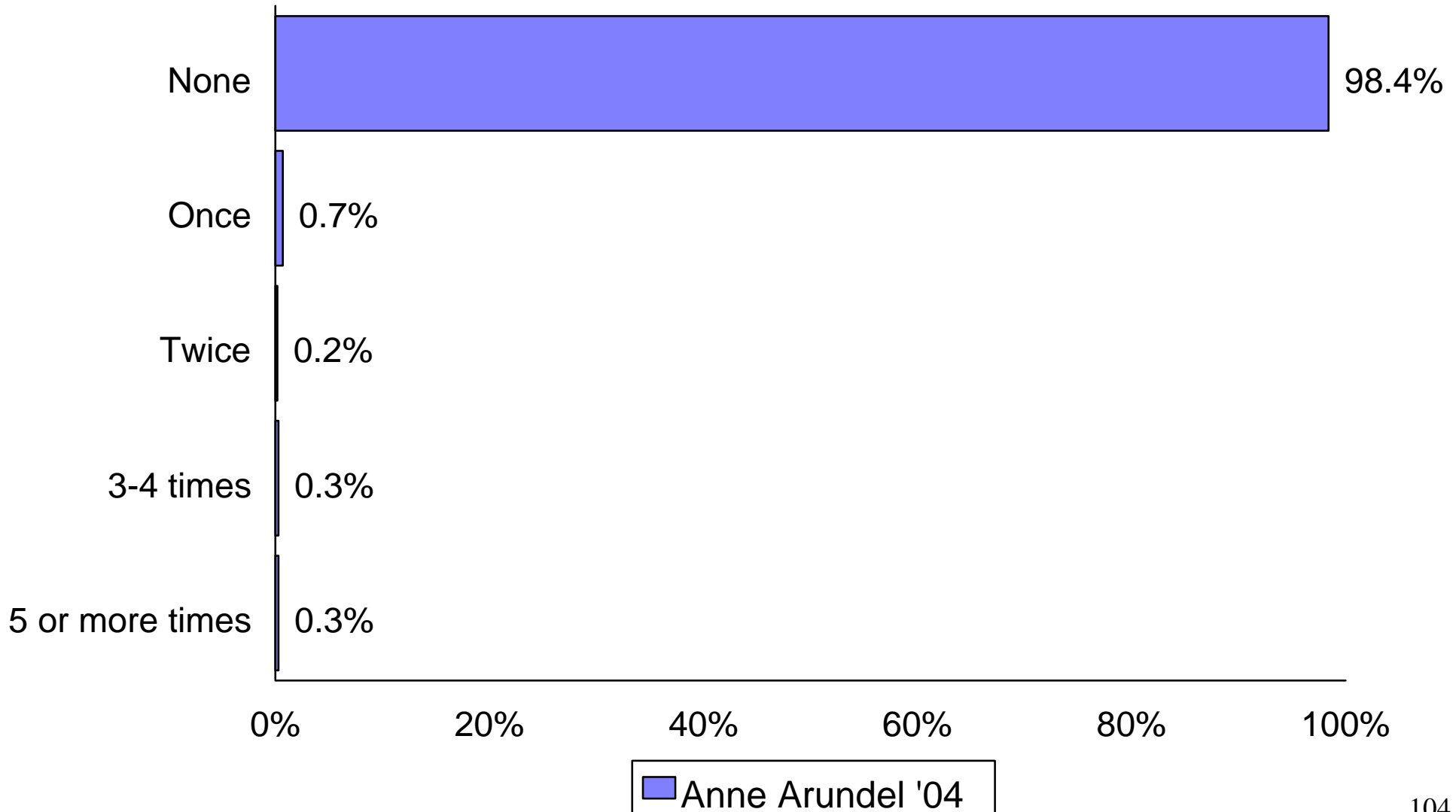
How many times during the past 30 days did you have 5 or more drinks on an occasion?

Respondents who had an alcoholic drink in the past 30 days



*Note: Anne Arundel is significantly different than National.

During the past 30 days, how many times have you driven when you've had perhaps too much to drink?



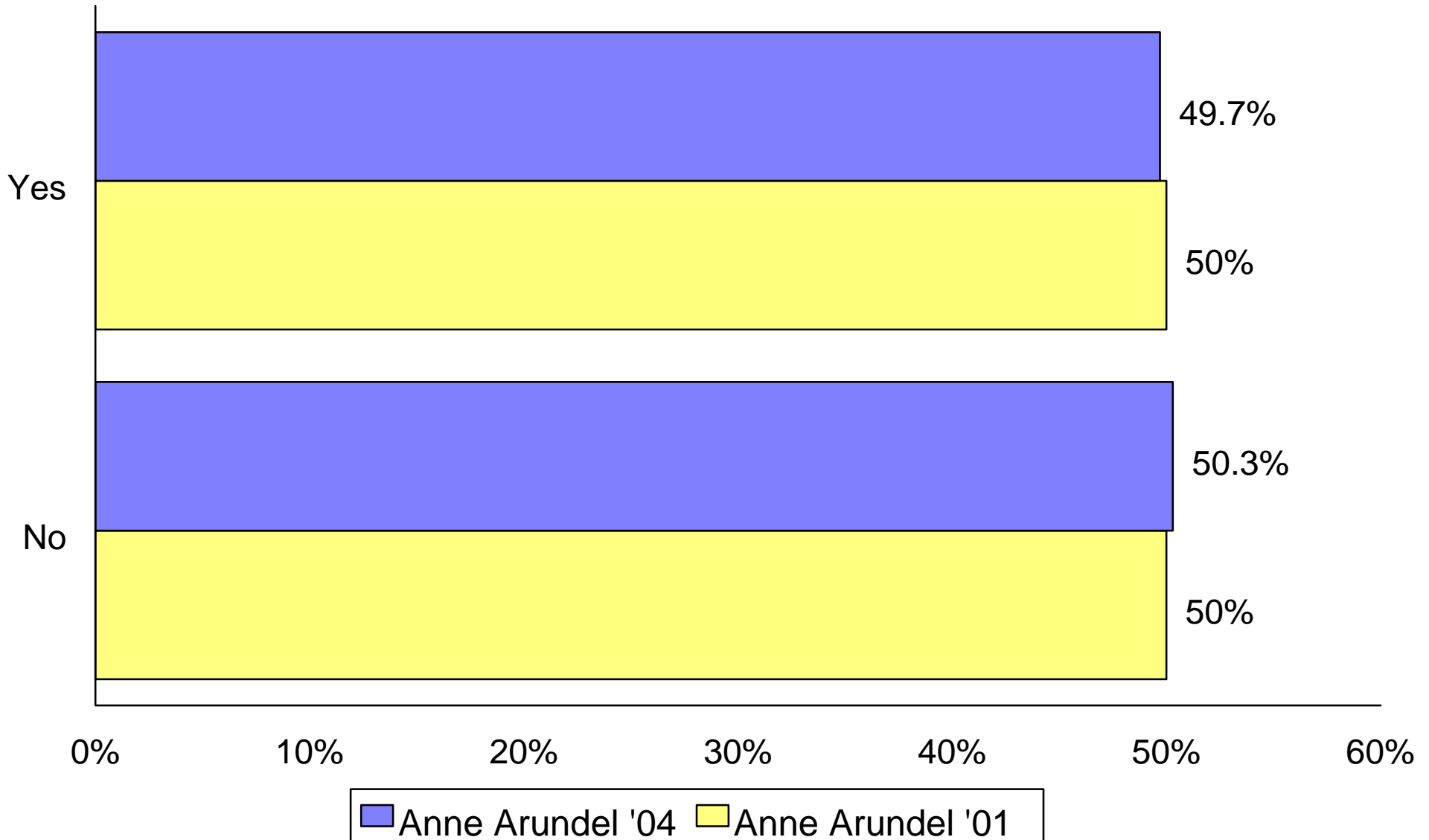
Statistically Significant Differences

Alcohol Consumption

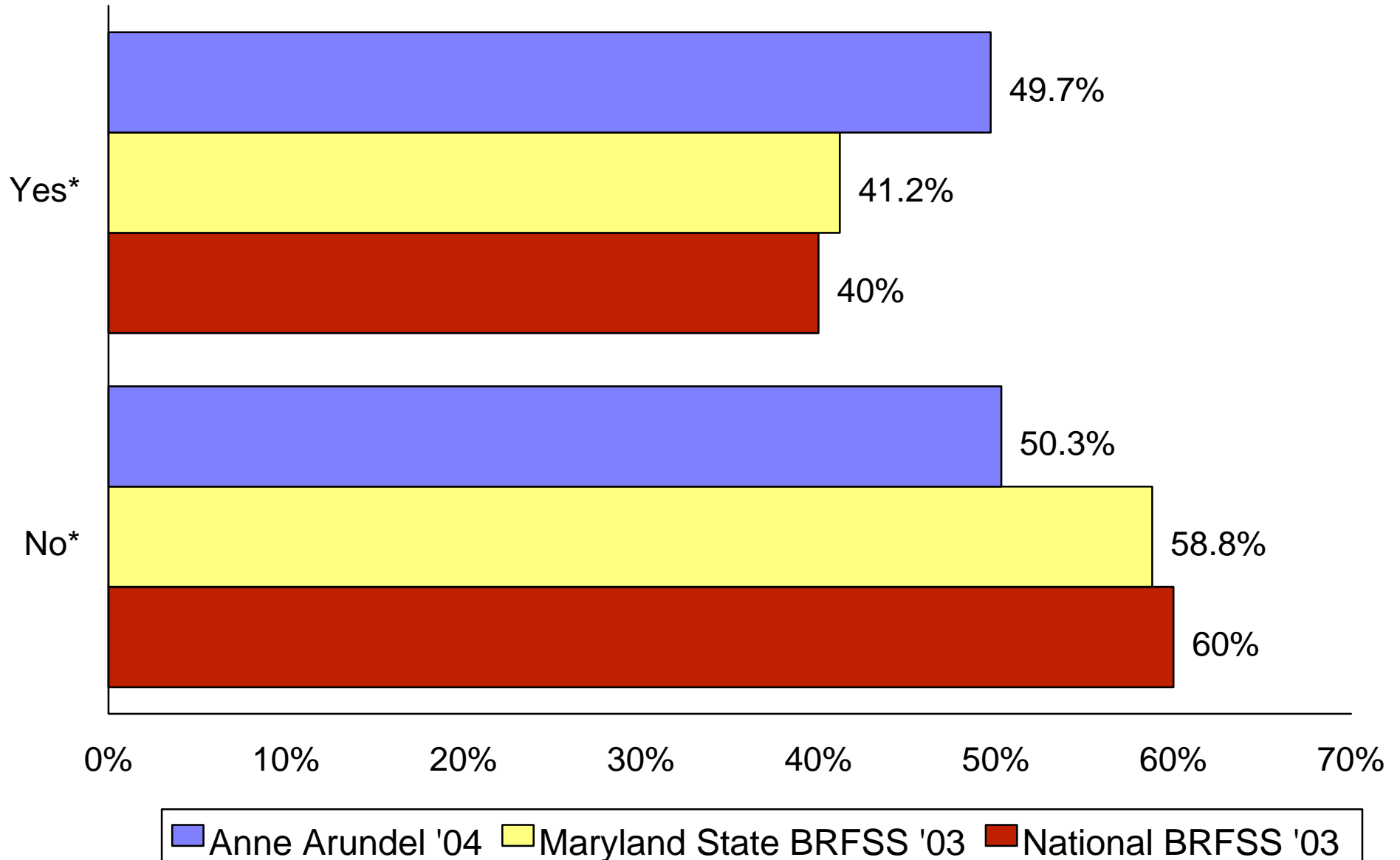
- ① The "65 & over" age group is more likely than other age groups to have a daily drink of an alcoholic beverage, but also more likely to report "no drinks" in past 30 days.
- ① The younger the respondent, the more likely they are to have "5 or more" drinks on an occasion.
- ① African American respondents are more likely than other racial groups to report "no days" in the past month where they drank an alcoholic beverage.
- ① The higher the income, the more likely respondents are to have had an alcoholic beverage in the past month.
- ① Males are more likely than females to have had an alcoholic drink in the past month and to have had "5 or more" drinks on an occasion.

Weight Control

Are you now trying to lose weight?



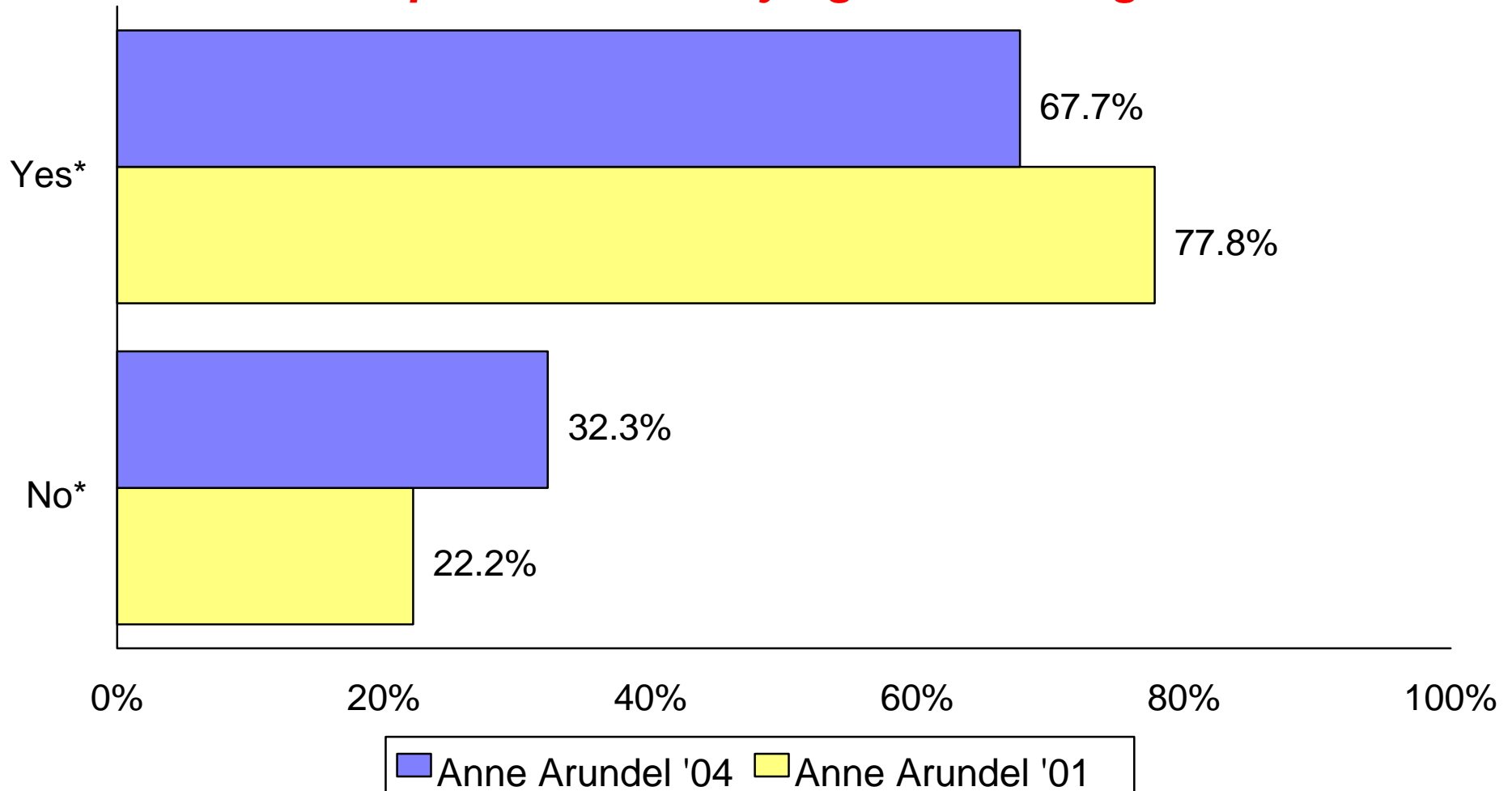
Are you now trying to lose weight?



*Note: Anne Arundel is significantly different than Maryland and National.

Are you now trying to maintain your current weight, that is, to keep from gaining weight?

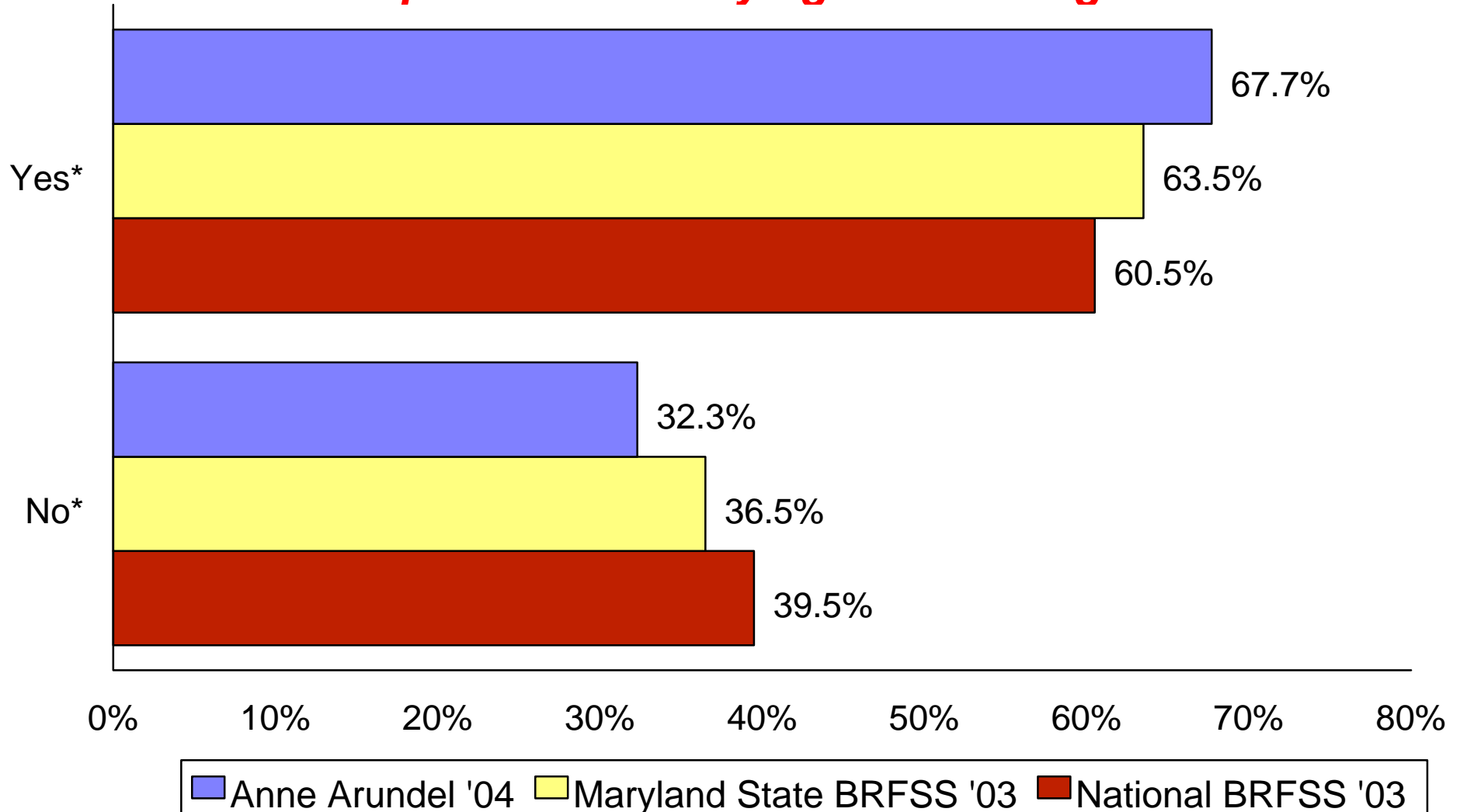
Respondents not trying to lose weight



*Note: A statistically significant difference exists between 2004 and 2001.

Are you now trying to maintain your current weight, that is, to keep from gaining weight?

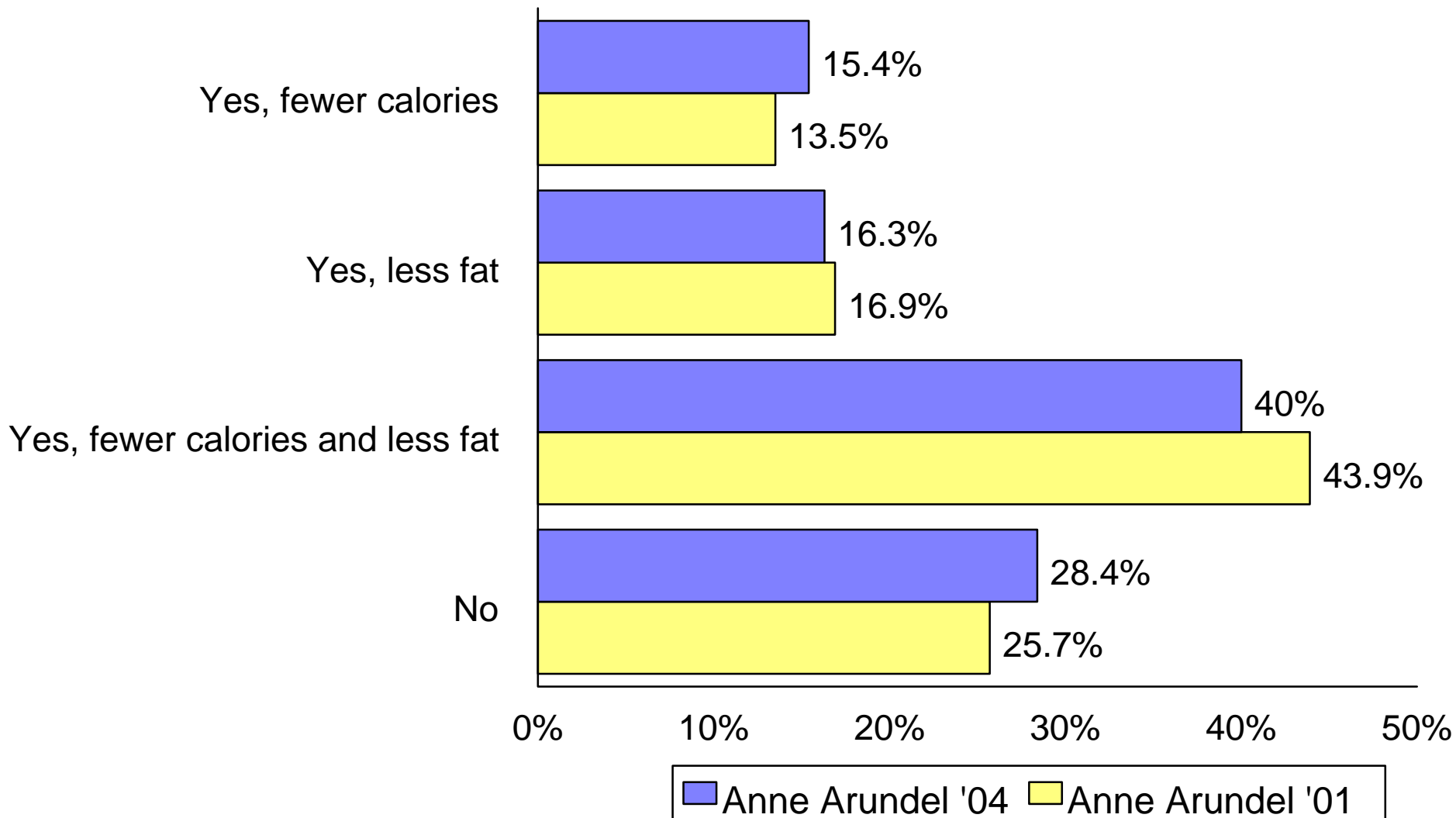
Respondents not trying to lose weight



*Note: Anne Arundel is significantly different than National.

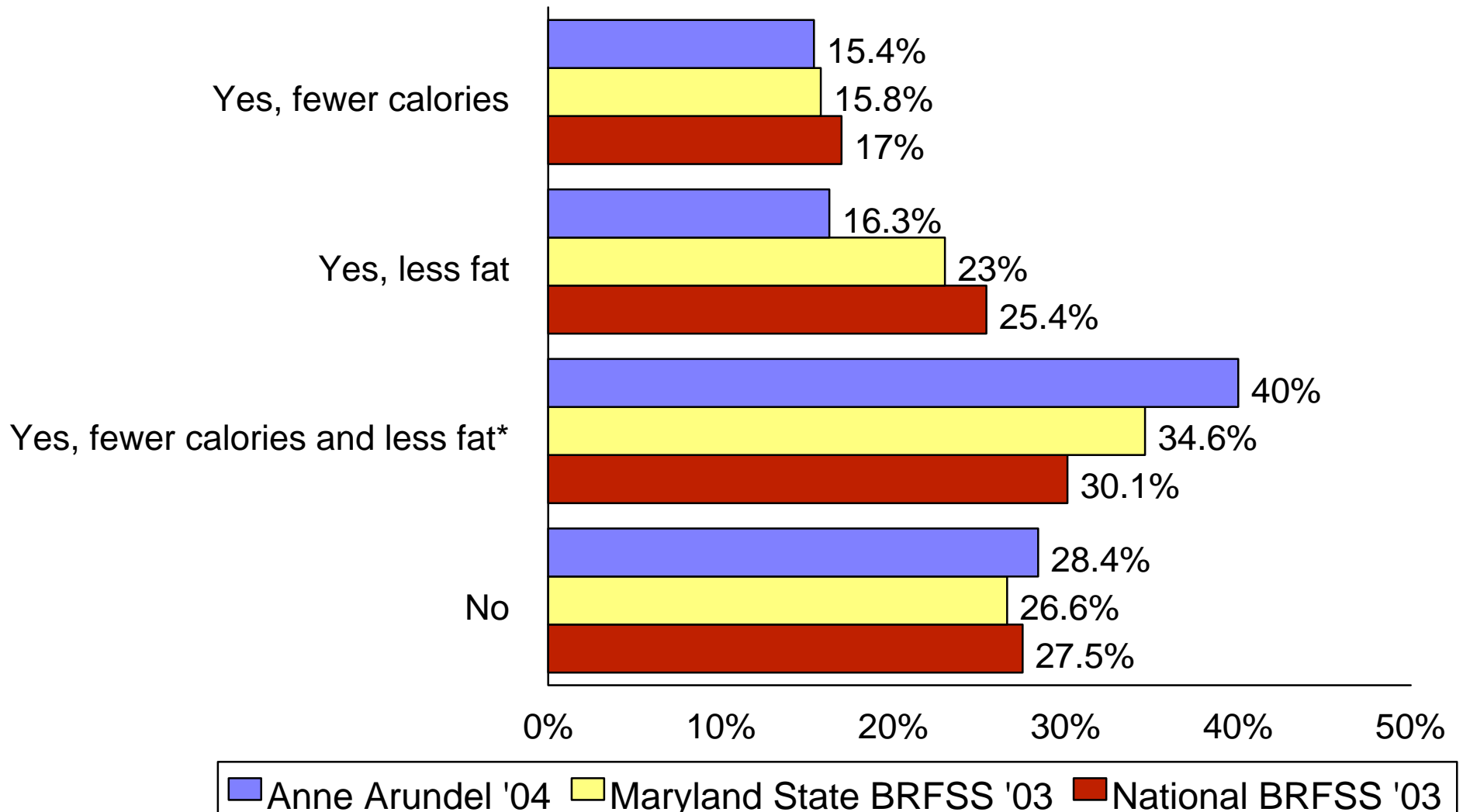
Are you eating fewer calories or less fat to lose weight or keep from gaining weight?

Respondents trying to lose or maintain weight



Are you eating fewer calories or less fat to lose weight or keep from gaining weight?

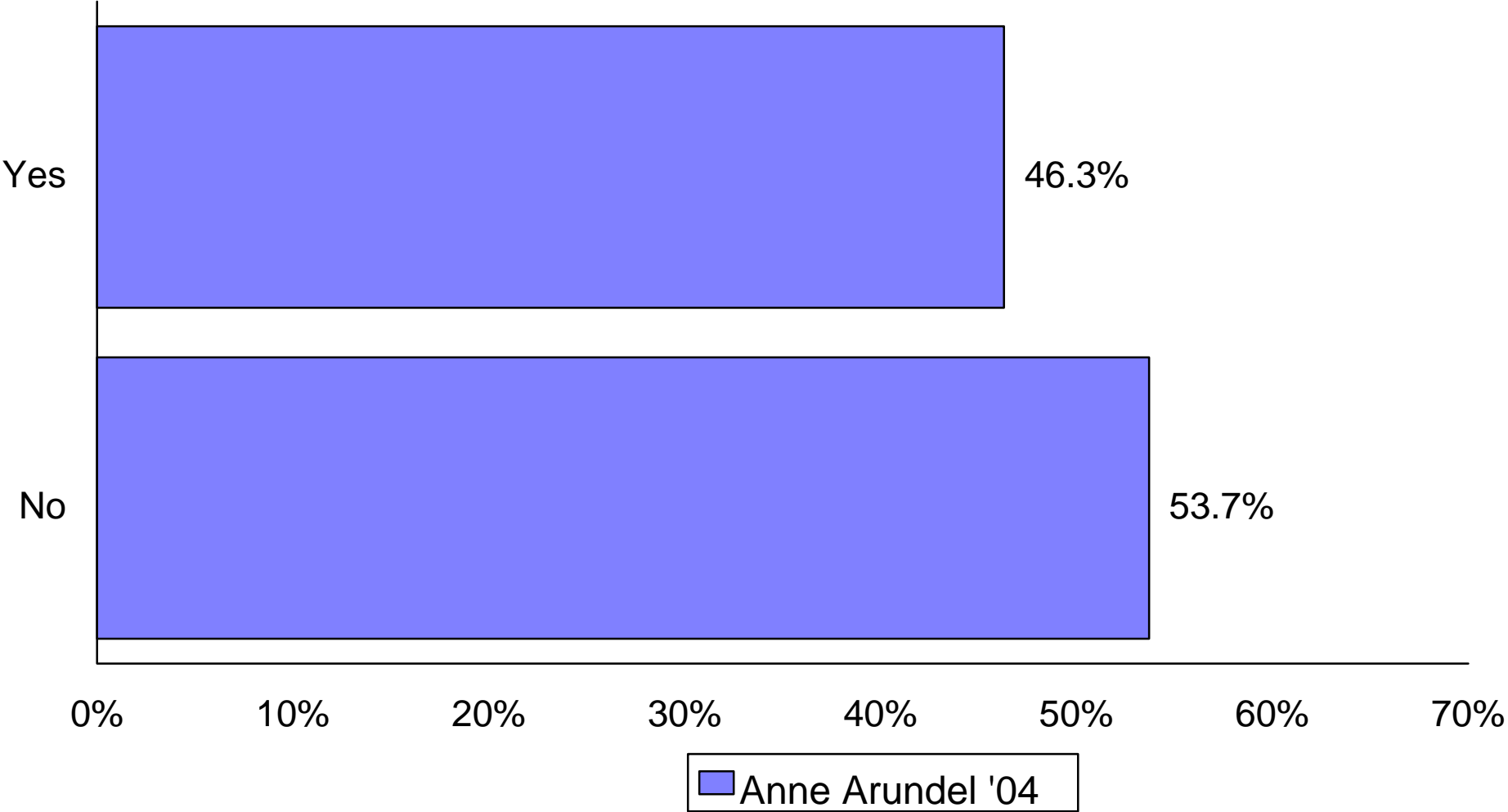
Respondents trying to lose or maintain weight



*Note: Anne Arundel is significantly different than National.

