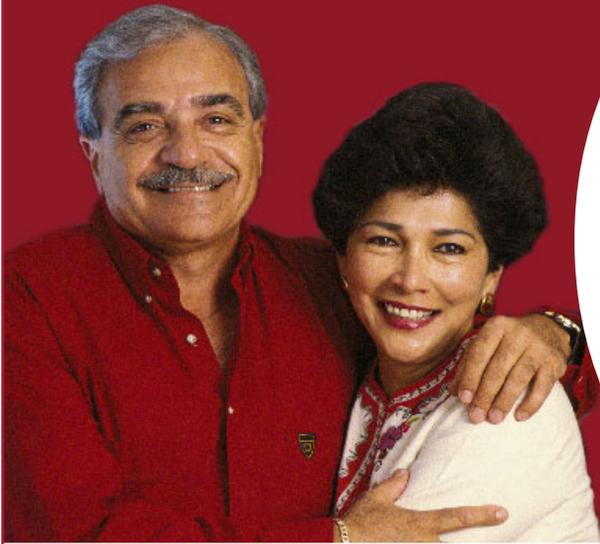


# Prevalence and Impact of



# Arthritis

Among Utah's Hispanic/Latinos and  
Non-Hispanic/Latino Whites

**Utah Department of Health  
Bureau of Health Promotion  
Arthritis Program**

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## **Additional Copies**

If you would like an additional copy of this report, or data found in this report, contact Randy Tanner at [rtanner@utah.gov](mailto:rtanner@utah.gov)

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# Prevalence and Impact of

# Arthritis

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The primary purpose of this report is to compare the impact of arthritis among Hispanic/Latino and non-Hispanic/Latino White adults in Utah. Because the Hispanic/Latino population more than doubled in Utah during the 1990s, health disparities among this group have become an urgent public health issue. By implementing effective public health interventions now, we may reduce the frequency and severity of arthritis among Hispanic Utahns in the future.

The information reported here is intended to serve as a reference for future research about factors associated with arthritis among Utah's Hispanic/Latino population. Highlights from the report include the following:

- Approximately 21.2% Hispanic/Latina females and 25.6% of non-Hispanic/Latina white females reported arthritis compared to 12.1% of Hispanic/Latino males and 16.6% of non-Hispanic/Latino White males.
- Even after adjusting for age, Hispanic/Latino persons with arthritis were almost twice as likely to report fair or poor health when compared to non-Hispanic/Latino Whites with arthritis (45.7% and 23.4% respectively).
- Hispanic/Latino adults with arthritis were almost twice as likely to report they were physically inactive than non-Hispanic/Latino White adults with diagnosed arthritis (41.1% and 23.3% respectively).
- Hispanic Latino adults with arthritis were more than twice as likely to report pain limited their activities for 15-30 days each month when compared to non-Hispanic/Latino Whites with diagnosed arthritis (54.2% and 21.3% respectively).
- Among Hispanic/Latino adults with arthritis, 21.6% reported having no health insurance while only 9.8% of non-Hispanic/Latino White adults with arthritis reported having no health insurance.
- Hypertension occurred at a significantly higher rate in both Hispanic/Latino and non-Hispanic/Latino White adults with arthritis (35.6% and 31.2% respectively) when compared to Hispanic/Latino and non-Hispanic/Latino Whites without arthritis (15.8% and 19.0% respectively).
- Hispanic/Latino adults with arthritis were more likely to report having high blood cholesterol (20.7%) when compared to Hispanic/Latino adults without arthritis (12.5%).
- The estimated prevalence of diabetes among Hispanic/Latino persons with arthritis was 9.6% compared to 5.6% among non-Hispanic /Latino whites with arthritis. Among Hispanic/Latino adults without arthritis, 7.9% also reported diabetes, compared to 3.9% among non-Hispanic/Latino whites without arthritis.



Hispanic/Latino persons are a diverse group originating from Spanish-speaking countries. Origin can be viewed as the heritage, nationality, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Spanish, Hispanic, or Latino may be of any race.

