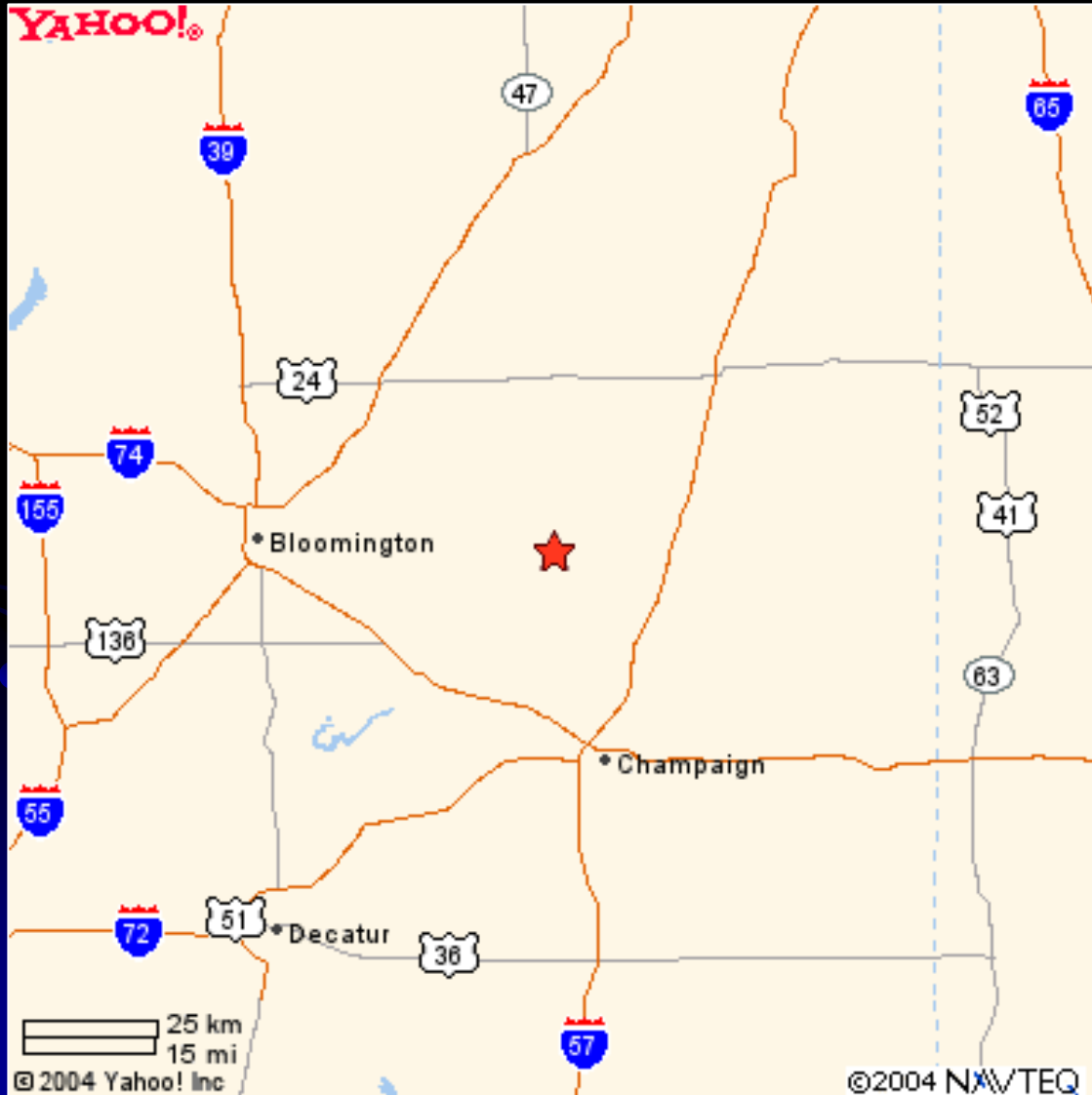


# Study of Chronic Disease Management & Health Education in a Rural Illinois Population

RMED COPC Project  
Gibson City Area – Spring 2005

# Gibson City, Illinois



Population 3,400

# Background

The purpose of this research is to sample a population of rural Illinois with a short written survey tool to assess the prevalence of chronic disease, as well as health care management and health education. Of specific interest is the population's utilization of health education currently in place and preference of learning style to help guide the community in program development. The Ford County Health Department has listed "elderly health education/prevention" as one of their I-PLAN top priorities, with one of the specific goals of having all persons (especially elderly) attend/participate in one health educational activity each year. This I-PLAN priority is one of the starting points for the RMED Community Oriented Primary Care project outlined here.

