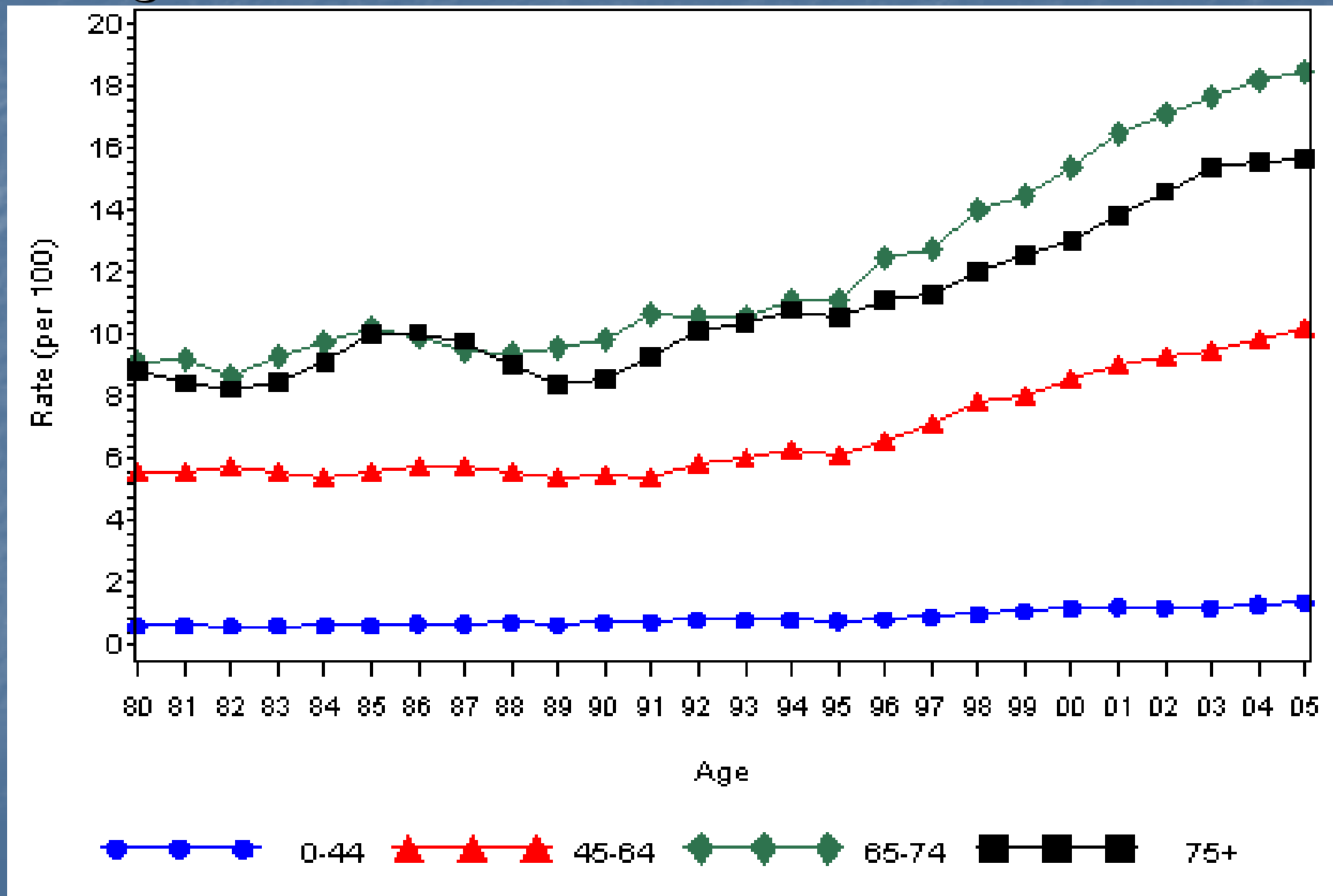


Diabetes in the Regional Hispanic Community

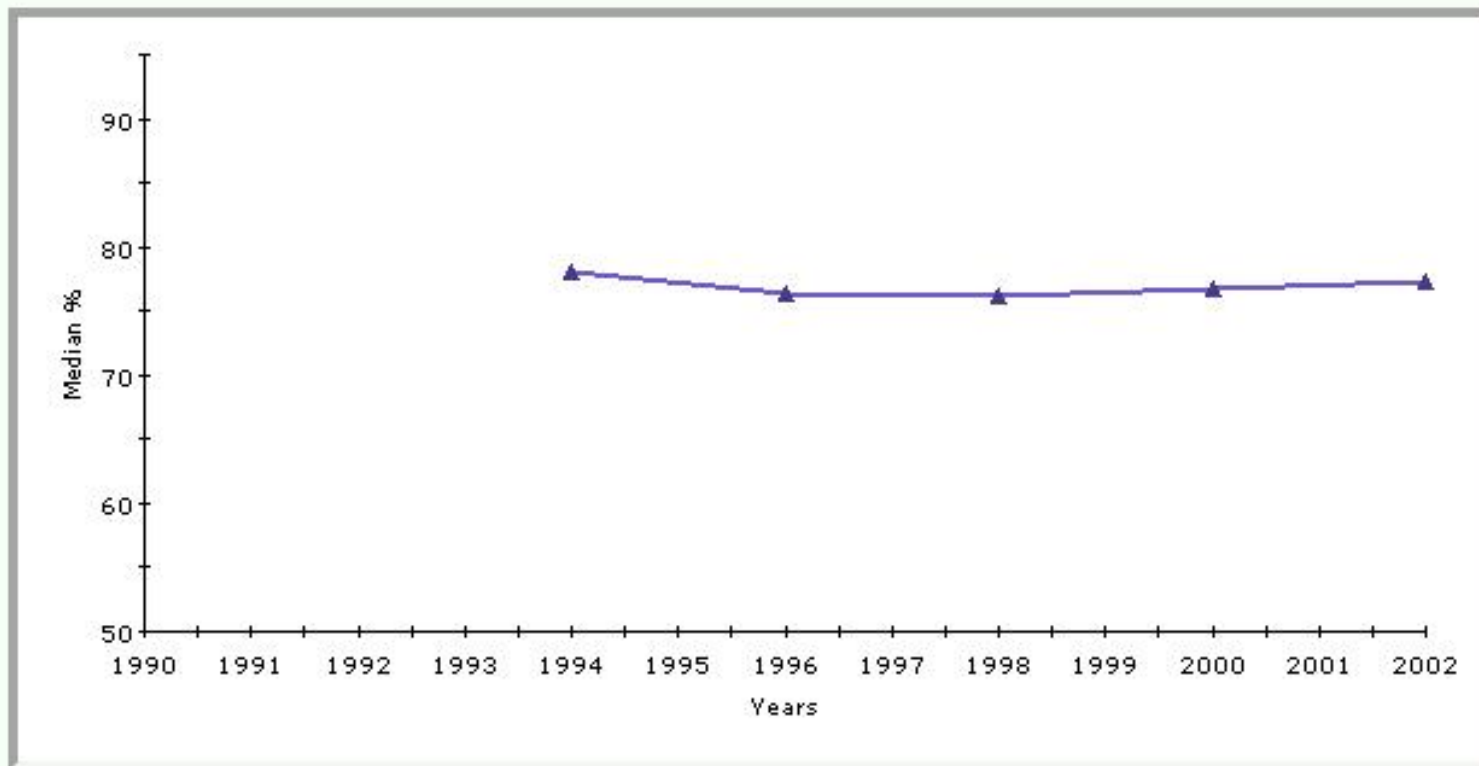
**Traci Burrell, Erica Duncan,
Nathan Jones, Dan Myers,
Melissa Randle, Serena
Whitson, Shashank Jain,
Karthik Vijayaraghavan**

Number (in Millions) of Persons with Diagnosed Diabetes, United States, 1980–2005