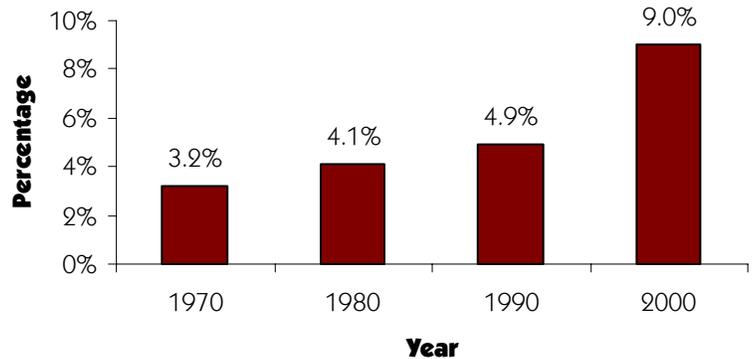
The Hispanic/Latino population in Utah increased 138% from 1990 to 2000 and grew more than twice as fast as the Hispanic/Latino population nationwide. In 2000, there were 201,559 Hispanic/Latino residents in Utah, representing 9.0% of Utah's population (**Figure 1**).

About two thirds of Hispanic/Latino people in Utah identified themselves as Mexican in the 2000 Census. In 2000, over half (53.0%) (106,787) of the Hispanic/Latino population resided in Salt Lake County. Utah County had the second largest Hispanic/Latino population (25,791)(12.8%), while Weber County was third (24,858)(12.3%). There were also a significant number of Hispanic/Latino people in Davis (12,955)(6.4%), Washington (4,727)(2.3%), Box Elder (2,791)(1.4%) and Summit County (2,080)(1.0%).

In Weber County, Hispanics and Latinos made up 12.6% of the total county population in 2000, the largest percentage among counties, followed by Salt Lake (11.9%), Carbon (10.3%), Tooele (10.3%), and Summit (8.1%). In 1990, Carbon and Tooele Counties led the state in the number of Hispanics/Latinos as a percent of their total county population (11.1%). Only 6% of the population in Salt Lake County was Hispanic/Latino in 1990 (**Figure 2**).

**Figure 1.**

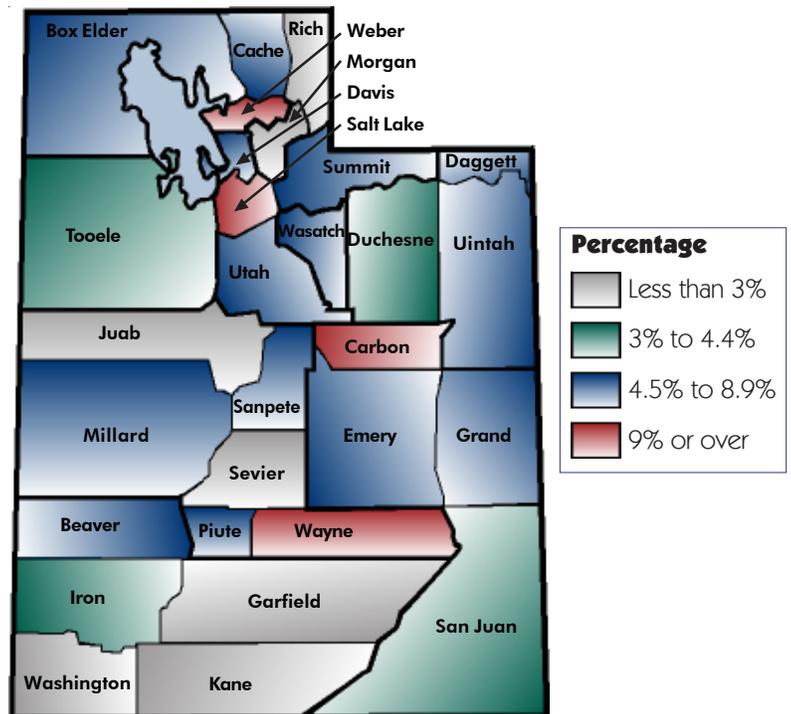
Percentage of the Utah Population of Hispanic/Latino Ethnicity by Year



Source: US Census Bureau

**Figure 2.**

Percentage of the County Population Reporting Hispanic/Latino Ethnicity



Source: US Census Bureau, 2000

# b background

Because the Utah Behavioral Risk Factor Surveillance System (BRFSS) survey samples a proportionate number of Hispanic/Latino persons, the sample size is limited and it is difficult to develop health care policies and programs for this particular ethnic group using this data source. Therefore, the Utah Department of Health, Bureau of Health Promotion, conducted an additional survey, the 2001 Utah Hispanic Health Survey, to assure an adequate sample of the Hispanic/Latino population.

