

# SHAPE Briefing



1998  
2002  
2006

## What's New? What's Coming?

Number 1

Trends and insights from SHAPE, the Survey of the Health of All the Population and the Environment

### Highlights

- **SHAPE 2006** is the third in a series of large-scale surveys of the health of people living in Hennepin County.
- Health information was collected on more than 8000 adults and, for the first time, more than 4000 children.
- Changes in methodology allowed **SHAPE 2006** to contact some households which would not have been contacted in the past.
- Hennepin County adults could complete the survey, for the first time, by mail instead of only by telephone.
- Results from **SHAPE 2006** will be released in a series of Briefings, larger data books, and in-depth analytic reports.

### Upcoming Issues

- ◆ Overall health of Hennepin County adults
- ◆ Overview of **SHAPE 2006 - Child Survey**
- ◆ Overall health of Hennepin County children

### Introduction

This *Briefing* summarizes the innovations and changes incorporated in the **SHAPE 2006** survey. It also explains how results from the two components, **SHAPE 2006 - Adult Survey** and **SHAPE 2006 - Child Survey** will be released. **SHAPE 2006** is the third in a series of nationally recognized surveys collecting information on the health of Hennepin County residents and factors that affect it.

### Background

Hennepin County has been using **SHAPE** as a major tool for assessing the health of people who live within the county since 1998. In 1998 and 2002, **SHAPE** surveyed adults on a broad range of health topics.

More than 10,000 households in the county participated in the **SHAPE 2006** survey, providing information on more than 8,000 adults and 4,000 children. Participation in SHAPE is voluntary and all of the information gathered is self-reported.

**SHAPE 2006** has several goals:

- Assess health levels and trends of Hennepin County residents,
- Understand factors and conditions related to the health of county adults by geographic area, race and ethnicity,
- Understand factors and conditions related to the health of county children by age group and geographic area, and
- Fill data gaps at the county level to facilitate effective program planning and policy development to improve the health status of all Hennepin County residents.

### What's New in **SHAPE 2006**

The information about the health of the population that is needed by community groups, program planners, and policy makers, and the best way to gather it, both evolve over time. **SHAPE** makes changes during each iteration to address these new requirements.

Changes were made in four primary areas:

- Selecting the sample of households,
- Using multiple methods to obtain information,
- Refining the questions and geographic areas, and
- Obtaining health information about children.

## Selecting the sample of households

In **SHAPE 1998** and **SHAPE 2002**, households were randomly selected from a list of phone numbers known to be in Hennepin County. Knowing the address that was associated with the phone number allowed the SHAPE team to select phone numbers to call within pre-defined geographic areas in the county and thus, report results from SHAPE for those geographic areas. Furthermore, knowing the racial and ethnic makeup of those geographic areas allowed the SHAPE team to determine how many completed surveys were needed from those geographic areas to ensure that it would be possible to report results for the larger racial and ethnic groups residing within the county.

While the results obtained using this method were relatively accurate, it was known that many households in Hennepin County were being systematically excluded. Some households do not have phones and the list of phone numbers included only about 55% of all the households in the county in 2002.

To address this known weakness, households were selected for participation in **SHAPE 2006** from the list the United States Postal Service uses to deliver mail (known as the Delivery Sequence File or DSF). Using the DSF allowed for better coverage across the county, providing results that more accurately reflect the health of all residents.

## Using multiple methods to obtain information

In 1998, **SHAPE** collected information on adults by telephone only. In 2002, the vast majority were contacted by phone, but a few respondents completed the SHAPE survey face-to-face. Since 2002, contacting people by telephone for surveys has increasingly become more difficult and complicated. Many, especially younger adults and recent immigrants, use a cell phone as their primary communication tool. Changes also allow people to take their old phone numbers with

them when they move into or out of the county. Many households use caller-ID to screen phone calls - especially from telemarketers and from people whom they do not know.