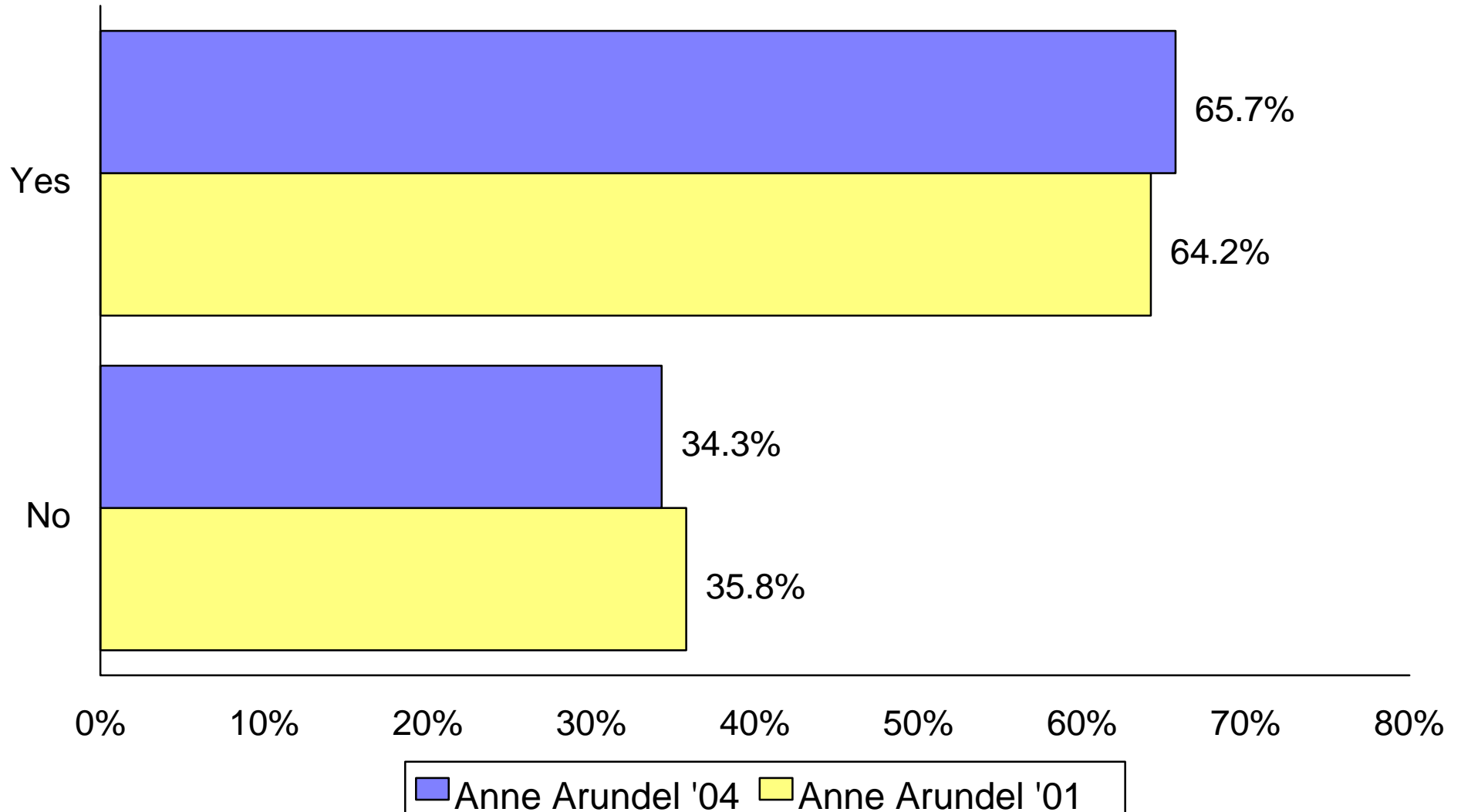
Are you eating fewer carbohydrates to lose weight or keep from gaining weight?

Respondents trying to lose or maintain weight



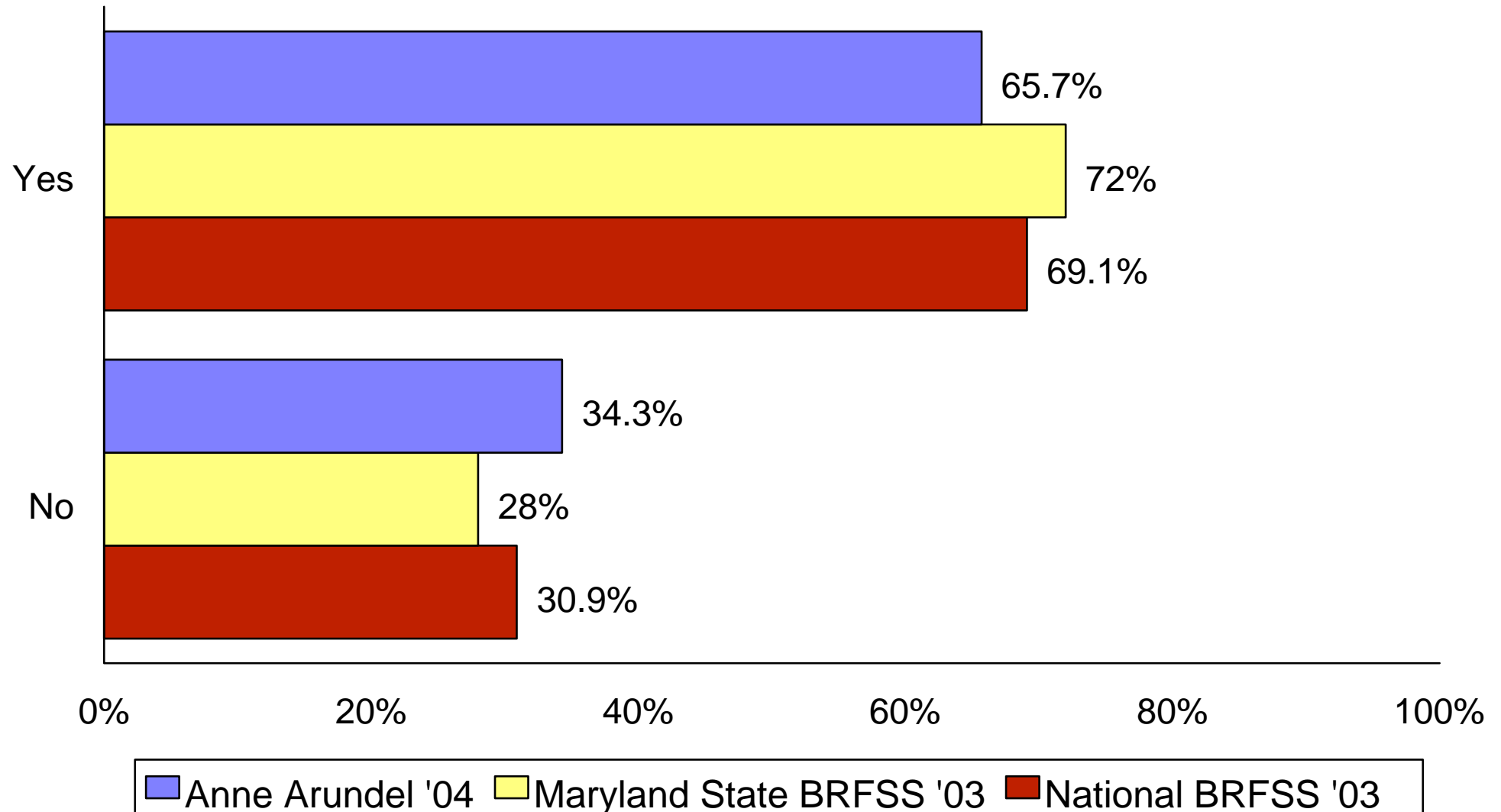
Are you using physical activity to lose weight or keep from gaining weight?

Respondents trying to lose or maintain weight



Are you using physical activity to lose weight or keep from gaining weight?

Respondents trying to lose or maintain weight



Statistically Significant Differences

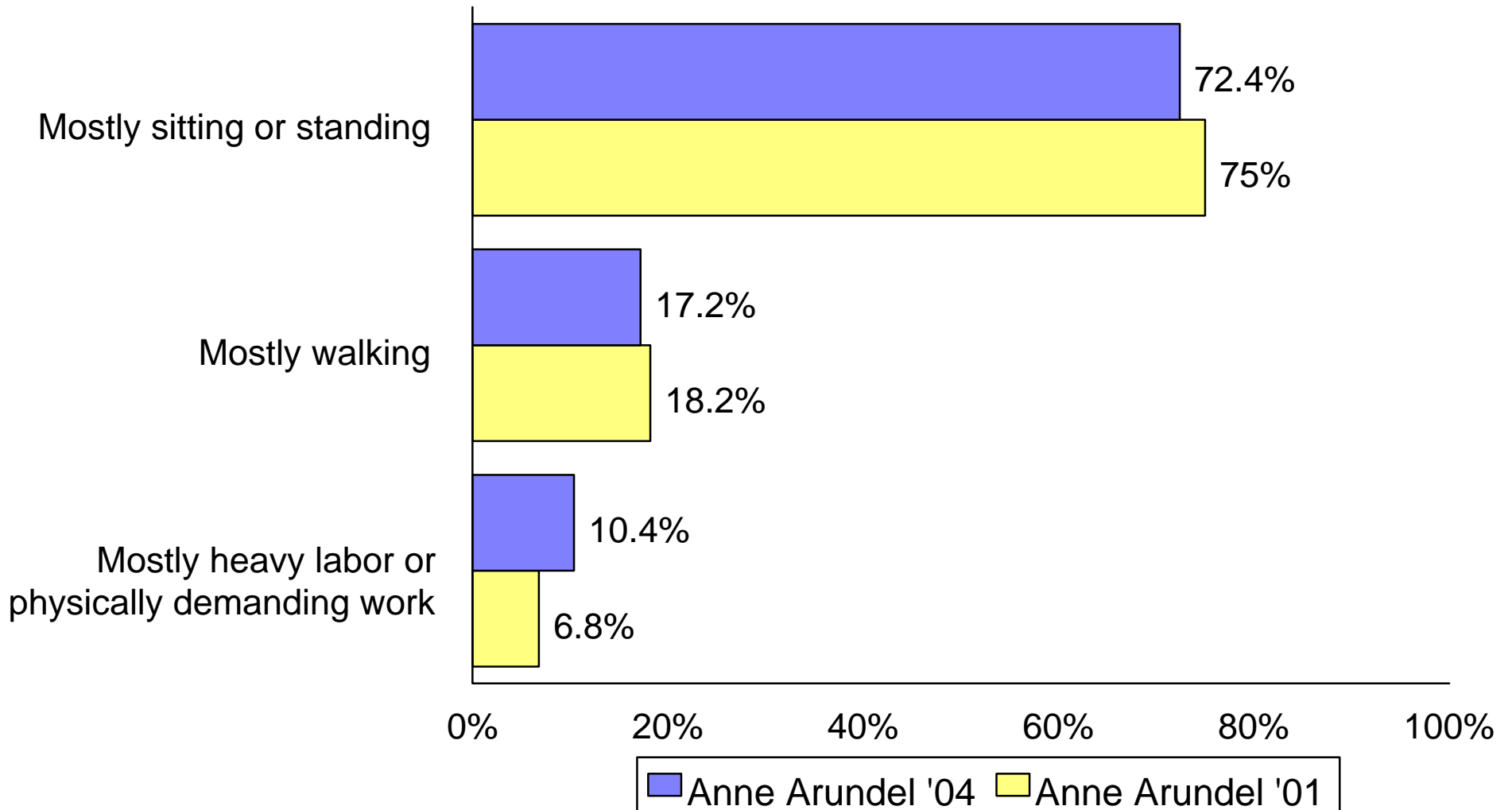
Weight Control

- ① Females are more likely than males to be trying to lose weight.
- ① The "less than \$15,000" income group is less likely than other income groups to use physical activity or exercise to lose weight.
- ① The "18-24" year old age group is less likely than other groups to be trying to lose weight.
- ① The younger the respondent, the more likely they are using physical activity or exercise to lose weight.

Exercise and Physical Activity

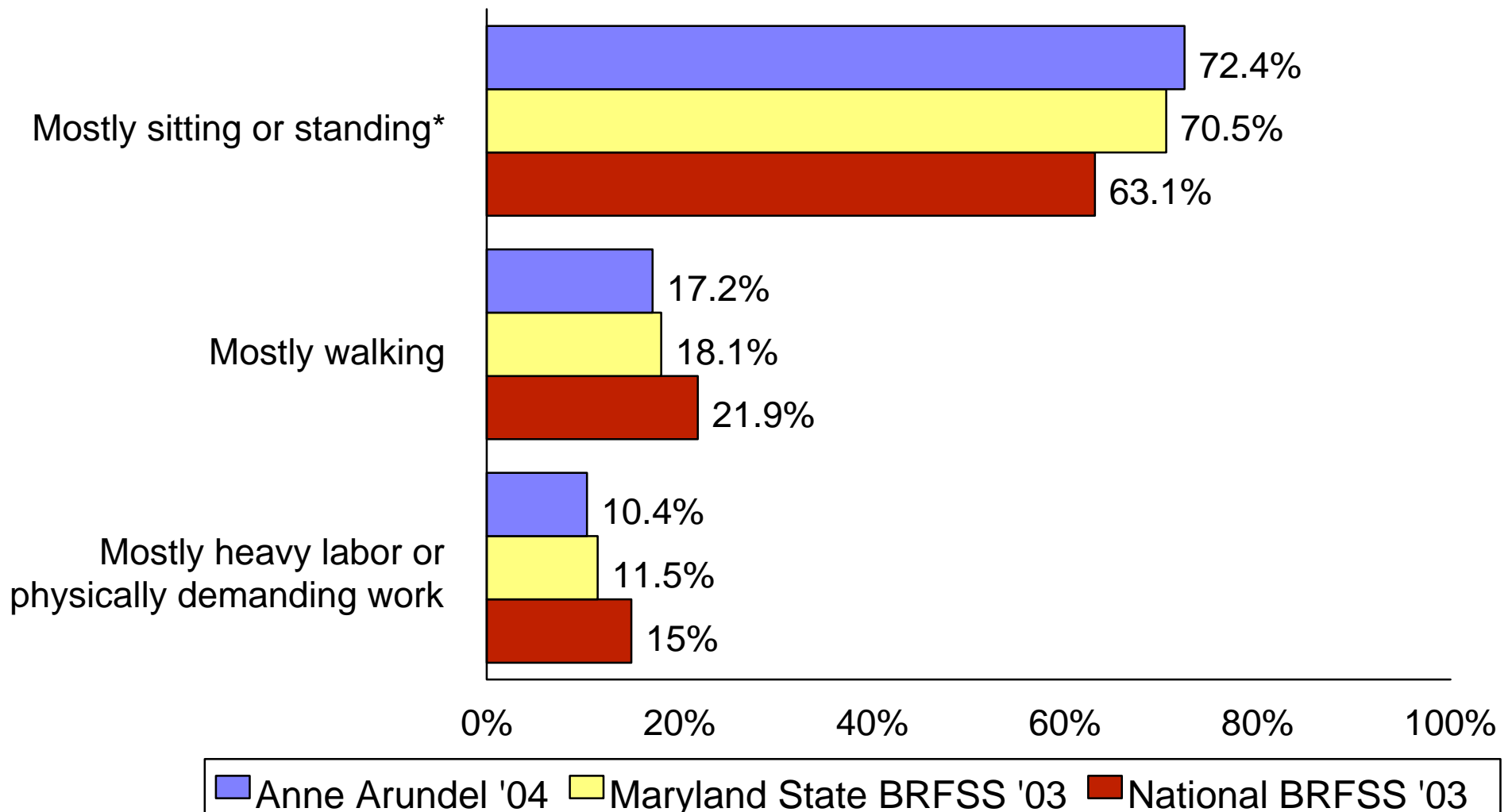
When you are at work, which of the following best describes what you do?

Respondents who are employed or self-employed



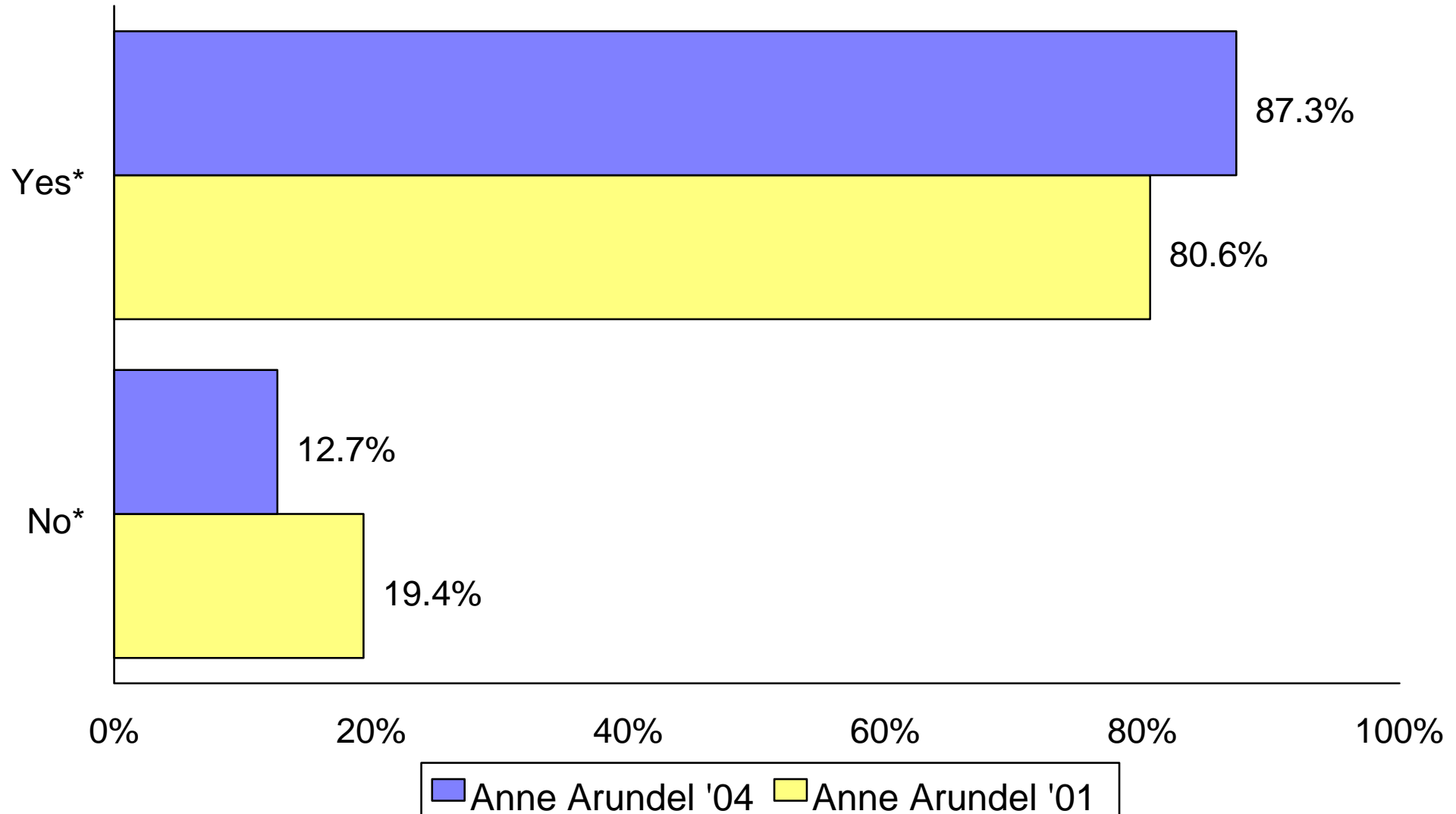
When you are at work, which of the following best describes what you do?

Respondents who are employed or self-employed



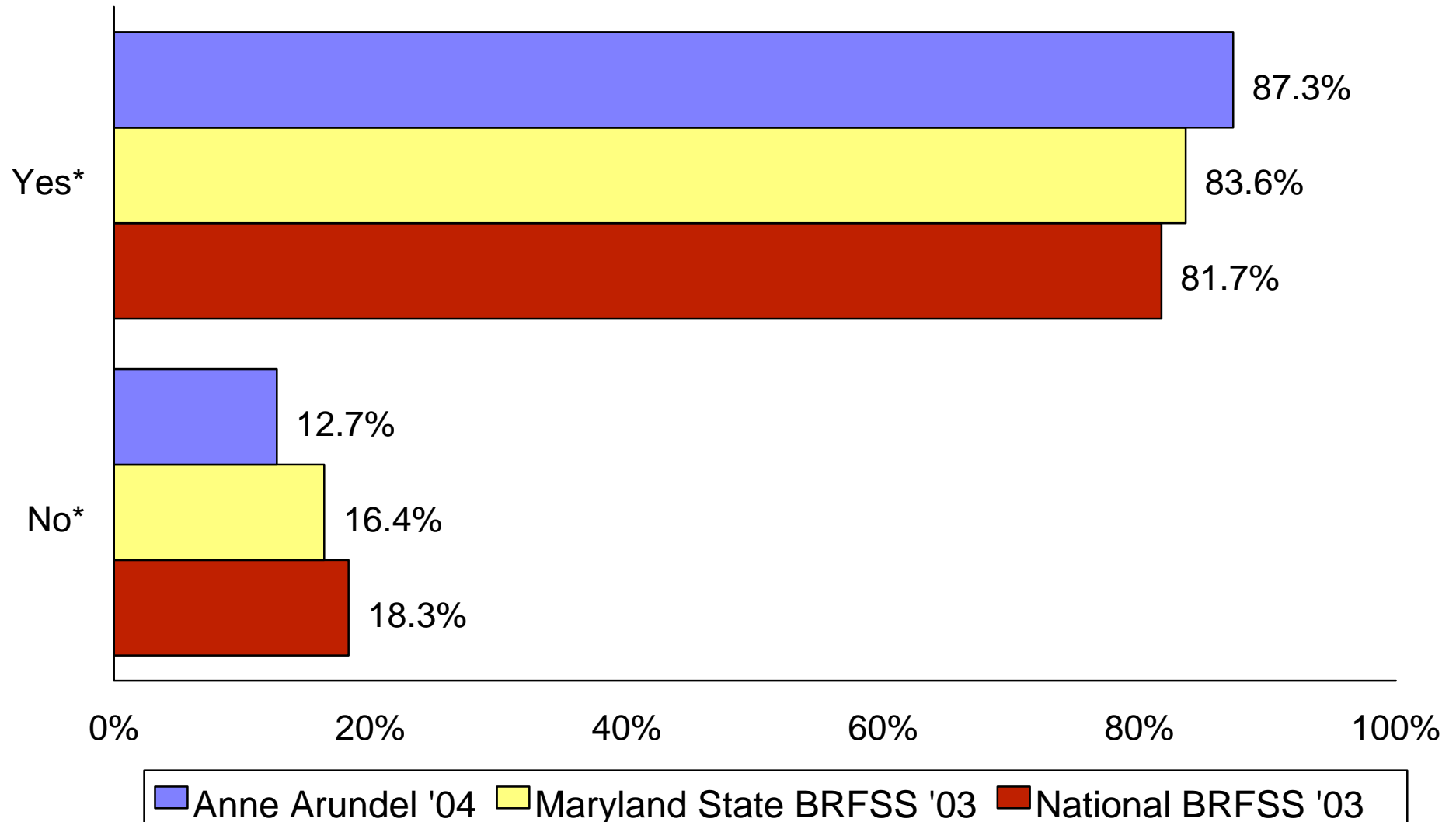
*Note: Anne Arundel is significantly different than National.

Thinking about the moderate physical activities you do in a usual week, do you do moderate activities for at least 10 minutes at a time?



*Note: A statistically significant difference exists between 2004 and 2001.

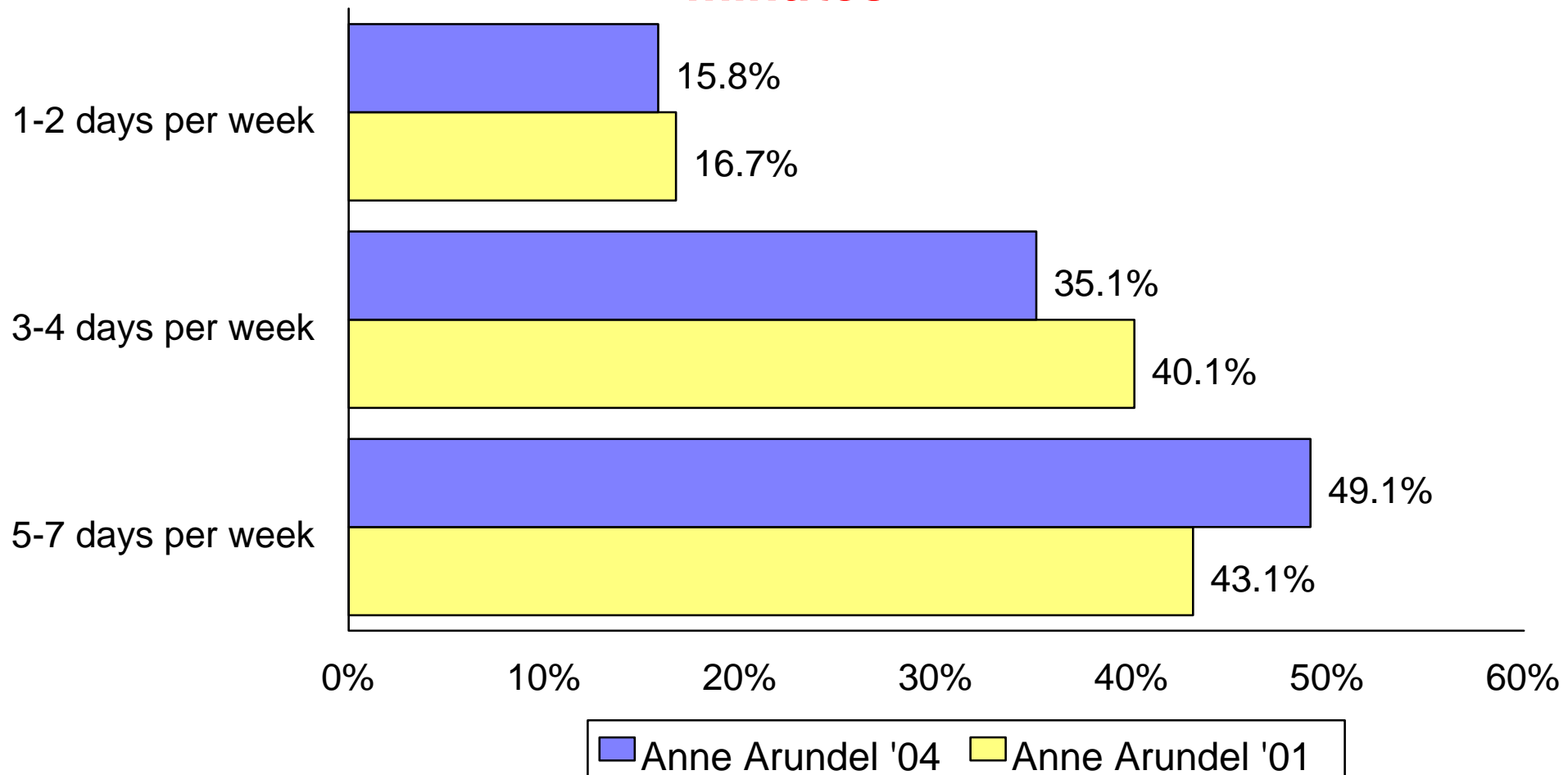
Thinking about the moderate physical activities you do in a usual week, do you do moderate activities for at least 10 minutes at a time?



*Note: Anne Arundel is significantly different than National.

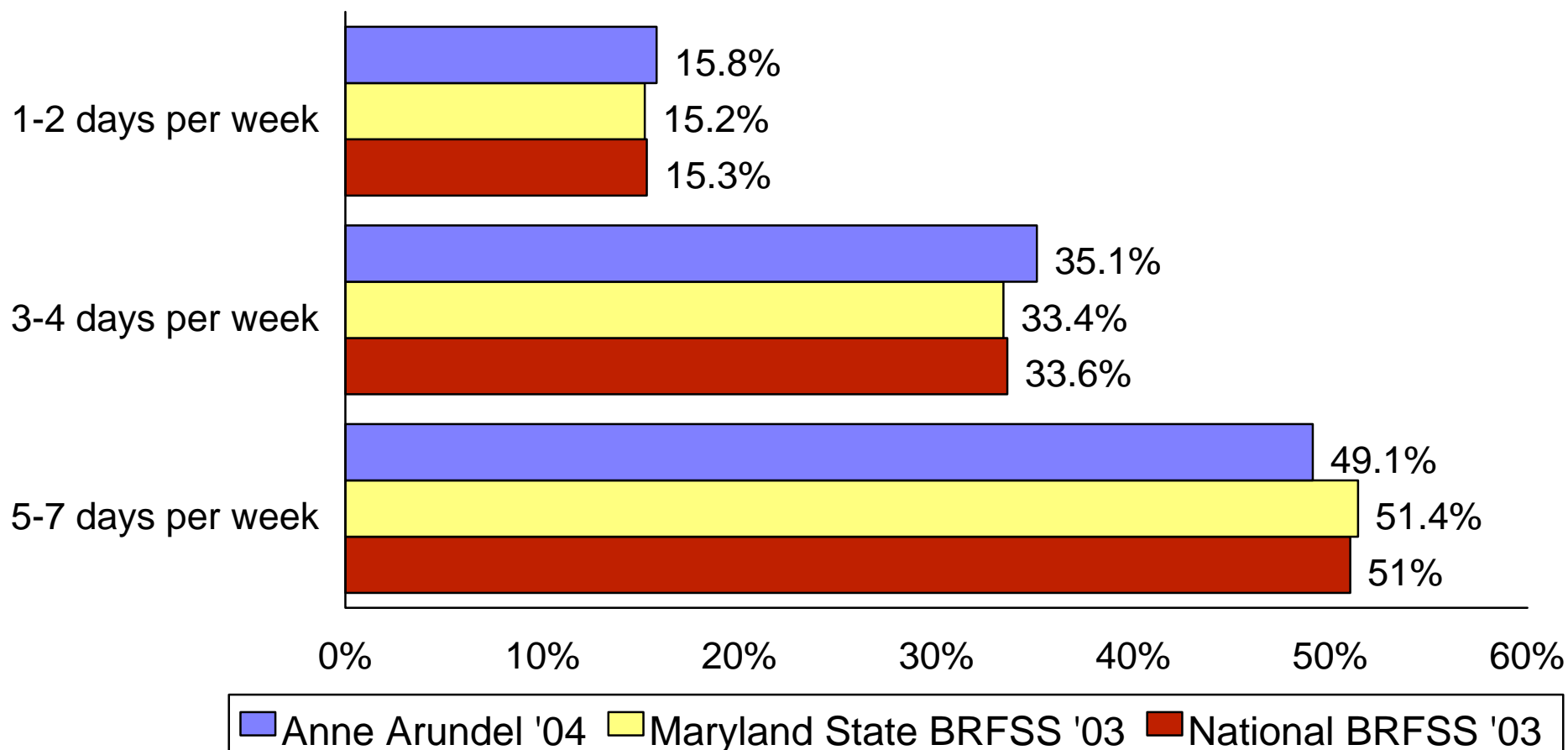
How many days per week do you do these moderate activities for at least 10 minutes at a time?