# Study Population

- Rural population comprised of adult persons living in the surrounding areas of Ford & Iroquois counties who presented to their primary care provider over a one-month period
- Census data indicates that <1% of the population is non-caucasian, so ethnicity was not included on the survey tool
- Survey completion was voluntary, and only surveys completed by adults (>18) were collected for analysis

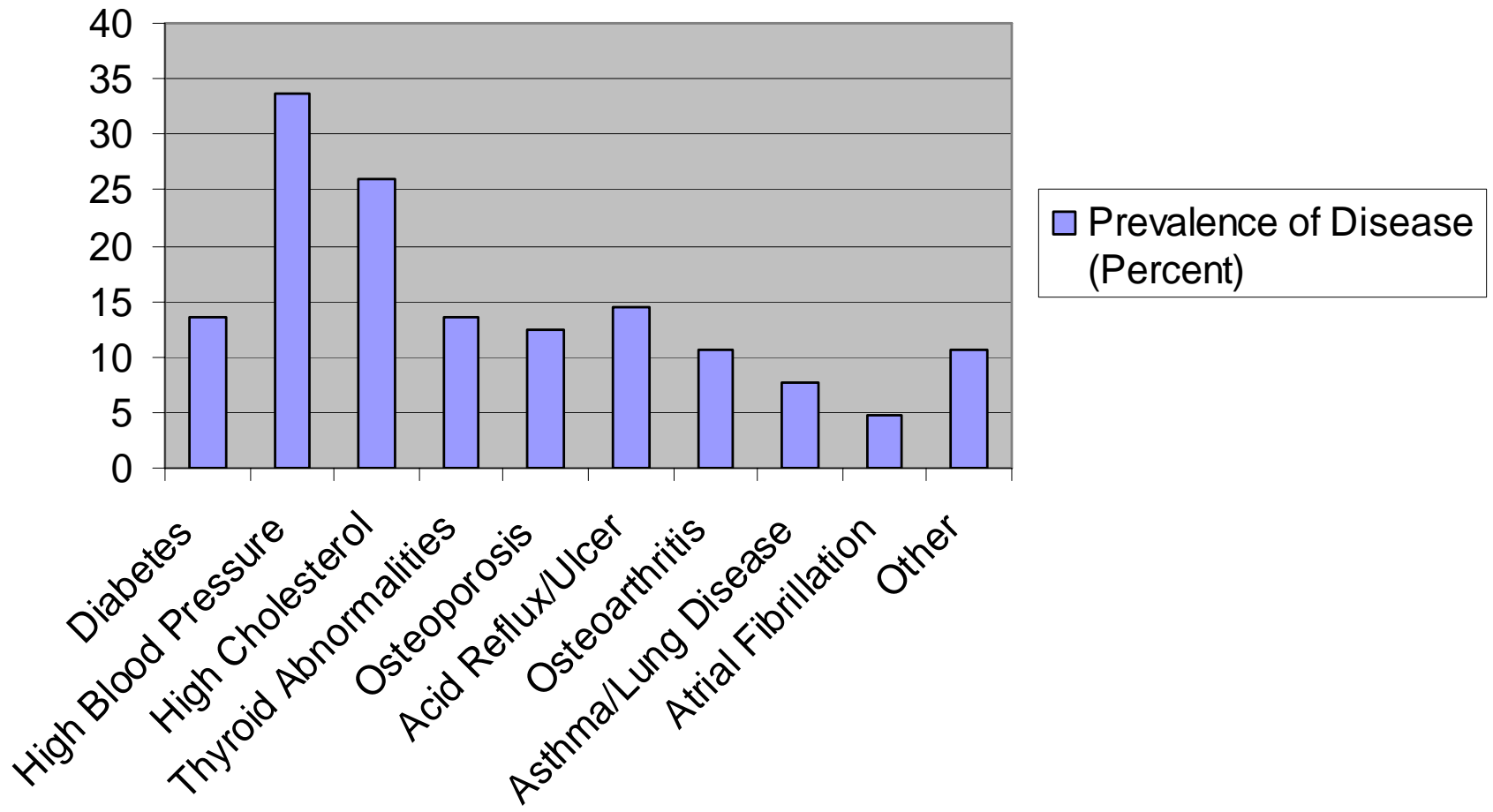
# Methods - Survey Tool

- One-page survey with limited questions designed to increase likelihood of completion and minimize time constraints
- Surveys placed in waiting room/reception areas of Gibson City Clinic and Forrest Family Practice for voluntary completion – with anonymous collection box
- 105 surveys completed by adults in one-month period
- Due to small sample size, data is *observational only* – presume *not statistically significant* and not generalizable