In addition to these changes, for approximately 45% of the households in the DSF, no phone number was available.

Given these complexities, continuing to survey by phone only was viewed as being neither cost-efficient nor effective at obtaining results from the desired broad cross-section of county residents.

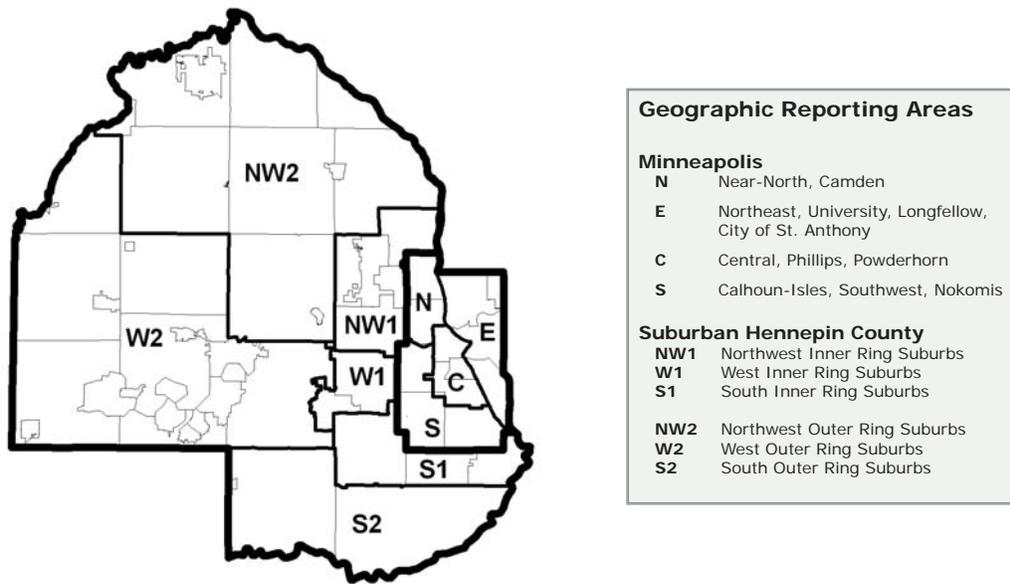
Therefore, in 2006, a self-administered version of the **SHAPE 2006 - Adult Survey** was mailed to a sample of Hennepin County households. The survey was translated into Spanish, Hmong, Somali, and Vietnamese. More than 2,500 persons returned completed surveys by mail.

Using the telephone to collect information was not eliminated, however. The telephone continues to be a good method to contact certain types of persons (e.g, older people and those who are at home much of the time). More than 5,000 completed the **SHAPE 2006 - Adult Survey** by phone.

While using multiple methods to collect information allows SHAPE to achieve more complete coverage of the Hennepin County population, it also causes complications when analyzing results.

For example, there may be questions which some people answer differently when talking to someone on the phone than when they are completing a written survey in the privacy of their home. This *mode effect* may cause the results for particular questions to show a difference from the 2002 survey. Care will be needed in cases where there are significant differences between the 2006 results and previous **SHAPE** surveys to interpret the causes of the change. However, given that **SHAPE 2006** has better coverage across the entire county, the 2006 results should provide more accurate estimates for the health measures reported.

Figure 1. Geographic reporting areas for *SHAPE 2006 - Adult Survey* data



## Refining the questions and geographic areas

The population demographics of Hennepin County and the fields of health and medicine are changing rapidly. The *SHAPE* project adapts itself at each iteration by including questions that are most relevant to: the latest guidelines for preventive care; health issues of interest for public policy makers, program managers, and community organizations; and emerging issues which affect the health of the population.

However, modifying and adding questions needs to be balanced with keeping the core content of the *SHAPE* survey constant to allow for monitoring trends and measuring changes over time.