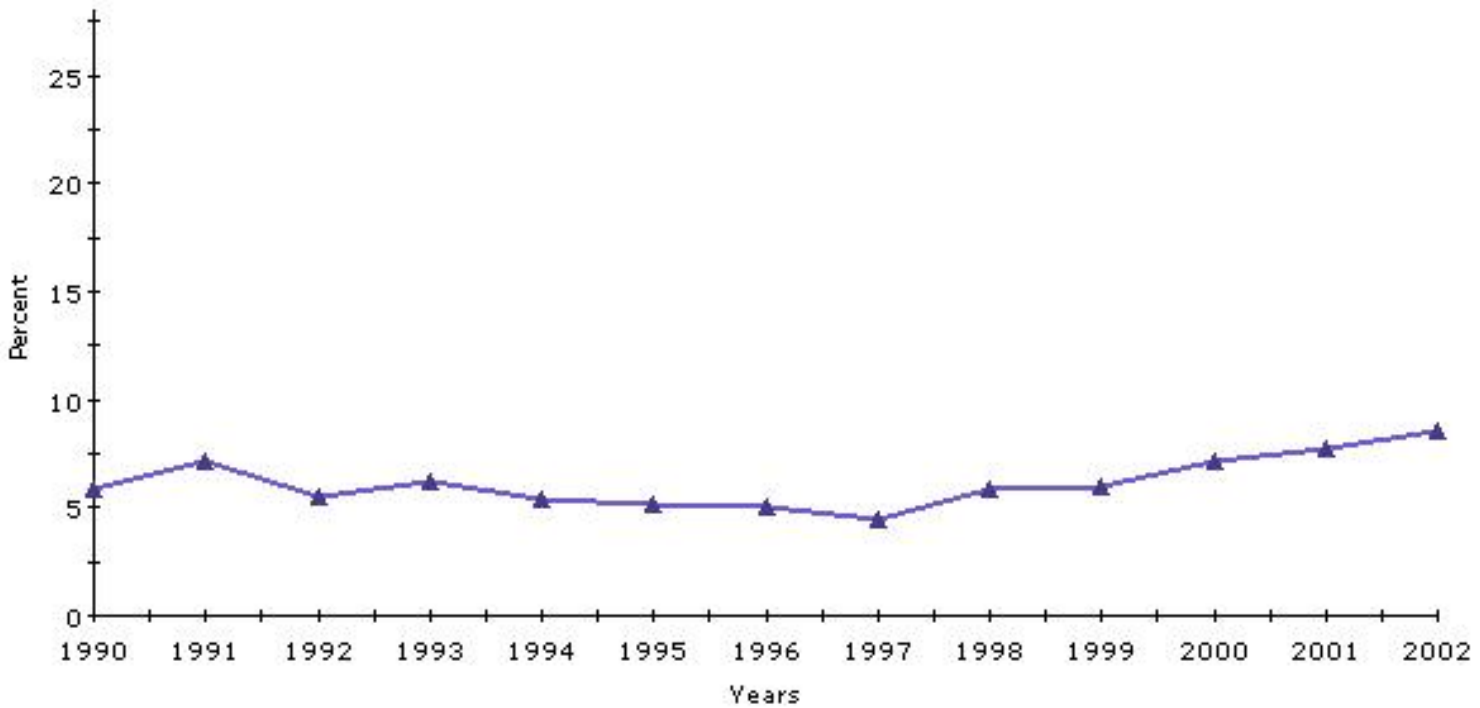
National Risk Factors

Not Enough Fruits And Vegetables Nationwide (States, DC, and Territories)