Respondents who engage in a moderate activity for at least 10 minutes



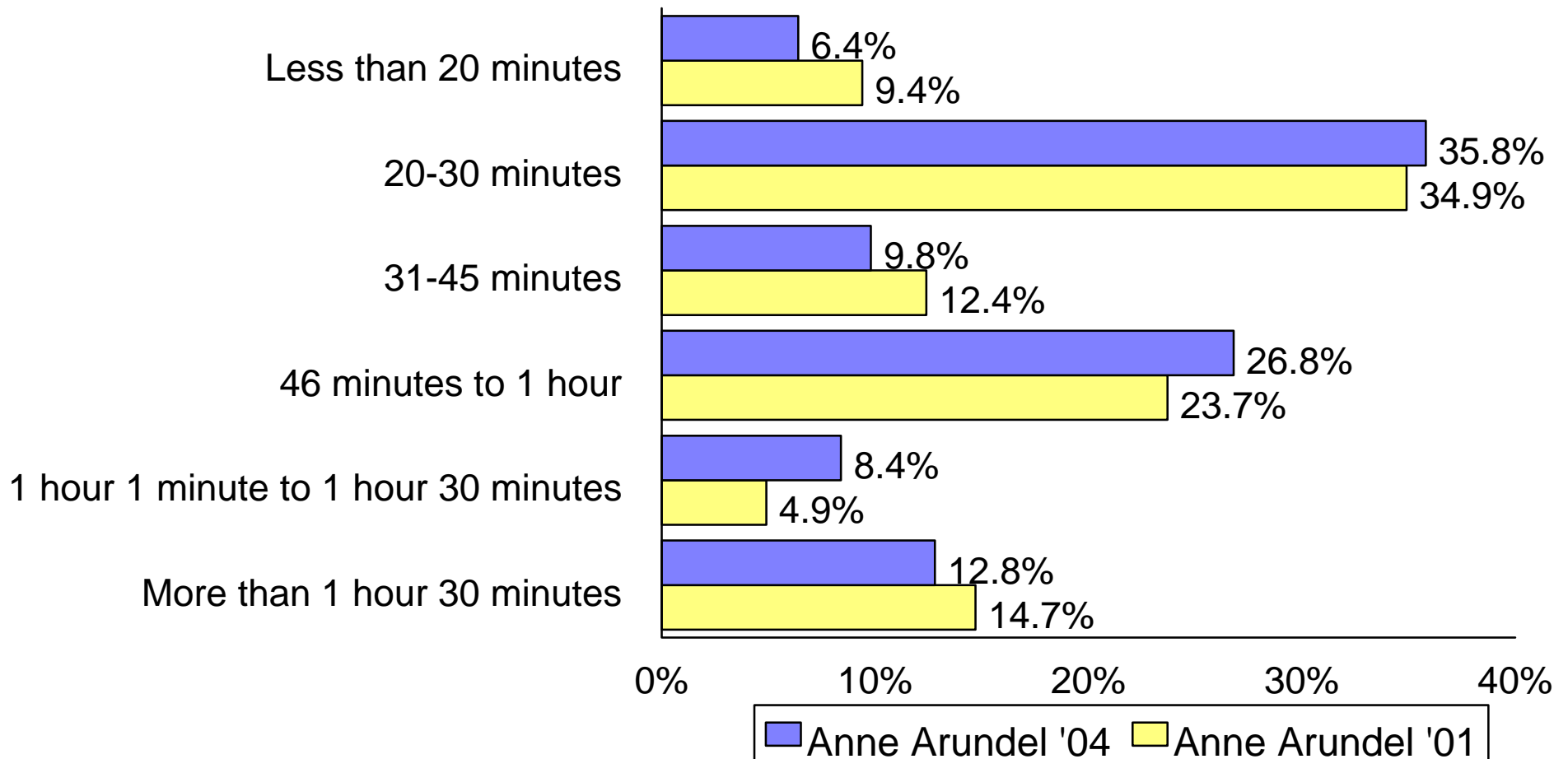
How many days per week do you do these moderate activities for at least 10 minutes at a time?

Respondents who engage in a moderate activity for at least 10 minutes



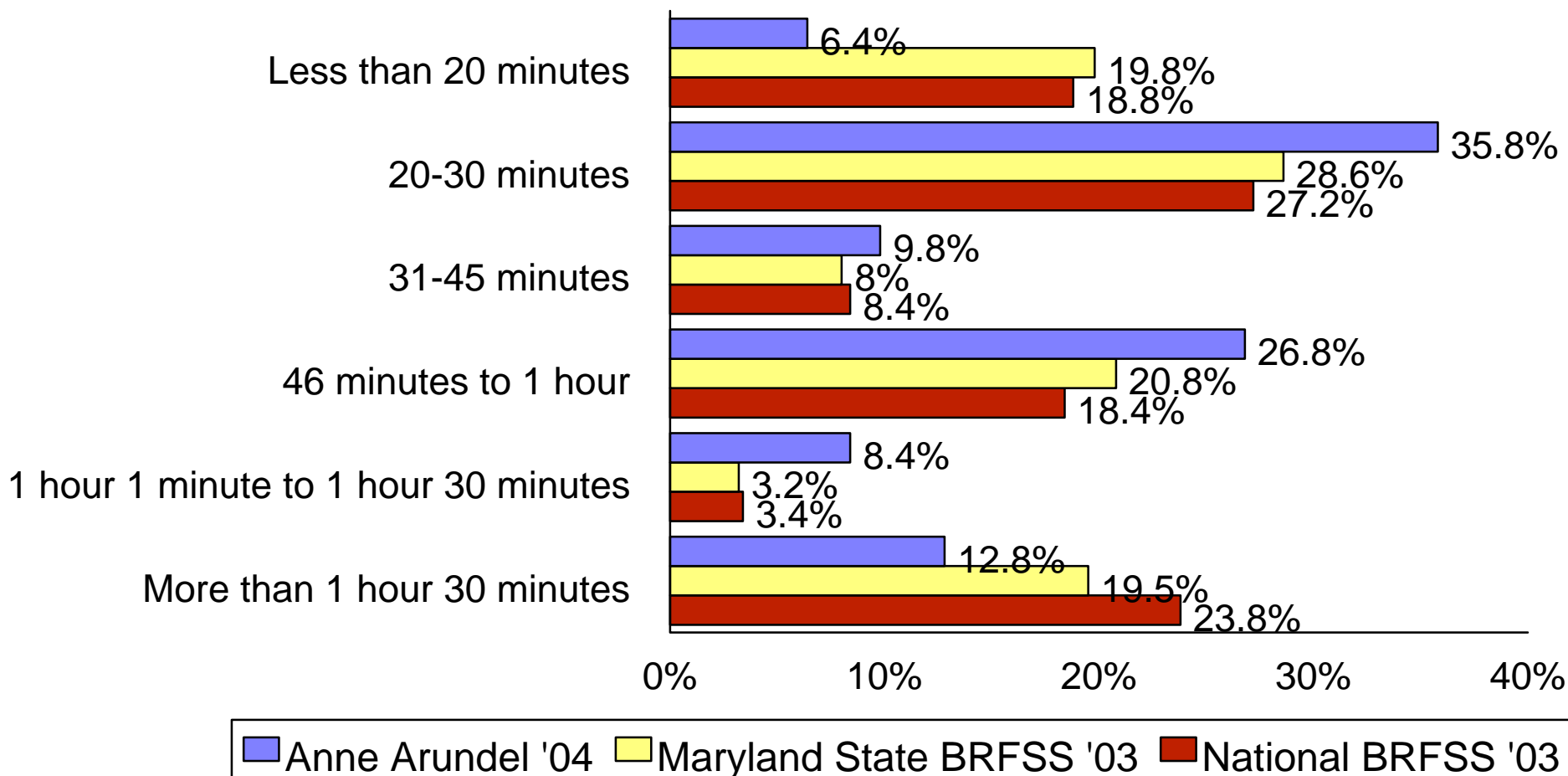
On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

Respondents who engage in a moderate activity for at least 10 minutes

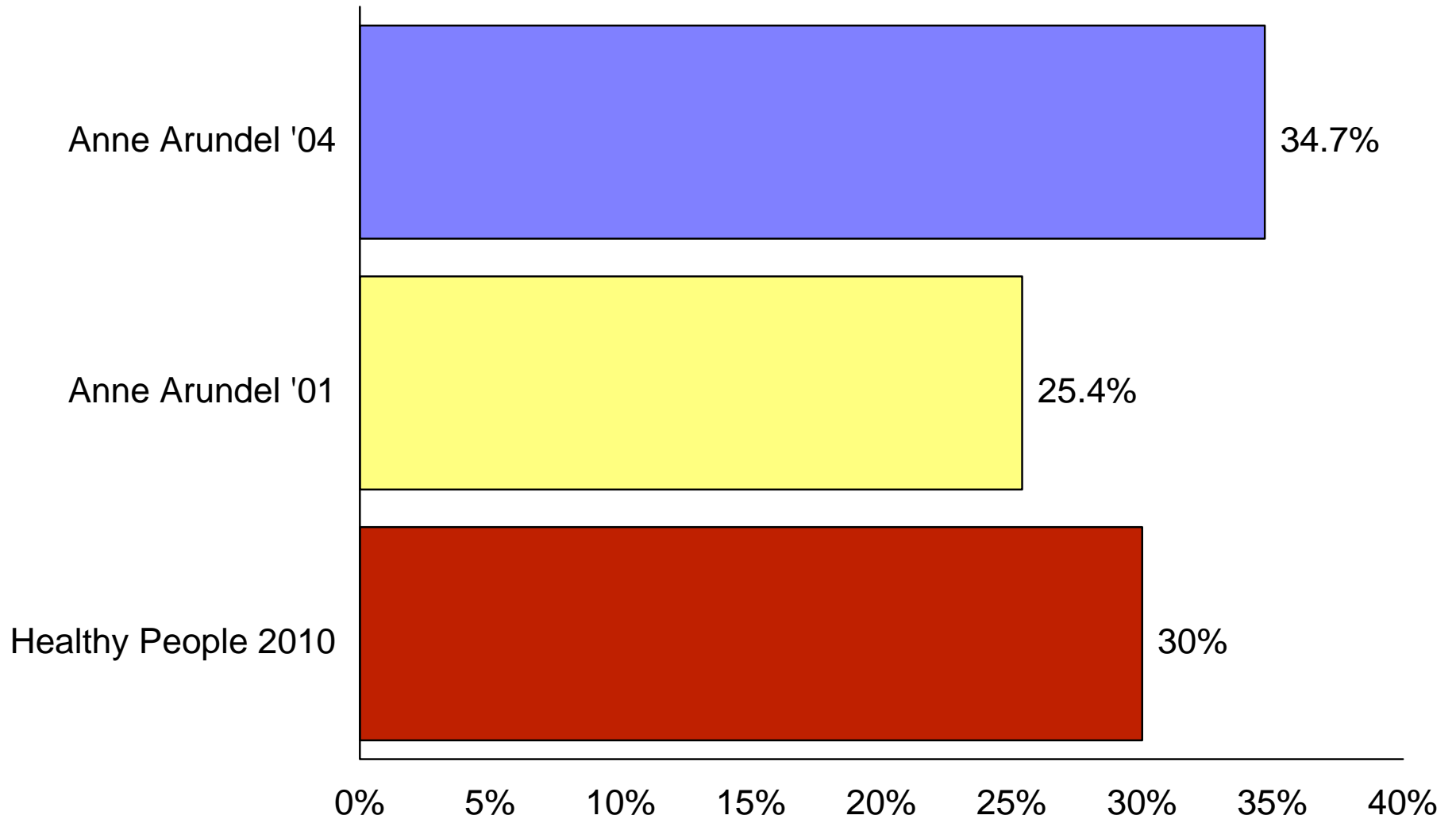


On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

Respondents who engage in a moderate activity for at least 10 minutes

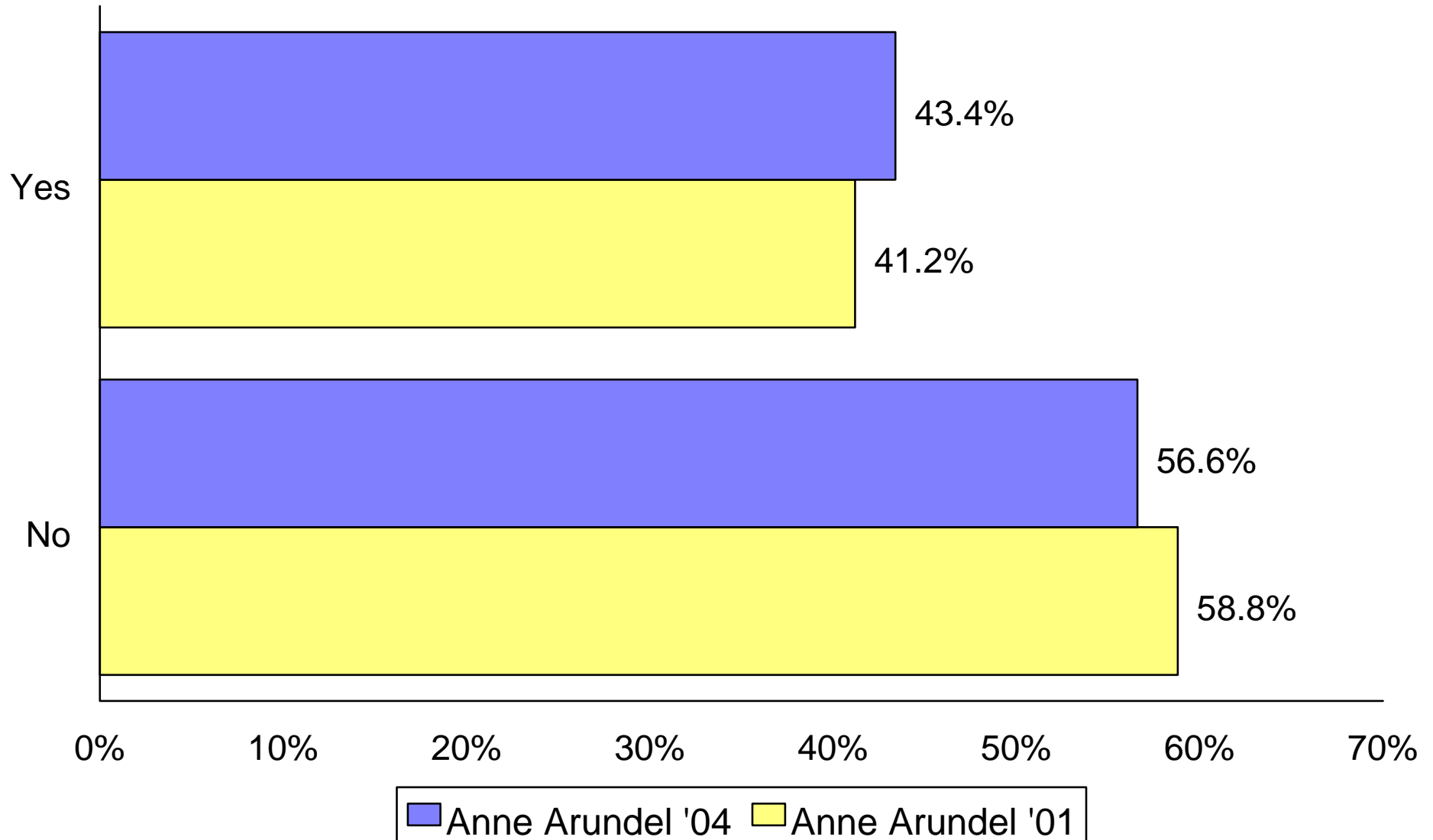


Proportion of adults who engage regularly, in moderate activity for at least 30 minutes

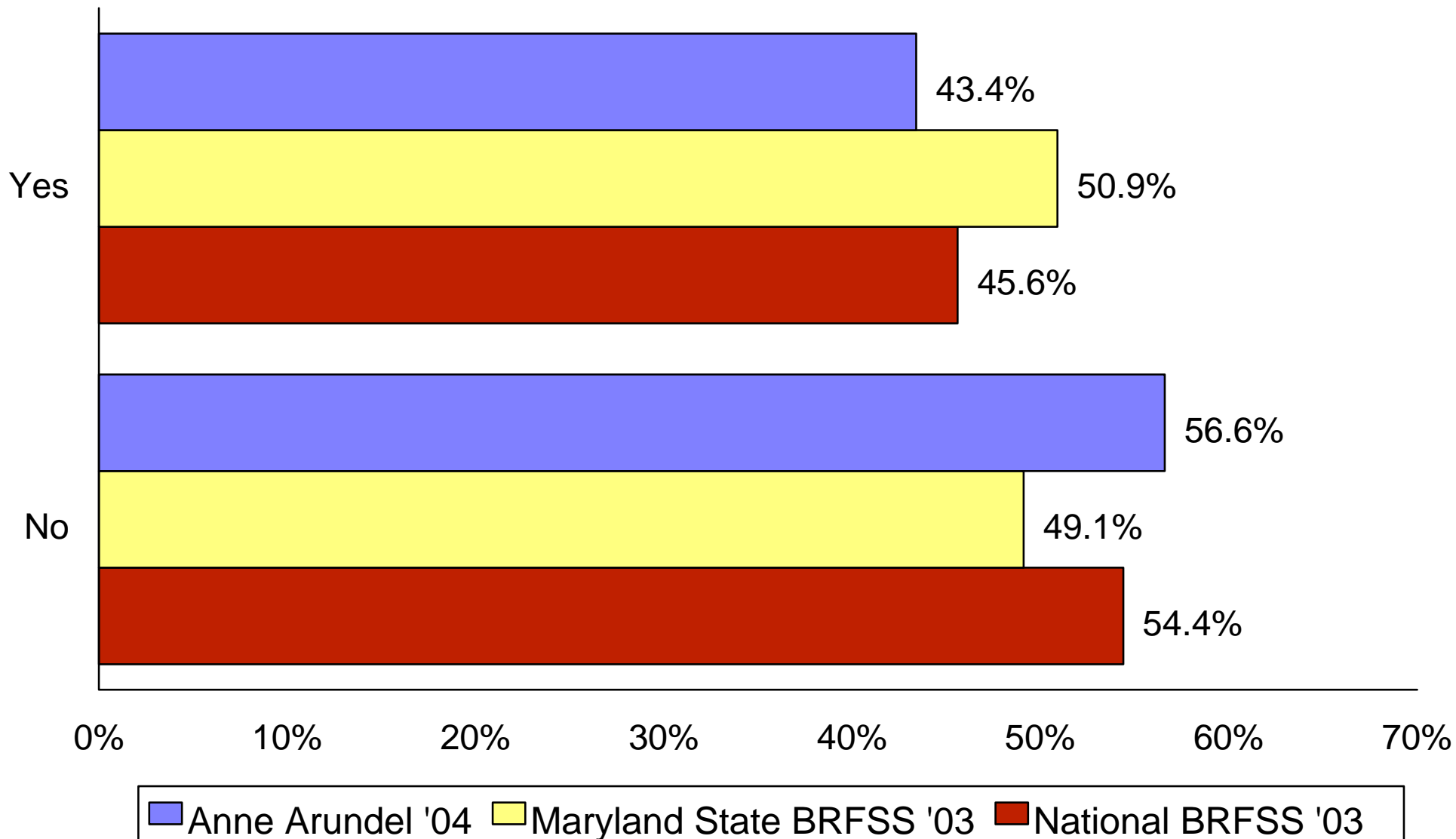


*Note: "Regular" is defined as 5-7 days a week

Thinking about the vigorous physical activities you do in a usual week, do you do vigorous activities for at least 10 minutes at a time?

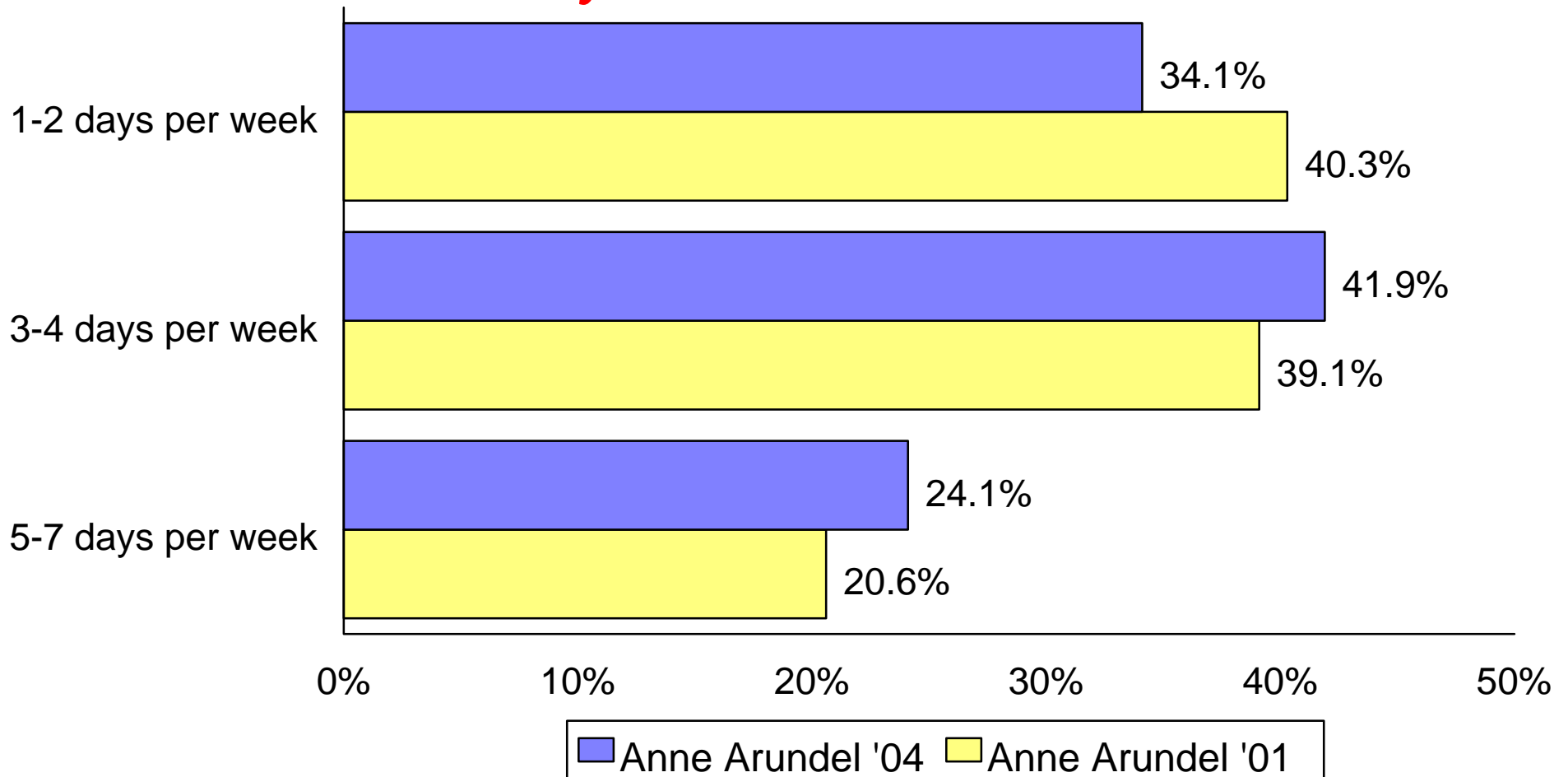


Thinking about the vigorous physical activities you do in a usual week, do you do vigorous activities for at least 10 minutes at a time?



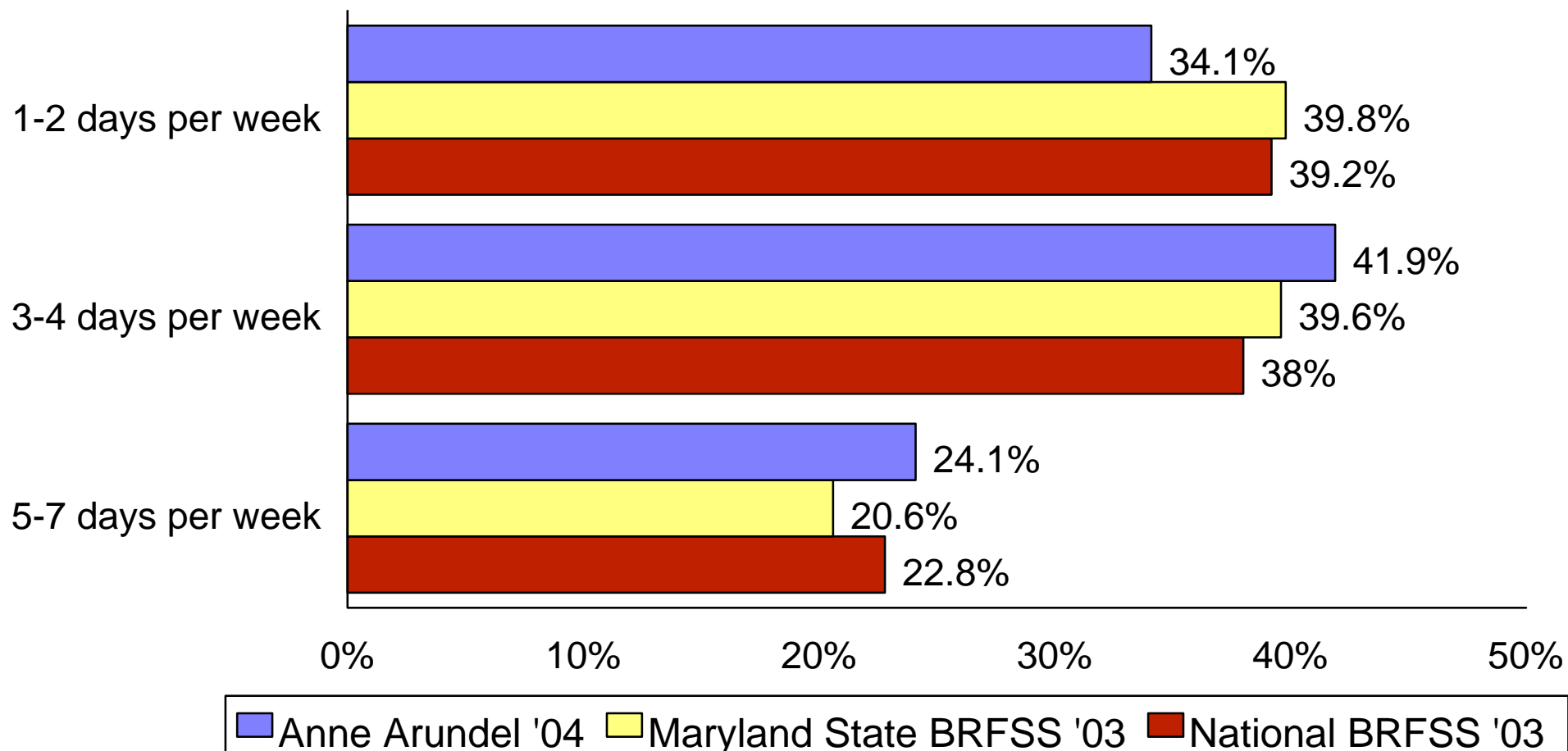
How many days per week do you do these vigorous activities for at least 10 minutes at a time?

Respondents who engage in a vigorous activity for at least 10 minutes



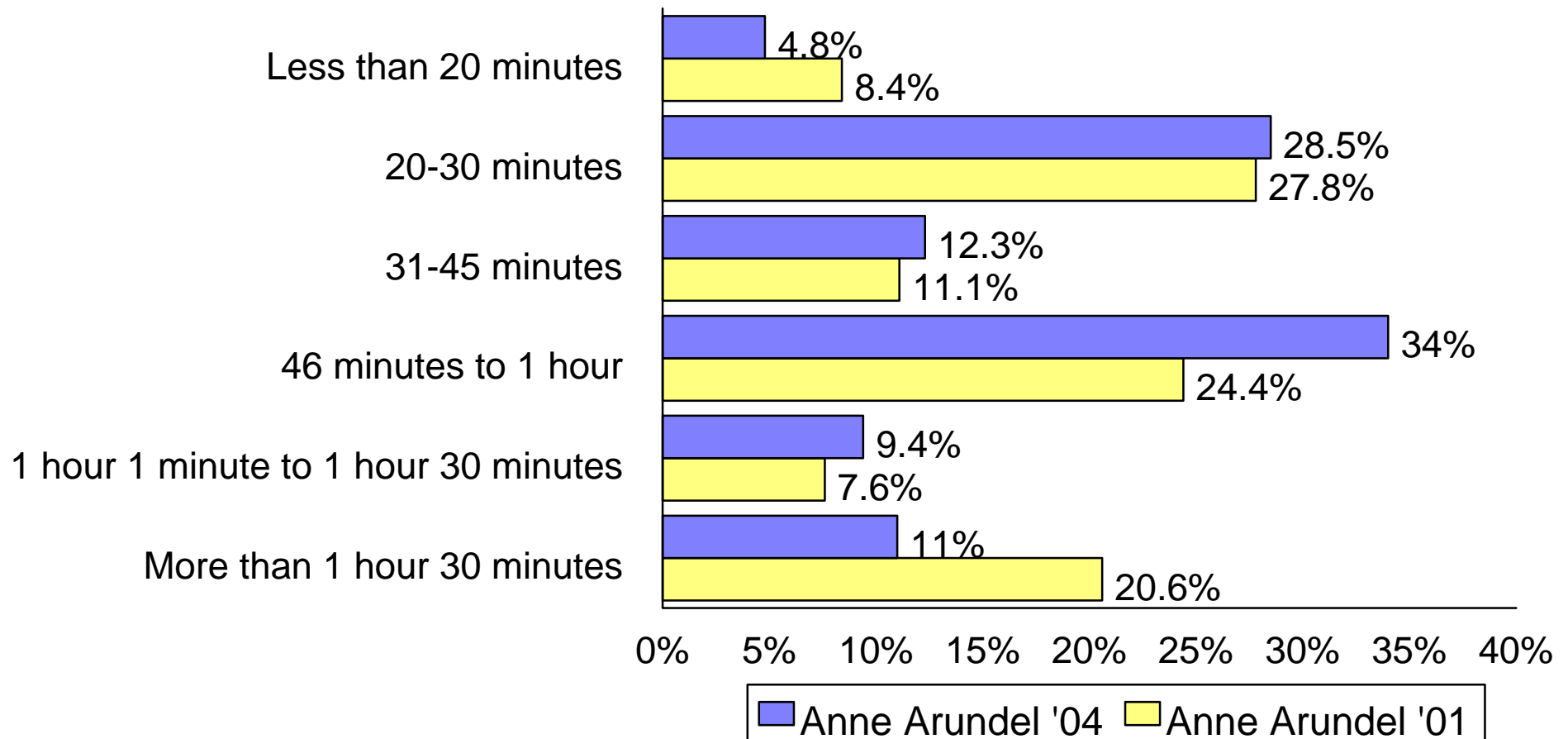
How many days per week do you do these vigorous activities for at least 10 minutes at a time?

