# **Preliminary Estimates of the Number of Uninsured Minnesotans**

## Staff Report to the Minnesota Health Care Commission

October 4, 1994

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## SUMMARY

- An estimated 8.9% of Minnesota's population -- approximately 400,000 persons -- currently lacks health coverage at any point in time.
- From 1990 to 1993, the rate of uninsurance in Minnesota remained essentially the same. This is in sharp contrast to the national trend of uninsurance which shows a steady increase in the rate of uninsurance in the nation as a whole.
- Since 1992, approximately 90,000 people have obtained subsidized health coverage through the MinnesotaCare Program and another 33,000 have obtained coverage through other programs as a result of MinnesotaCare referrals. Approximately 72,000 persons are currently enrolled in MinnesotaCare.
- So far, 132 employers have obtained health coverage through the Minnesota Employees Insurance Program (MEIP), a purchasing pool for private employers administered by the Minnesota Department of Employee Relations. Seventy-eight percent of these employers did not previously offer coverage.
- Under Minnesota's small group insurance reforms implemented in 1993, a large number
  of firms which previously did not offer group coverage to their employees have now
  begun to do so.
- Compared to insured Minnesotans, the uninsured are more likely to be male, unmarried, between the ages of 18 and 35, and to have lower incomes. About 72% of uninsured adults are working.
- Estimates of state uninsurance rates are based on findings from four surveys.

## **INTRODUCTION**

This report was prepared by the staff of the Minnesota Health Care Commission as part of the commission's health care financing study. It contains preliminary estimates of the number of uninsured Minnesotans, state and national uninsurance trends, and the impact of MinnesotaCare health reforms on the uninsured population. The Minnesota Health Care Commission has not had an opportunity to review the estimates and, therefore, has not yet approved the estimates. Under the commission's direction, the estimates will be further refined prior to the completion of the commission's report in January.

The purpose of the commission's financing study is to develop recommendations for the 1995 Minnesota Legislature on how to restructure the existing health care financing system to achieve universal coverage. The goal of the commission is to achieve universal coverage without a major increase in total health care spending. A major focus of the commission's work will be to identify savings in the health care system that will result from health reform and to reallocate the savings to reduce the cost of universal coverage.

The financing study was mandated by the 1994 MinnesotaCare Act, which also included an expression of the state's commitment to achieve universal coverage by 1997. Several state programs have already been enacted to improve access to health coverage, but existing programs will not lead to universal coverage without further changes in their structure and financing.

## MINNESOTA'S UNINSURED POPULATION

Commission staff have estimated that 8.9% of Minnesota's population -- approximately 400,000 persons -- currently lacks health coverage at any point in time. The estimates of state uninsurance rates are based on findings from three surveys conducted since the last statewide survey of the uninsured in 1990, including findings from a survey completed in 1993 by the RAND Corporation for the Robert Wood Johnson Foundation. Data sources and the methodology for making the estimates are found in the appendix following this report.

Based on the three survey sources analyzed, staff have concluded that the rate of uninsurance in Minnesota has remained essentially unchanged over the period 1990 to the present. The Minnesota trend is in sharp contrast to the national trend in the rate of uninsurance from 1987 to 1992, as reported by the U.S. Census Bureau's Current Population

Preliminary Estimates of the Number of Uninsured Minnesotans
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Survey. These national data show a steady increase of about 0.33% per year in the rate of uninsurance in the nation as a whole, beginning at 13.0% uninsured in 1987 and growing to a projected 15.2% by 1994. If Minnesota had followed the national trend, Minnesota's uninsured population would have increased from 390,000 in 1990 to 459,000 persons by 1994, an increase of 69,000 persons.

Chart 1 shows the Minnesota trend line and the national uninsurance trend line. The chart also shows the most recent point in time estimate of the uninsurance rate from the 1993 Robert Wood Johnson/RAND survey.