This report presents arthritis prevalence and risk factors among the Utah Hispanic/Latino population and the Utah non-Hispanic/Latino White population. Hispanic/Latino data were gathered using the 2001 Hispanic Health Survey and non-Hispanic/Latino White data were gathered using the 2001 BRFSS Survey. For this report non-Hispanic/Latino adults includes just persons who are non-Hispanic/Latino White.

The Bureau made every effort to keep the Hispanic Health Survey as consistent as possible to the 2001 BRFSS Survey to allow us to compare the important issues of health care access, preventive health-care, lifestyle behaviors, and health status between Utah's Hispanic/Latino and non-Hispanic/Latino White populations. Because the Hispanic Health Survey was designed to target only the Hispanic/Latino population, the sample was taken from a Hispanic surname list obtained from Genesys Sampling Systems. Although the Hispanic Health Survey and the BRFSS Survey use different sampling designs and weighting schemes, each survey is representative of the population surveyed. Therefore, using confidence intervals to compare differences between the two groups is appropriate.

Because many of the BRFSS rates are influenced by age, the data for this report were age-adjusted to the 2000 U.S. standard population to control for the differences in the age composition of the Hispanic/Latino and non-Hispanic/Latino White populations. However, age-adjusted rates are synthetic and used only for comparison purposes and don't reflect the absolute magnitude that a crude or unadjusted rate depicts.

A total of 939 Hispanic/Latino adults completed the Hispanic Health Survey. The sample included more males than females (54.6% and 45.4% respectively). Almost one of five (19.7%) lived in households with an annual income of less than \$20,000. Two fifths (40.3%) had less than a high school education. Over half of the sample (58.5%) were between the ages of 18 and 34 and 3.9% were 65 and older.

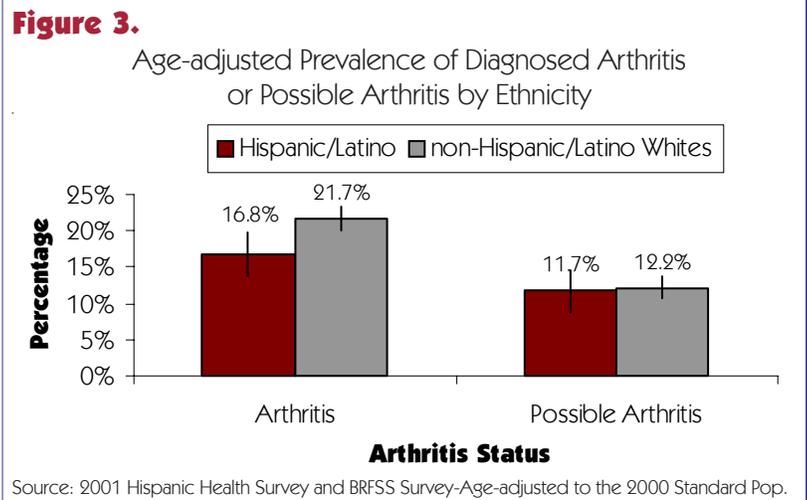
The majority of respondents (55.7%) reported the language most often spoken at home was Spanish, followed by English (31.9%), then both Spanish and English (12.2%). Most respondents (97.4%) had lived in Utah for more than one year. Over half (54.5%) were born in Mexico and 33.2% were born in the United States.

Throughout this document persons with arthritis are defined as those persons who answered yes to the following questions in both the BRFSS and Hispanic Health Surveys, "Have you ever been told by a doctor that you have arthritis?" Persons were considered to have possible arthritis if they answered yes to both of the following questions in the BRFSS and Hispanic Health Surveys, "During the past 12 months, have you had pain, aching, stiffness, or swelling in or around a joint?" and "Were these symptoms present on most days for at least one month?"