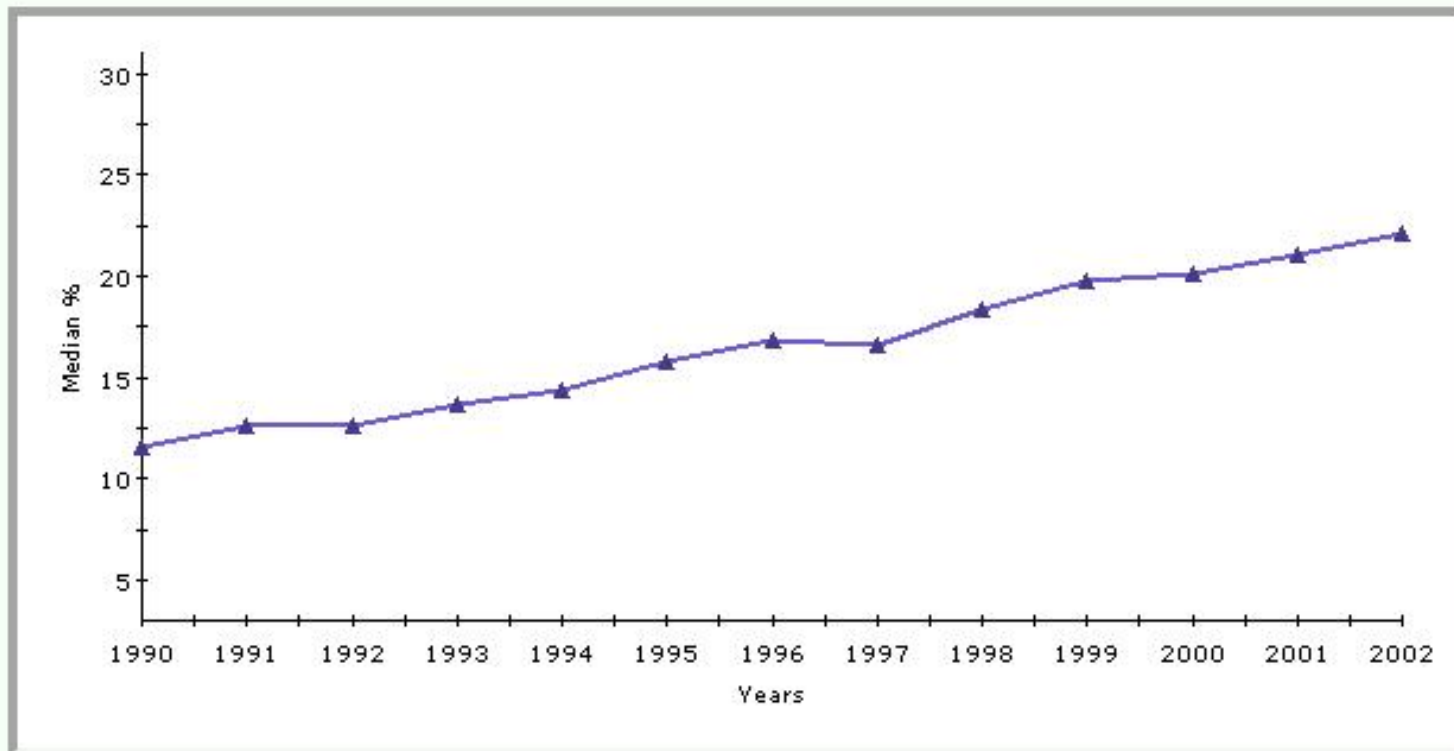
National Risk Factors

**Diabetes Awareness
Tennessee**

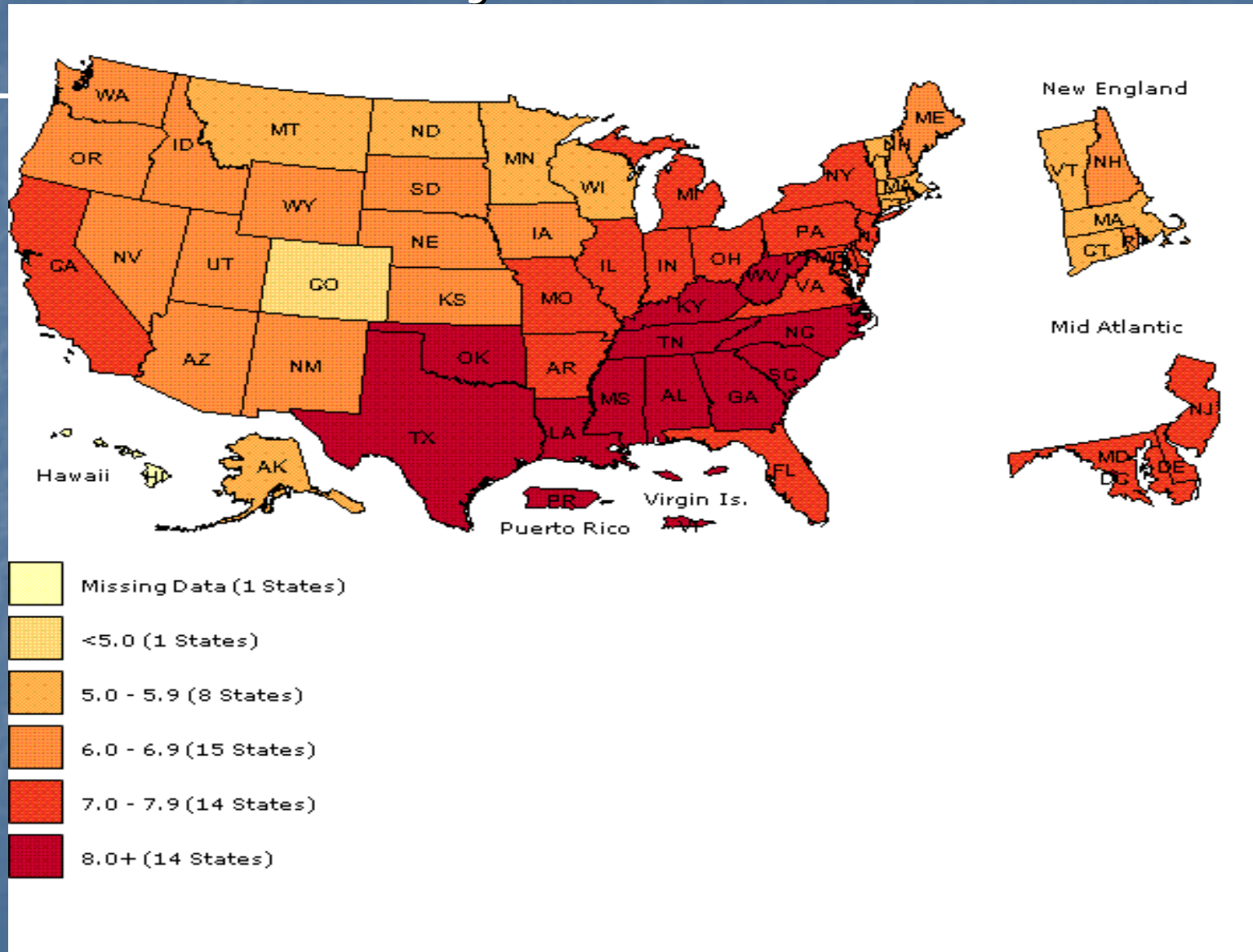