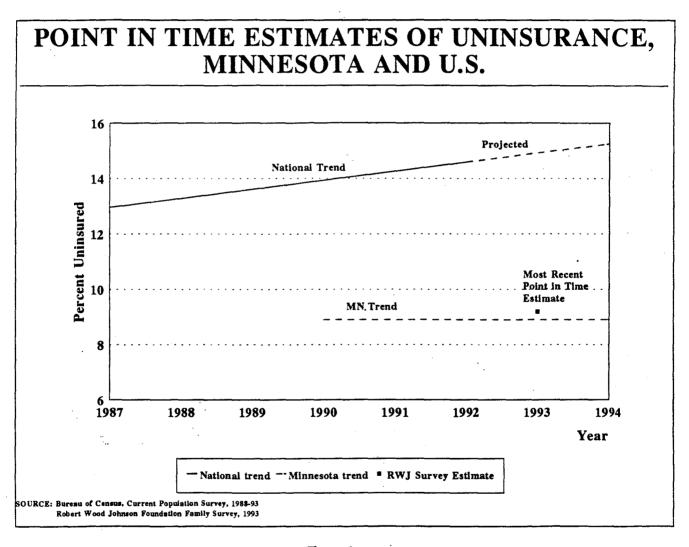


Chart 1

National data indicate a steadily decreasing proportion of employer-based health coverage and a corresponding increase in uninsurance rates and growth in government health care programs. Between 1987 and 1992, the national uninsurance rate rose from 13.0% to 14.7%, and the percent of the national population with employer-based coverage fell from 62.1% to 58.3% (See Chart 2). These national trends are likely due to a number of factors, including increasing health care costs and disproportionate growth in service sector jobs that are not likely to offer health coverage. Minnesota's uninsurance rates are also generally lower than those of neighboring states.

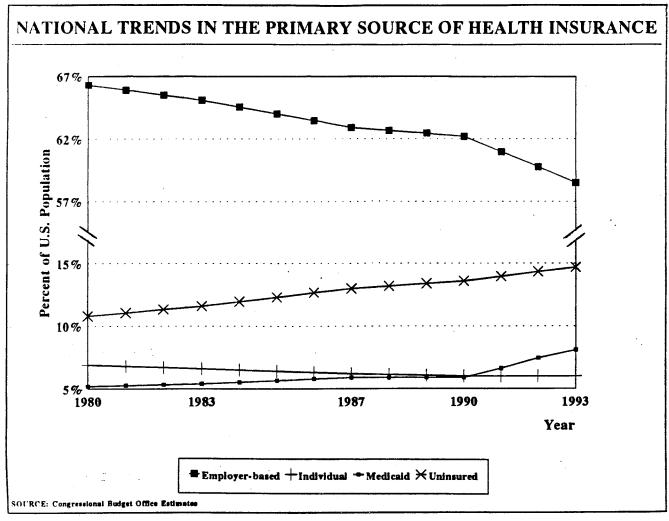


Chart 2

<sup>&</sup>lt;sup>1</sup> Unpublished Current Population Survey Data, Income Statistics Branch/HHES Division, U.S. Bureau of the Census, U.S. Department of Commerce, Washington, D.C., June 1994.

<sup>&</sup>lt;sup>2</sup> U.S. Bureau of the Census, Statistical Abstract of the United States, Washington, D.C., Various Issues.

## Characteristics of the Insured and Uninsured in Minnesota

Information on the demographic characteristics of the insured and uninsured in Minnesota is drawn from the 1993 Current Population Study, which provides data from a population sample interviewed in 1992. Since the MinnesotaCare Subsidy program was not established until October 1992, the 1992 data does not reflect changes in the uninsured population's demographic characteristics as a result of the MinnesotaCare program. We expect to receive more detailed RAND/Robert Wood Johnson survey data and other data which will provide more recent demographic information.

#### Age

Nearly half of the uninsured -- 49% -- are young adults aged 18-34. An additional 13% of the CPS uninsured are under age 18. In contrast, 26% of the **insured** in Minnesota are under age 18 in 1992, and 25% are aged 18-34.

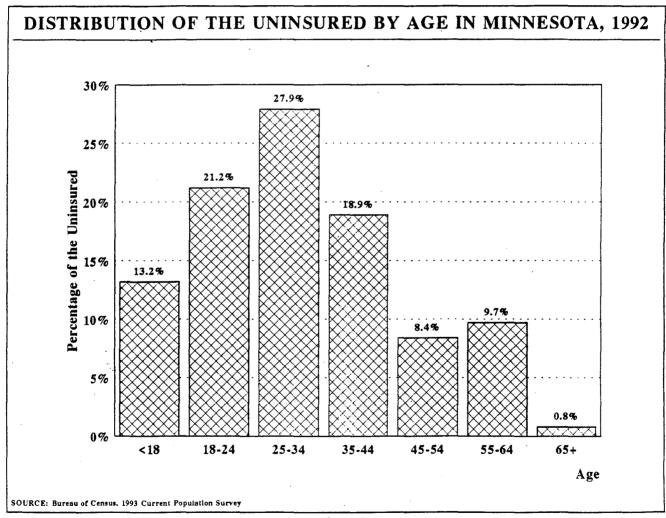


Chart 3

## **Education**

Most of the uninsured (66%) have a high school education or less. About 43% of the uninsured are high school graduates, while 24% did not graduate high school. Just 9% are college graduates.

