

# **DETECTION AND CONTROL OF CARDIOVASCULAR DISEASE IN THE RURAL COMMUNITY**

**Is there a difference between a clinic population and the general population regarding cardiovascular disease risk factors?**

# Epidemiology of Cardiovascular Disease (CVD)



Leading cause of mortality in U.S.

- | CHD- 500,000 deaths annually (1st)
- | Stroke- 150,000 deaths annually (3rd)
- | Financial burden- 287 billion

# Risk Factors Whose Control Reduces CVD...



## ■ Hypertension

- Lowering BP reduces stroke, MI and CHF
- HTN accelerates atherosclerosis in the presence of threshold level of LDL cholesterol
- Decreasing diastolic BP by 5-6mmHg in all pts with HTN would decrease incidence of heart disease by 14% and stroke by 42%

## ■ Cholesterol

- Causal relationship of total cholesterol and increasing LDL to CVD is well established
- Assessment and control of LDL cholesterol remains cornerstone of screening for CVD

...

## ■ **Diabetes**

- Both IDDM and NIDDM are potent risk factors for CHD, stroke and PVD
- Diabetic men 2x more likely than non- diabetics
- Diabetic women are 4x more likely than non-diabetics

## ■ **Cigarette Smoking**

- doubles the incidence of CVD
- increases CVD's mortality by 50%

## ■ **Obesity**

- accounts for 78% of HTN in men and 65% in women
- Increase risk for CVD through its precipitation/exacerbation of HTN, D.M., decrease HDL and increase TAG
- appears to be associated in 70% of Dx CVD

# Methods



- Systematic sample in clinic
- Face to face interviews with people in a primary care clinic in Williamson Co. IL
- 104 interviews were conducted in March 2002
- Interviews lasted approximately 3-5 minutes
- Results compared with Williamson Co. tabulations for Behavioral Risk Factor Survey (BRFS)

# Comparison of Clinic to BRFs Sample Characteristics

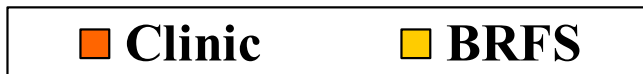
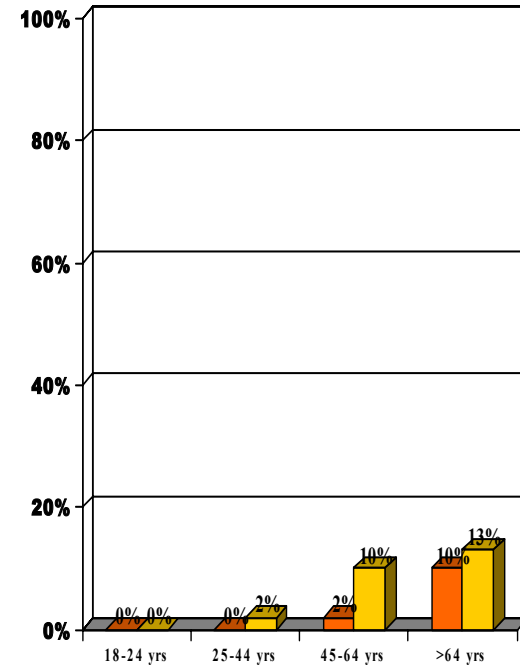
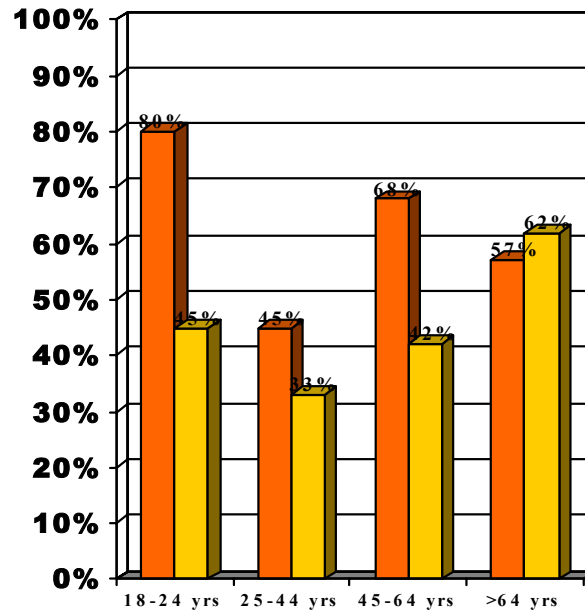
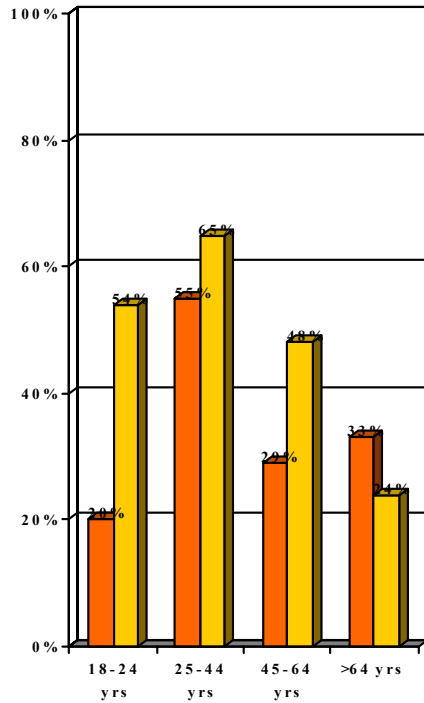
<b>■ <u>Age</u></b>	<b><u>Clinic</u></b>	<b><u>BRFS</u></b>
■ 18-24 yrs	4%	10%
■ 25-44 yrs	40%	38%
■ 45-64 yrs	38%	29%
■ >64 yrs	21%	21%
<b>■ <u>Gender</u></b>		
■ Male	40%	47%
■ Female	60%	53%
<b>■ <u>Ethnicity</u></b>		
■ White	98%	98%