Respondents who engage in a vigorous activity for at least 10 minutes



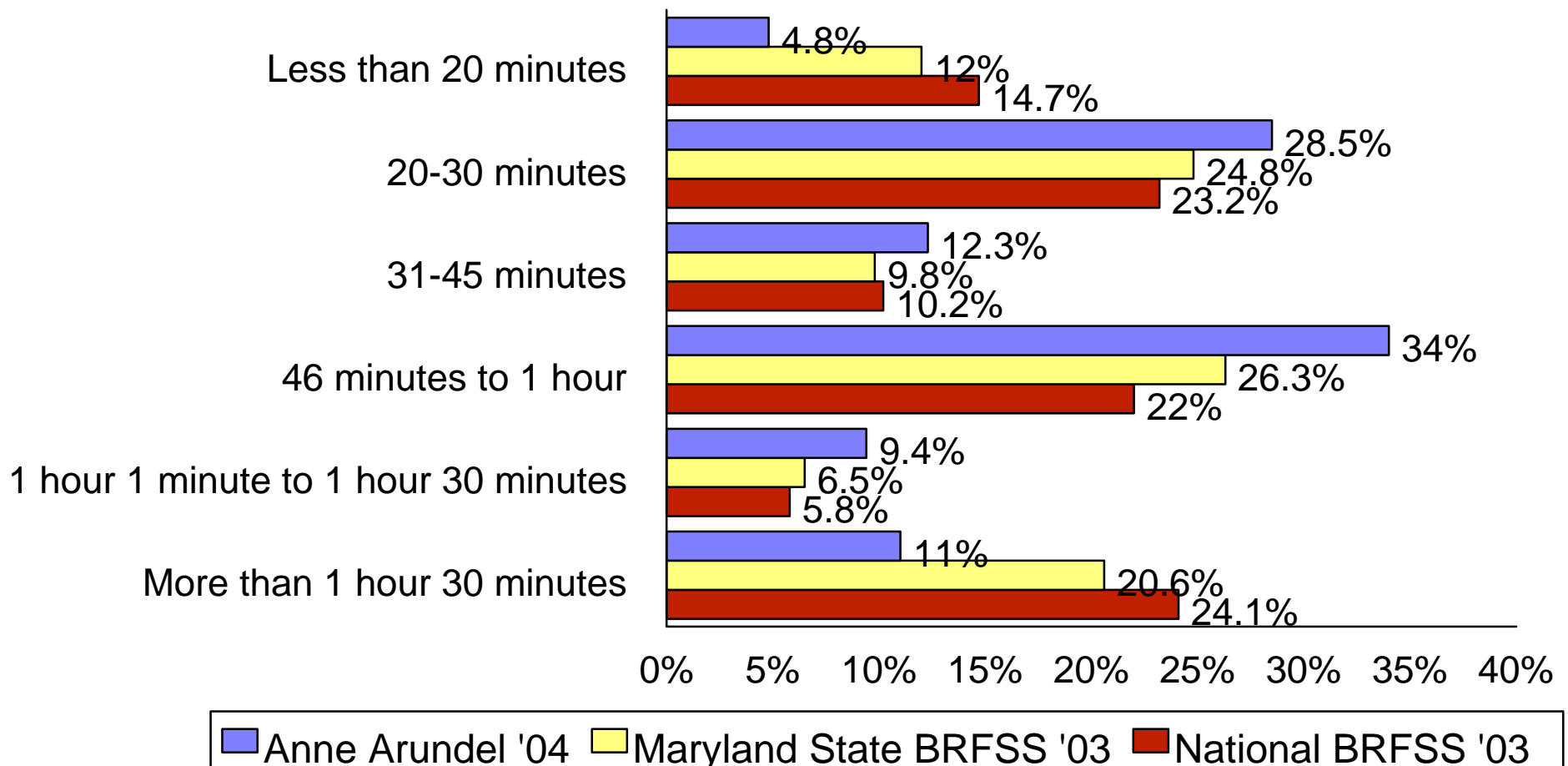
On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

Respondents who engage in a vigorous activity for at least 10 minutes

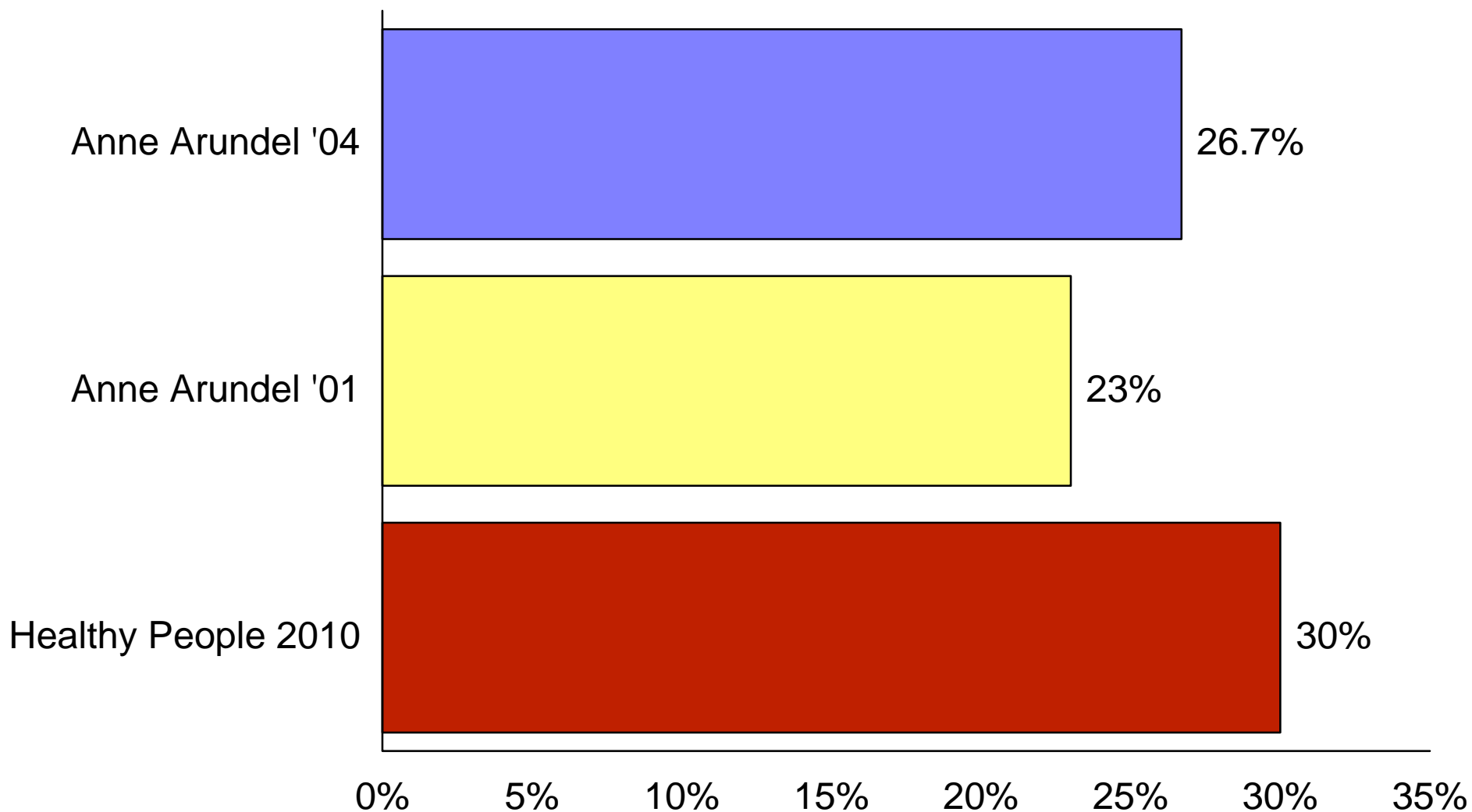


On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

Respondents who engage in a vigorous activity for at least 10 minutes



Proportion of adults who engage in vigorous activity at least three or more days a week for at least 20 minutes



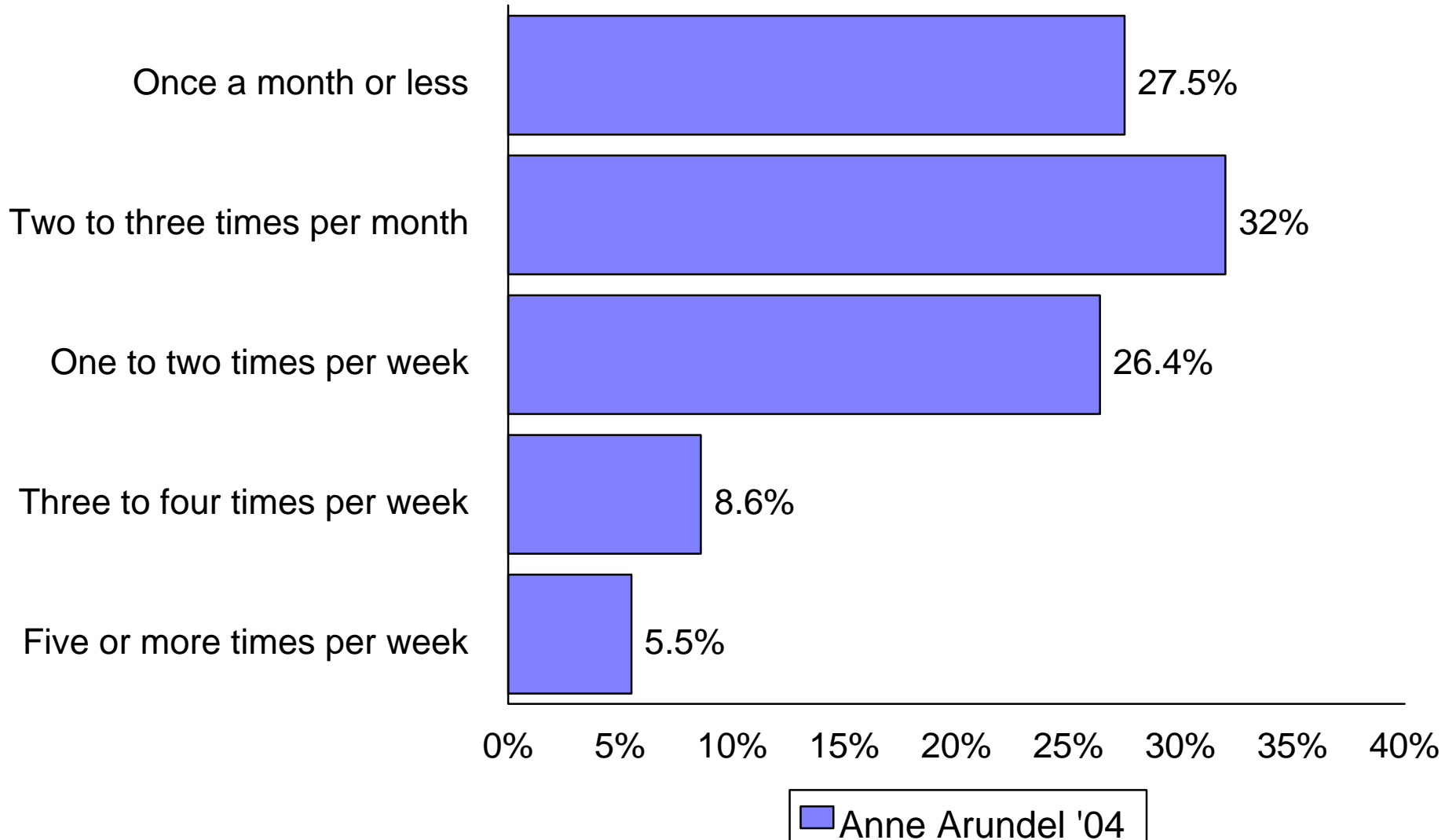
Statistically Significant Differences

Exercise and Physical Activity

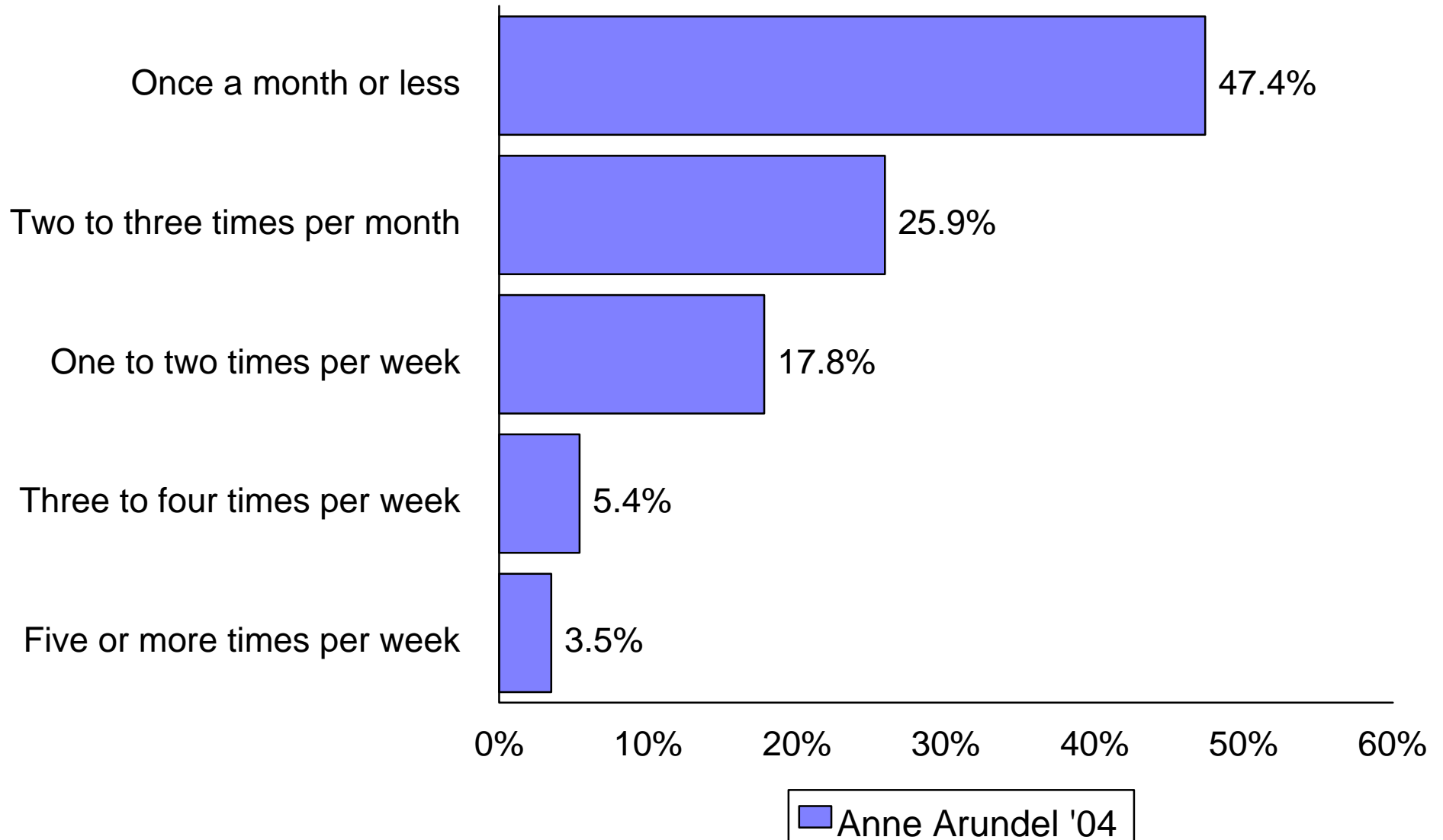
- ① The younger the respondent, the more likely they are to engage in moderate and vigorous physical activity.
- ① The higher the income level, the more likely respondents are to engage in moderate and vigorous physical activity.

Nutrition

During an average month, how many times do you eat a meal or snack at a sit-down restaurant or cafeteria not including fast food restaurants?



During an average month, how many times do you eat a meal or snack from a fast food restaurant, either eaten there or carried away?



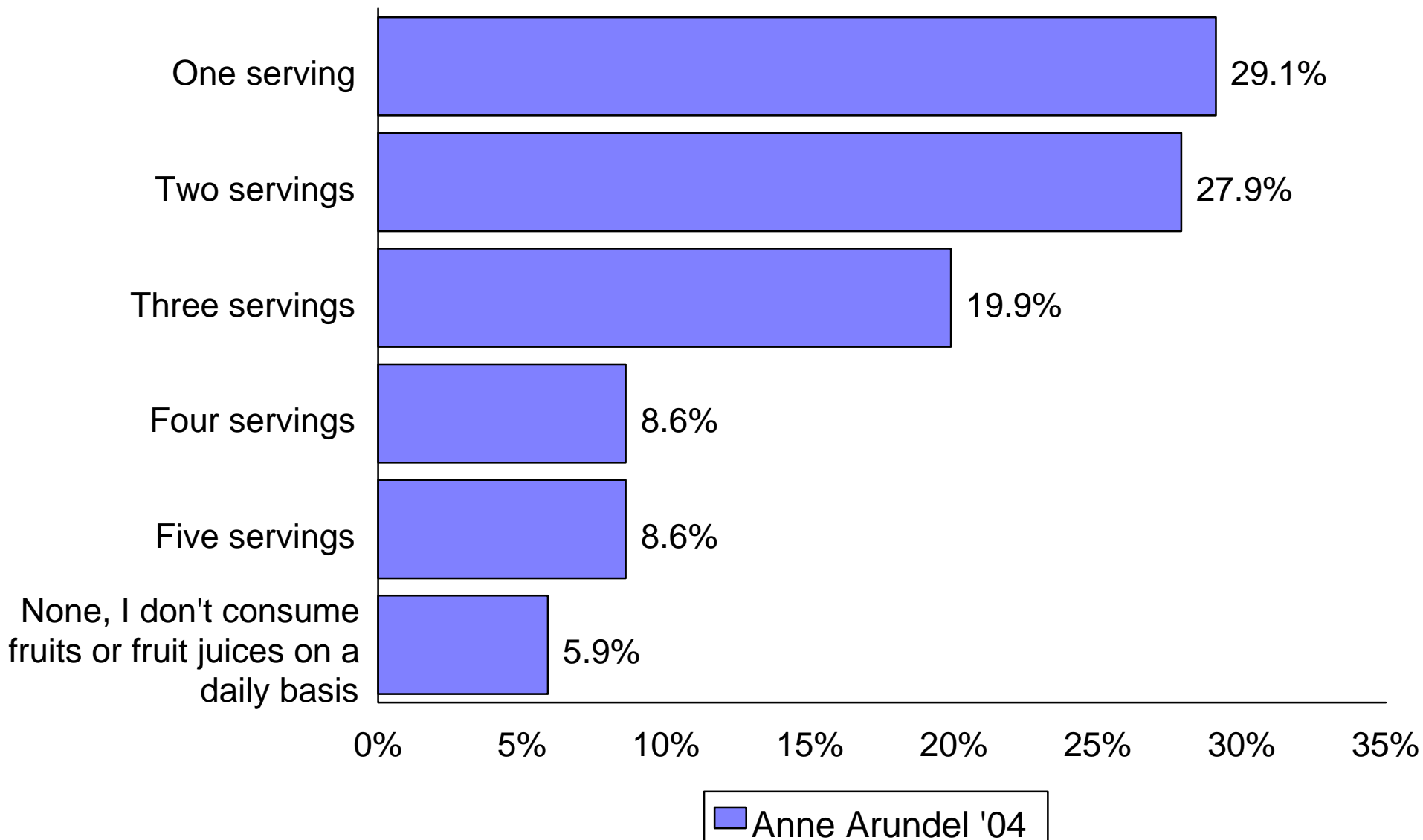
Statistically Significant Differences

Nutrition

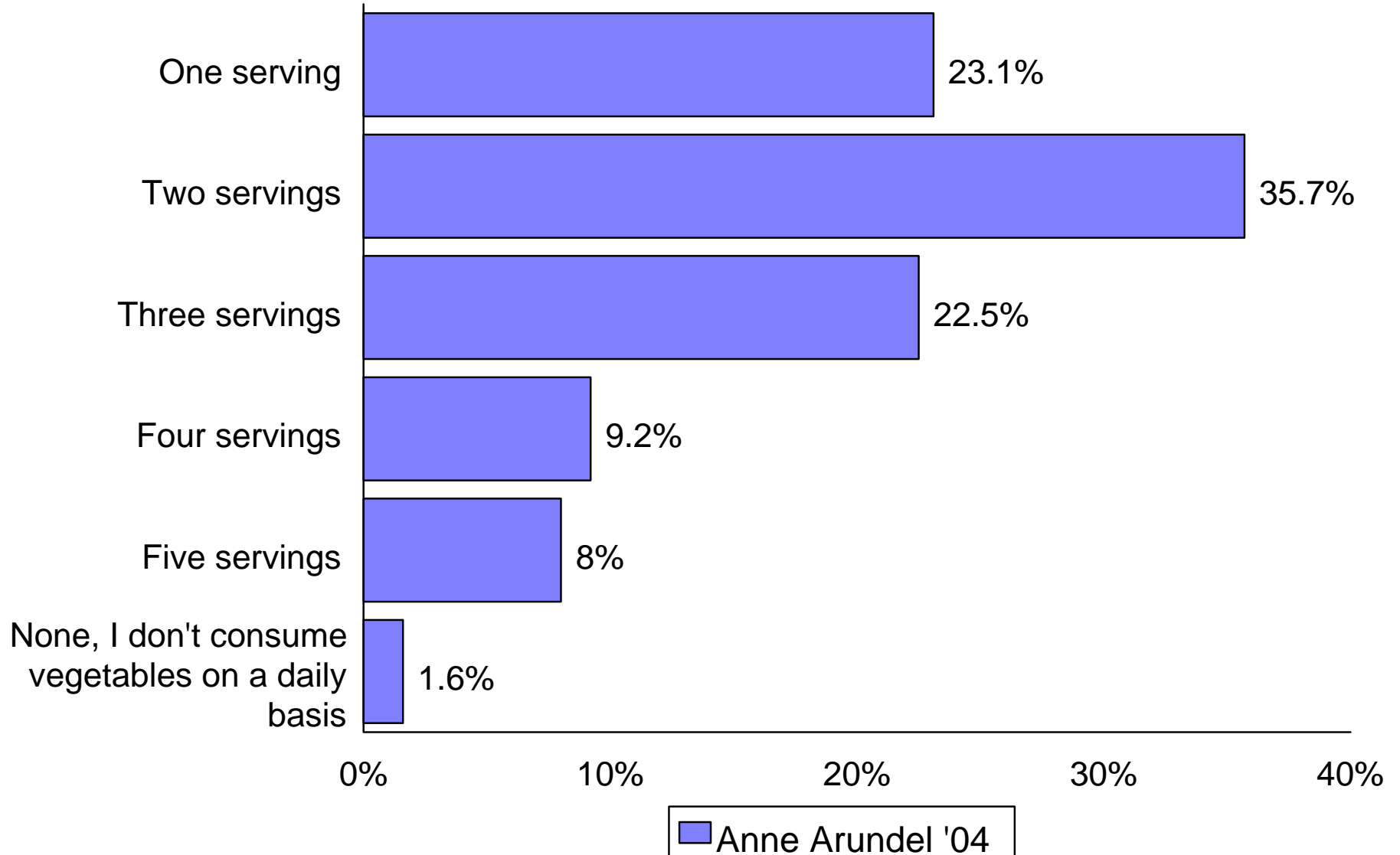
- ① Males are more likely than females to eat a meal or snack in a restaurant or cafeteria, including fast food restaurants.
- ① The higher the income, the more likely respondents are to eat a meal or snack in a restaurant or cafeteria, including fast food restaurants.
- ① The younger the respondent, the more likely they are to eat a meal or snack in a restaurant or cafeteria, not including fast food restaurants.

Fruit and Vegetable Consumption

About how many servings of fruit or fruit juices do you consume every day?



About how many servings of vegetables do you consume every day?



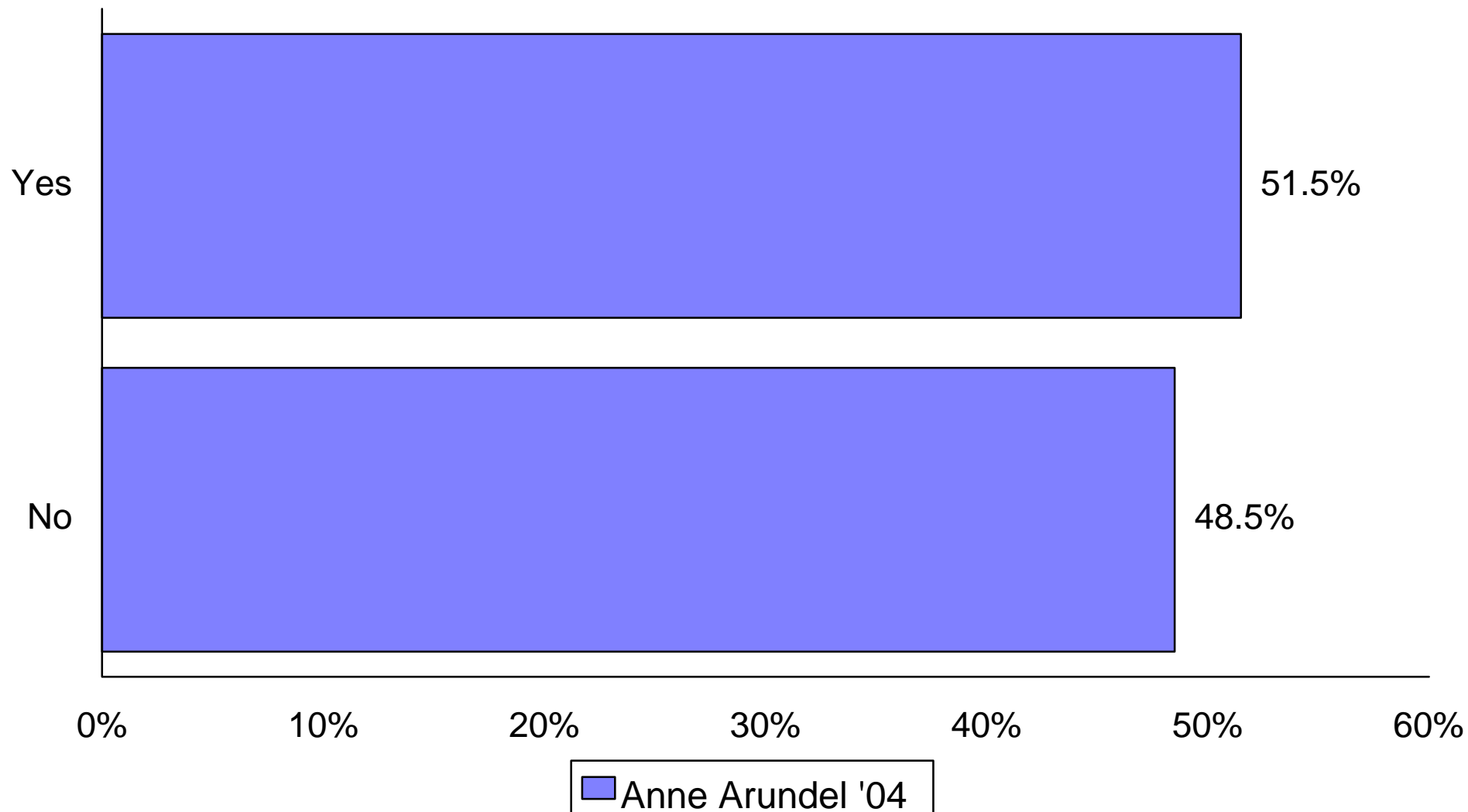
Statistically Significant Differences

Fruit & Vegetable Consumption

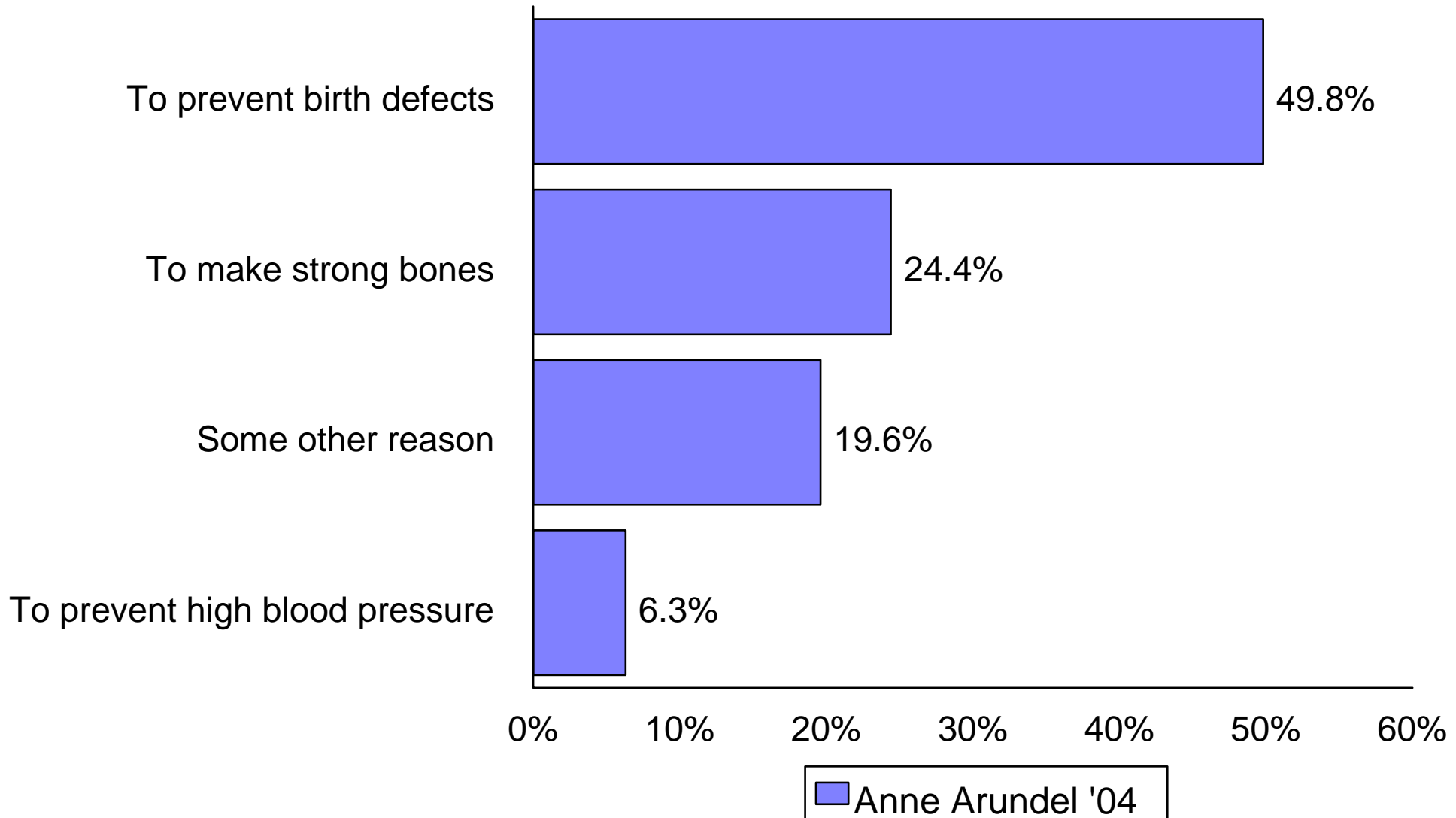
- ① Females consume more daily servings of fruit or fruit juices than males.
- ① Females consume more daily servings of vegetables than males.

Folic Acid

Do you take a vitamin pill or supplement that contains folic acid?



Some health experts recommend that women take 400 micrograms of the B vitamin folic acid, for which one of the following reasons?