Among the insured, 52% have a high school education or less, and 21% are college graduates.

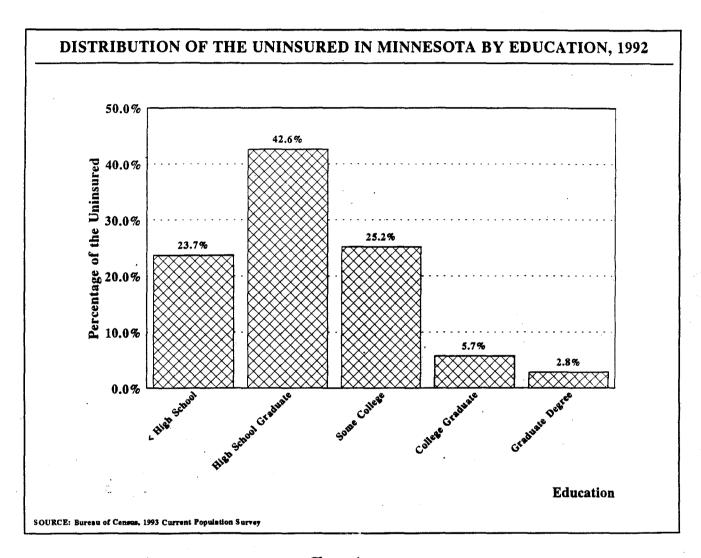
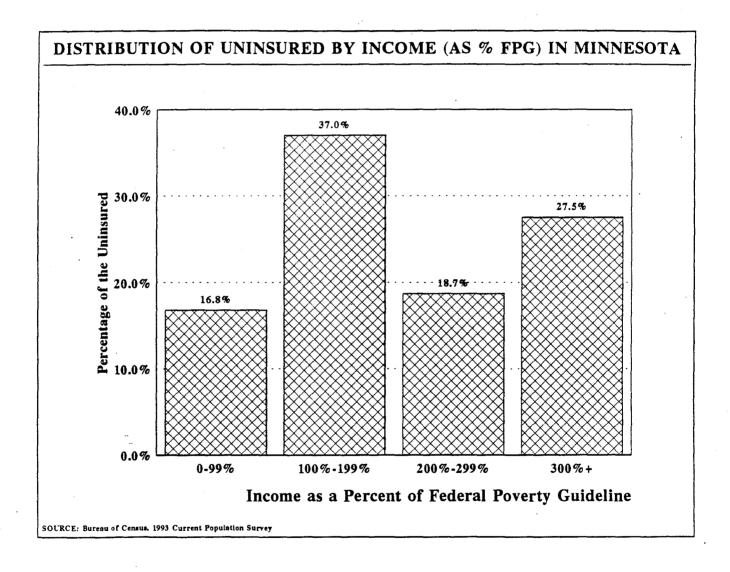


Chart 4

#### Income

The most striking demographic differences between the insured and uninsured in Minnesota lie in their income characteristics.

More than twice as many uninsured Minnesotans (37%) have incomes between 100% and 200% of the federal poverty guideline as do insured Minnesotans (16%). The federal poverty guidelines vary by family size.<sup>3</sup> The differences between the insured and uninsured are small when considering those who have incomes below the federal poverty guideline (17% of the uninsured and 13% of the insured) and those with incomes between 200% and 300% of poverty (19% of both the insured and uninsured). However, fully 53% of the insured have incomes equal to or greater than 300% of the federal poverty guideline, while only 28% of the uninsured have incomes in this range.



<sup>&</sup>lt;sup>3</sup> 1994 Federal Poverty Guidelines:

- \$7,360 for a single individual.
- \$9,840 for a family of two.
- \$12,320 for a family of three.

#### Chart 5

Preliminary Estimates of the Number of Uninsured Minnesotans
Staff Report to the Minnesota Health Care Commission October 4, 1994

## **Employment Status and Occupation**

More than half of insured adults (63%) and most uninsured adults (72%) are currently employed. The uninsured are more likely to work in service and labor occupations than the insured, and less likely to work in managerial, professional, or technical occupations.