# Percentage Reporting Health Status by Age Group

**Excellent**

**Good-Fair**

**Poor**

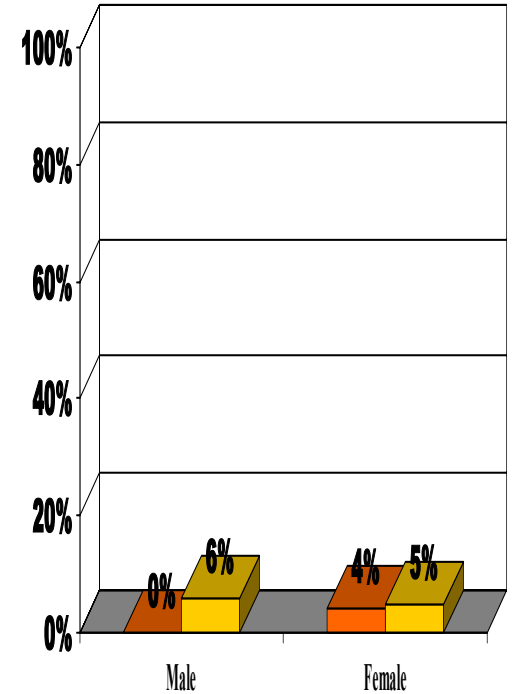
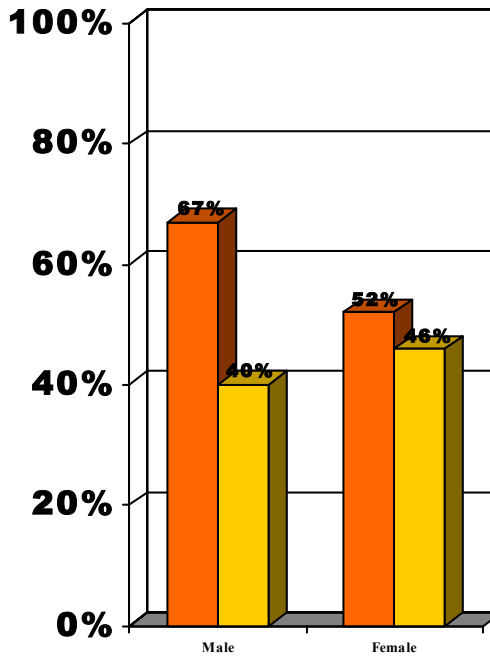
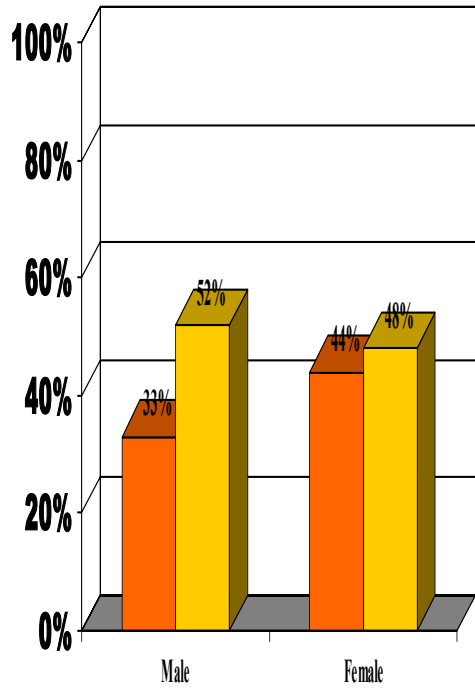