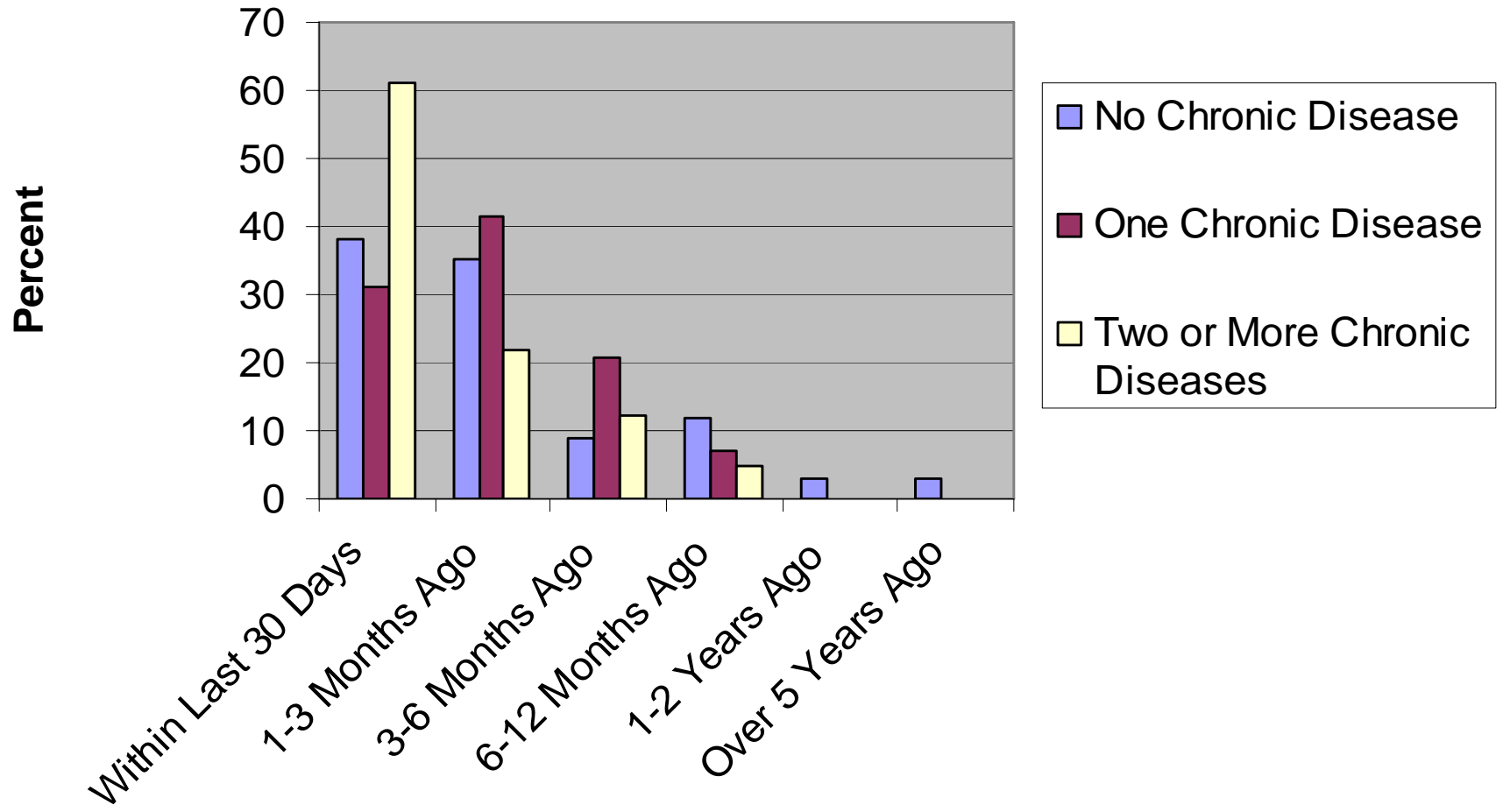
# Results

- Age & Gender Data
  - 74% Female (mean age 50.3)
  - 26% Male (mean age 62.3)
  - 31.7% of total were >65 years of age
- Majority of sample population had seen primary care provider in recent past
  - 45.6% within 30 days
  - 31.1% report 1-3 months ago