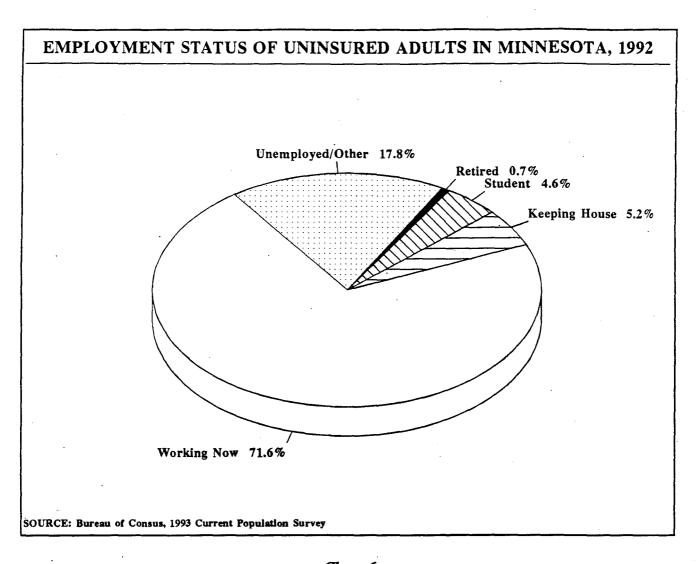


Chart 6

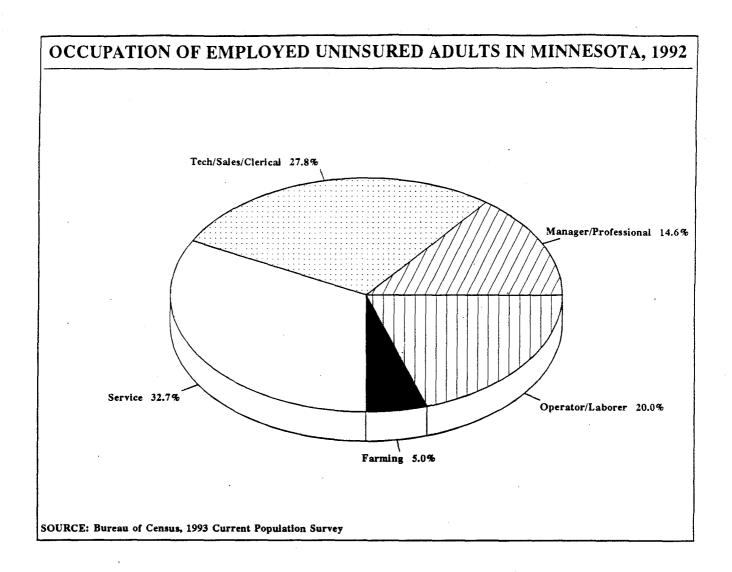


Chart 7

#### Sex

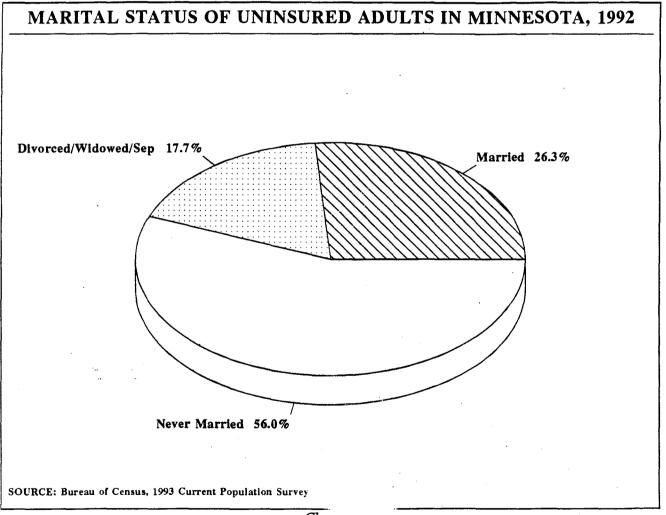
Compared to insured persons in Minnesota, the uninsured are much more likely to be male. In 1992, 63% of the uninsured were male, while 47% of those with health insurance were male.

#### Race

Like the population of Minnesota, the vast majority (over 90%) of both the insured and uninsured is white. Approximately 1% of the uninsured in 1992 were Hispanic, 3% were Asian, and 6% were Black. Among the insured, about 2% were Hispanic, 1% were Asian, and 4% were Black.