# Percentage Reporting Health Status by Gender

**Excellent**

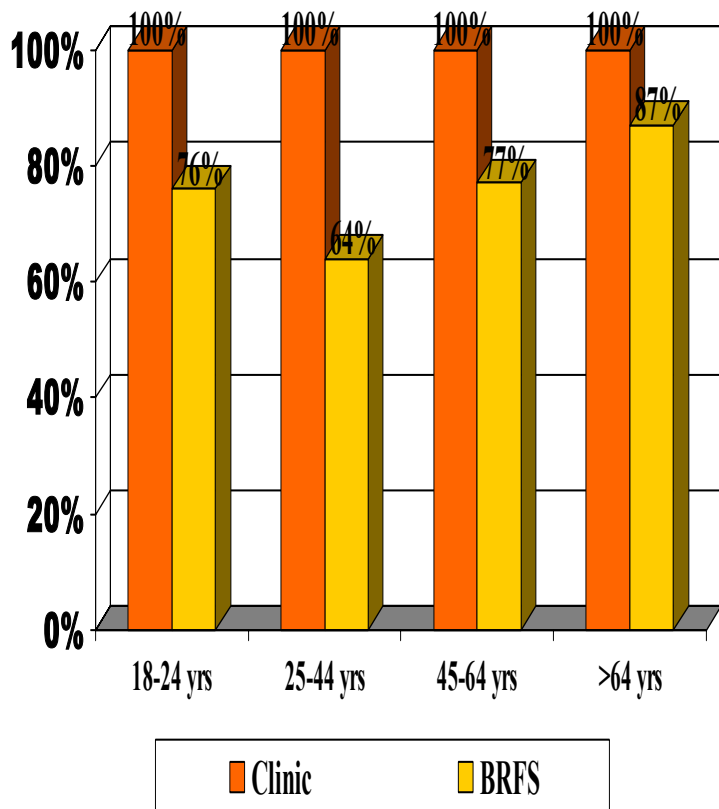
**Good**

**Poor**

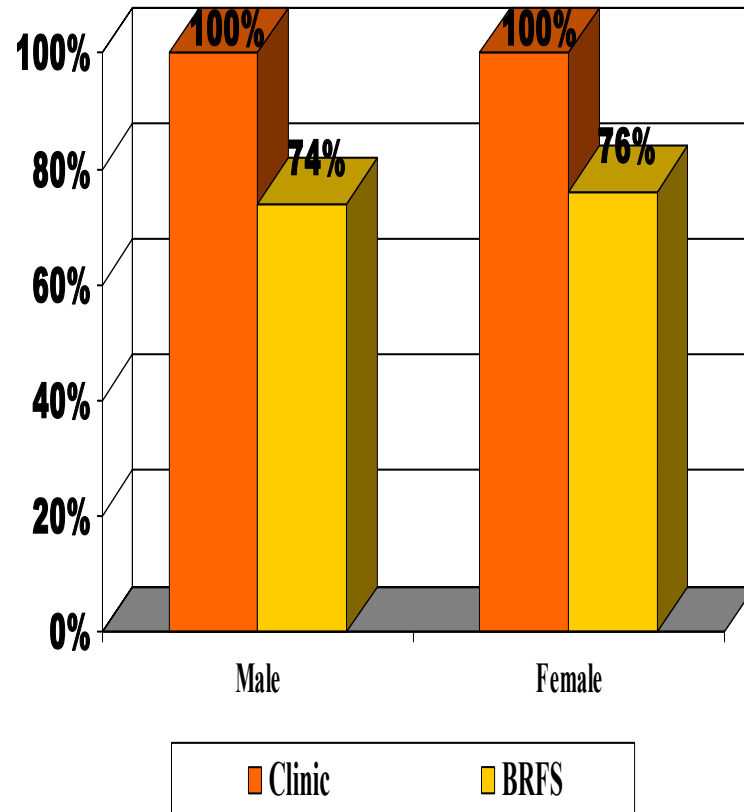


**Clinic** **BRFS**

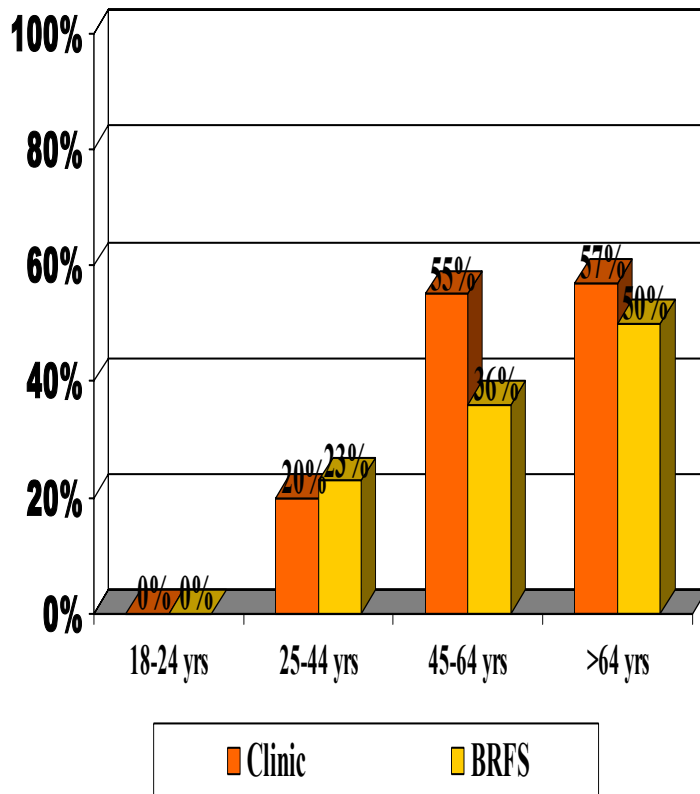
## Percentage Reporting Blood Pressure Checked