Statistically Significant Differences

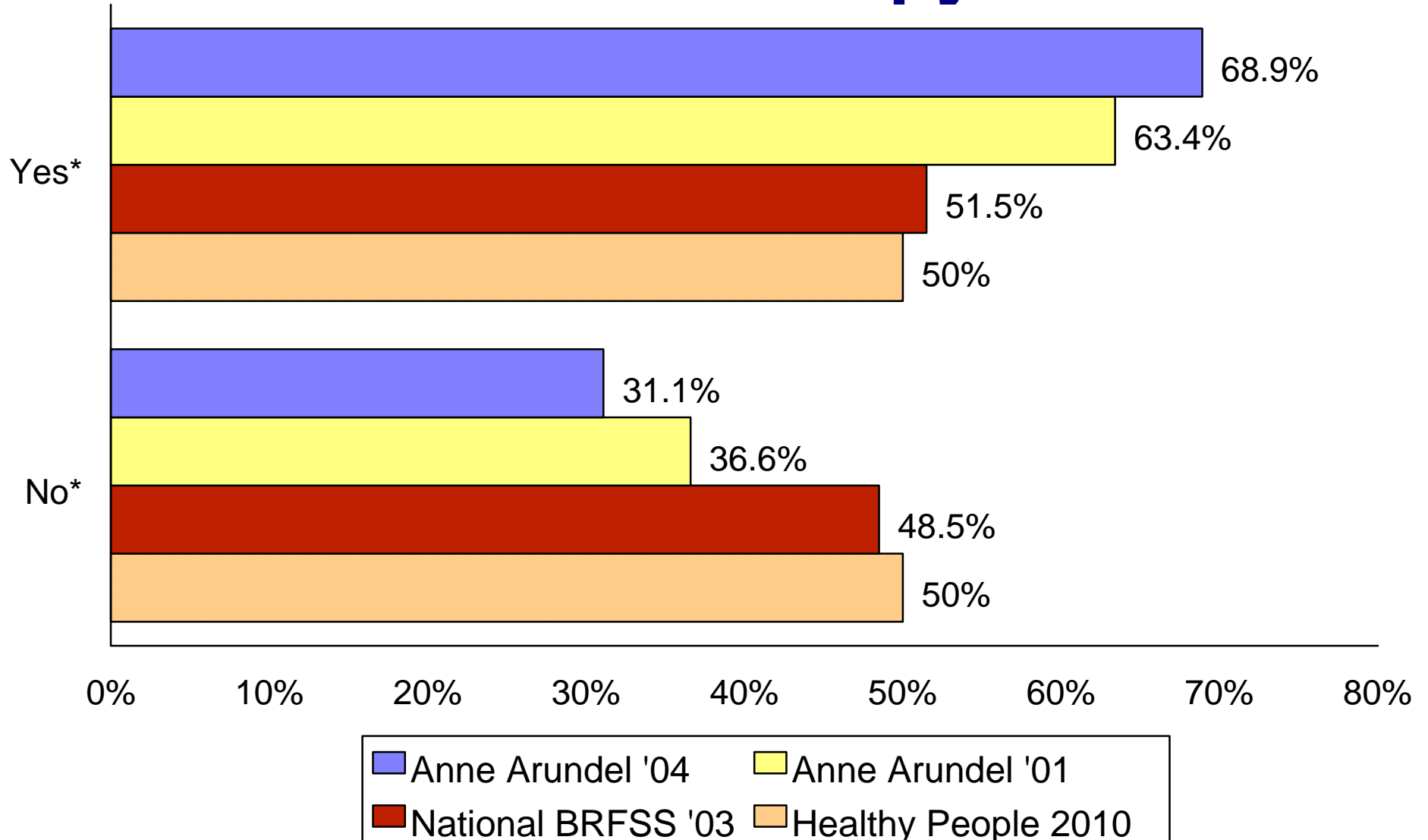
Folic Acid

- ① Females are more likely than males to take a vitamin pill or supplement that contains folic acid.
- ① Females are more likely than males to feel women should be taking B vitamin folic acid to prevent birth defects.

Colorectal Cancer Screening

Respondents age 50 and over only

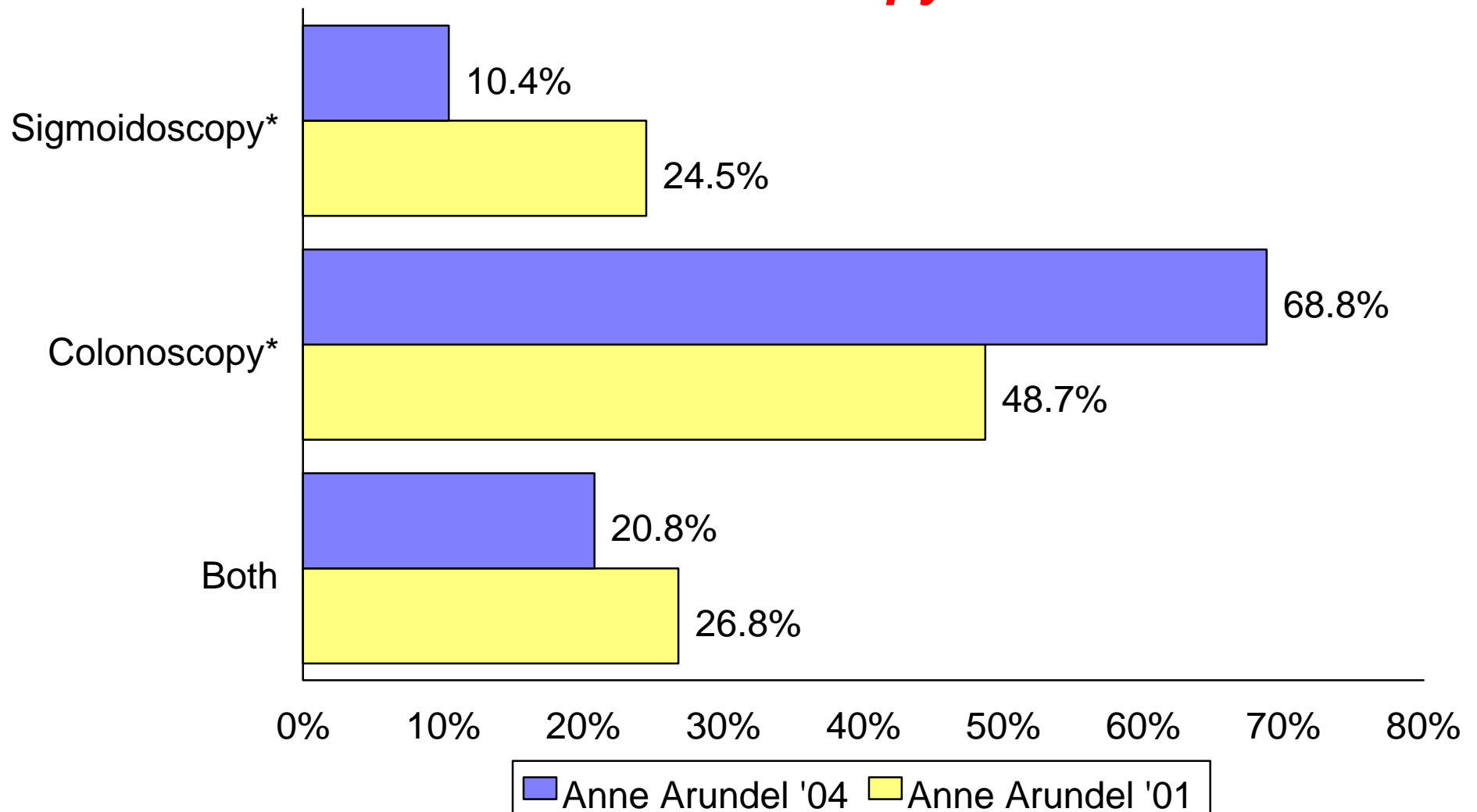
Have you ever had a sigmoidoscopy or colonoscopy?



*Note: Anne Arundel is significantly different than National.

Which exam did you have?

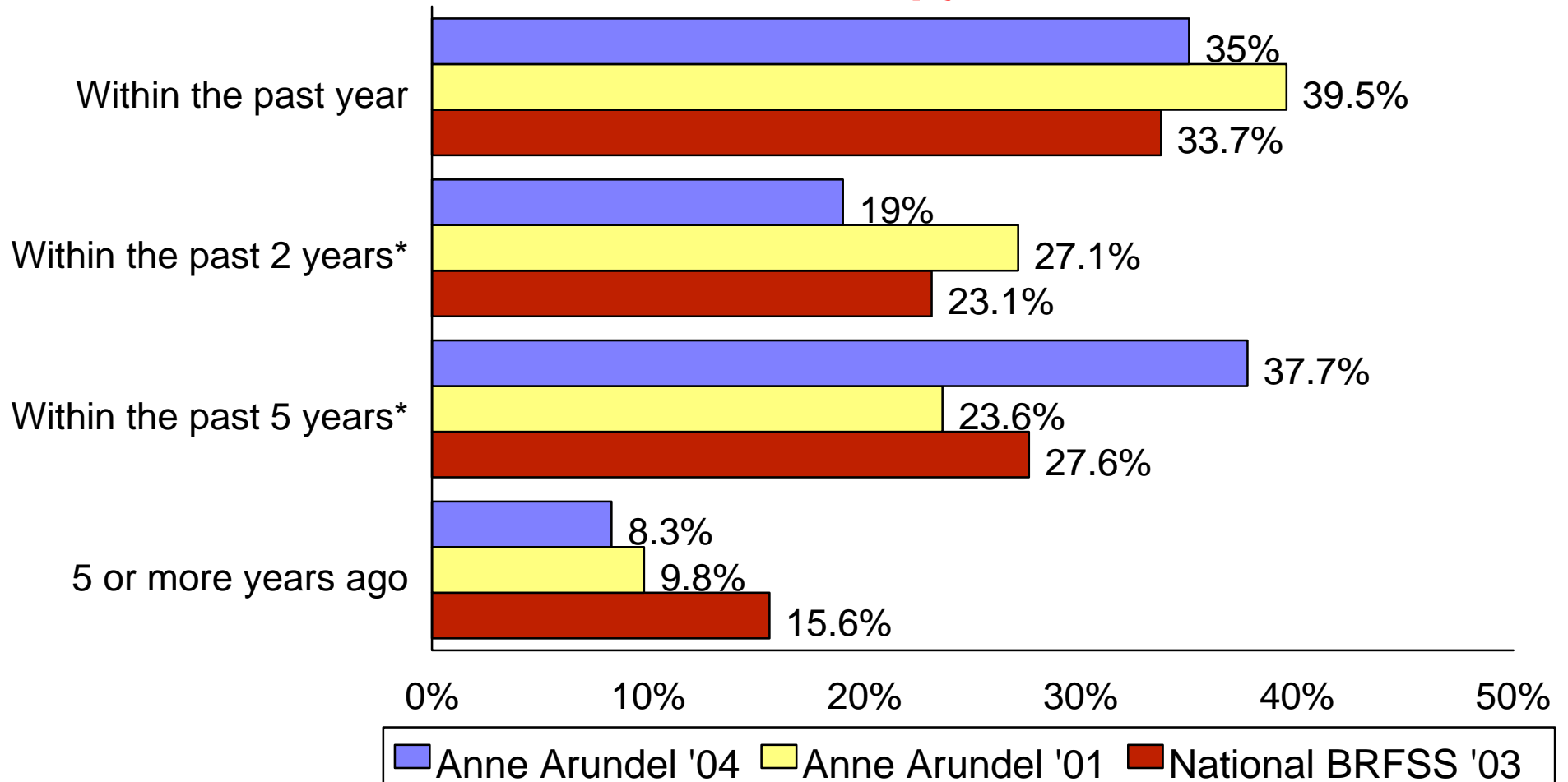
Respondents who have had a sigmoidoscopy or colonoscopy



*Note: A statistically significant difference exists between 2004 and 2001.

How long has it been since you had your last sigmoidoscopy or colonoscopy?

Respondents who have had a sigmoidoscopy or colonoscopy



*Note: A statistically significant difference exists between 2004 and 2001.

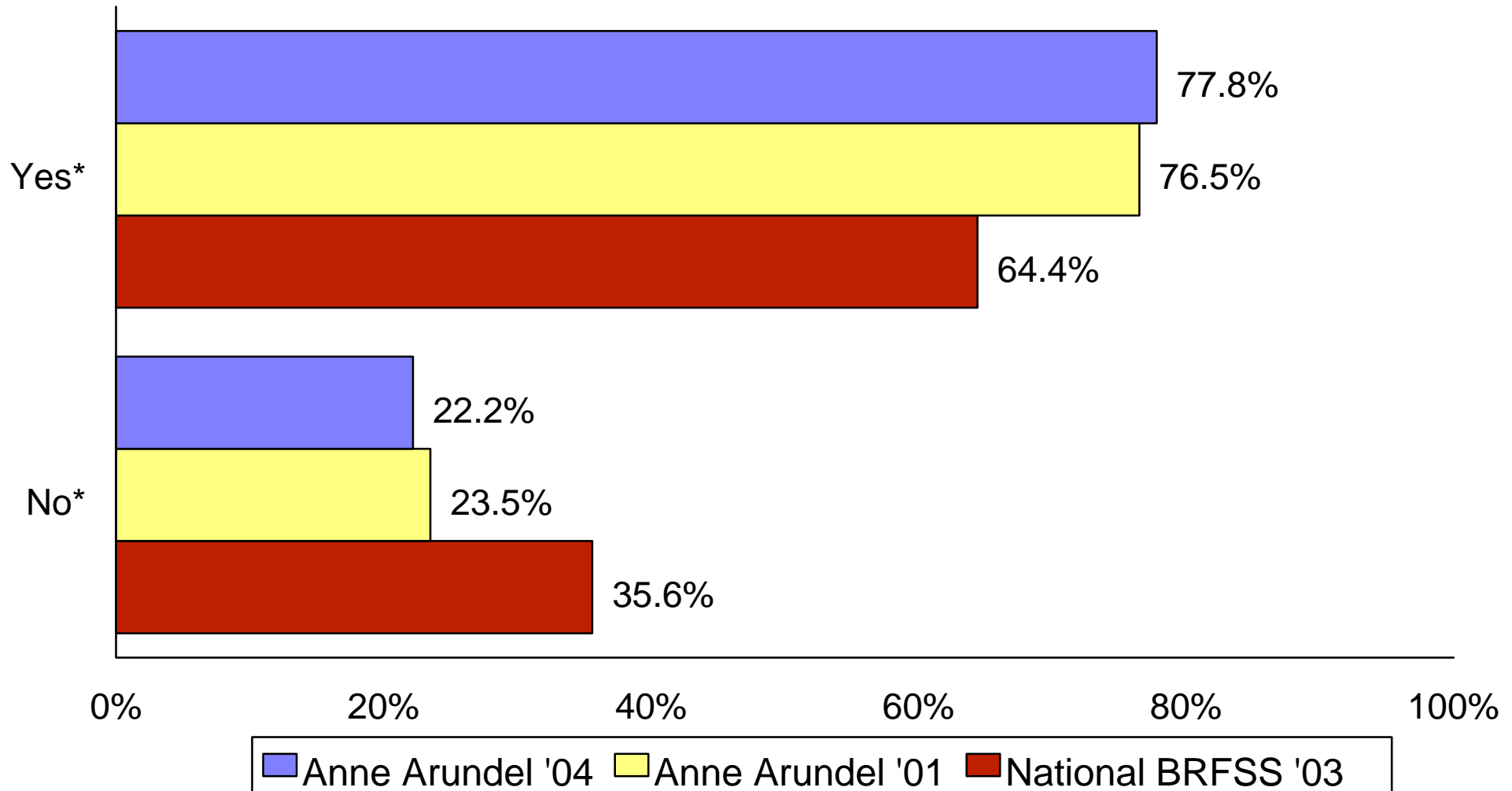
Statistically Significant Differences

Colorectal Cancer Screening

- ① The younger the respondent, the less likely they are to have had a sigmoidoscopy or colonoscopy.

Women's Health

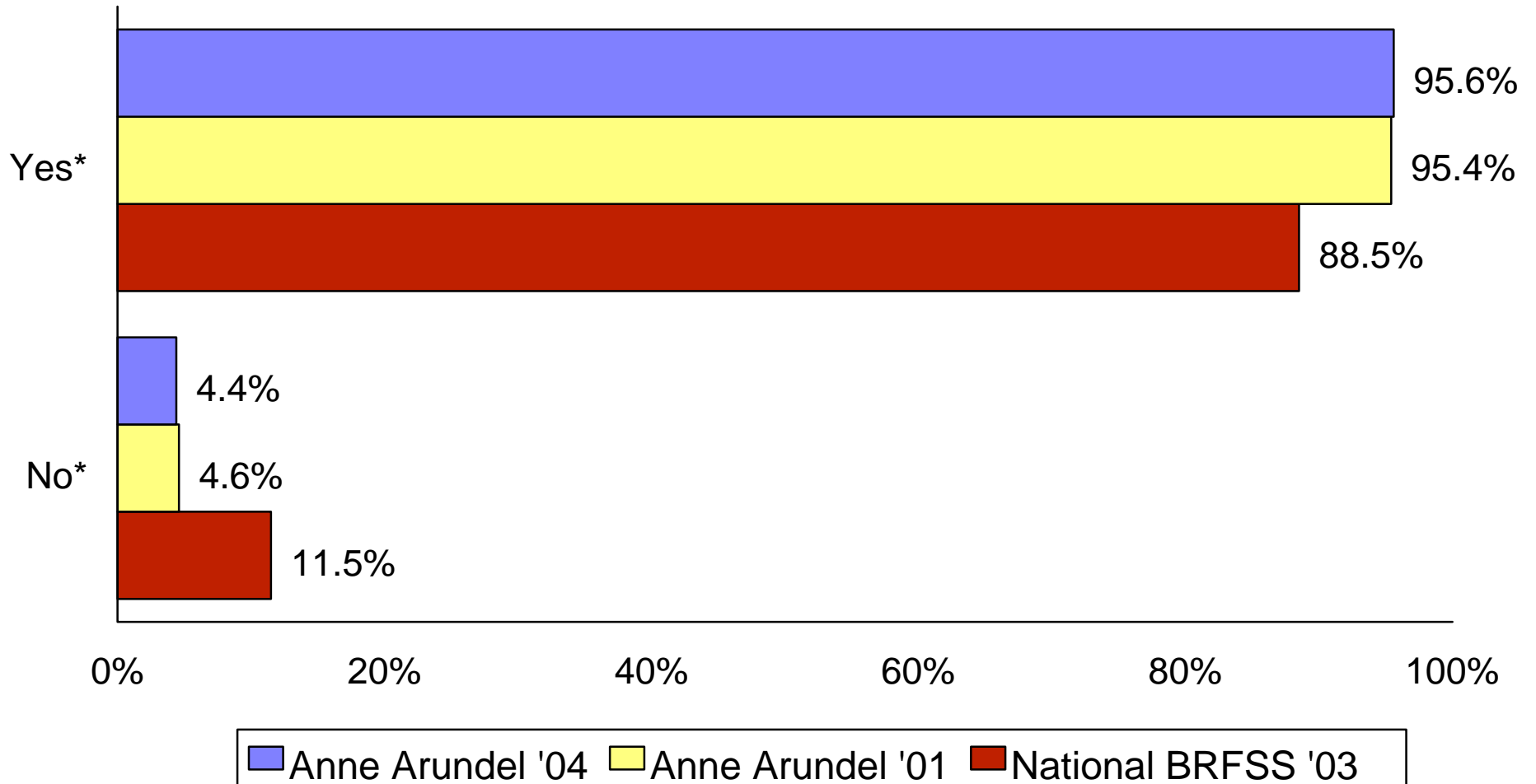
Have you ever had a mammogram?



*Note: Anne Arundel is significantly different than National.

Have you ever had a mammogram?

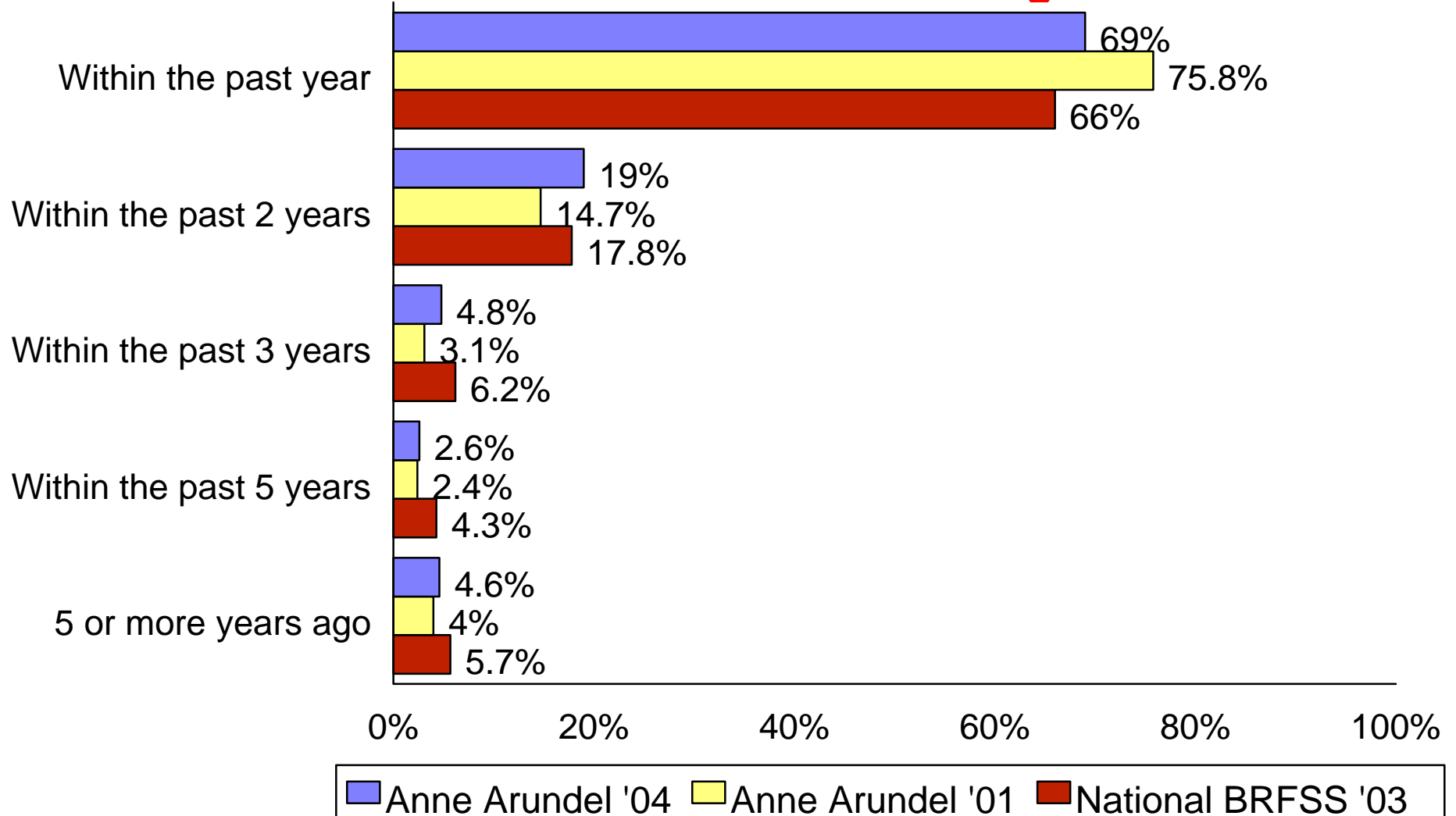
40 and over



*Note: Anne Arundel is significantly different than National.

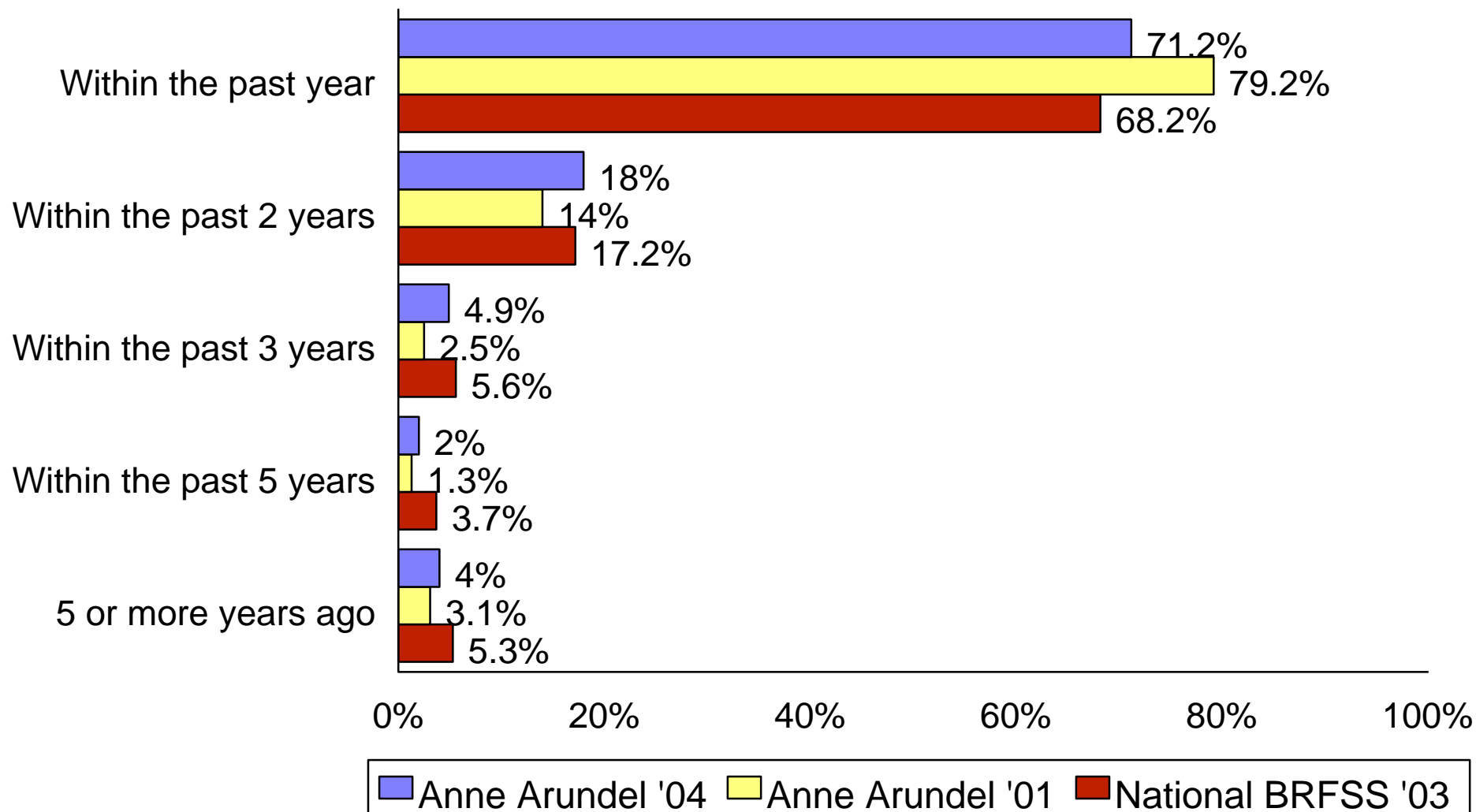
How long has it been since you had your last mammogram?

Women who have had a mammogram

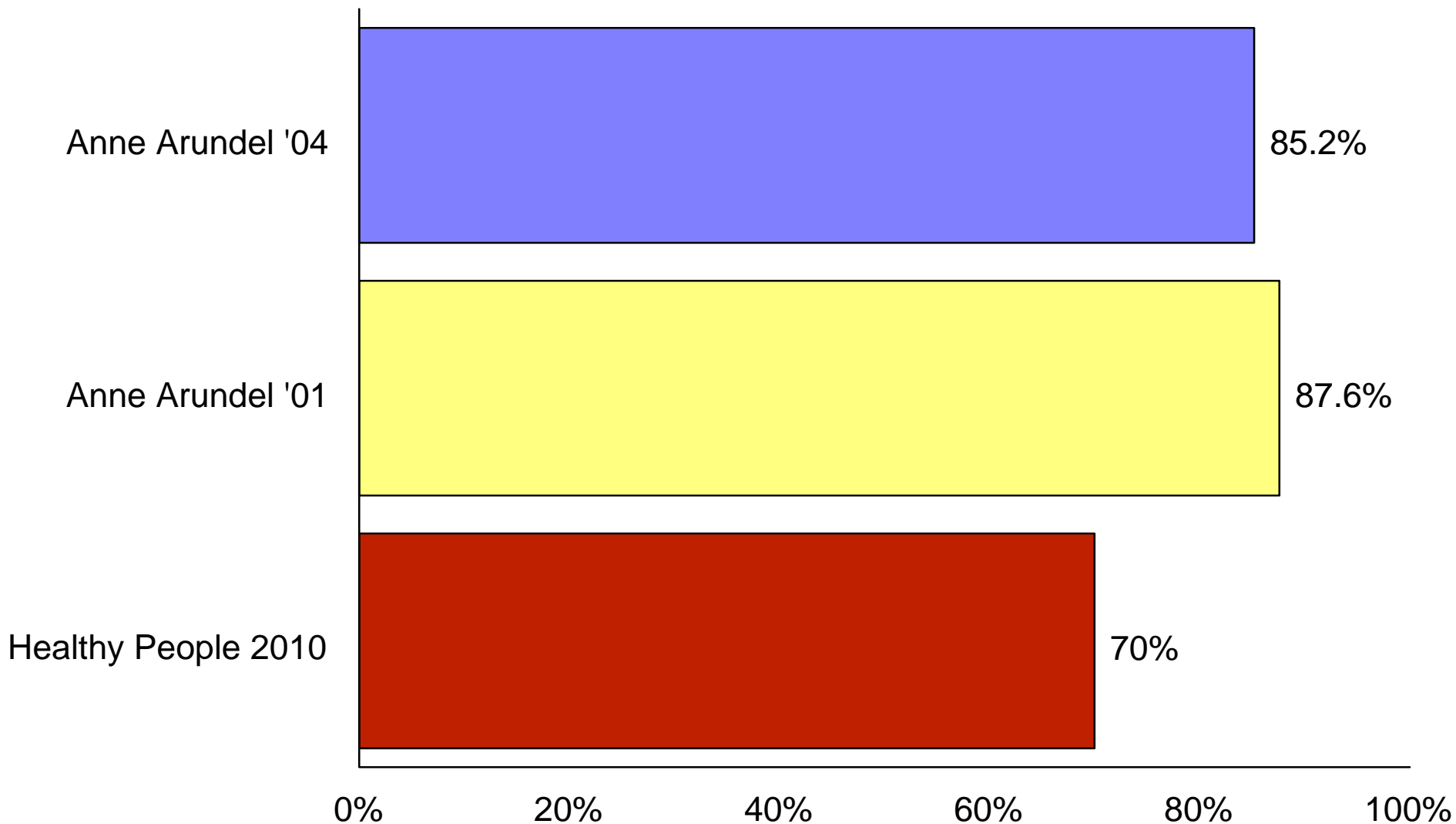


How long has it been since you had your last mammogram?