#### **Marital Status**

Compared to the insured, the uninsured are much less likely to be married. About 26% of the uninsured over age 18 are married, while 61% of the insured of this age are married. Just over half of uninsured adults (56%) have never been married, as compared to 24% of insured adults. Also, uninsured adults are twice as likely as insured adults to be divorced (14% vs. 7%).



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#### Family Size

On average, uninsured people live in slightly smaller households than insured people in Minnesota. The average household size for the uninsured is 2.1 persons, while the average household size for the insured is 2.5 persons. About 65% of the uninsured live in households where there are no children under the age of 15, while 53% of the insured live in such households.

## EVALUATION OF THE IMPACT OF SELECTED HEALTH REFORMS

Minnesota's health reforms include a variety of programs designed to improve access to health coverage. Insurance reforms are designed to make private coverage more accessible for those who can afford it. The Minnesota Employees Insurance Program makes it easier for small employers to obtain affordable health coverage through a state-run purchasing pool. The MinnesotaCare Program provides subsidized coverage to low-income uninsured persons.

The 1994 MinnesotaCare Act calls for a comprehensive evaluation of Minnesota's health care reform programs to be completed in 1995. To aid the commission in completing the health care financing study this year, the staff undertook a quick and somewhat informal evaluation of several programs that are designed to improve access. It is clear from our preliminary evaluation that Minnesota's health care reform programs have been successful in making health coverage available to many uninsured persons. While existing data is not adequate to establish any causal relationships, staff believe these programs have resulted in a lower rate of uninsurance than would have been experienced without them.

## The MinnesotaCare Subsidy Program

The MinnesotaCare Program was enacted by the 1992 Minnesota Legislature in response to concerns about the growing number of uninsured Minnesotans. MinnesotaCare, implemented October 1, 1992, was an expansion of its predecessor, the Children's Health Plan, which had been in operation since July 1, 1988.

At present, approximately 72,000 Minnesotans in 25,000 families with children are enrolled in MinnesotaCare. More than 90,000 people have been covered since its inception in 1992. In addition, since 1988 an estimated 33,000 people have obtained coverage through the Medical Assistance (MA) and General Assistance Medical Care (GAMC) programs as a result of referrals from MinnesotaCare (or earlier, Children's Health Plan) applications.

The MinnesotaCare Program currently provides health care coverage to uninsured families with children whose family income is at or below approximately 275% of the federal poverty guideline (FPG).<sup>4</sup> Effective October 1, 1994, the program will expand to cover uninsured adults without dependent children and with income at or below 125% of FPG. The income standard for uninsured adults without dependent children is scheduled to increase to 275% of FPG effective October 1, 1995. Enrollees are required to pay a premium based on family size and income.

To be eligible for MinnesotaCare, a person must not have been covered by any other health insurance for the last four months. This requirement does not apply to children in families with income at or below 150% of FPG. In addition, adults must not have had access to employer-subsidized health insurance for the last 18 months.

### MinnesotaCare covers the following services:

- Doctor and health clinic visits
- Inpatient hospital services (including inpatient mental health), with a \$10,000 annual limit and 10 percent copayment for adults
- Children's dental services, except orthodontics
- Adult preventive dental services (does not include x-rays)
- Immunizations
- Eye exams
- Prescription eyeglasses
- Most prescription medications
- Laboratory and x-ray services
- Certain outpatient mental health services
- Chemical dependency treatment
- Home health services, except private duty nursing and personal care services
- Chiropractic services
- Rehabilitative therapy services
- Hospice care services
- Emergency ambulance services
- Medical equipment and supplies.

Adults are required to pay copayments of: \$3 for each prescription medication, \$25 for each pair of eyeglasses, and 10 percent of inpatient hospital charges.

The program is funded by enrollees' premiums, copayments, and health care provider taxes.

<sup>&</sup>lt;sup>4</sup> For single individuals, 275% of the FPG is currently \$20,240. For 2 person families 275% of FPG is \$27,060, and for 3 person families the amount would be \$33,902.