Within 1 Year By Age Group



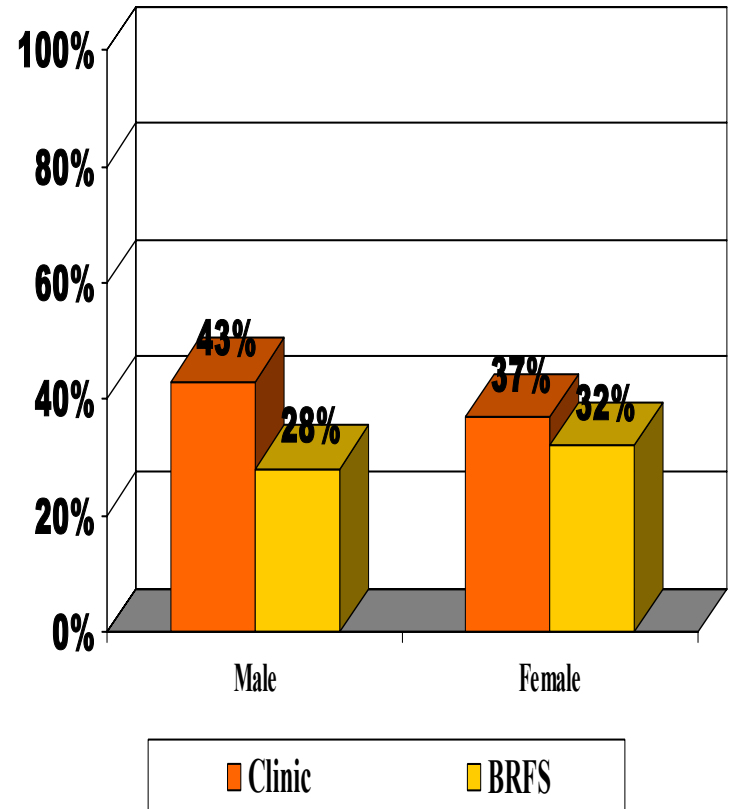
## Percentage Reporting Blood Pressure Checked Within 1 Year By Gender



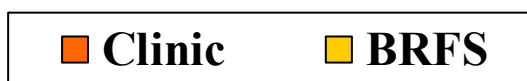
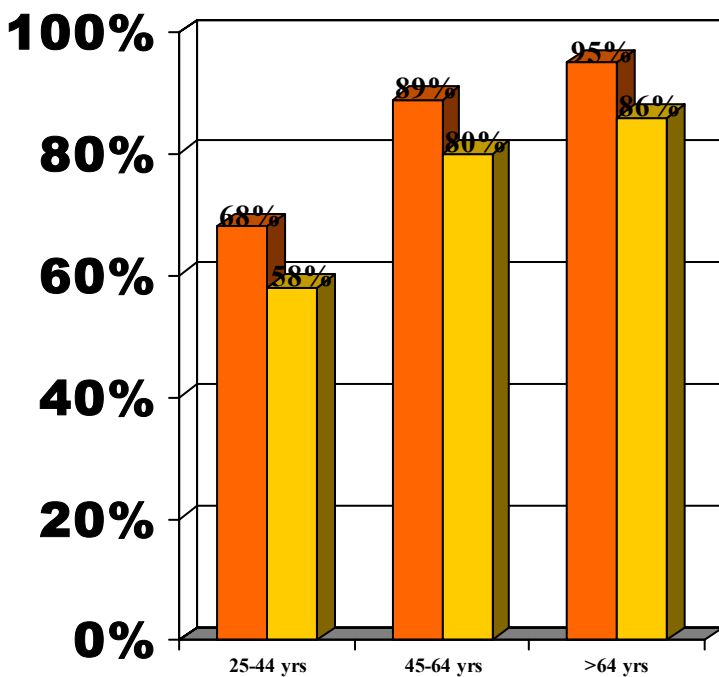
## Percentage Told Blood Pressure High By Age Group