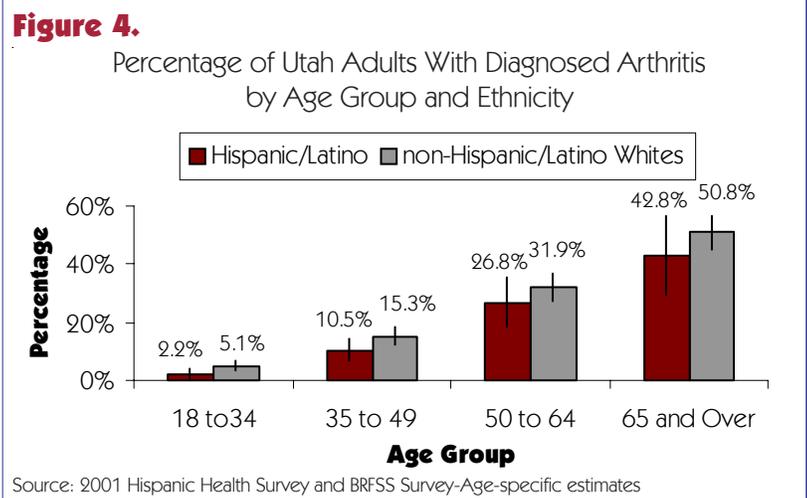
From our findings, we discovered several pronounced risk factors for arthritis among the Hispanic/Latino population. These were being female, older, and having hypertension or diabetes. Hispanic Latino adults were also substantially more likely to report fair or poor health and to be more physically inactive.

### Arthritis Prevalence

After adjusting for age 21.7% of non-Hispanic/Latino Whites reported diagnosed arthritis compared to 16.8% of Hispanic/Latino adults which portrays a statistically significant difference (**Figure 3**).

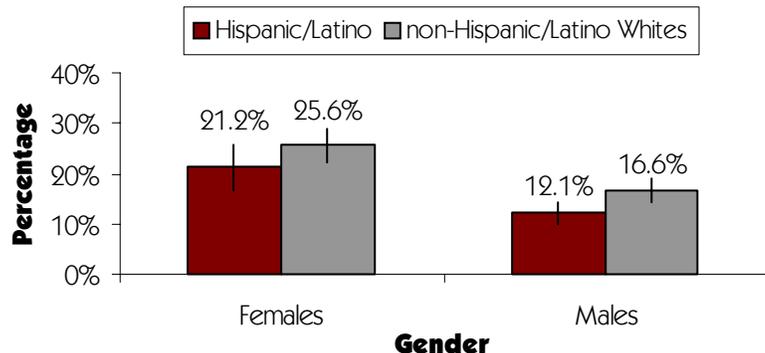


Age-specific rates provide a more thorough understanding of the distribution of arthritis among the two populations. As seen in **Figure 4**, the age-specific estimates of diagnosed arthritis are similar in both Hispanic/Latino adults and non-Hispanic/Latino Whites.



**Figure 5.**

Age-adjusted Prevalence of Diagnosed Arthritis by Gender and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

## Arthritis Prevalence

Arthritis is significantly more common among Hispanic/Latina and non-Hispanic/Latina White females. Approximately 21.2% Hispanic/Latina females and 25.6% of non-Hispanic/Latina White females reported arthritis compared to 12.1% of Hispanic/Latino males and 16.6% of non-Hispanic/Latino White males (**Figure 5**).

Overall, arthritis prevalence is similar for Hispanic/Latino adults and non-Hispanic/Latino White adults after adjusting for the effect of age. Regardless of ethnicity, females were more likely to report doctor-diagnosed arthritis than males.

## Self-reported Health Status

Self-reported health status is considered to be a reliable indicator of a person's overall health, quality of life and general well being. Survey participants were asked the question, "Would you say that in general your health is excellent, very good, good, fair or poor?" For this report we looked at the percentage of people who reported fair or poor health.

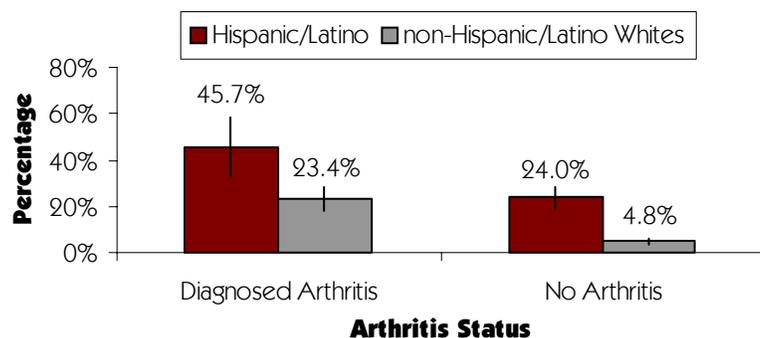
Among those with arthritis, Hispanic/Latino adults were almost twice as likely to report fair or poor health than non-Hispanic/Latino White adults with arthritis (45.7% and 23.4% respectively). In

contrast, almost one in four (24.0%) of Hispanic/Latino adults without arthritis reported fair or poor health, while only one in 20 (4.8%) non-Hispanic/Latino Whites reported fair or poor health (**Figure 6**).