National Risk Factors

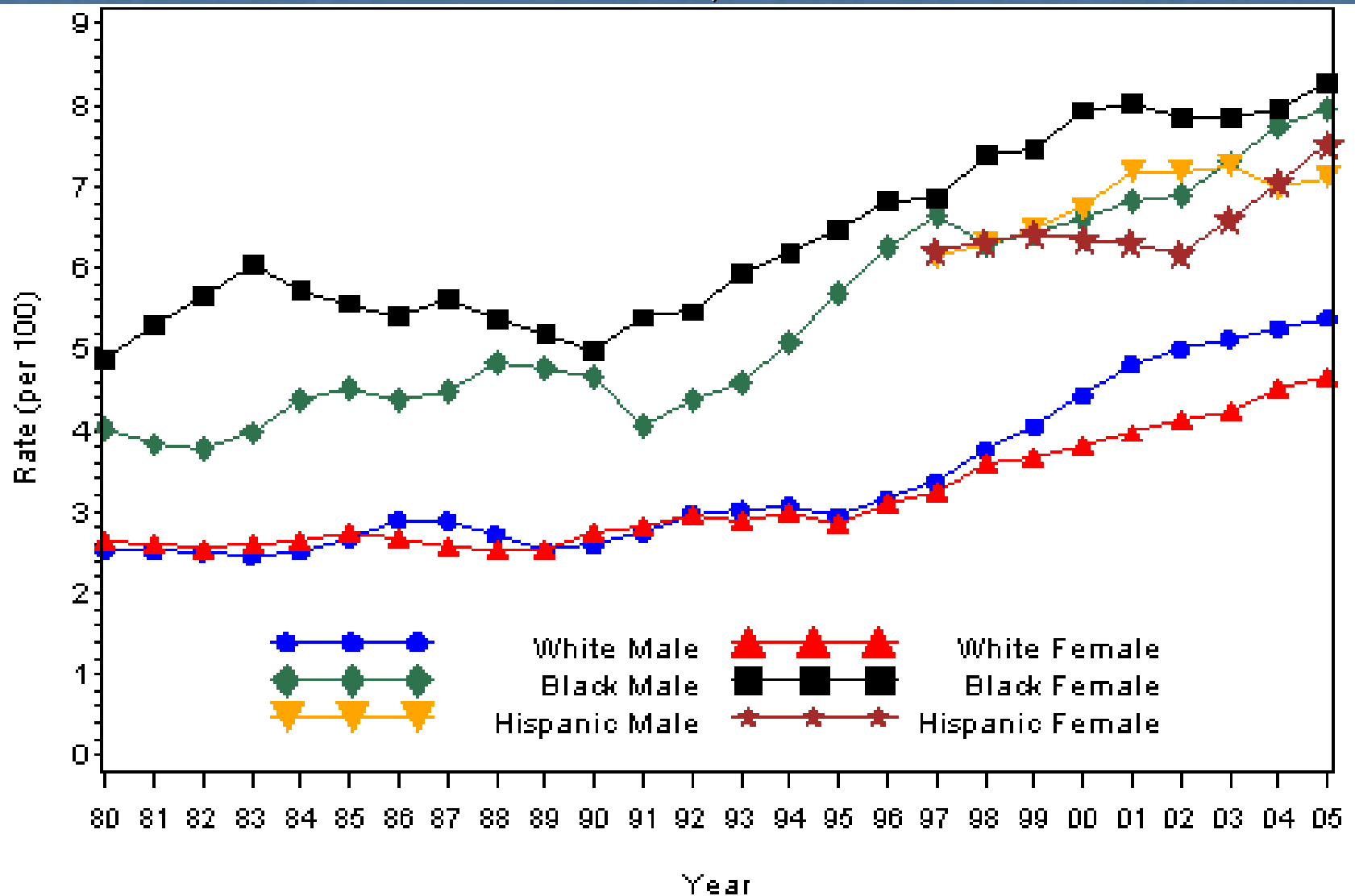
**Obesity: By Body Mass Index
Nationwide (States, DC, and Territories)**