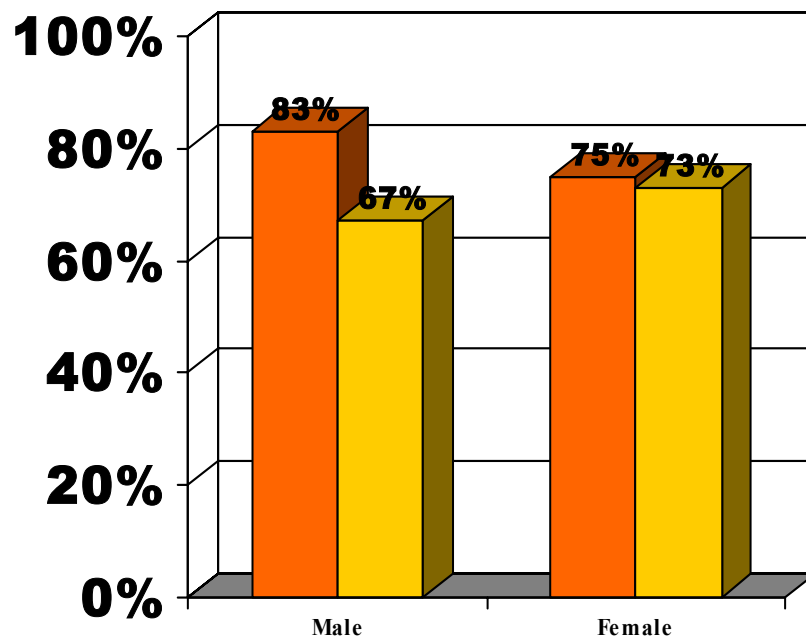
## Percentage Told Blood Pressure High by Gender



## Percentage Reporting Had Cholesterol Checked By Age Group

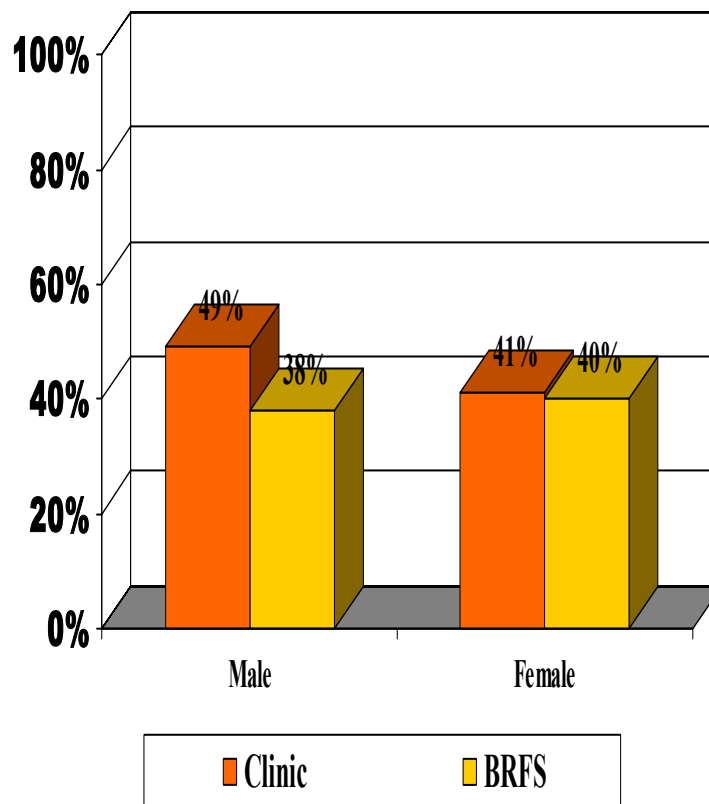
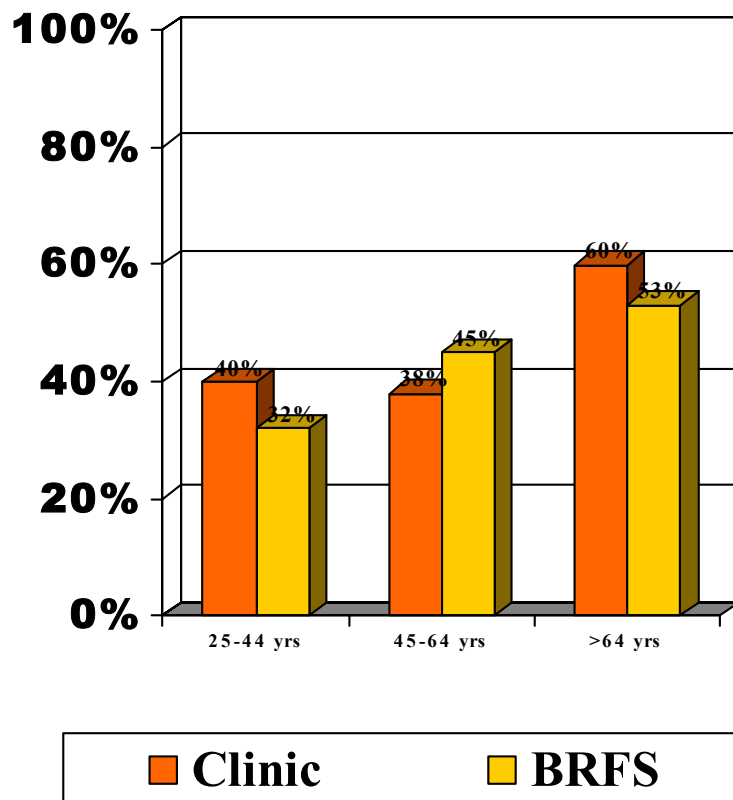