# Prevalence of Disease



# Chronic Disease & Most Recent Contact With Primary Care



# Preventive Screening Results

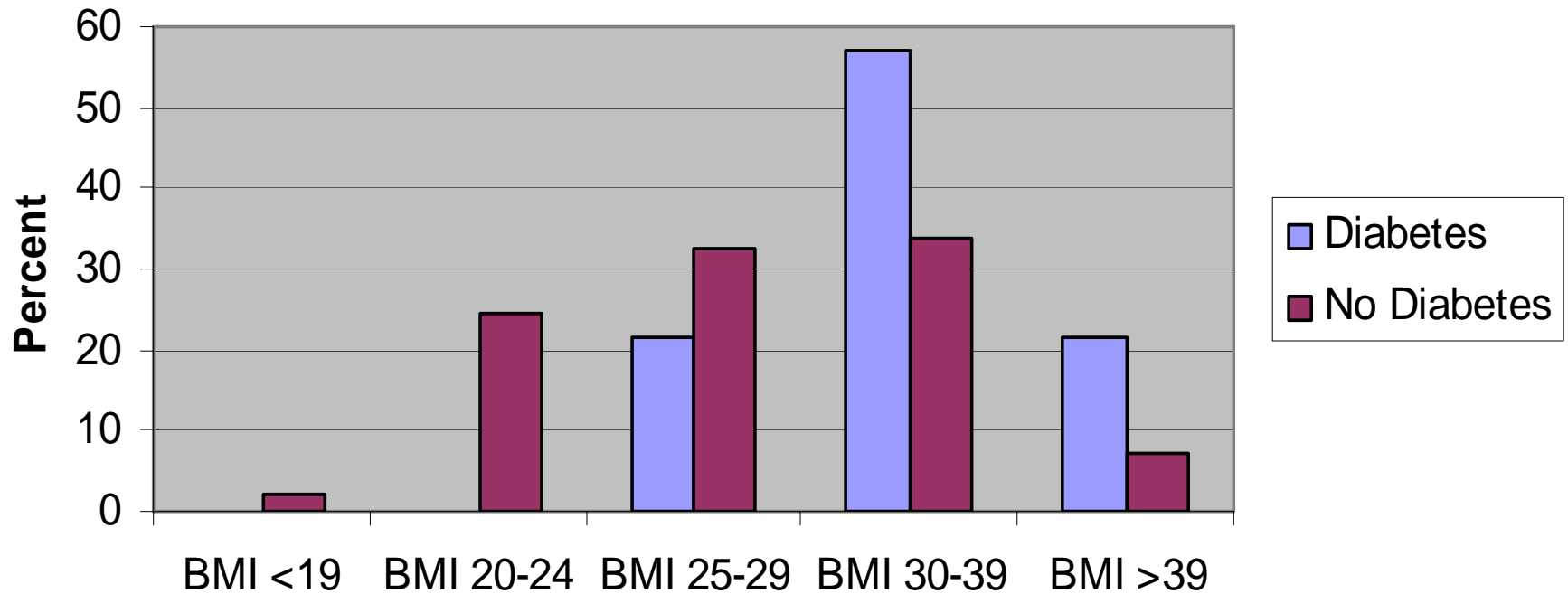
- 63.3% of respondents >50 years of age reported ever having a ***colonoscopy***
- 92.5% of women >50 years of age reported ever having a ***mammogram***
- 80% of women >50 years of age reported ever having a ***bone density (dexa) scan***
- 79.2% of women >18 years of age reported ever having a ***pap smear***

# Cardiovascular Events & Smoking

- 85.7% of those reporting a past **heart attack** also reported being a *former or current smoker*
- 77.8% of those reporting past **coronary artery stent or angioplasty** also reported being a *former smoker*
- 100% (n=3) of those reporting a past **stroke** also reported being a *former smoker*
- 100% (n=6) of those reporting past **coronary artery bypass surgery** also reported being a *former smoker*