Among both ethnic groups, persons with arthritis were more likely to report fair or poor health than those without arthritis. Regardless of arthritis status, Hispanic/Latino adults were more likely to report fair or poor health than non-Hispanic/Latino white adults.

**Figure 6.**

Percentage of Utah Adults With and Without Arthritis Who Reported Fair or Poor Health Status by Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

## Activity Limitation

Activity limitation among persons with arthritis may compromise their health and independence and increases their risk for adverse outcomes. When Hispanic/Latino adults with doctor-diagnosed arthritis were asked if they were limited in any way in any activities because of a physical, mental or emotional problem, they were less likely to report activity limitation for a year or longer than non-Hispanic/Latino Whites (26.4% and 34.2% respectively). However, both Hispanic/Latinos and non-Hispanic/Latino Whites with arthritis were significantly more likely to report limiting their activities for a year or longer than persons without arthritis (**Figure 7**).

Regardless of ethnicity, adults with arthritis were more likely to report limiting their activities for a year or longer.

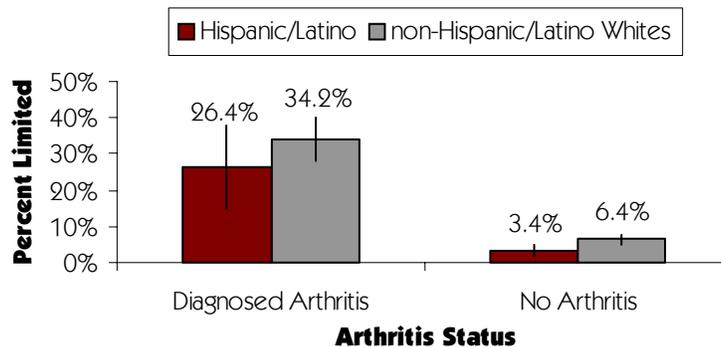
## Physical Activity

Although physical activity helps maintain healthy joints, Hispanic/Latino adults with diagnosed arthritis were almost twice as likely to report no leisure time physical activity compared to non-Hispanic/Latino White adults with diagnosed arthritis (41.1% and 22.3%, respectively). Hispanic/Latino adults without arthritis were also twice as likely to report they were not physically active compared to non-Hispanic/Latino White adults without arthritis (31.7% and 14.9%, respectively) (**Figure 8**).

Hispanic/Latinos were about half as likely to engage in leisure-time physical activity as non-Hispanic/Latino White adults regardless of arthritis status.

**Figure 7.**

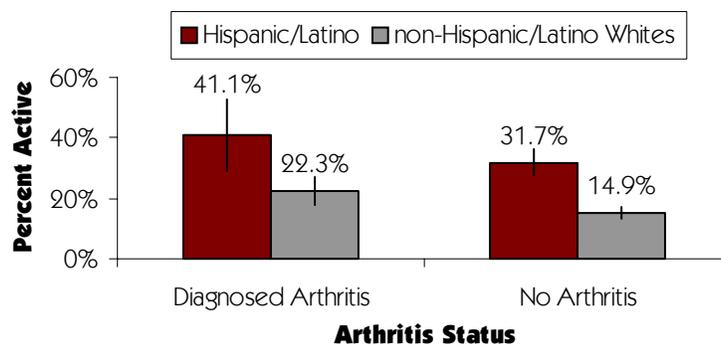
Age-adjusted Percentage of Adults Reporting Activity Limitation For A Year or Longer by Arthritis Status and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