## Percentage Reporting Had Cholesterol Checked by Gender

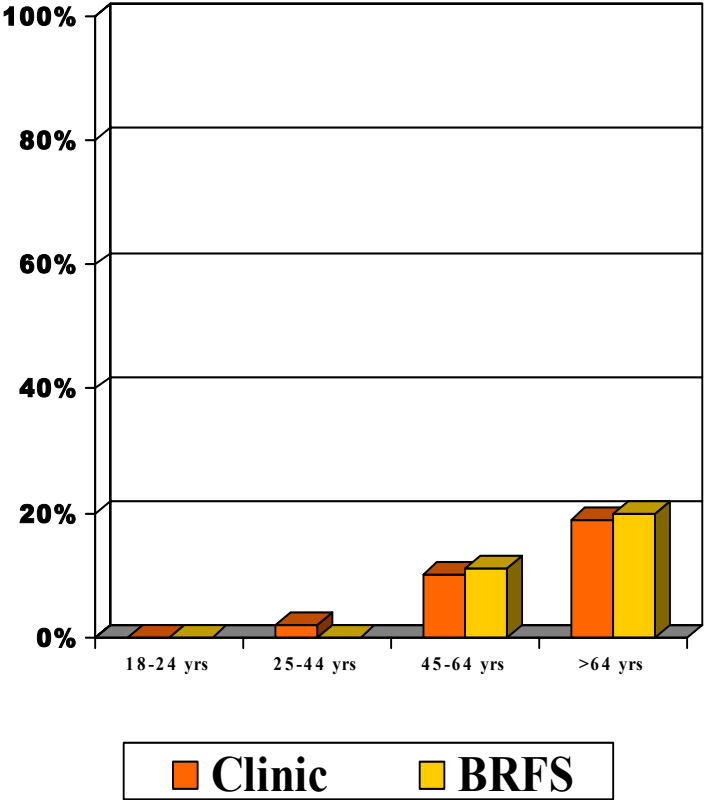


## Percentage Told Cholesterol High By Age Group

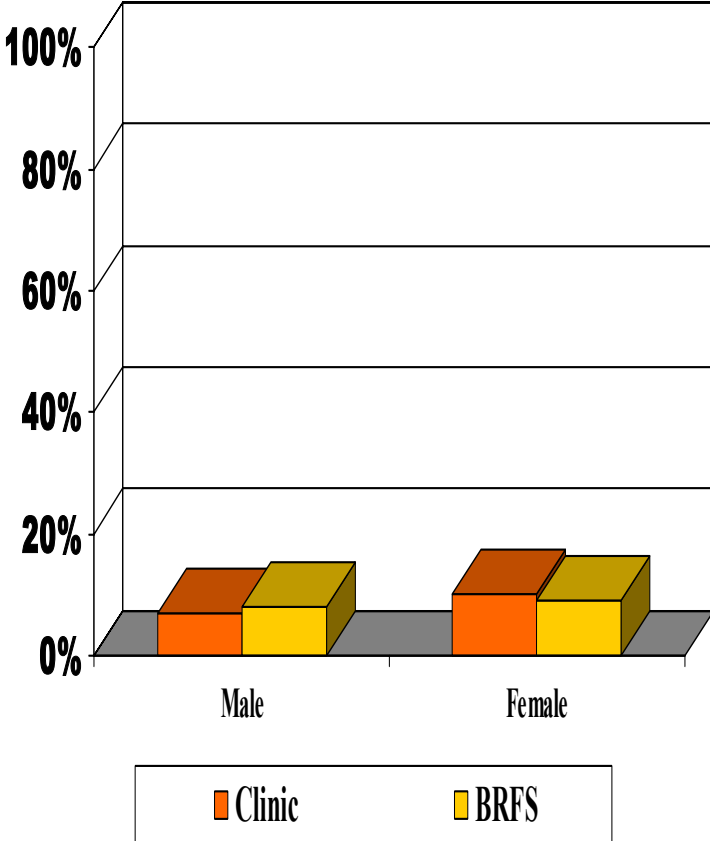
## Percentage Told Cholesterol High by Gender