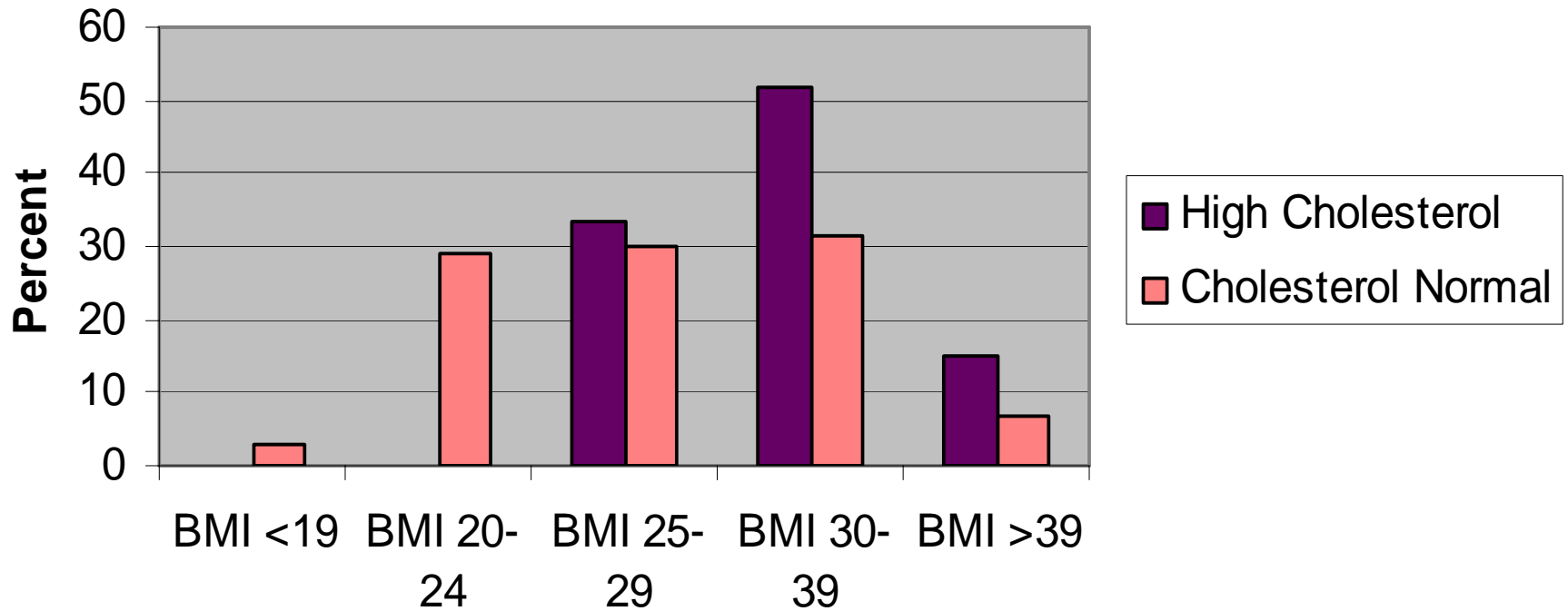
# Chronic Disease & BMI

## Diabetes & BMI



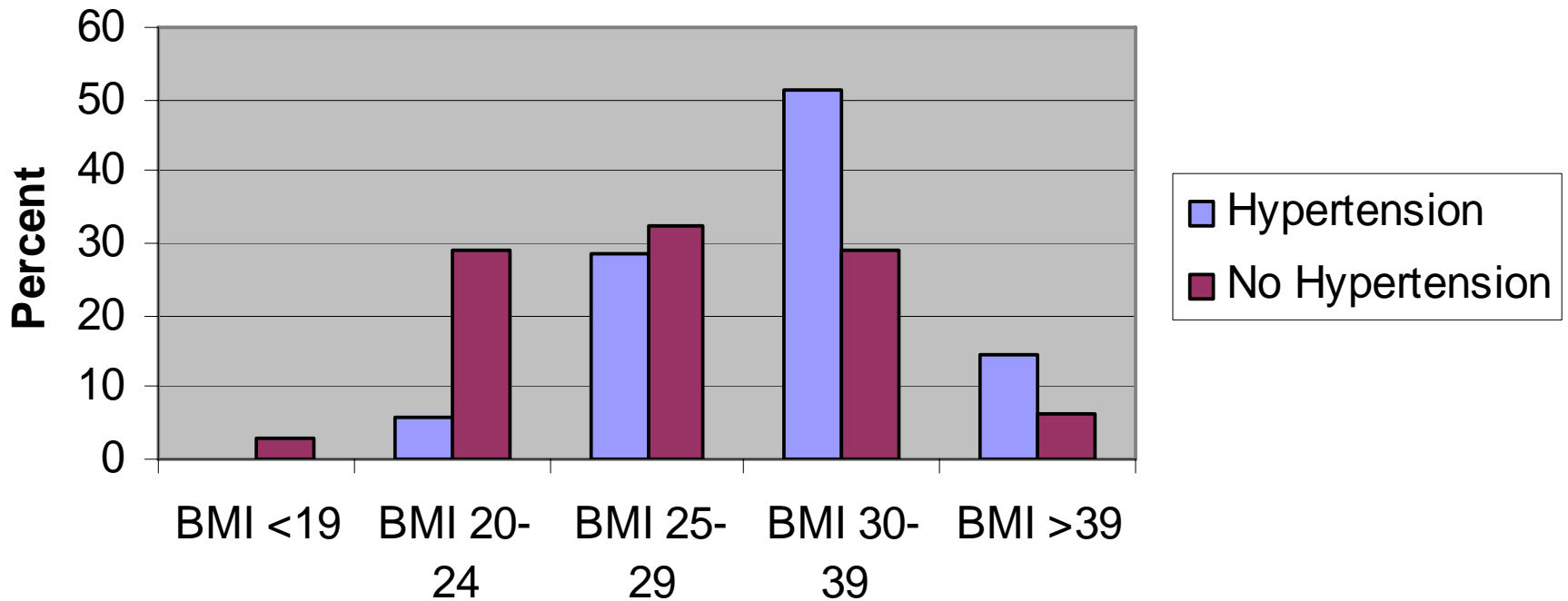
# Chronic Disease & BMI

## High Cholesterol & BMI



# Chronic Disease & BMI

## Hypertension & BMI



# Recommended Lifestyle Changes

- 58.3% of those w/ a BMI 30-39 and 100% of those w/ a BMI >39 were *encouraged to exercise*
- 75% of those w/ a BMI 30-39 and 100% of those w/ a BMI >39 were *encouraged to lose weight*
- 87.5% of current smokers report a doctor suggesting they *stop smoking*

# Learning preferences

- 69.3% of respondents prefer **written handouts** as a learning tool
- 27.7% report preference of **instructor/lecture** format
- 18.8% of respondents indicate a preference for **e-mail or internet** sources
  - Within the e-mail/internet group, **52.6%** were ages 18-35 and only **5.3%** were >65
  - E-mail/internet was *chosen more often* as a preferred learning tool in the 18-35 age range than any other method