## **Small Group Insurance Reform**

In 1992 the Legislature passed a variety of reforms designed to make health coverage for employees of small firms (size 2-29 employees) more affordable and more available. The reforms included the design of a more affordable small group product, guaranteed issuance, and rate bands which limit the variation permitted in premiums. The reforms will expand to cover groups of 30-49 employees as well beginning July 1, 1995. The Minnesota Health Care Commission is in the process of evaluating the impact of MinnesotaCare's insurance reforms on accessibility and affordability of health coverage in the small group market. Preliminary results of an informal survey of the state's largest insurers in the small group market indicate that many small firms which previously did not offer group coverage to their employees have begun to do so under the reforms.

## The MEIP Purchasing Pool

A health coverage purchasing pool is based on the concept of pooled buying power in order to secure more affordable insurance coverage for member employers and their employees. In addition to increasing marketplace clout, purchasing pools are able to spread risk more broadly and benefit from economies of scale.

The Minnesota Employees Insurance Program (MEIP) is a state-administered health care insurance purchasing pool that was created in the 1992 MinnesotaCare Act. MEIP is a voluntary purchasing pool available to employers with 2 to 29 employees who have had difficulty obtaining affordable insurance coverage for their employees (the pool will include employers with 2 to 49 employees in the near future).

MEIP was implemented in the fall of 1993. Current enrollment is 132 groups, with coverage provided to approximately 1,000 employees and 1,500 dependents. A majority of the employers who have joined the pool (78%) did not offer coverage to their employees prior to joining the pool.

The pool offers four different coverage plans. Each employer that joins the pool must contribute at least 50% of each employee's premium based on the lowest cost plan. A majority of employers in the pool voluntarily contribute 100% of each employee's premium.

Enrollment has increased steadily since the formation of the pool, and the program anticipates continued growth in enrollment. The pool is marketed through private insurance agents. A majority of employers within the pool are in the service/retail sector and are located within the Twin Cities metropolitan area.

In addition to MEIP, private purchasing pools have formed in Minnesota and are a powerful tool for employers to improve affordability and accessibility of coverage for their employees.

## INCREASE IN TOTAL HEALTH CARE SPENDING UNDER UNIVERSAL COVERAGE

Commission staff are developing estimates of the increase in statewide total health care spending that is likely to occur under universal coverage. This task will involve estimating the amount of health care uninsured persons already receive and how this care is paid for. It is generally believed that a significant portion of the costs of uncompensated care that is currently provided to uninsured persons is passed on to other purchasers in the form of higher provider fees, higher insurance premiums, and taxes for government health care programs. The commission plans to recommend methods of capturing some of the money that is already spent on health care for the uninsured to reduce any new costs of achieving universal coverage. The goal of the commission is to develop a strategy for achieving universal coverage without a major increase in total health care spending<sup>5</sup>.

According to a recent national study conducted by Steven Long and Susan Marquis of the RAND Corporation under contract with the U.S. Congress Office of Technology Assessment, national universal coverage would result in a 2.2% increase in total health care spending. This estimate was based on a 15% national uninsurance rate. Minnesota's uninsurance rate is significantly lower.

## **Appendix**

## DATA SOURCES AND METHODOLOGY

Commission staff used results of three surveys conducted since the last statewide survey of the uninsured by the Minnesota Health Care Access Commission in 1990 to estimate the number if Minnesotans who do not have health insurance at this time. These are the Current Population Survey (1991-1993), the Behavioral Risk Factor Surveillance System (1990-1994) and the Robert Wood Johnson Foundation Family Survey (1993). Each survey has particular strengths and weaknesses. Results from one survey have informed the results of the others, giving commission staff confidence in the estimate of the number of uninsured. By using several sources of data, the commission can obtain a useful estimate without being limited by the weaknesses of any one data set.

### Current Population Survey

The Current Population Survey (CPS) is the source of official government statistics on employment and unemployment in the US. A secondary purpose of the survey is to collect demographic data on the national population. The yearly "March supplement" collects basic employment and demographic data pertaining to the previous year, plus detailed data on income and non-cash benefits. Data has been collected monthly for over 50 years.

This survey uses a multi-stage stratified area probability sampling frame to provide a representative sample of the noninstitutionalized population of the United States.

The CPS was not originally intended to produce regional or state level estimates, but because of the increasing level of interest in doing so over the years, the sample has been modified to provide more accurate estimates. CPS provides correction factors with which to adjust the standard errors for state level estimates.

Interviews are conducted in sampled households once a month for the same four months in two consecutive years. Data collection involves both face-to-face and telephone interviews; up to 60% of the interviews are by telephone. However, telephone interviews are conducted only after at least one face-to-face interview has been conducted. Information is gathered about all members of a sampled household through an interview with one adult member of that household.