# Percentage Told Has Diabetes By Age Group



# Percentage Told Has Diabetes by Gender

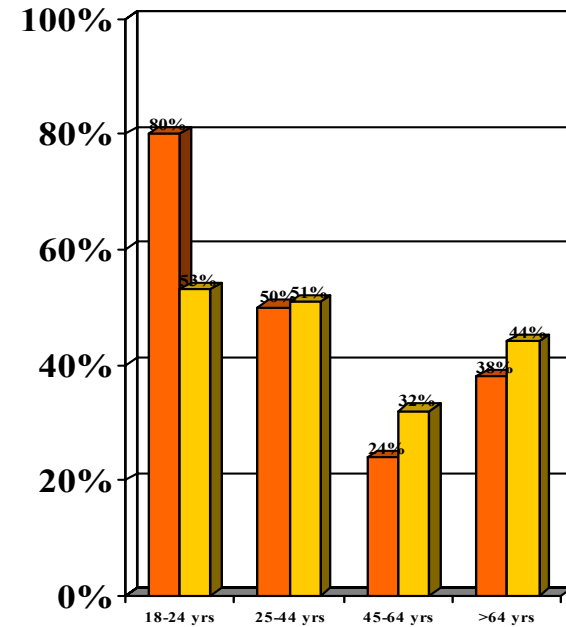
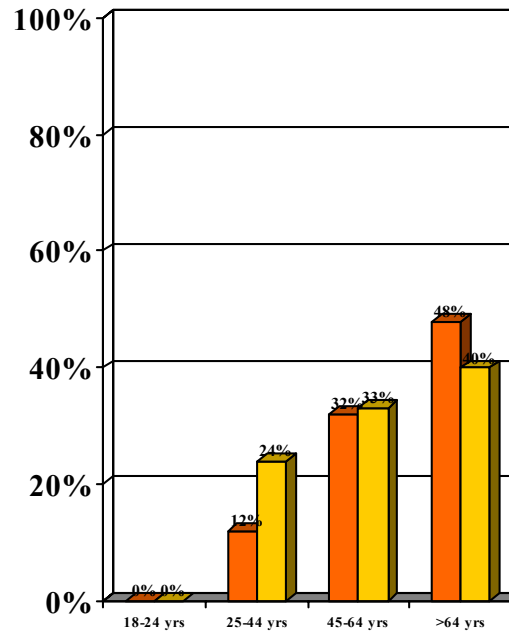
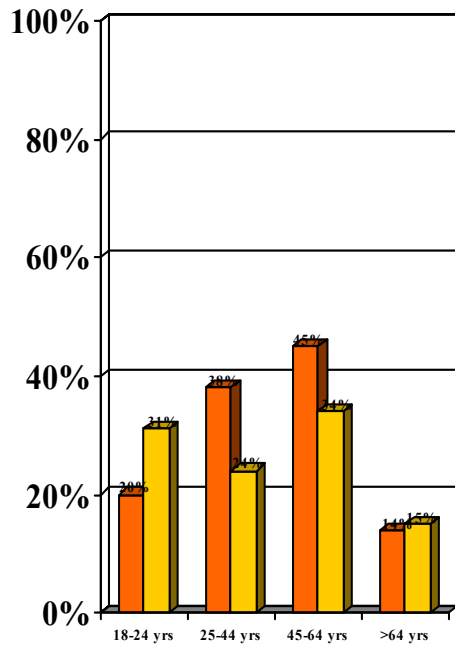