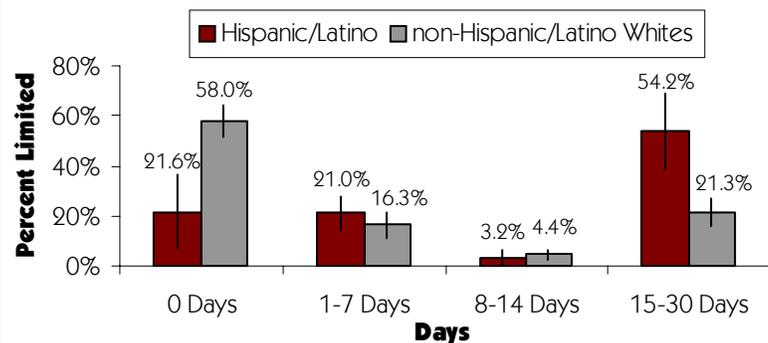
**Figure 8.**

Age-adjusted Percentage of Adults Who Reported No Leisure-time Physical Activity by Arthritis Status and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

**Figure 9.** Age-adjusted Percentage of Adults With Arthritis Reporting Pain Limited Activities by Number of Days and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

## Pain

Pain is an important symptom among persons with arthritis. Measuring pain-free days provides an approach for tracking this health-related quality of life measure for persons with arthritis. When asked how many days pain made it hard for them to participate in their usual activities, such as self-care, work or recreation, 54.2% of Hispanic/Latino adults with diagnosed arthritis reported pain limited their activities for 15-30 days each month compared to 21.3% of non-Hispanic/Latino Whites (**Figure 9**). Hispanic/Latino adults were also less likely to report their activities were not limited by pain than non-Hispanic/Latino Whites (21.6% and 58.0% respectively).

In attempting to explain why Hispanic/Latino adults were more than twice as likely to report pain made it hard for them to do their usual activities for more than 14 days a month, we investigated levels of physical activity and obesity on activity limitation due to pain. However, neither the level of physical activity nor obesity status could account for the observed difference.

There was considerable variation between ethnic groups at each end of the activity limitation continuum. Over half (58%) of Hispanic/Latino White adults reported no days when pain limited their activities, compared to one-fourth (21.6%) of Hispanic/Latino adults. At the high end of the activity limitation continuum, the pattern is reversed. Over half (54.2%) of Hispanic/Latino adults reported pain limited their activities for 15 to 30 days, while less than one-fourth of Hispanic/Latino Whites reported the same degree of limited participation.



## Health Insurance Coverage

Individuals who have health insurance coverage are more likely to seek and obtain needed health care than those who are uninsured. Among Hispanic/Latino adults with arthritis, 21.6% reported having no health insurance. On the other hand, only 9.8% of non-Hispanic/Latino White adults with arthritis reported having no health insurance (**Figure 10**).

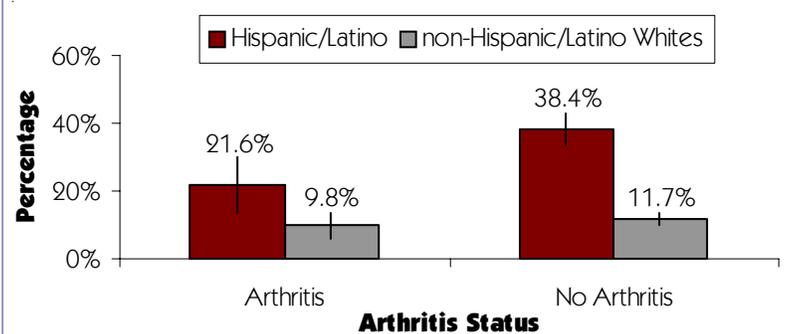
The lower rate of health insurance coverage for Hispanic/Latino adults may in part be explained by the fact that legal U.S. residency or citizenship status is required to receive health insurance coverage from public health care assistance programs such as Medicaid. Federal law prevents states from using Temporary Assistance for Needy Families (TANF) dollars to assist most legal immigrants until they have been in the U.S. for at least five years. This restriction applies not only to cash assistance, but also to TANF-funded work supports and services such as childcare, transportation, and job training. It may also be possible that many Hispanic/Latino adults are employed at jobs for which health insurance is not a benefit. Finally, it is also possible that even when employers offer health care coverage it may not be affordable for some Hispanic/Latinos.

Hispanic/Latinos may also be concerned about cultural differences, language barriers, and a lack of primary care providers or other health care specialists who can meet their special needs. It is unclear how this important factor may influence health care utilization related to arthritis.

Hispanic/Latino adults with arthritis are more likely to have some health insurance coverage than Hispanic/Latino adults without arthritis. Regardless of arthritis status, Hispanic/Latino adults are less likely to have health insurance coverage than non-Hispanic/Latino White adults.