# Health Information Utilization

*In the last 12 months . . .*

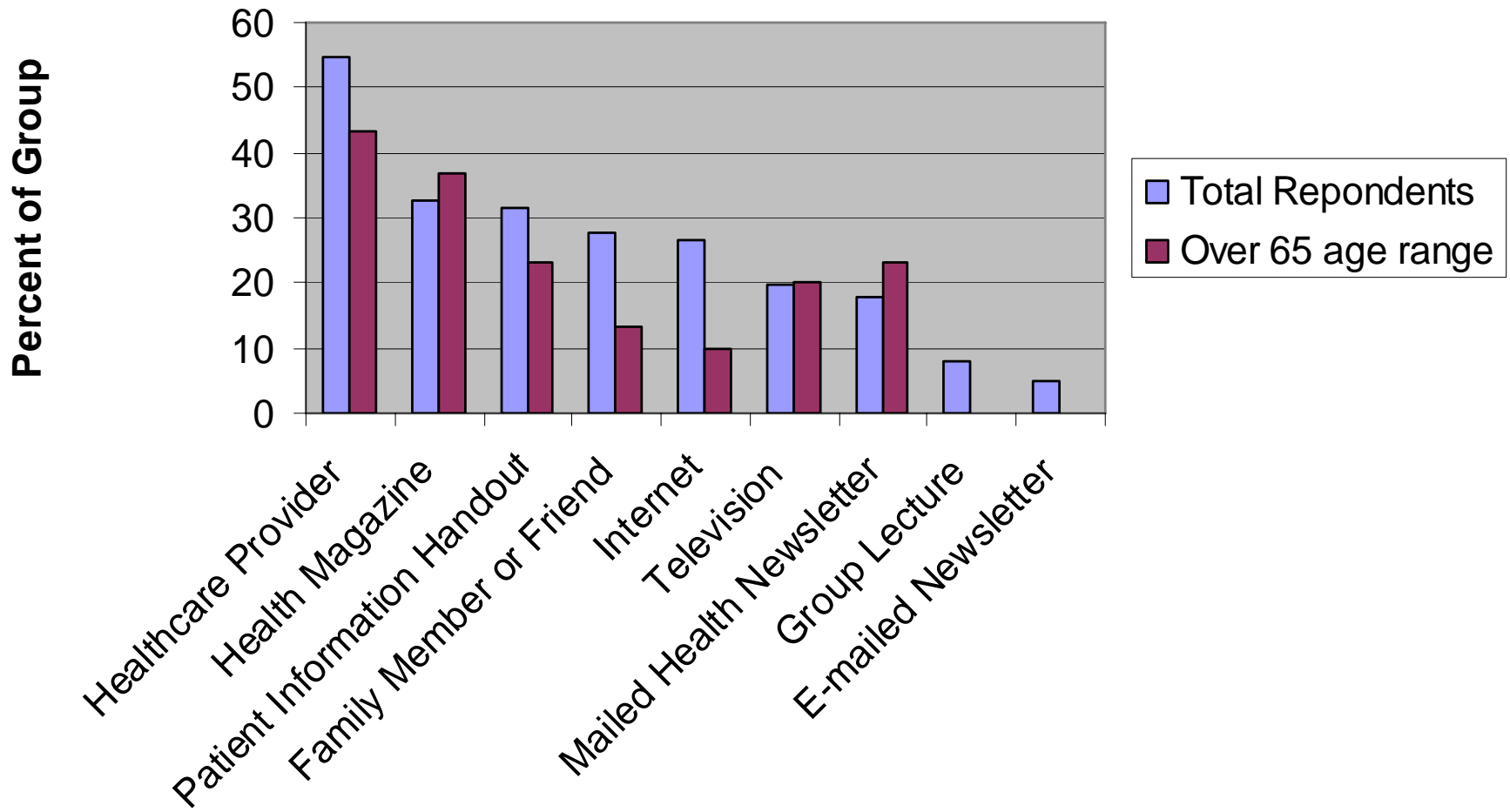
- 54.5% received health info from ***healthcare provider*** (43.3% of >65)
- 32.7% read a ***health magazine*** (36.7% of >65)
- 31.7% received a ***patient info handout*** (23.3% of >65)
- 27.7% received health info from a ***family member or friend*** (13.3% of >65)
- 26.7% acquired health info from the ***internet*** (10% of >65)

# Health Information Utilization

*In the last 12 months . . .*

- 19.8% acquired health info from **TV**  
(20% of >65)
- 17.8% read a ***mailed health newsletter***  
(23.3% of >65)
- 7.9% attended a ***group lecture*** (0% >65)
- 5% received an ***e-mailed newsletter*** (0% >65)
  
- Only 3% reported receiving ***no health information*** in the last 12 months (3.3% >65)

# Health Information Utilization



# Conclusions – Chronic Disease

- As anticipated, chronic disease is prevalent in rural Illinois population
- BMI correlated with diabetes, hypertension and hypercholesterolemia
- Smoking correlated with cardiovascular events
- Appropriate lifestyle change recommendations noted (smoking cessation in smokers, weight loss/exercise in morbidly obese)
- Emphasis on proper screening in patient population is apparent

# Conclusions – Health Education

- Majority of patients prefer health information in form of written handout
- E-mail and internet sources of health information are utilized most by 18-35 age range
- Very few respondents (3%) report no health information in last 12 months, although validity of sources not assessed

# Follow-up

- As with most studies, further sampling is recommended – check for statistical significance w/ larger sample size
- Data shared with Gibson City Clinic, Forrest Family Practice and Gibson Area Hospital
- Healthcare providers encouraged to utilize written handouts for general patient health information
- Recommend incorporation of e-mail and internet sources for health information targeting 18-35 age range

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