Commission staff have used CPS data from three consecutive years (1991-1993, which provides information about the population of Minnesota in 1990-1992). In 1993, the CPS sample size was 1673.

## Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a seasonally-adjusted nation-wide survey study. The Minnesota segment is operated by the Minnesota Department of Health's Center for Health Statistics under a cooperative agreement with the Centers for Disease Control to collect data on behavioral health risks. A module of questions specific to the Minnesota segment is included at the end of a core questionnaire. This study has been conducted yearly since 1984, and the core questions have generally remained the same from year to year.

This telephone survey utilizes a multi-stage cluster probability sampling frame using the Waksberg method of random digit dialing. This sampling frame produces a random sample of households from the noninstitutionalized population of Minnesota who have telephones.

Once a household has been selected for the survey, one adult is randomly selected for the interview. Information is collected only about that individual; thus, the data from this survey only refers to the adult population of Minnesota.

Through 1993, approximately 285 telephone interviews were conducted each month, for a yearly sample size of about 3420. Starting in 1994, the sample size will be increased to about 4800 per year. (The 1994 BRFSS has not been completed, but provisional data from January through July, 1994 was made available to the commission staff for preliminary analysis.)

## Robert Wood Johnson Foundation Family Survey

The Robert Wood Johnson Foundation Family Survey (RWJ) project was conducted in 10 states by the RAND Corporation through its subcontractor, Mathematica Policy Research, Inc. It was funded through the Robert Wood Johnson Foundation State Initiatives in Health Care Reform project. The objectives of this study were to describe problems in the current health care system, conduct prospective policy analysis, provide baseline data from which to evaluate health care reforms, and to develop standard instruments and procedures for state health insurance surveys.

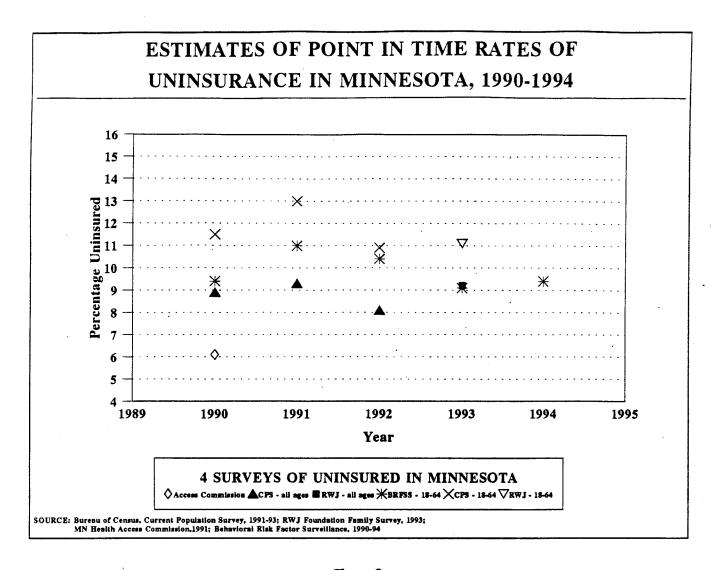
In this study, the uninsured and those receiving Medical Assistance were oversampled through the use of a screening questionnaire and Medical Assistance enrollee lists. Most interviews were conducted by telephone, so a telephone sampling frame was used to draw the majority of the sample. An area probability samp was used to draw a subsample of households without telephones (estimated to be 8% population). The target sample size was about 2000 Minnesota households. Into was gathered about all members of a sampled household through an interview of one adult member of that household.

The RWJ survey was unique in that it contained questions pertaining to coverage by specific Minnesota state health care programs, that is, Medical Assistance (MA), General Assistance Medical Care (GAMC) and the MinnesotaCare program. The other two surveys do not provide this level of detail in their questions.

## Estimation Process for the Rate of Uninsurance in Minnesota

When comparing the point estimate of the rate of uninsurance from each of these surveys, one should expect some variability. The three surveys are very different in terms of their sampling methodologies, question wording and sample size, and thus should not be expected to yield identical estimates. This is not to say that the sampling designs of any of these surveys is substandard or improper. Each sampling design, when carefully administered, will yield a properly representative sample of the population of Minnesota. Even two surveys which used the exact same methodology might not produce the same point estimate, due to variability in the samples drawn.