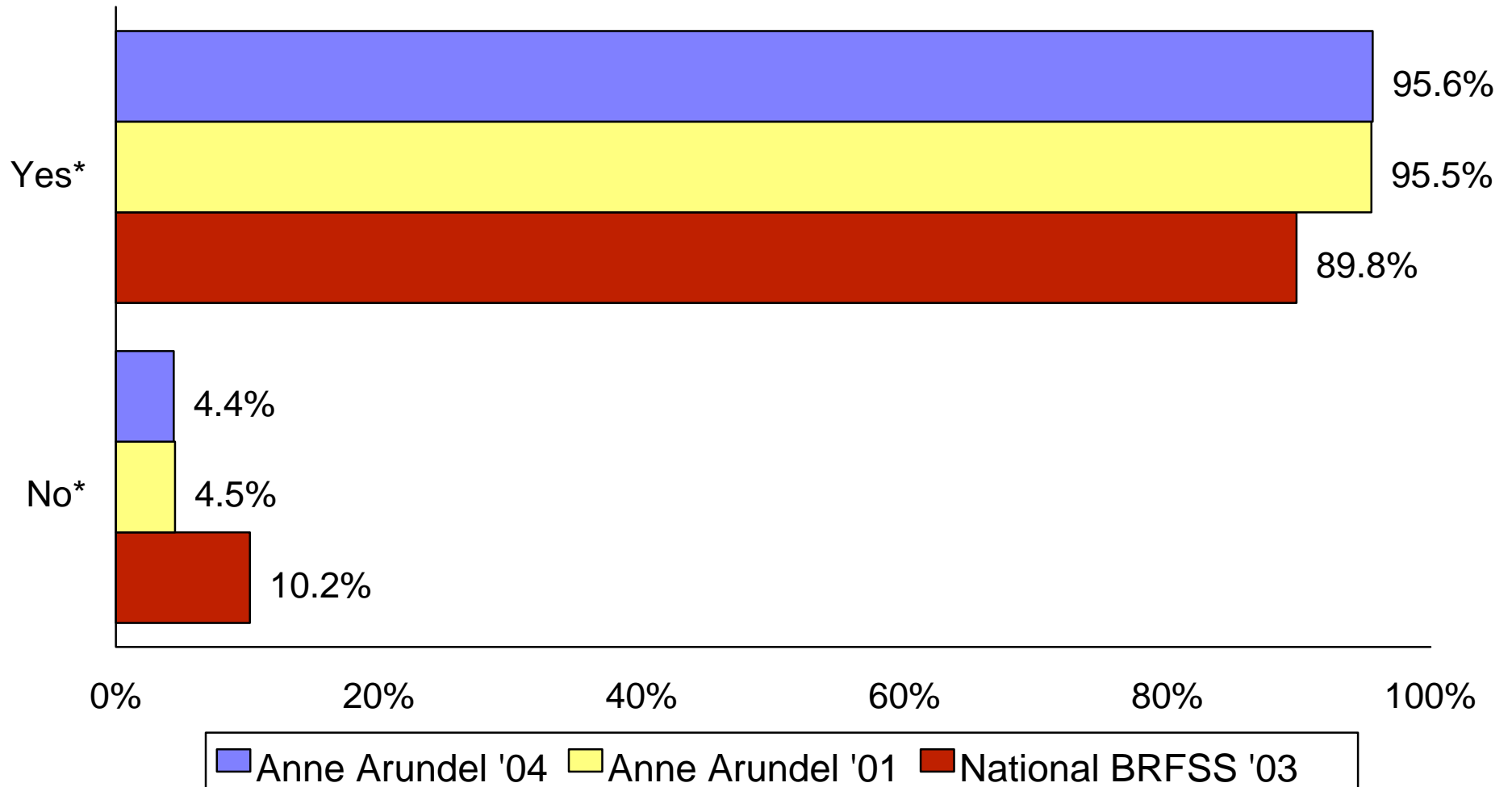
Women, 40 and over, who have had a mammogram



Proportion of women 40 & over who have had a mammogram in the preceding two years



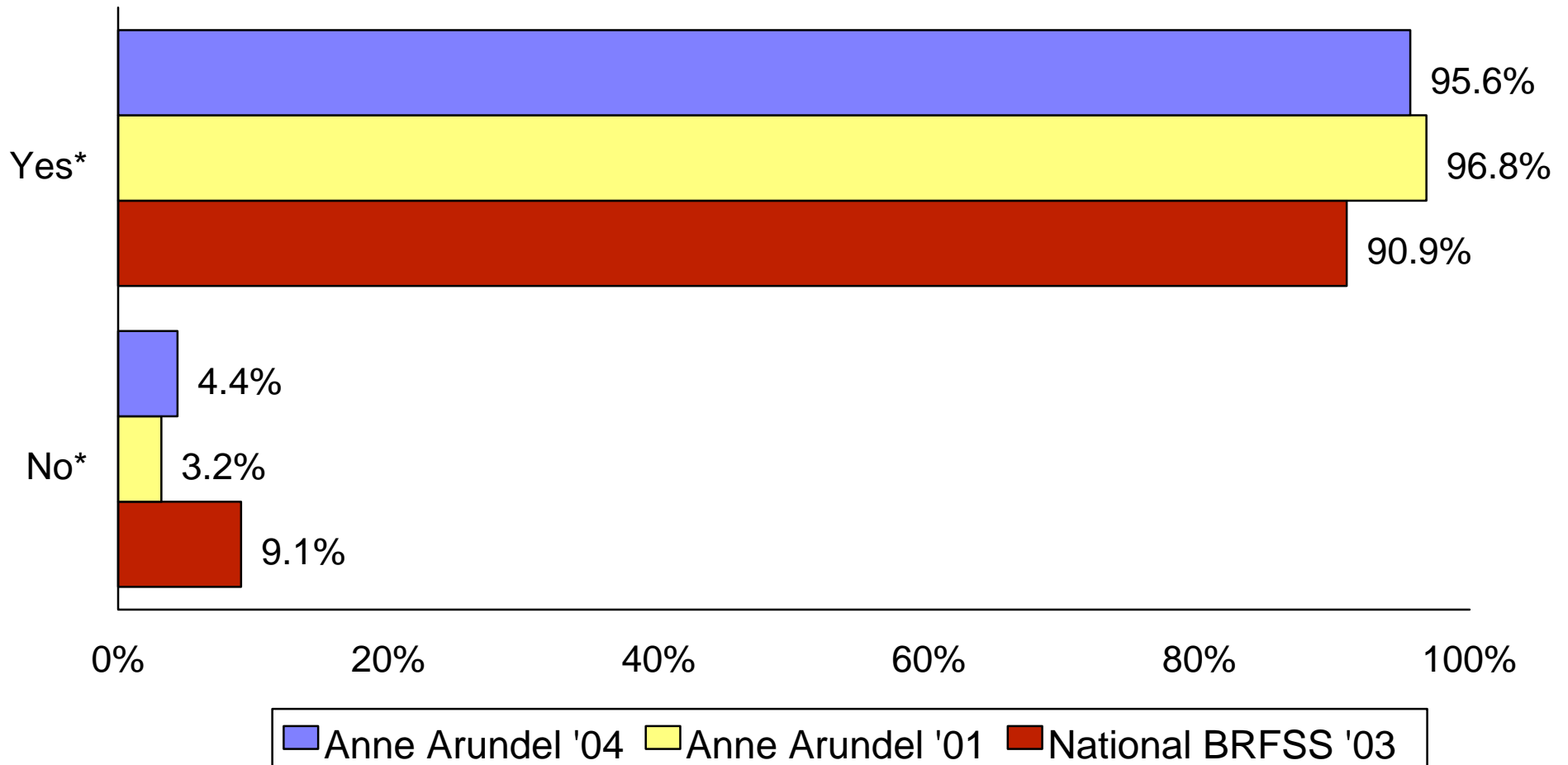
Have you ever had a clinical breast exam?



*Note: Anne Arundel is significantly different than National.

Have you ever had a clinical breast exam?

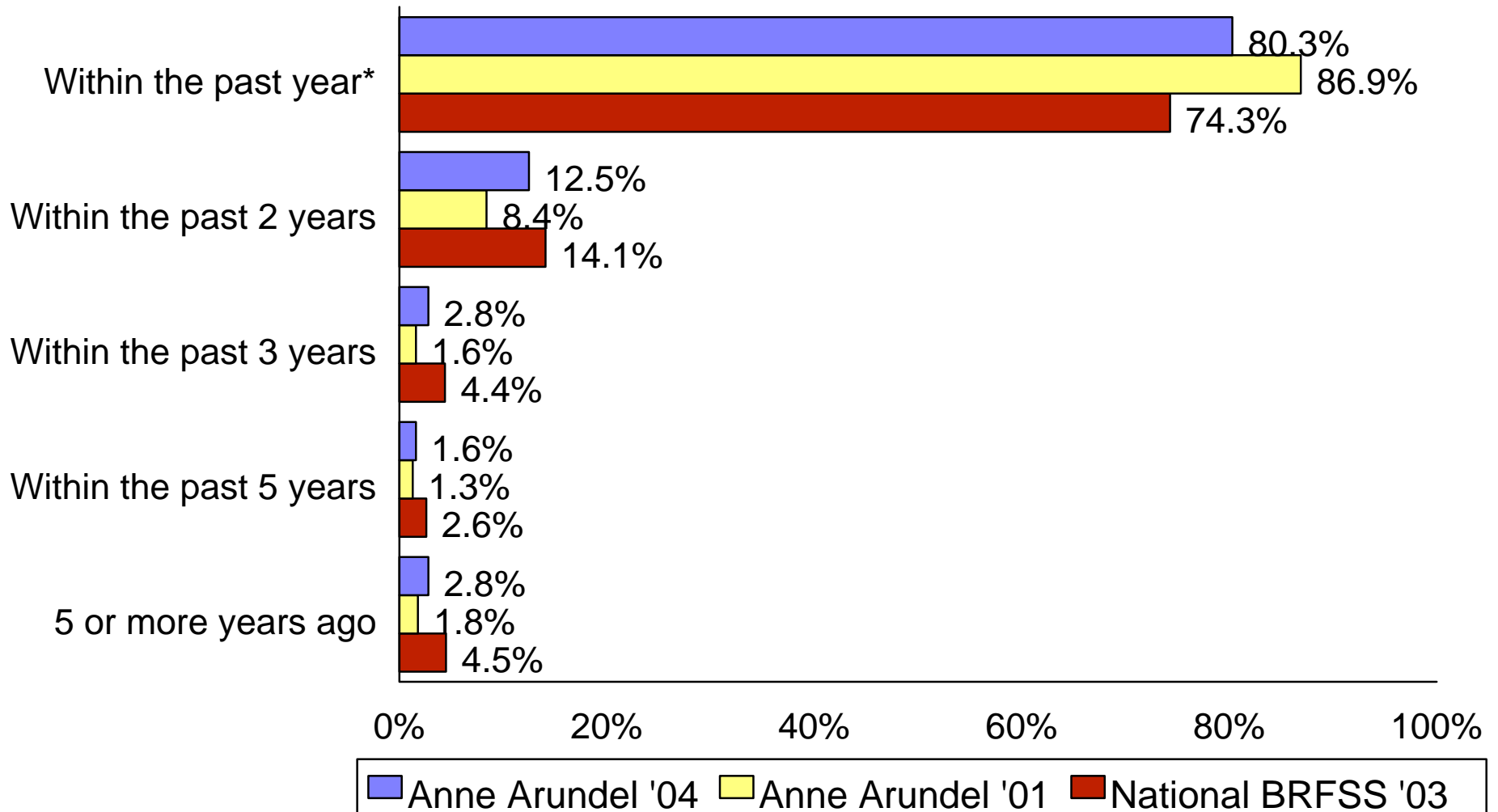
40 and over



*Note: Anne Arundel is significantly different than National.

How long has it been since you had your last clinical breast exam?

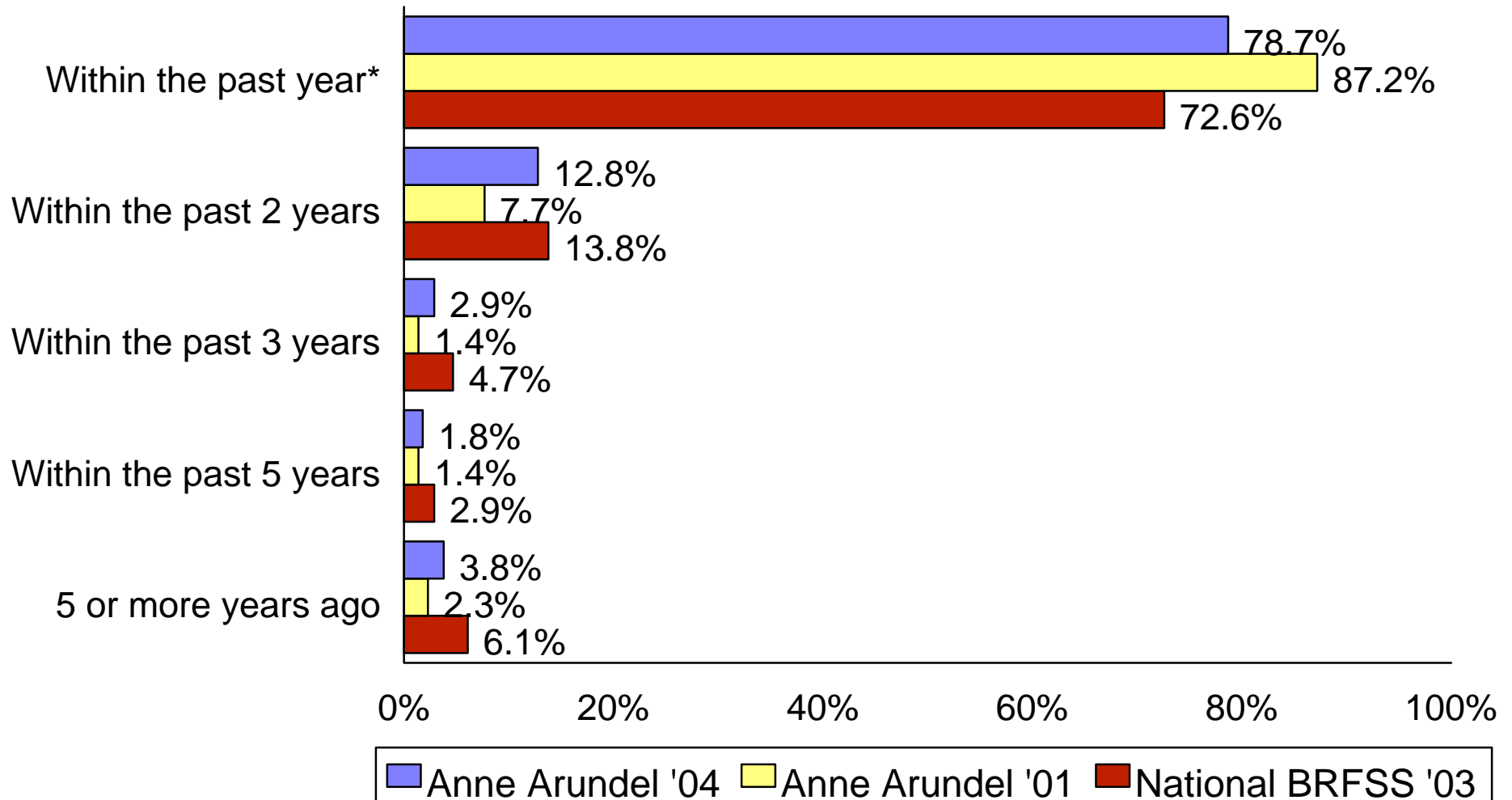
Women who have had a clinical breast exam



*Note: Anne Arundel is significantly different than National.

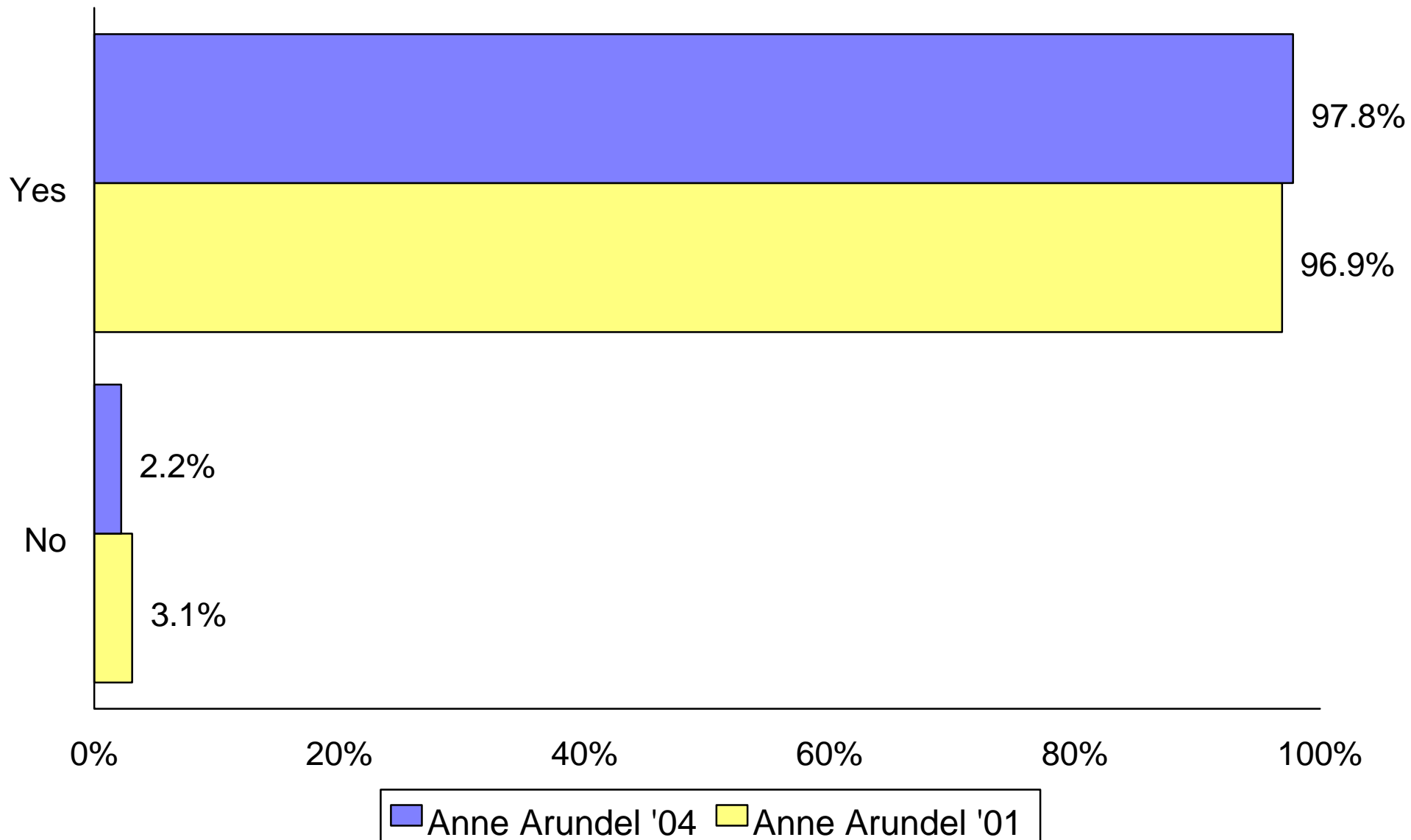
How long has it been since you had your last clinical breast exam?

Women, 40 and over, who have had a clinical breast exam

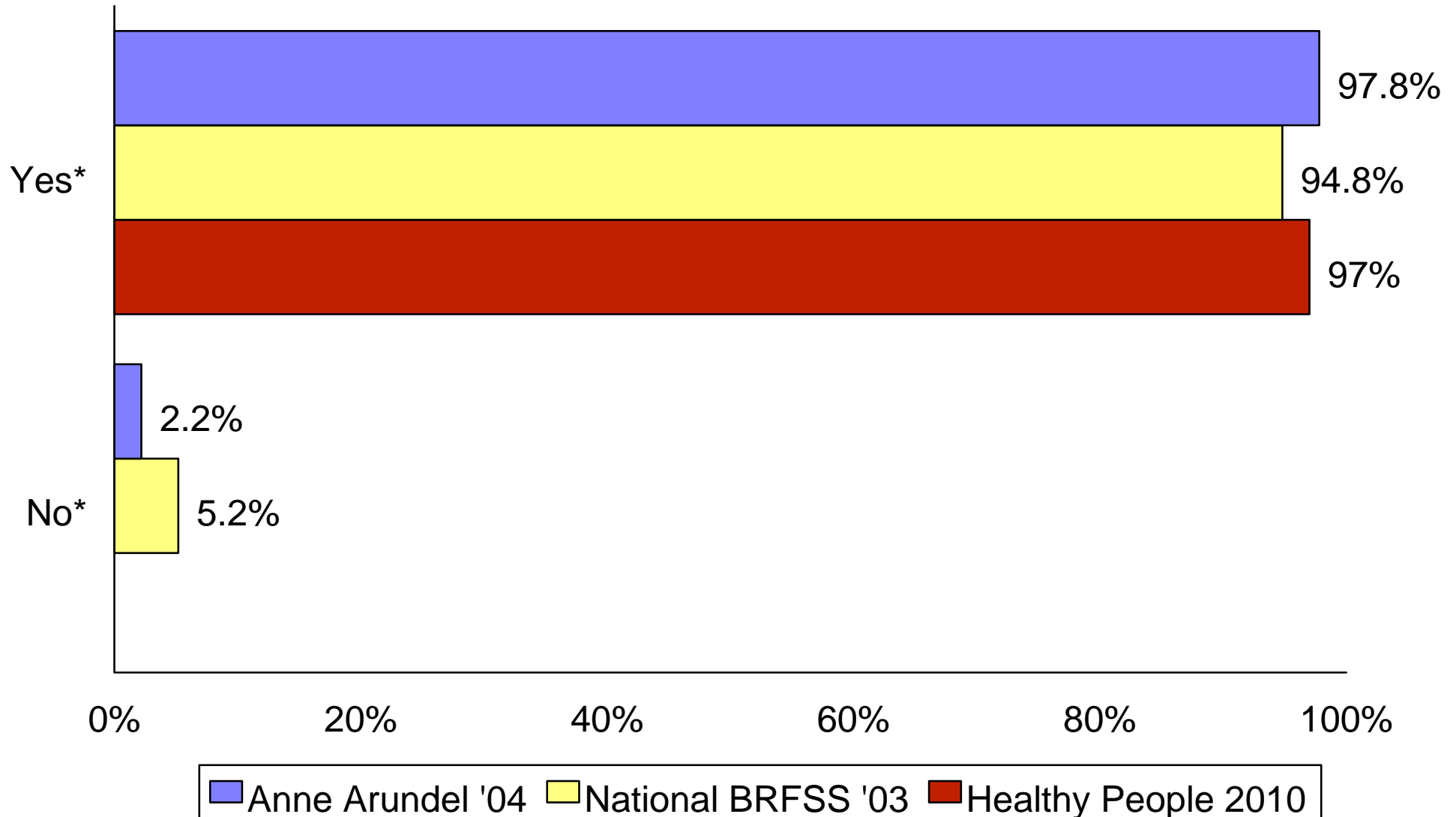


*Note: Anne Arundel is significantly different than National.

Have you ever had a Pap smear?



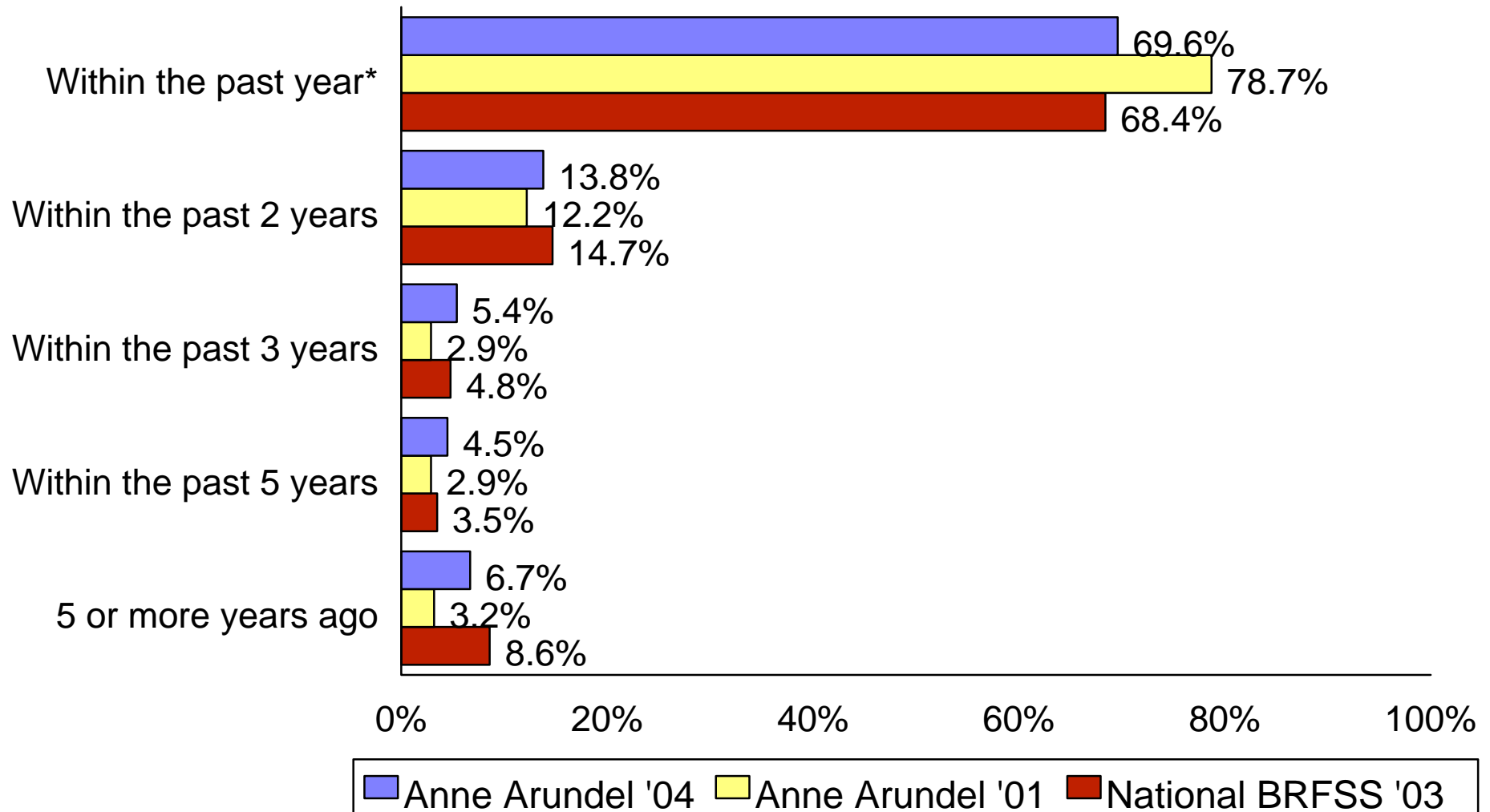
Have you ever had a Pap smear?



*Note: Anne Arundel is significantly different than National.

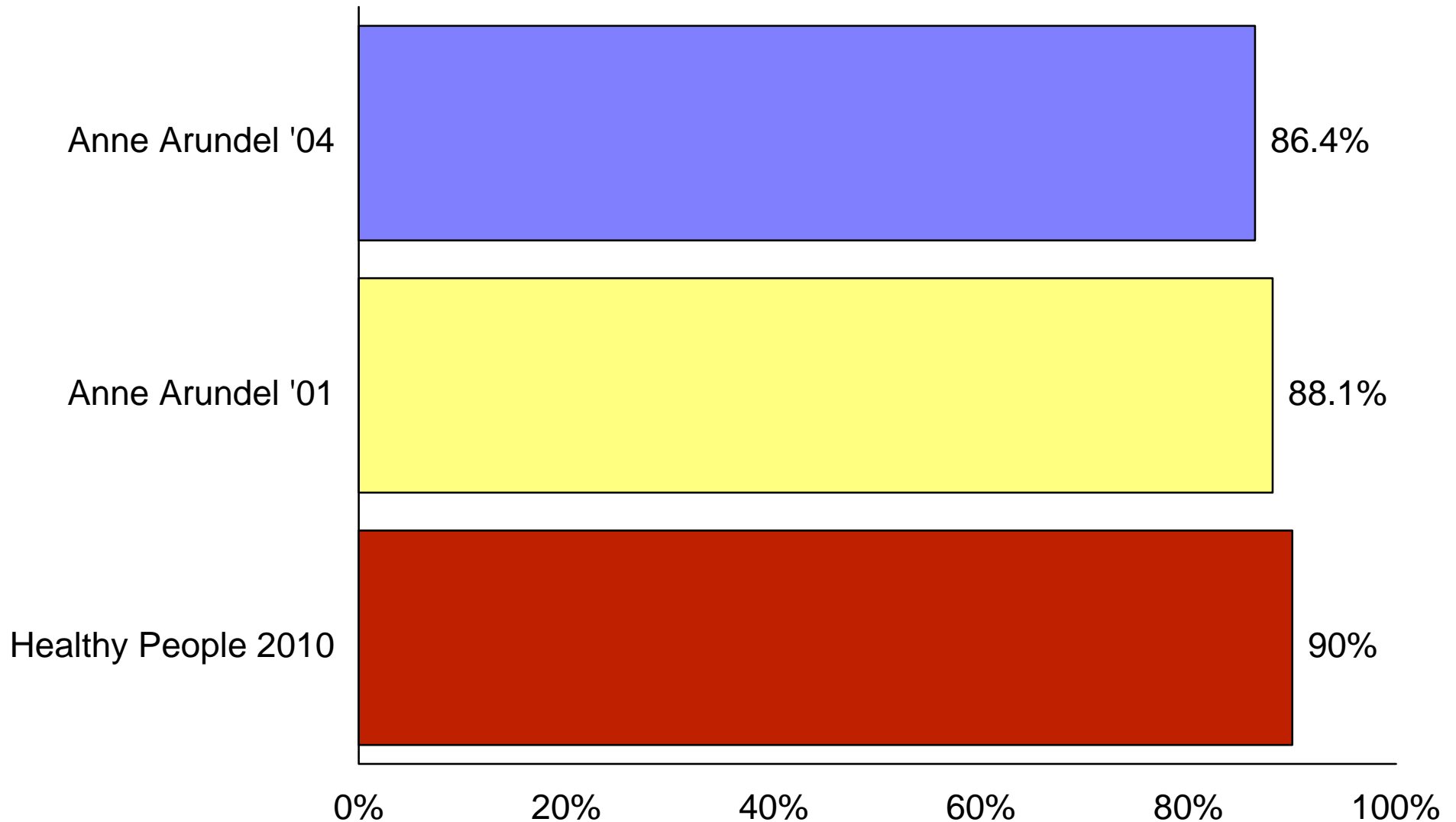
How long has it been since you had your last Pap smear?