# Smoking status

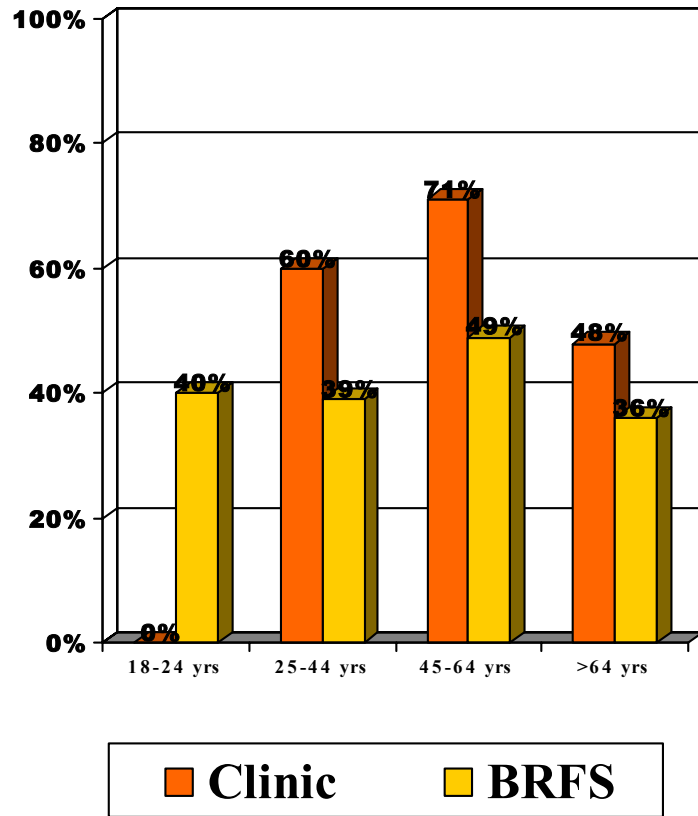
## Current Smokers

## Former Smokers

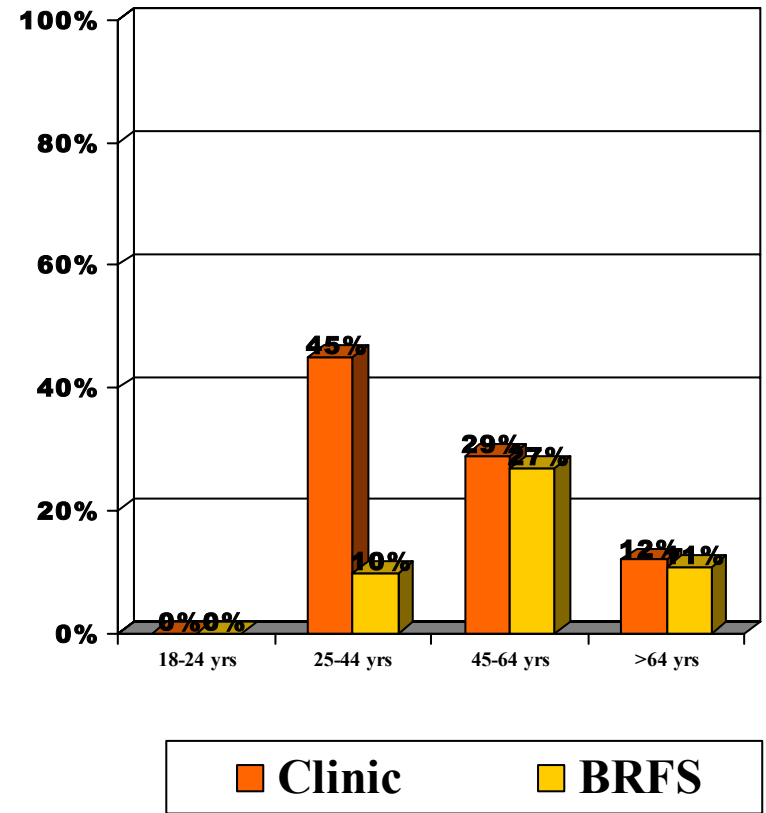
## Non-Smokers



## Percentage Trying to Lose Weight By Age Group



## Percentage Reported That Had Been Given Weight Loss Advise By Age Group



# Conclusions

- Both the clinic and county studied reflect a high awareness of and care for factors (e.g., cholesterol & blood pressure screening) related to preventing CVD
- BRFs and clinical data generally match
- There are several notable differences between BRFs and clinical patients surveyed:
  - more females than males visit a clinic
  - males in the BRFs are more likely to perceive their health as excellent than male clinic patients
- A high percentage of clinic and BRFs respondents desire weight loss yet a low percentage of respondents receive weight loss advice from a health professional

# Recommendations

- The clinic and county studied should continue with their good CVD screening practices.
- BRFs and clinical data can complement each other.
- BRFs data should not replace clinical information about individuals.
- Rural physicians are advised to more openly discuss issues of weight loss with their patients.
- Awareness was the focus of this study. Future studies might focus on treatment and intervention.

# Conclusions and Recommendations