Chart 9 shows a scatter diagram of the rates of uninsurance at a point in time provided by the three surveys. These include uninsurance rates from CPS for 1990, 1991 and 1992, and from RWJ for 1993. These data points are the uninsurance rates for all ages. The 1990-1994 data points from the BRFSS are for adults aged 18-64 only. (Note: data for 1994 BRFSS is provisional data representing only interviews completed in the first half of 1994.) For comparison to the BRFSS estimates, the diagram also includes the estimates from the CPS and RWJ surveys for ages 18-64. The uninsurance rates for this restricted age range can be expected to be higher than the rates for all ages, because the uninsured are concentrated in the 18-34 year old age group and those over 64 are typically covered by Medicare.



#### Chart 9

Taken together, the data points from these three surveys suggest that since 1990, the rate of uninsurance in Minnesota at a point in time has remained essentially stable. This is particularly evident when one follows the CPS or the BRFSS data points from year to year. While the data points from the different surveys vary by as much as 3.7% in any given year, this can be attributed to the fact that many of the points refer to the restricted age range, and to sampling variability between the surveys. More importantly, the point estimates from the three surveys are not statistically different from one another at a 95% level of confidence.

The 1990-1993 Minnesota trend line on Chart 1 is estimated simply by calculating the statistical average of the data points for the CPS and RWJ estimates, since these data points refer to Minnesotans of all ages. The estimate of the uninsurance rate for 1994 is an extrapolation of

the 1990-1993 trend. However, evidence from BRFSS data available through the first half of 1994 also supports the assertion that the rate of uninsurance has **not** changed in 1994.

In drawing these preliminary inferences about the rates of uninsurance from the three surveys, commission staff have consulted with experts from the Minnesota Department of Health, the Minnesota Department of Human Services, and the Institute for Health Services Research at the University of Minnesota. Note that, because of the relatively small number of data points, commission staff were unable to perform a more sophisticated statistical analysis in estimating the rate of uninsurance in this state. A longer time series would be necessary in order to undertake such an analysis. Given the available data and other relevant information gathered through expert consultation, the average of the data points over time provides the best statistical estimate of the rate of uninsurance from 1990 to 1993.

Chart 9 also shows the point estimate of the rate of uninsurance at a point in time obtained by the 1990 Minnesota Health Care Access Commission study. While the new Minnesota uninsurance rates are higher than the estimate prepared for the Access Commission in 1990, staff believe that the "increase" is due to differences in survey methodology and does not indicate any growth in the number of uninsured persons since 1990. Staff have concluded based on an analysis of current survey data that the earlier estimates were at the low end of the range of statistically possible results.

#### Potential for Bias

It is important to keep in mind that there are several sources of bias potentially present in any survey data set that can affect the results obtained from that survey. These sources include coverage bias (bias occurring when members of the population of interest have no chance of being selected for the sample), non-response bias (bias occurring when non-response is correlated with variables of interest), response error (bias occurring when respondents accidentally or deliberately give incorrect answers), and measurement error (questionnaire items do not actually measure what they are meant to measure, for a variety of reasons).

The problem of noncoverage often particularly applies to telephone surveys, where persons without telephones have no chance of being selected for the sample. Of these three surveys, the BRFSS exclusively uses a telephone design. If individuals without telephones are different from sampled individuals in terms of the survey variables of interest (such as whether or not they have health insurance), then the survey estimates of these variables could be biased. However, since there are very few households without telephones, the bias introduced by the noncoverage of persons without telephones should be very small (the 1990 Census estimated that just 2.1% of Minnesota households do not have a telephone).

Probably the most important potential source of bias in the survey data is response error. It is known from previous studies that people sometimes do not know the details of their health care coverage. It is also possible that some respondents may not view certain government programs, such as Medicaid, Medical Assistance or General Assistance Medical Care as being "health insurance." Survey design experts guard against the possibility of response error by careful question construction, selective probing of responses, rigorous training of interviewers, and the pretesting of questionnaires.

#### Future Analyses

Commission staff will be conducting other analyses on this survey data later this fall. Plans include examining additional characteristics of the insured and uninsured, such as health status, health behaviors and health care access; determining the reasons for uninsurance; determining the types of insurance held by the insured; and determining the nature and extent of underinsurance in this state.

In addition, additional data should become available which will provide information about insurance histories and the process of losing coverage. Finally, data from the 1994 Current Population Survey (with results of interviews and in 1993) will become available in December of this year. Commission staff will a data to possibly further refine the estimate of the rate of uninsurance.