Women who have had a Pap smear

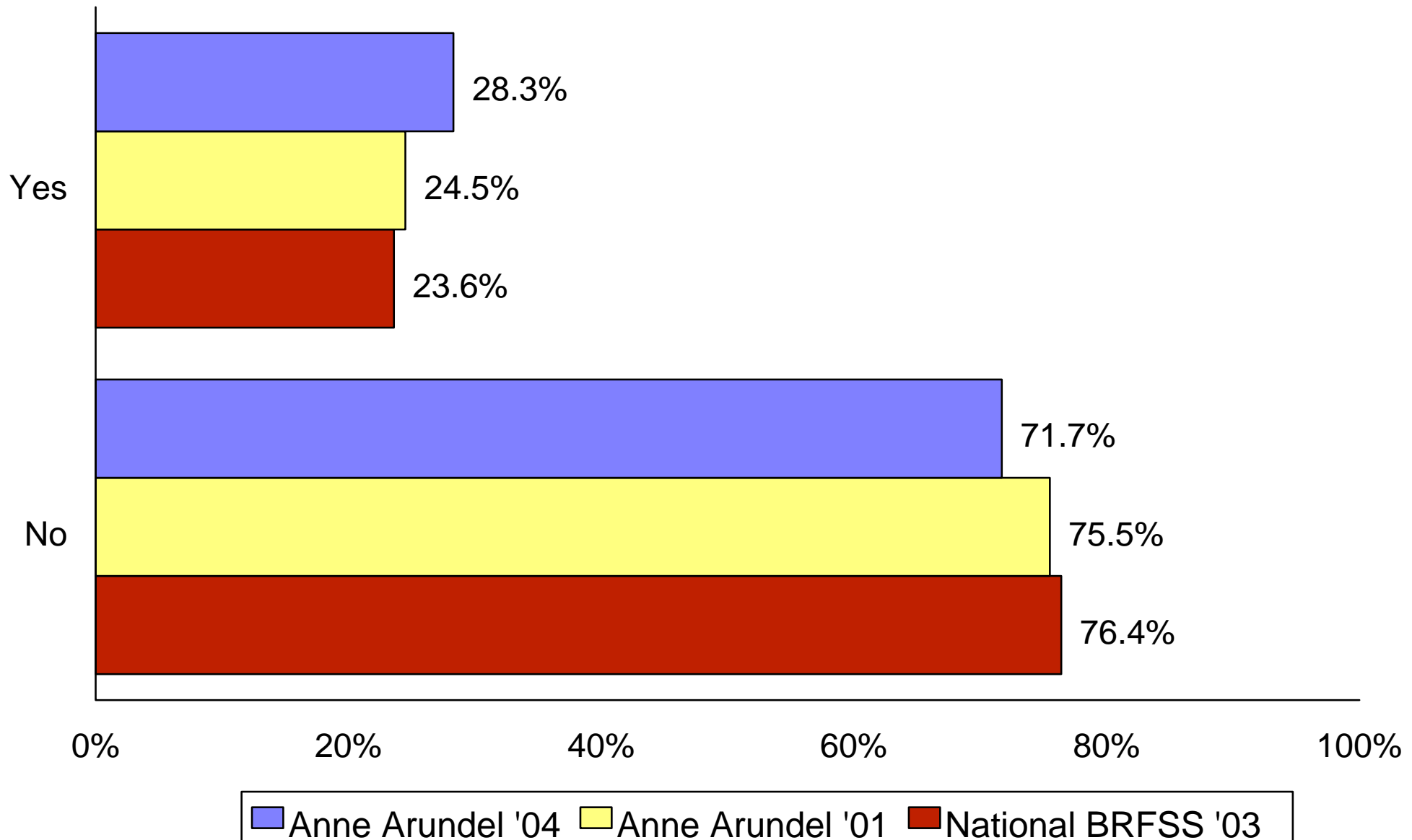


*Note: A statistically significant difference exists between 2004 and 2001.

Proportion of women 18 & over who have had a Pap smear in the preceding three years



Have you ever had a hysterectomy?



Statistically Significant Differences

Women's Health

- ① The older the respondent, the more likely they are to have had a mammogram.
- ① Females "65 & over" are least likely to have ever had a pap smear.
- ① Females "65 & over" are least likely to have had a pap smear in the past year.
- ① Hispanic females are less likely than Non-Hispanic females to have had a mammogram in past year.
- ① Hispanic females are less likely than Non-Hispanic females to have had a clinical breast exam in the past year.

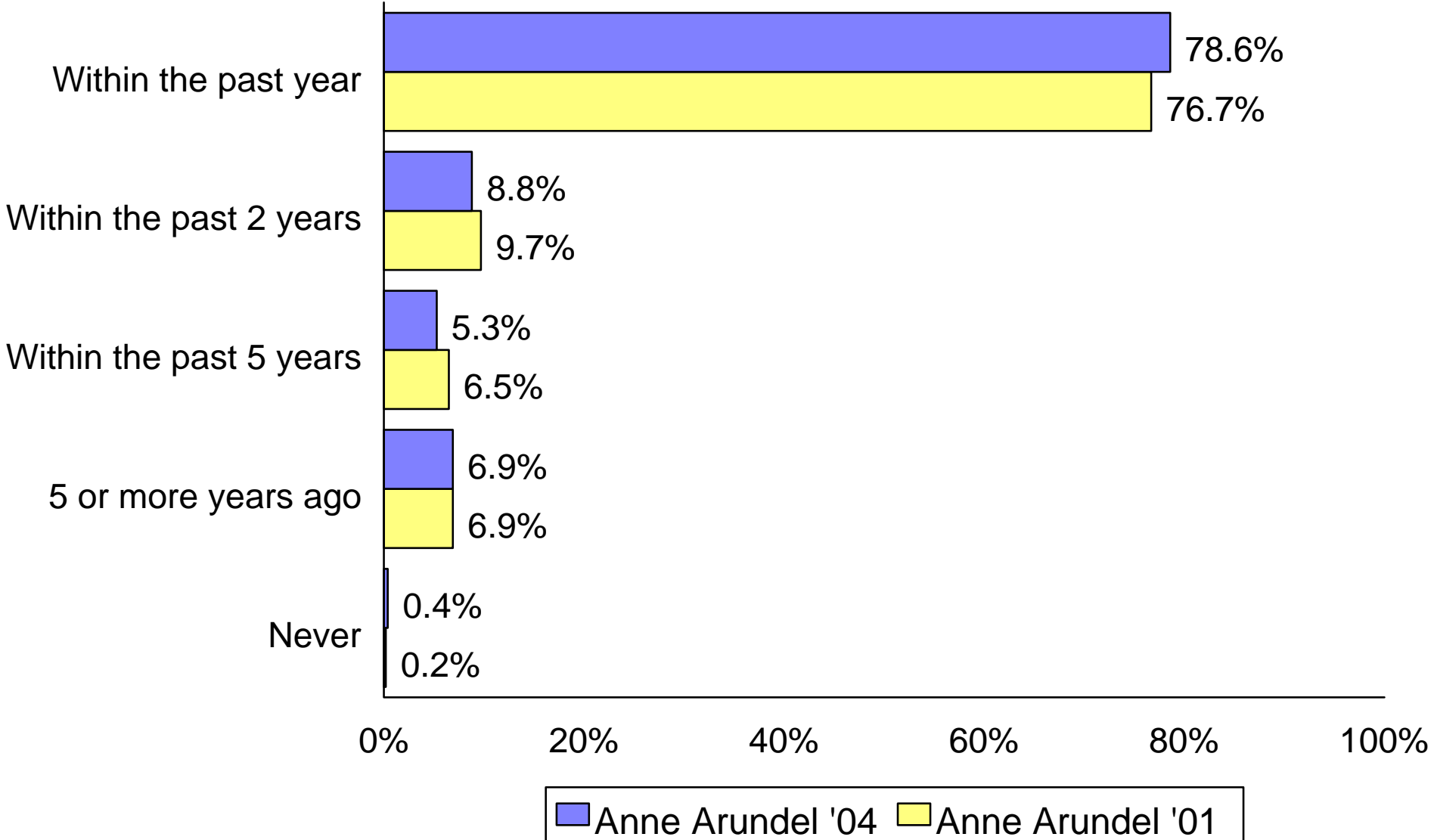
Statistically Significant Differences

Women's Health (cont.)

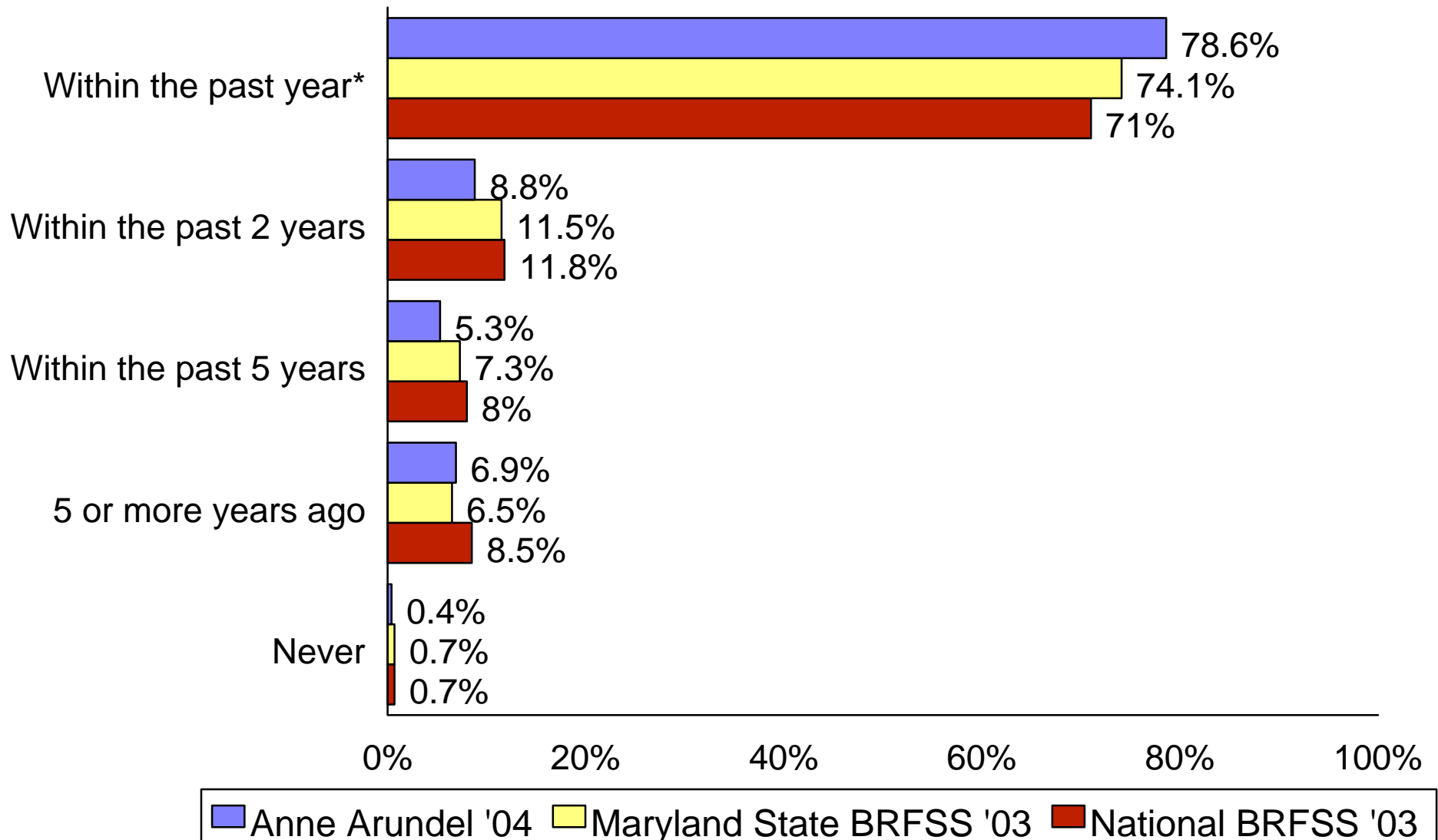
- ① The lower the income, the less likely respondents are to have had a pap smear in the past year.
- ① The "more than \$75,000" income group is less likely than other groups to have had a hysterectomy.

Oral Health

How long has it been since you last visited a dentist or dental clinic for any reason?



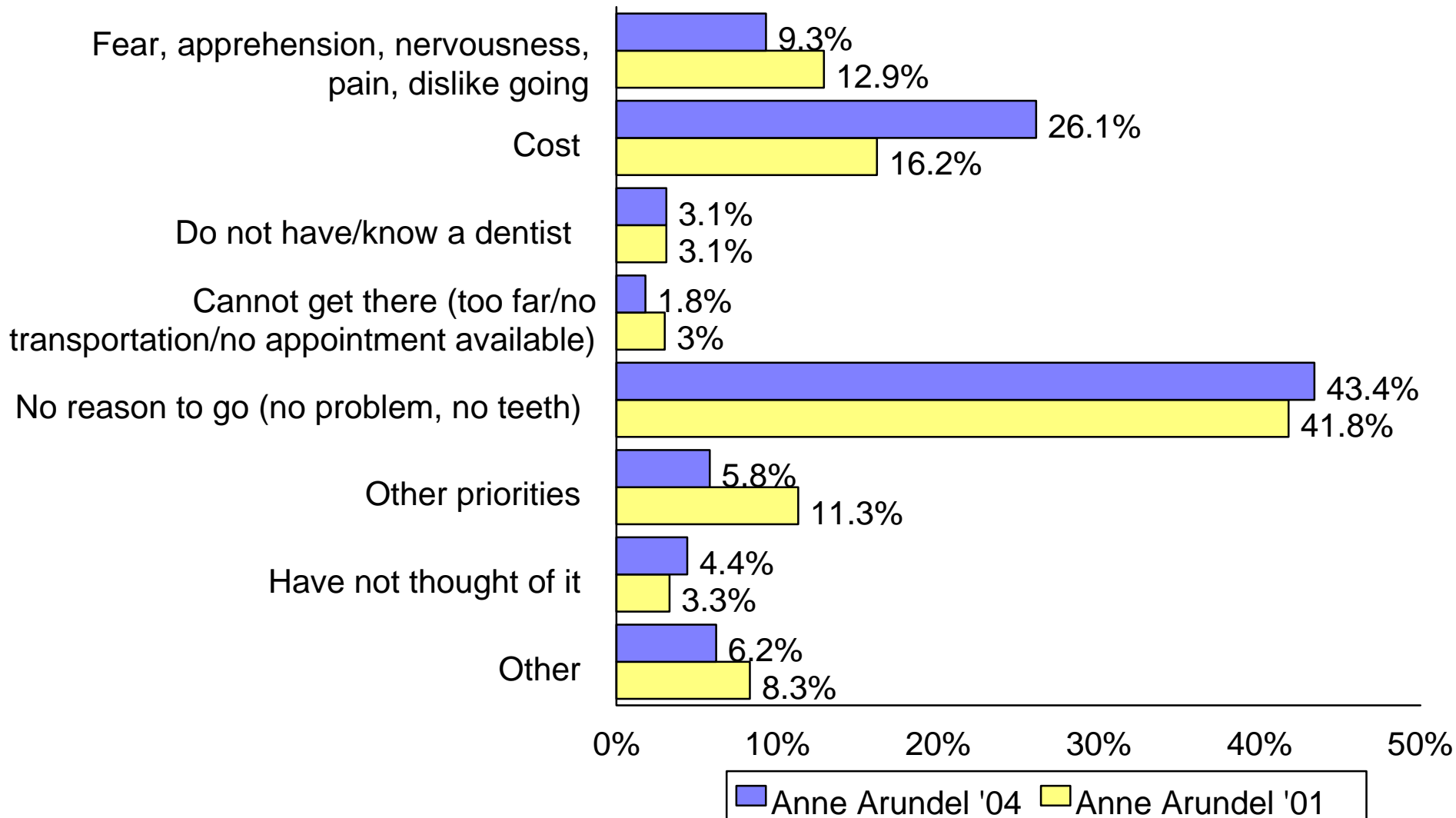
How long has it been since you last visited a dentist or dental clinic for any reason?



*Note: Anne Arundel is significantly different than National.

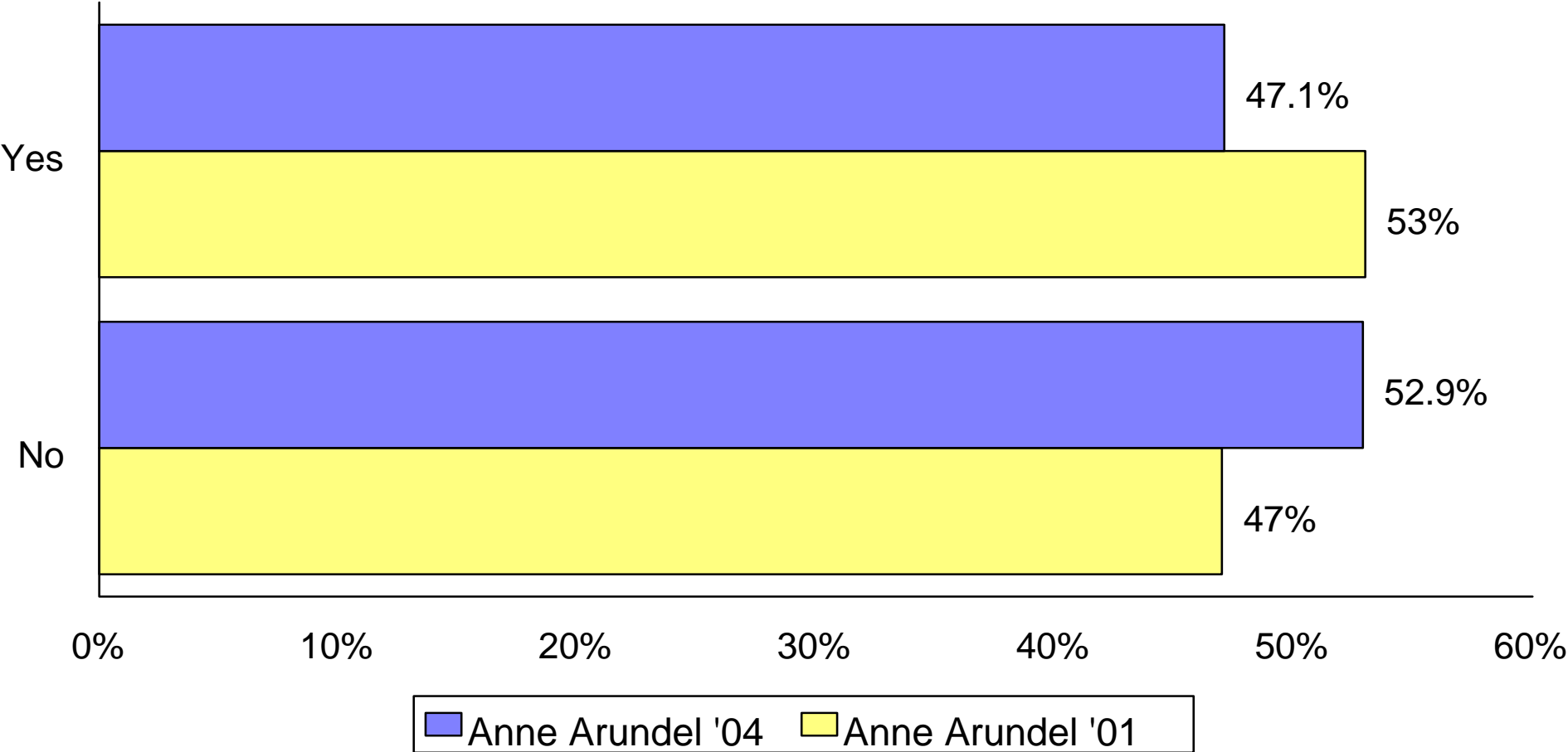
What is the main reason you have not visited the dentist in the last year?

Respondents who have been to the dentist more than one year ago

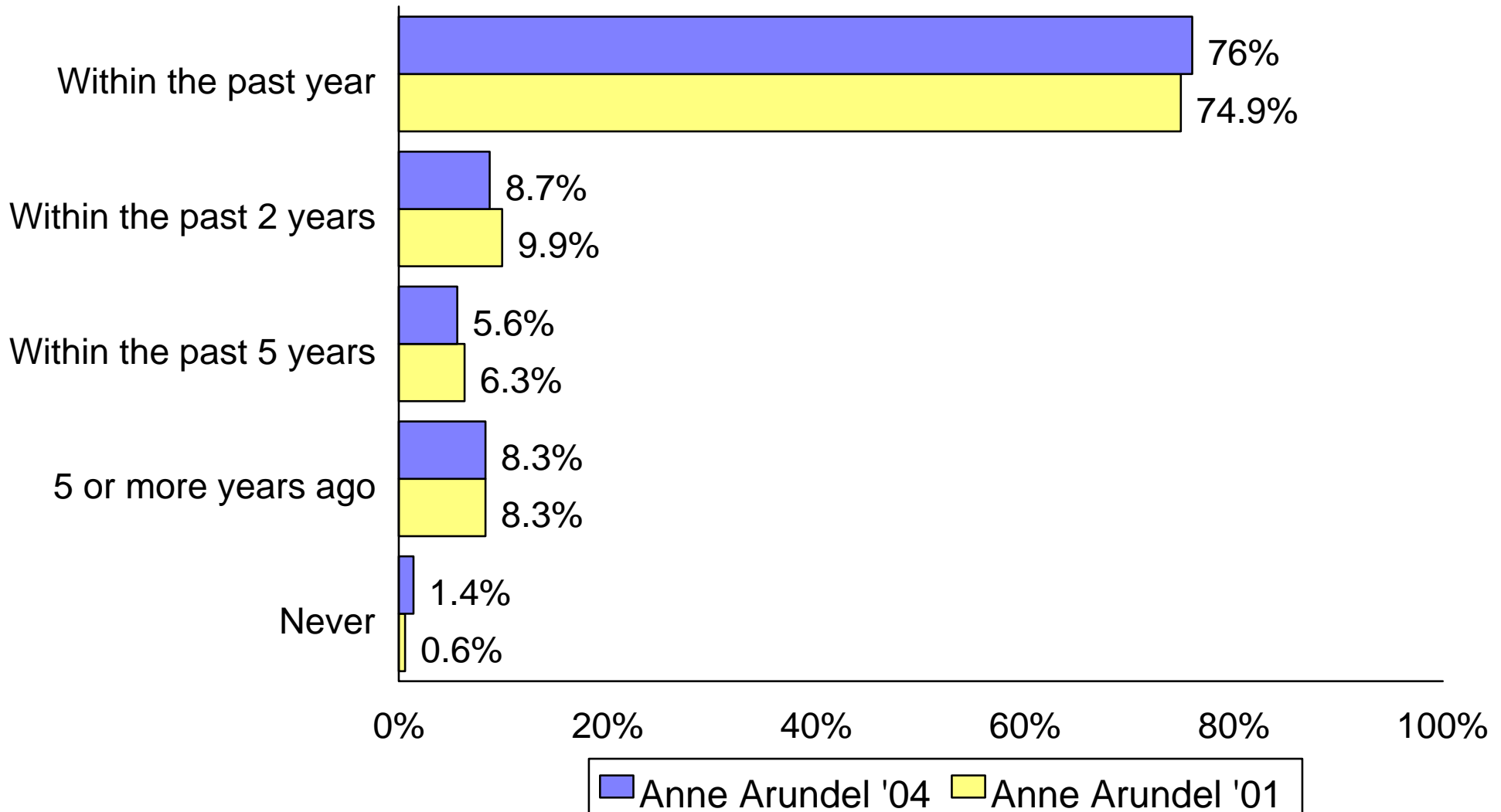


Do you have any kind of insurance coverage that pays for some or all of your routine dental care?

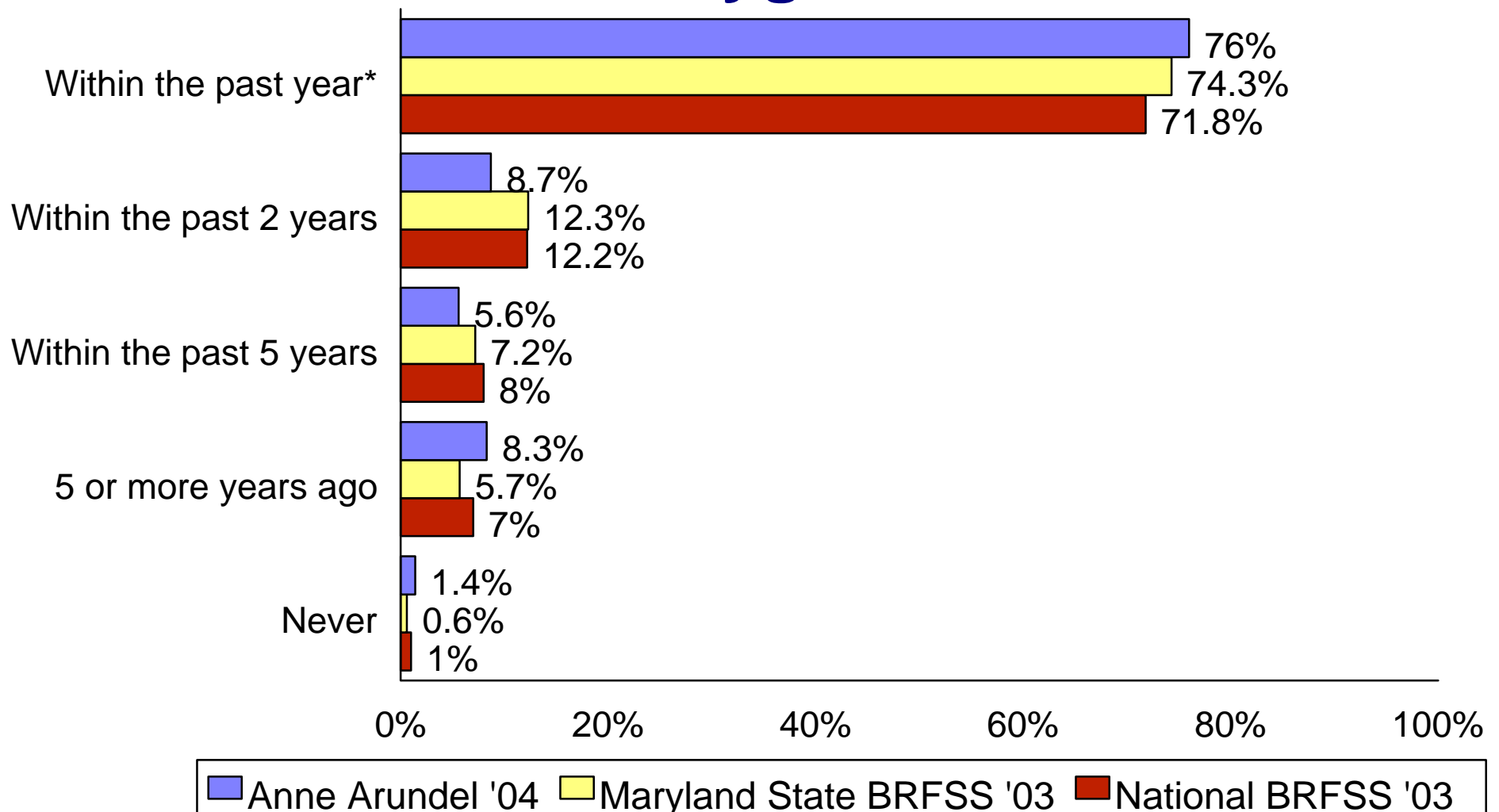
Respondents who have been to the dentist more than one year ago



How long has it been since you had your teeth cleaned by a dentist or dental hygienist?



How long has it been since you had your teeth cleaned by a dentist or dental hygienist?



*Note: Anne Arundel is significantly different than National.

Statistically Significant Differences

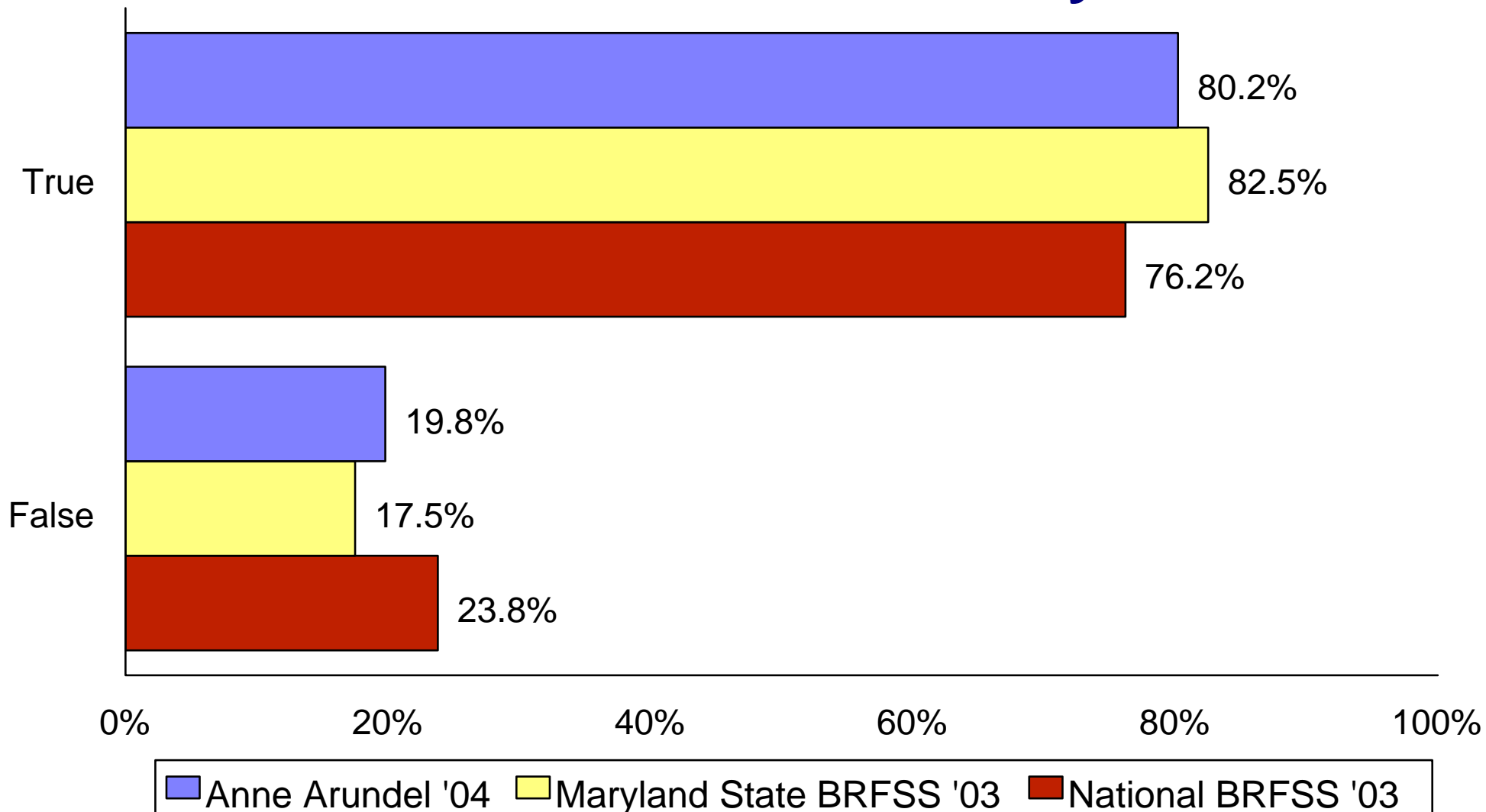
Oral Health

- ① The lower the income, the less likely respondents are to have visited a dentist or dental clinic in the past year or to have teeth cleaned by a dentist or dental clinic in past year.
- ① The lower the income, the less likely respondents are to have dental insurance.
- ① The "18-24" and "65 & over" groups are least likely to have dental insurance.