**Figure 10.**

Age-adjusted Percentage of Adults Without Health Insurance Coverage by Arthritis Status and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

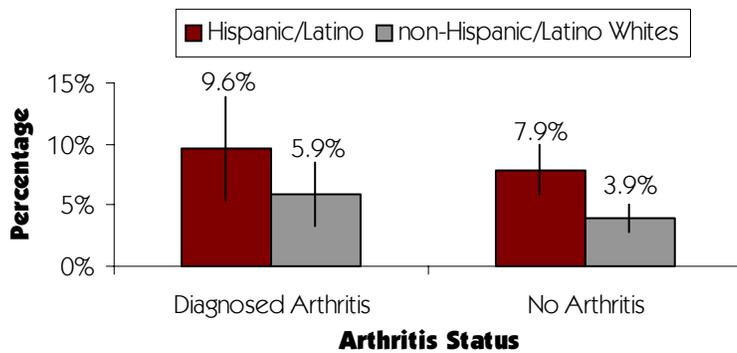


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Hispanic/Latino adults and non-Hispanic/Latino White adults with arthritis were more likely to report having coexisting medical conditions than persons without arthritis. While this higher percentage reflects to some extent the older age of those with arthritis, the age-adjusted rates presented here still indicate the rates of coexisting diseases in persons with arthritis were significantly different from the rates among persons without arthritis. This may, at least in part, be because persons with arthritis likely received more medical care than persons without arthritis, and are more likely to have an existing condition diagnosed.

**Figure 11.**

Age-adjusted Prevalence of Diabetes by Arthritis Status and Ethnicity



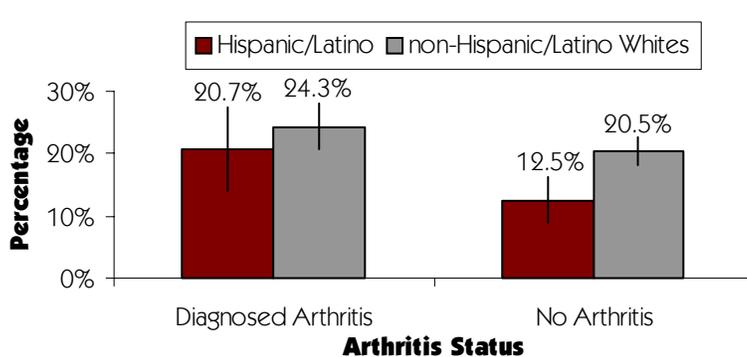
Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

## Diabetes Mellitus

The estimated prevalence of diabetes among Hispanic/Latino persons with arthritis was 9.6% compared to 5.9% among non-Hispanic/Latino Whites with arthritis. The prevalence of diabetes was significantly different among Hispanic/Latinos without arthritis was 7.9% compared to 3.9% among non-Hispanic/Latino Whites without arthritis (**Figure 11**).

**Figure 12.**

Age-adjusted Prevalence of High Blood Cholesterol by Arthritis Status and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

## High Cholesterol

Hispanic/Latino and non-Hispanic/Latino White adults with arthritis were more likely to report having high blood cholesterol (20.7% and 24.3% respectively) when compared to Hispanic/Latino and non-Hispanic/Latino White adults without arthritis (12.5% and 20.5% respectively) (**Figure 13**).

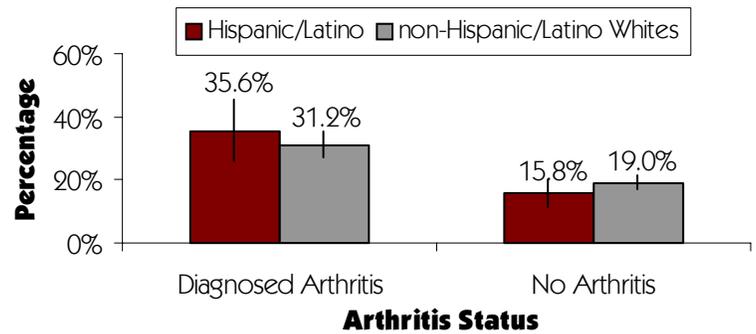
Regardless of arthritis status, Hispanic/Latino adults had a significantly increased prevalence of diabetes when compared to non-Hispanic/Latino Whites without arthritis. Hispanic/Latino and non-Hispanic/Latino adults with arthritis had significantly increased prevalence of hypertension when compared to those without arthritis. Hispanic/Latino adults had a significantly lower prevalence of high cholesterol when compared to non-Hispanic/Latino adults with and without arthritis.