Total Percentage of Adults with Diagnosed Diabetes By State, 2005



Prevalence of Diagnosed Diabetes by Race/Ethnicity and Sex, United States, 1980–2005



Needs Assessment

- Community Leader Interviews (Puertas Abiertas)
- Literature Review
- Key Informants
- Community Surveys
- Interactive Tour of Migrant Camps

Needs Identified

- **Diabetes**
- Mental Health
- Domestic Violence
- Help with homework

Diabetes Risk Factors

- Cultural Practices/Beliefs
- Ethnicity
- Education Level
- Access to Health Care
- Income Status
- Nutrition
- Physical Activity
- Obesity and Hypertension

Health Belief Model

- Perception
- Modifying Factors
- Likelihood of Action
- Self-Efficacy

Project Goal

- Change the prevalence of Diabetes mellitus in the Hispanic community in the Johnson city area.



Specific Aims

- Improve nutrition and educate the Hispanic community about the risks of Diabetes Mellitus



Objective 1: Healthier nutritional choices

- Recipe books
- Story of Juan (Puertas Abiertas)
- Example of nutritious meal



Implementation & Evaluation

Participants

- Puertas Abiertas
- Mountain City Hispanic Community
- Johnson City Hispanic Community



Process Evaluation

- Number of participants involved
 - overall
 - screening
 - activities
 - discussion
 - Q & A
- Number of cookbooks distributed
- Number of referrals due to screening results

Outcome Evaluation

- Number of screened participants compared to referred participants
- Pre- and post-survey comparison
- Surveys from different aggregates
- Participant post-discussion

Flea Market



At the Flea Market



Blood Pressure Screening



Screening for Diabetes



Data analysis



Data analysis

- Two projects
 - Mountain city
 - Pre and post test
 - Johnson city church
 - Pre test only
- Survey
 - Section I – awareness of risk factors
 - Section II – awareness of symptoms
 - Section III – awareness of ability to control Diabetes

Data comparisons

- Mountain city – Pretest vs Post test
 - Tests the effectiveness of the intervention
- Mountain city community vs Johnson city church community
 - Tests the difference / similarity of the two communities in terms of awareness

Data analysis methods

- Simple comparison of percentage correct responses
- T test
- Chi square test for pre and post test comparison

Results

- Pre and post test:
 - Intervention was effective in increasing awareness of symptoms
 - Increasing awareness that DM is not a disease only of the elderly
 - Diabetes can be treated/prevented