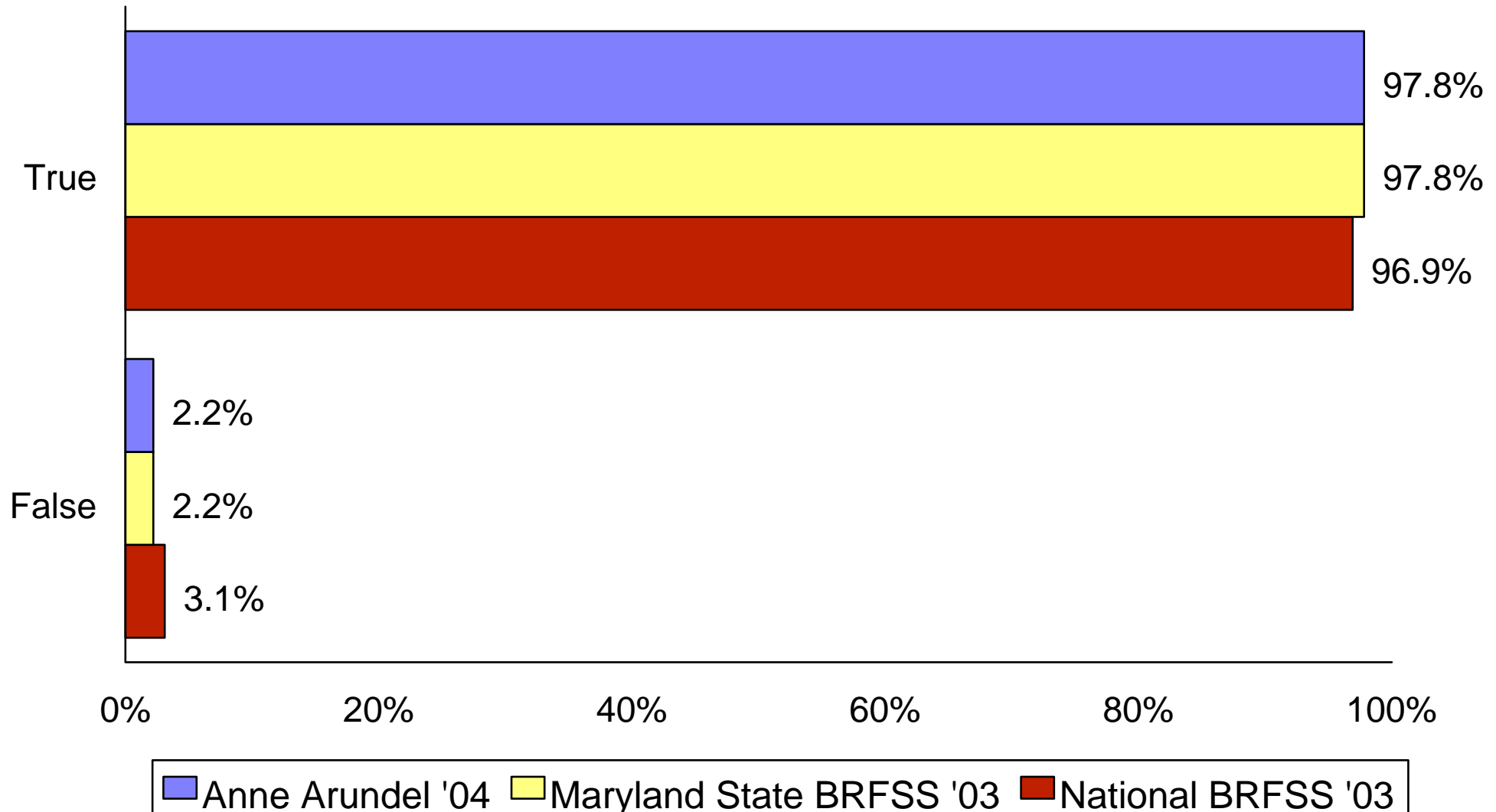
HIV/AIDS

***Only asked of respondents less than 65
years of age***

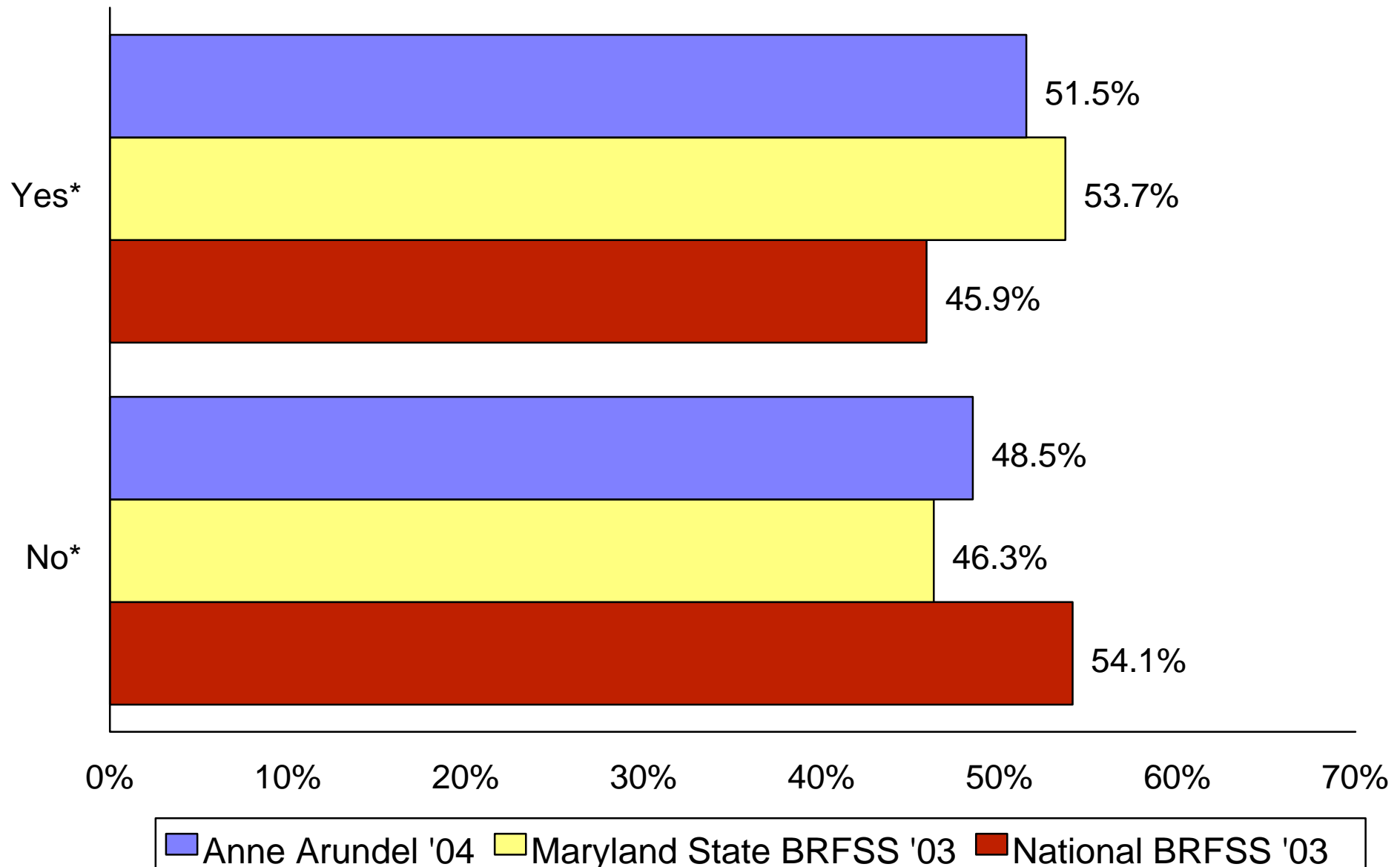
A pregnant woman with HIV can get treatment to help reduce the chances that she will pass the virus on to her baby



There are medical treatments available that are intended to help a person who is infected with HIV to live longer



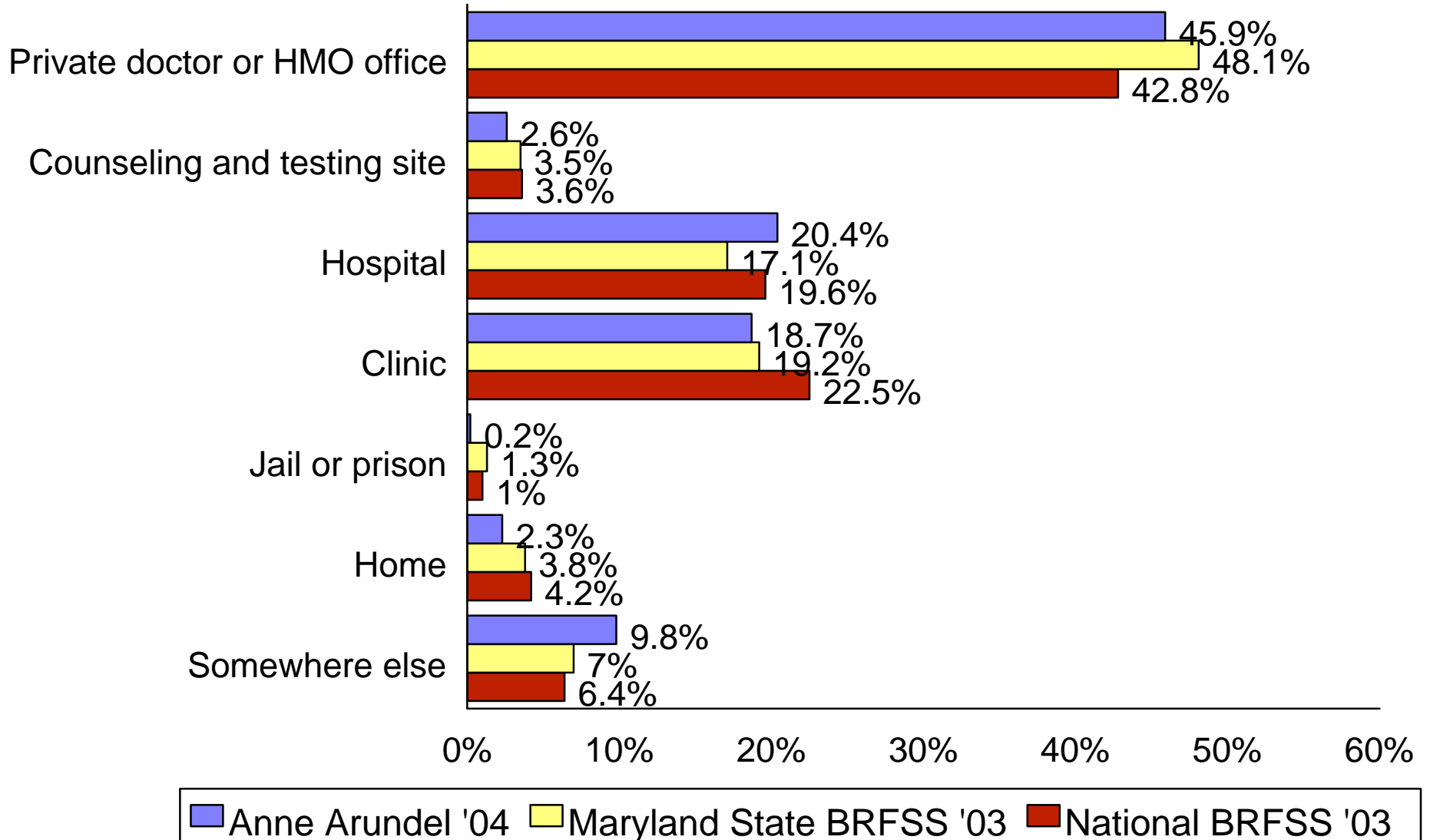
Have you ever been tested for HIV?



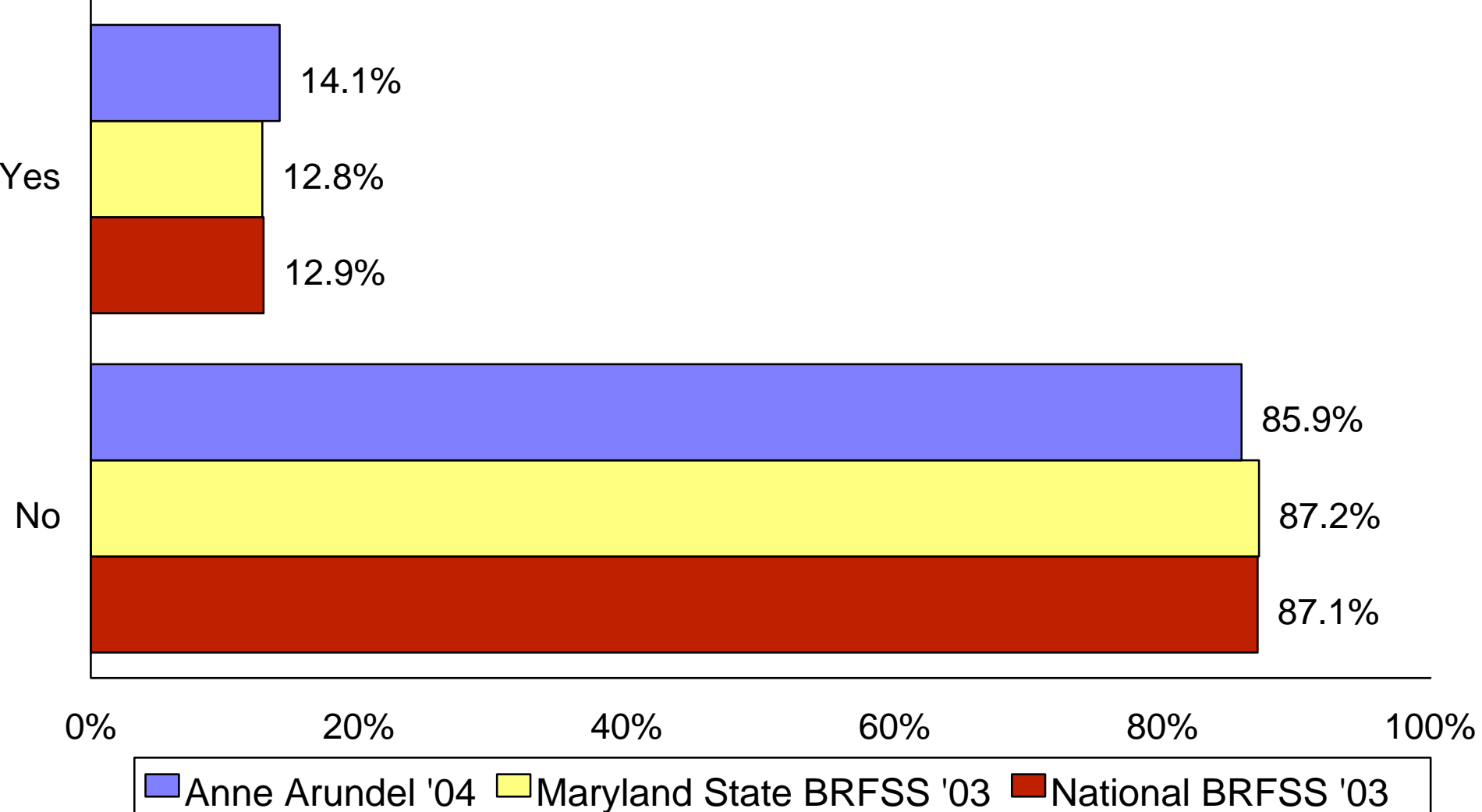
*Note: Anne Arundel is significantly different than National.

Where did you have your last HIV test?

Respondents who have had an HIV test



In the past 12 months, has a doctor, nurse, or other health professional talked to you about preventing sexually transmitted diseases through condom use?



Statistically Significant Differences

HIV/AIDS

- ① The "25-35" age group is more likely than other age groups to have been tested for HIV.
- ① The younger the respondent, the more likely they are to have talked to doctor about preventing STDs through condom use.
- ① African American respondents are least likely to agree there are medical treatments available to help a person who is infected with HIV to live longer.
- ① White and Asian respondents are least likely to have been tested for HIV.
- ① African American respondents are most likely to have talked to doctor about preventing STDs through condom use.

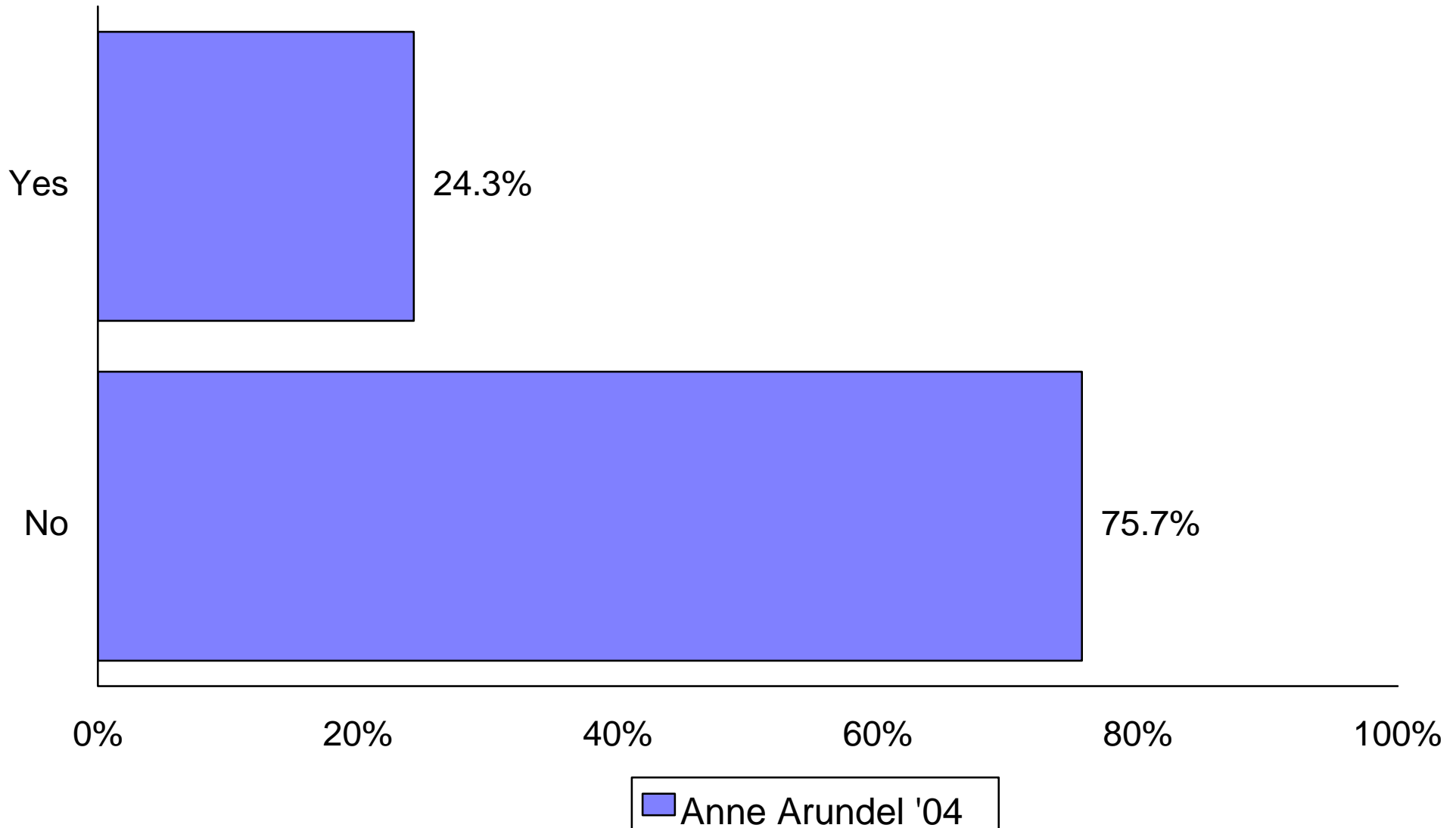
Statistically Significant Differences

HIV/AIDS (cont.)

- ① The higher the income, the less likely respondents are to have talked to doctor about preventing STDs through condom use.
- ① Males are less likely than females to agree that a pregnant woman with HIV can get treatment to help reduce the chances she will pass the virus to her baby.
- ① Females who have had an HIV test were more likely than males who have had an HIV test to have gotten it in a private doctor's office or HMO office.

Firearms

Are any firearms kept in or around your home?



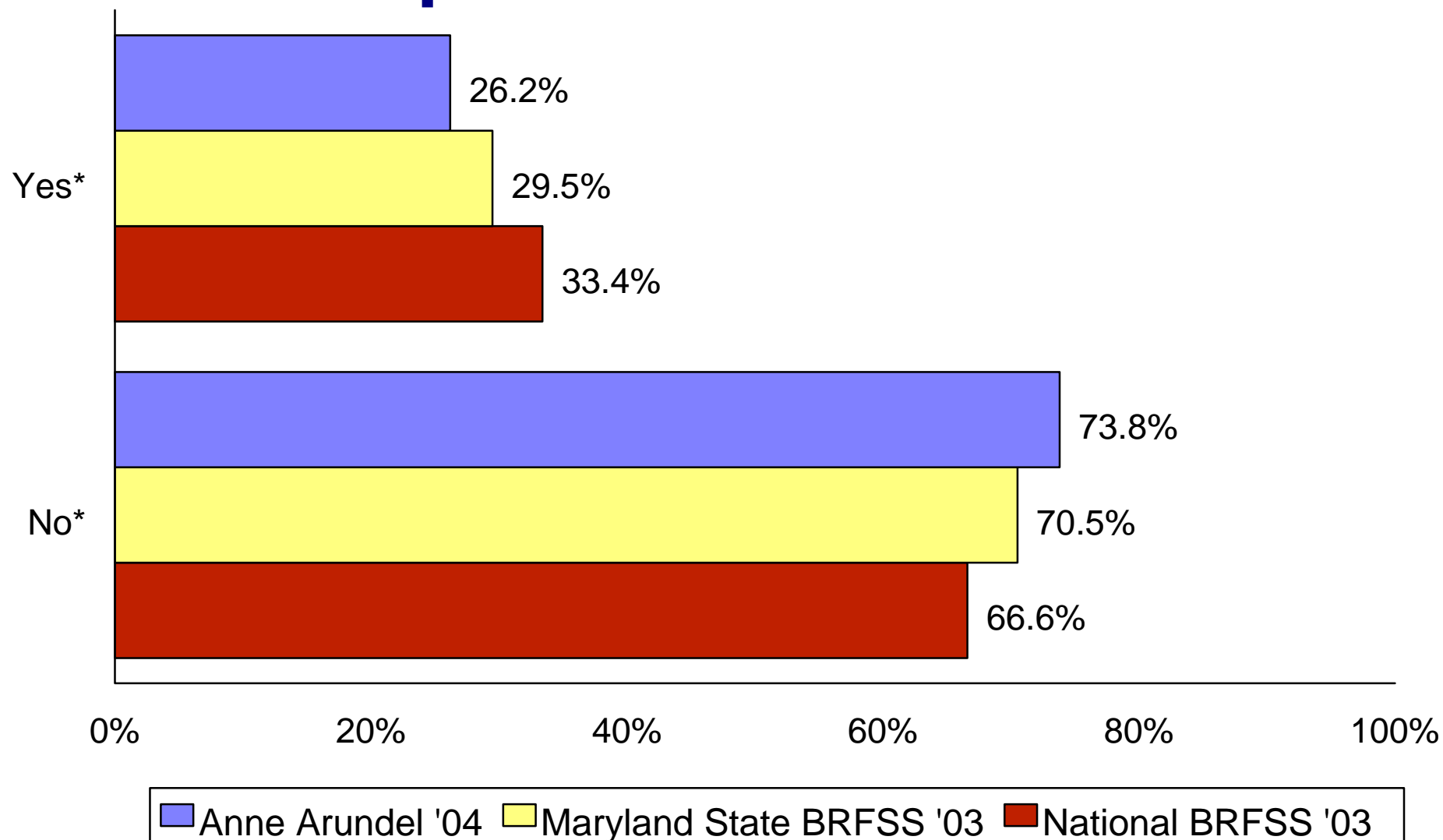
Statistically Significant Differences

Firearms

- ① Males are more likely than females to keep a firearm in or around their home.

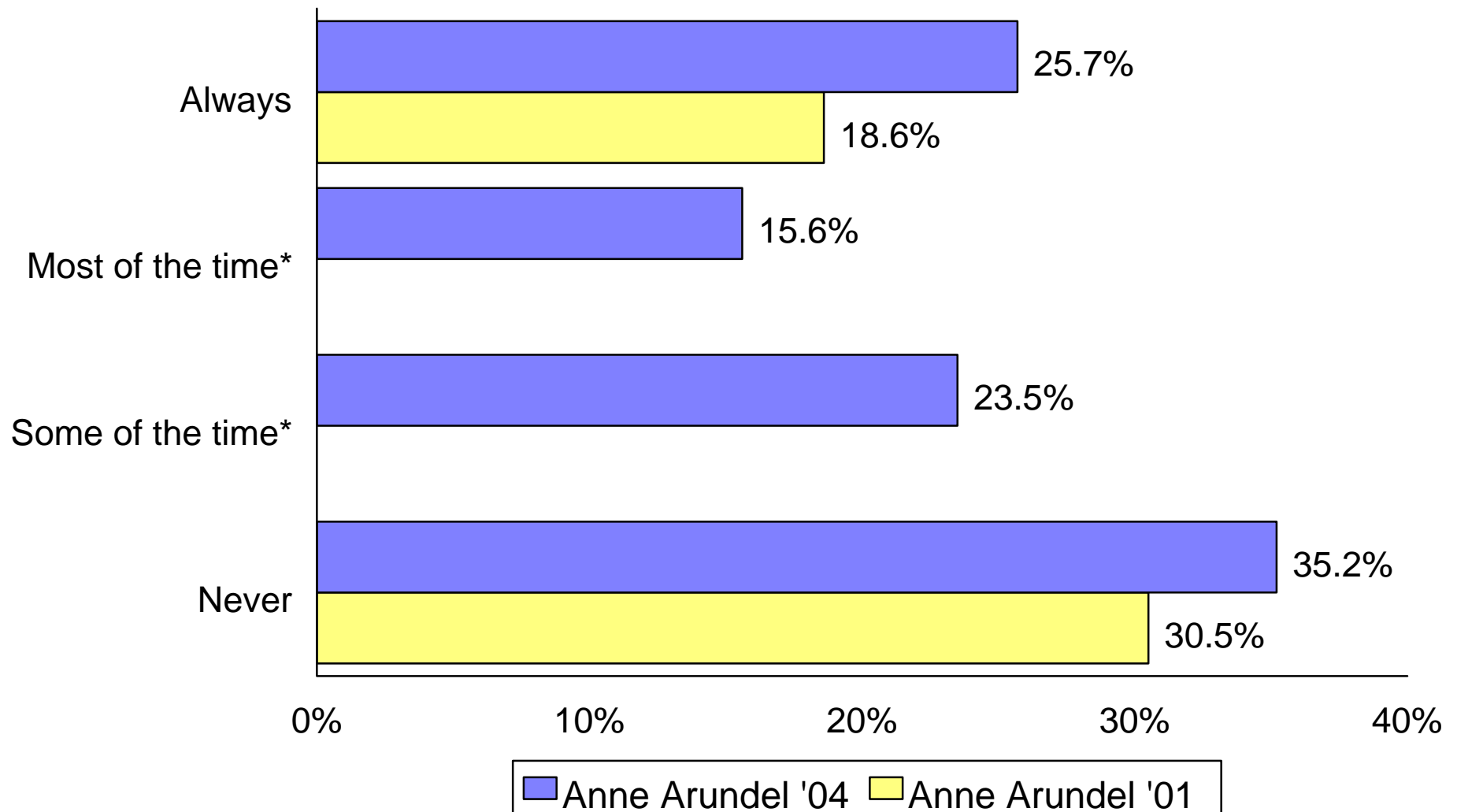
Sun Safety

Have you had a sunburn within the past 12 months?



*Note: Anne Arundel is significantly different than National.

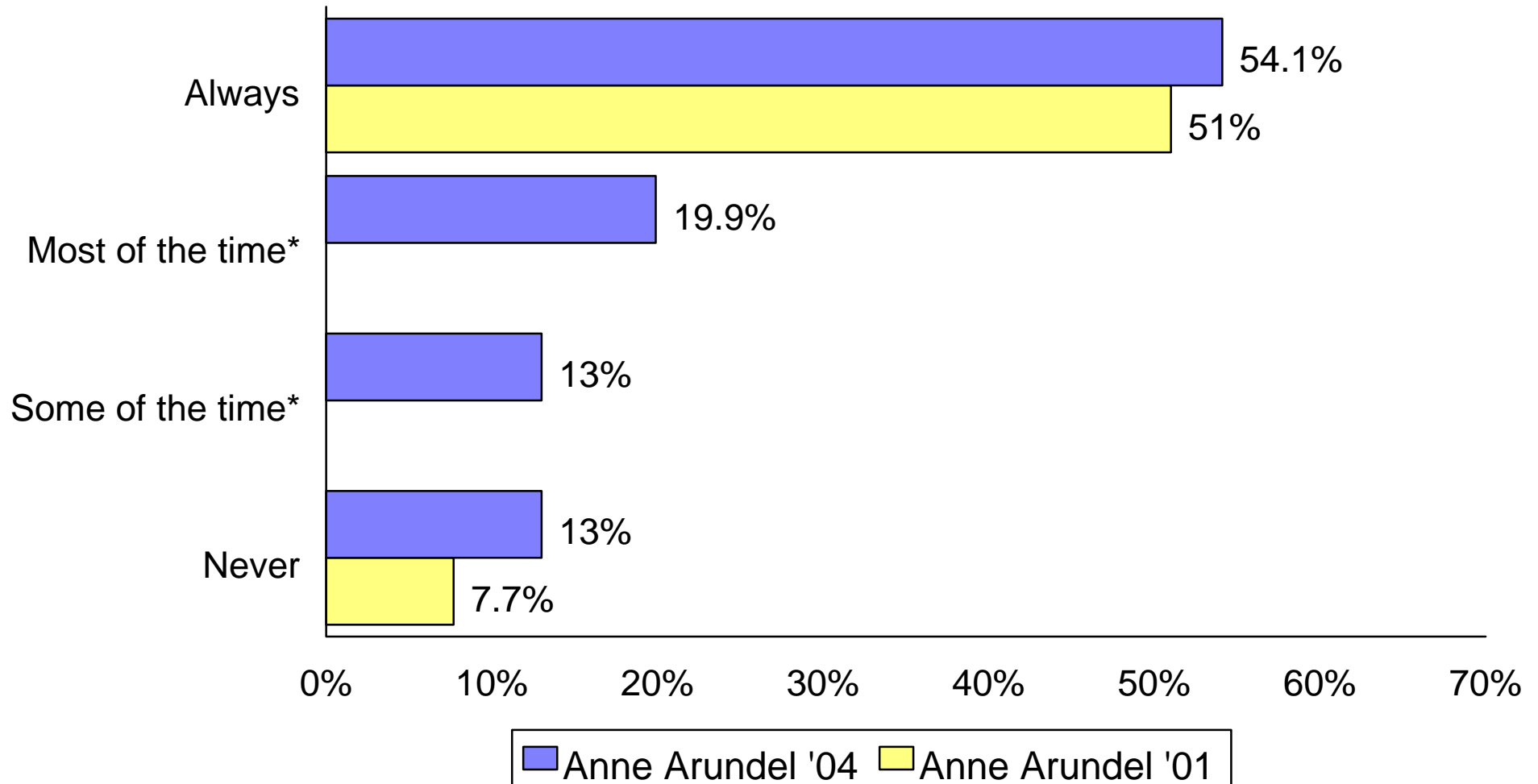
When you go outdoors for an hour or more on a sunny day, how often do you use a sunscreen lotion with a rating of SPF 15 or higher?



*Note: Categories differed in 2001.

Do you put sunscreen on your children when they go outdoors?

Respondents with children under 18



*Note: Categories differed in 2001.

Statistically Significant Differences

Sun Safety

- ① The younger the respondent, the more likely they are to have had a sunburn in the past year.
- ① "18-24" year olds are less likely than other age groups to "always" use sunscreen.
- ① White respondents are significantly more likely than other racial groups to have had a sunburn, but also significantly more likely to "always" use sunscreen.
- ① The higher the income, the more likely respondents are to have had a sunburn in the past year and the less likely to wear sunscreen.
- ① Males are more likely than females to have had a sunburn in the past year and less likely to wear sunscreen.