## High Blood Pressure

Hypertension occurred at a significantly higher rate in both Hispanic/Latino and non-Hispanic/Latino White adults with arthritis (35.6% and 31.2% respectively) than Hispanic/Latino and non-Hispanic/Latino White adults without arthritis (15.8% and 19.0% respectively) (**Figure 13**).

**Figure 13.**

Age-adjusted Prevalence of Hypertension by Arthritis Status and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

## Overweight/Obese

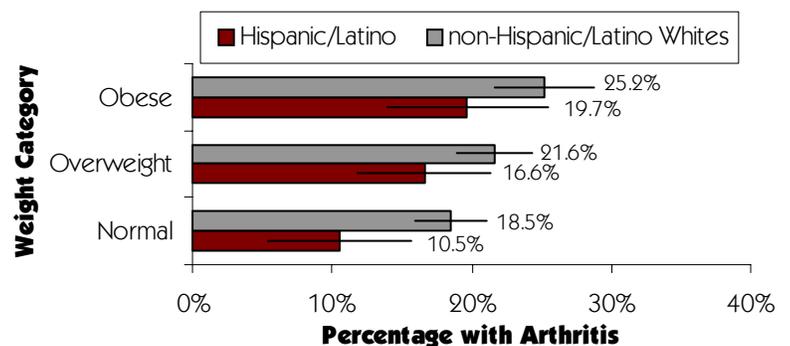
For this report, we used self-reported weight and height to calculate Body Mass Index (BMI). For analysis purposes we defined overweight as a BMI of 25-29.9 and obese as a BMI of 30 or greater. Persons who were overweight or obese are at increased risk of developing osteoarthritis of the knee and often experience more pain in the weight-bearing joints.

The prevalence of diagnosed arthritis was similar for both Hispanic/Latino persons and non-Hispanic/Latino Whites among persons who were overweight or obese. Hispanic/Latino persons who were obese were almost twice as likely to have arthritis when compared to Hispanic/Latino persons who were at normal weight (**Figure 14**).

Non-Hispanic/Latino White adults were more likely to report having arthritis, regardless of their weight category.

**Figure 14.**

Age-adjusted Prevalence of Doctor-diagnosed Arthritis by Weight Category and Ethnicity



Source: 2001 Hispanic Health Survey and BRFSS Survey-Age-adjusted to the 2000 Standard Pop.

# Recommendations

Data presented in this report allow for an initial description of arthritis prevalence and risk in Utah's Hispanic/Latino communities and identify disparities between this population and non-Hispanic/Latino Whites. These data do not assess the causes of observed disparities related to arthritis between the populations investigated. Additional work is needed to identify these causes and, perhaps, identify interventions to reduce the disparities. Also further study is required to broaden our knowledge of the impact of arthritis on issues such as physical inactivity, weight control, and pain management. Based on the data reported here, we recommend additional work to:

- Assess and describe factors contributing to the observed higher prevalence of activity limitation due to pain in Hispanic/Latino adults when compared to non-Hispanic/Latino White adults.
- Determine contributing factors to observed disparities in co-morbid conditions including diabetes mellitus, high blood pressure, and high cholesterol.
- Increase awareness of and participation in evidence-based arthritis programs focused on improved self-management, increased physical activity, and achievement of appropriate body weight. These efforts should be focused on all persons with arthritis.
- Identify and implement language and culture appropriate arthritis management interventions for Hispanic/Latino communities in Utah.
- Establish productive partnerships between the Hispanic/Latino communities, the Utah Department of Health, healthcare providers, advocates, public health professionals and others focused on reducing the burden of arthritis in Hispanic/Latino adults in Utah.

It is also important that more generalized efforts continue to provide direction for improving standards of care, identifying strategies aimed at improving health status and health outcomes, and understanding/impacting factors that influence the health status of Hispanic/Latino populations in Utah. By working towards these recommendations, we may move closer to reducing health disparities, improving the health of Utah Hispanic/Latinos, and elevating the overall health of Utah adults.