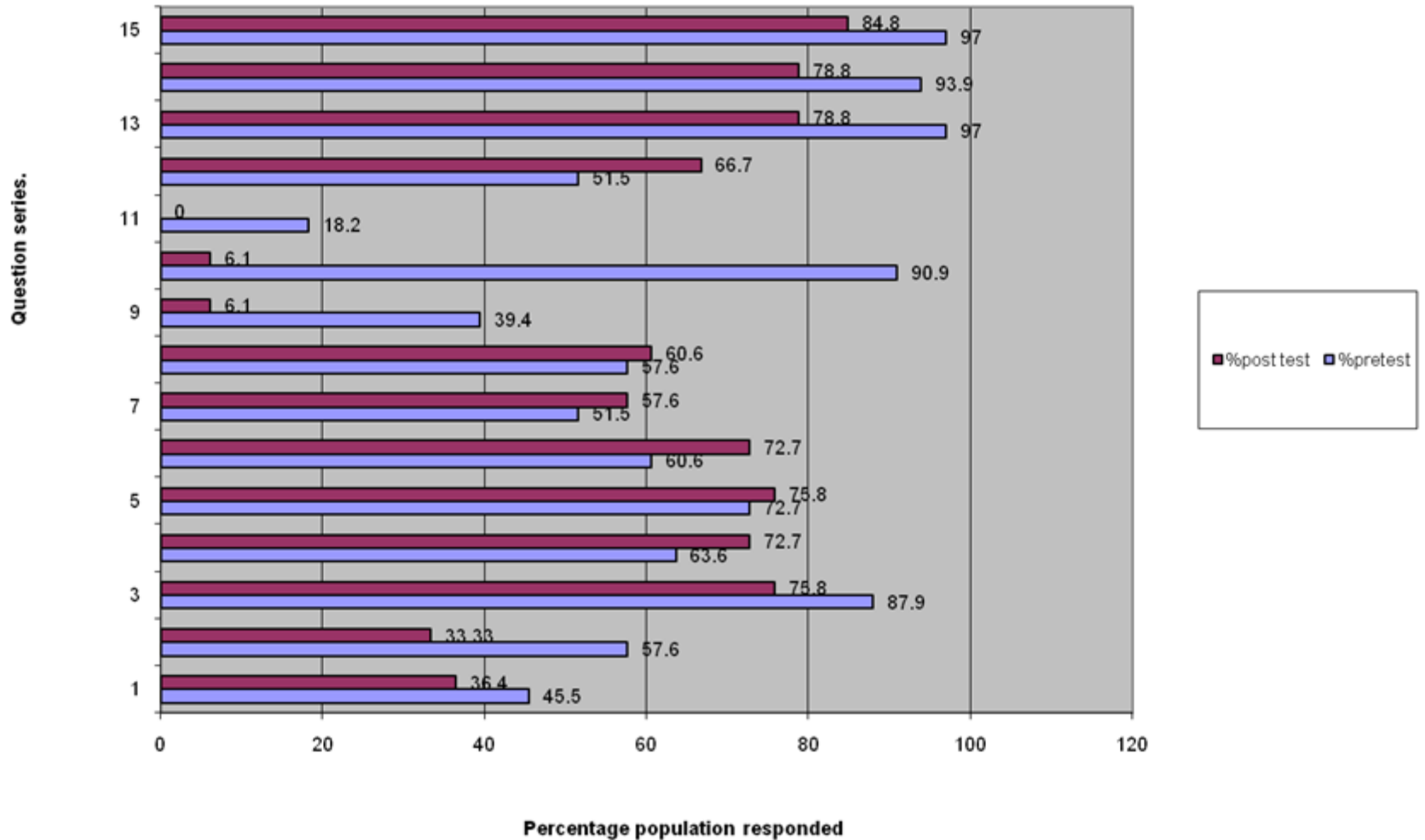
Mountain City vs Church community

- Church community was better in terms of awareness of
 - DM causation
 - Symptoms
 - Effectiveness diabetes control in disease progression