In 2006, some of the changes include additional or expanded questions on:

- Health care coverage,
- Diabetes and high blood pressure,
- Use of interpreters in healthcare settings,
- Barriers to walking and biking, and
- Determination of whether the respondent or someone in that person's household had received services from the Hennepin County Human Services and Public Health Department (HSPHD).

A change in geographic reporting areas will

affect how results from *SHAPE 2006 - Adult Survey* are reported. In 2002, results were reported for 11 communities within Minneapolis and three main areas within Suburban Hennepin County (Northwest, West, and South) along with several smaller areas defined by cities (Bloomington, Edina, and Richfield; and Brooklyn Center, Osseo, and Brooklyn Park).

For *SHAPE 2006*, the results for adults will be reported for 10 primary geographic areas: four areas within Minneapolis and six Suburban Hennepin County areas. The areas were selected based on demographic analyses of previous *SHAPE* surveys and inputs from and discussions with *SHAPE* data users (see Figure 1).

Because information was collected on fewer children than adults and the questions included in *SHAPE* on children are often age-specific, the results for children will be reported for fewer geographic areas, namely Minneapolis and Suburban Hennepin County.

## Obtaining health information about children

A major addition in 2006 was the *SHAPE 2006 - Child Survey*, a new survey related to the health of children. In households where there was at least one child, the adult most knowledgeable about the health of a randomly selected child was asked a series of questions about that child.

The topics covered in **SHAPE 2006 - Child Survey** included:

- General health and health conditions,
- Health insurance coverage and health care access,
- Exercise, nutrition, and healthy/risky behaviors,
- Academic performance and school readiness,
- Parental involvement and family connectedness, and
- Child care and unsupervised time.

Topics and question content varied by the age of the child (e.g., some topics are appropriate for infants, others for teens).

## When will the results be released?

After months of planning and preparing, processing thousands of phone calls and written surveys, and making numerous presentations about how useful the **SHAPE** data will be, it is understandable that all parties involved are eager to see the results soon after the last phone call has been completed. Unfortunately, there are many steps which need to be taken before results can be released with

the associated confidence intervals, caveats, and comparisons. Some of the steps include:

- Checking the quality and completeness of the data,
- Determining how to assign values to respondents when the data is partially missing or unclear, and
- Developing weights to allow for estimating rates and percentages for the health measures at the county level.

Weighting the data is necessary for two main reasons:

1. Different respondents had a different probability of being selected for the **SHAPE 2006** survey, and
2. The demographics of the persons who completed the **SHAPE** survey may be different than the general population in one or more key areas (e.g., age, gender, racial/ethnic classification).

To maintain the desired accuracy of data estimates and still release **SHAPE** results in a timely manner, a three-phase process will be followed:

Phase 1, starting in summer 2007, will include a series of **SHAPE 2006 Briefings** - short reports like this one, each focusing on one particular area of the **SHAPE** surveys.

Phase 2, in late 2007, will be in the form of detailed data books containing the results for both the adult and child versions of **SHAPE** broken down by the available geographic areas and for selected racial and ethnic groups.

Phase 3 will include detailed analyses on selected topic areas or for particular populations within the county. Possible topic areas include Health of Seniors, Health of African-Born Blacks, and Mental Health Issues.

### Acknowledgments

The **SHAPE** project would like to thank the many individuals, community organizations, and subject-area experts who provided advice and support for the development of **SHAPE 2006**. A partial list of those who provided assistance to the **SHAPE 2006** project can be found on the **SHAPE** Web site listed below. The **SHAPE** project would especially like to thank the more than 10,000 residents of Hennepin County who generously took the time to complete the **SHAPE** survey.

### For More Information

SHAPE 2006 is a collaborative project between the Hennepin County Human Services and Public Health Department and the University of Minnesota School of Public Health.

For more information on this *Briefing* or other topics related to the **SHAPE** project, or to receive this information in an alternate format, contact [SHAPE@co.hennepin.mn.us](mailto:SHAPE@co.hennepin.mn.us) or 612-348-6150.

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