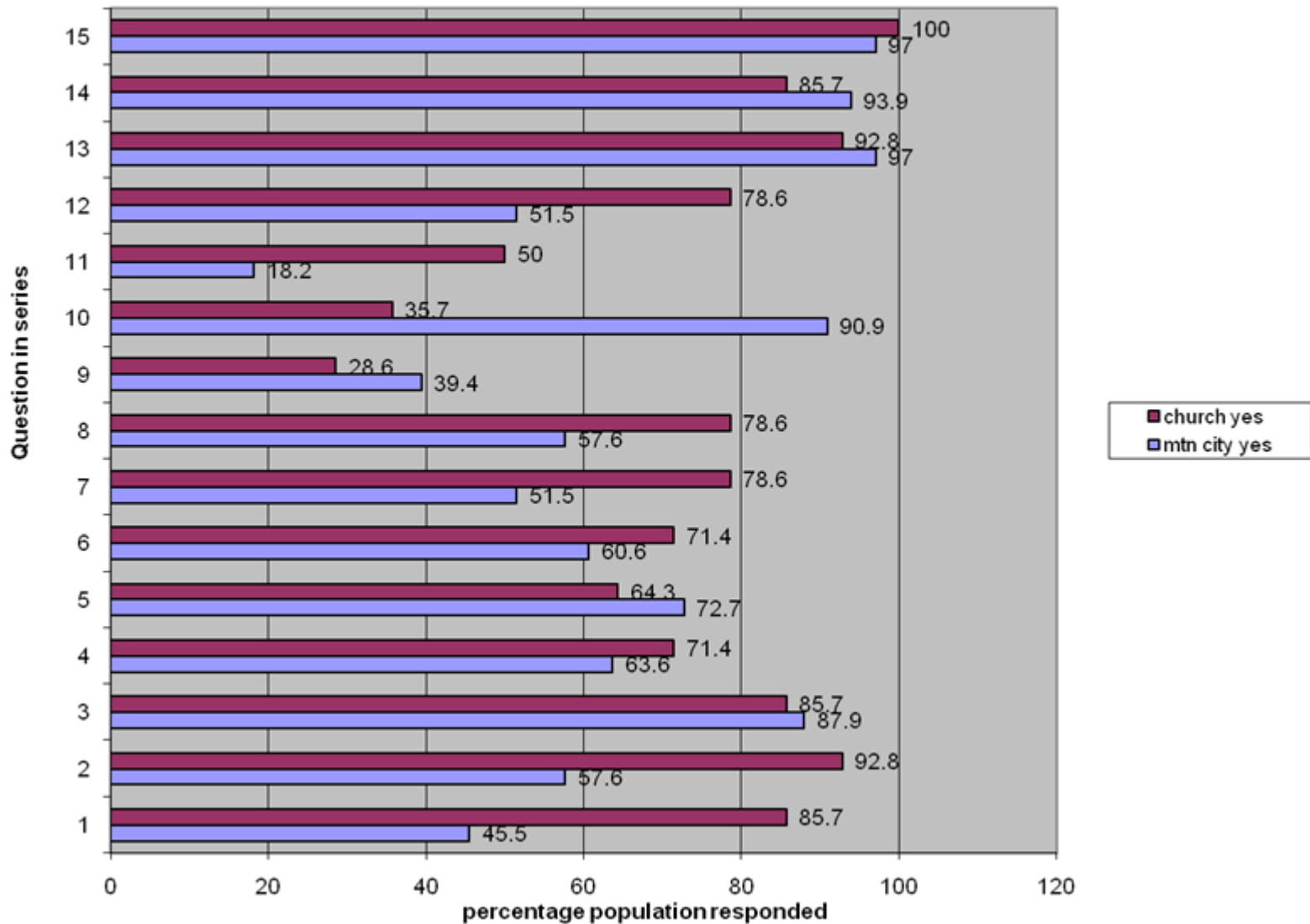
Tables and graphs



percentage 'yes' response in pre and post test surveys



Comparison of awareness between mountain city & church project



Outcome

- Awareness of symptoms increased
- Awareness that diabetes is not disease of elderly increased
- Awareness on efficacy of behavioral change on diabetes control increased

Process data

- difficulties during the logistics of materials
- time was not enough for Q & A sessions
- which members should answer to which type of questions
- more intensive discussions

Surprising Results

- Nine referrals in Mt. City – all being treated
- Hispanic culture depends on location – country of origin and locations in NE TN
- Drama is an effective way to communicate health-related information

Important Results

- Not all Hispanics are the same
- Community Leader
- Communication is essential
- Ongoing Assessment

Results of Previous Efforts

- Importance of the role of the mother in Hispanic families' health
- Approach the community on an informal level
- Hispanic community is eager to learn

Limitations

- Insufficient data for a full statistical analysis (JC church)
- Differences in data collection
- Small sample size
- No demographic information for participants

Recommendations

- Maintain rapport for future interaction
- Communicate with community leader prior to intervention
- Larger sample size
- Collect demographic data
- Do pre and post surveys matched

In Conclusion

- Large unmet need for diabetes related information
- Culturally sensitive intervention is effective and necessary
- Desire to learn and assume personal responsibility
- Difference in pre-test awareness between Mountain City and Johnson City

Findings from your section

(Write as simple declarative sentences)

What did you learn about the health issue?

- There is a need for Hispanics in NE TN to have a greater awareness of diabetes
- Hispanics are at particularly high risk due to multiple barriers

What did you learn about your community or population and health?

- There is a community interest to learning
- Cultural sensitivity is important to reaching this population
- Community leadership is imperative for success

Section: Hispanic Community

Health issue: Diabetes

Community partner: Puertas Abiertas

Understanding multiple views of the same health issue

Views from community about the health issue

- The community wants more information and access to additional resources
- Stigma related to diabetes
- Hispanics believe it is only a disease of the elderly
- Hispanics believe that diabetes cannot be prevented or delayed through lifestyle changes

Views from health providers and system about the health issue

- There is a connection between obesity, hypertension, and diabetes
- Ethnicity has a strong influence (nutrition, culture, education, economic status)
- Cultural views on ideal body weight may affect dietary practices and prevalence of diabetes

Section: Hispanic Community

Health issue: Diabetes

Community partner: Puertas Abiertas

Interpretations of factors associated with health disparities in Appalachia

Several factors are found to be associated with health disparities. Did your section identify relationships of the health issue with any of these factors?

- **Poverty** - no specific demographic information, although money and lack of insurance were identified as barriers to accessing care through our initial survey
- **Rurality** - difference in pre-intervention awareness between Mountain City community and Johnson City church community
- **Cultural beliefs** - reliance on alternative medicines
- **Other factors** - health is not the priority for many of the migrant workers, especially in rural areas

Section: Hispanic Community

Health issue: Diabetes

Community partner: Puertas Abiertas

Special Thanks

- Key informants
- Professors
- Each other
- Puertas Abiertas
- Course Coordinators



Preguntas?

