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SECOND UPDATE
AND REVIEW

**NEW JERSEY
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of
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Governor

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Healthy New Jersey 2000

Second Update and Review

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This is a PDF of a report published online as separate HTML pages in 1999. The hard copy report was prepared in Word Perfect and contained Harvard Graphics graphs which had to be removed from the online presentation due to web capabilities at the time. The graphs, stored as uneditable picture objects, are included separately at the end of each chapter in this PDF.

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Acknowledgments

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For questions or comments relating to data contained in the report, contact the Center for Health Statistics. http://nj.gov/health/chs/contactus.shtml

Table of Contents

Introduction

In 1991, the Department of Health published Healthy New Jersey 2000: A Public Health Agenda for the 1990s. For the first time, New Jersey not only defined a comprehensive set of goals for preventing disease and improving the health of the State's residents over the coming decade, but also identified very specific targets for improvements as well as indicators to measure progress toward these targets. Sixty-seven objectives, or targets and their associated indicators, were established in eleven major health categories, ranging from improving maternal and child health to reducing the adverse impacts of diseases such as cancer, HIV/AIDS and cardiovascular disease. These priority areas and objectives were determined by the Department in partnership with health care providers, educators, researchers, consumer advocacy groups and grass roots organizations. In adopting this public health agenda, New Jersey followed the example set by the U.S. Department of Health and Human Services, which published Healthy People 2000, a set of 300 national health promotion and disease prevention objectives.

In 1996, the Department published Update Healthy New Jersey 2000, which evaluated initial progress, starting from baseline data from the late 1980s, toward achieving our State's objectives. Because of the length of time required to collect, process and analyze health indicator data, the latest data reflected in the 1996 update generally were from the years 1992 or 1993. With Update Healthy New Jersey 2000 - Second Update and Review, the Department of Health and Senior Services, the successor agency to the former Department of Health, has added data from 1995, 1996, or even, in some cases, 1997. This places us in a better position to see the trends associated with each objective, and to assess the likelihood of New Jersey's achieving its targets in the year 2000.

This update is also timely in helping the Department and its partners plan a public health agenda for the next decade. In September of 1998, the federal government released Healthy People 2010 Objectives, Draft for Public Comment, and will be publishing the final version of this document in January, 2000. In 1999, the Department will once again consult with its partners in developing New Jersey's goals and objectives for the first decade in the 21st Century. In the course of this process it is essential to see how well we have done in reaching our year 2000 objectives, assessing our methods of setting targets, as well as the ways in which we measure our progress and identify accountability for achieving our objectives.

The outlook for the year 2000 is mixed. We are very pleased to report that New Jersey is on track for reaching its year 2000 objectives in a number of areas, most notably:

- reducing the infant mortality rate for the population as a whole;
- reducing birth rates among females in their teens, both for the population as a whole and for minority teens;
- reducing breast cancer death rates for all women;
- reducing lung cancer death rates for the total population as well as for minority males;

- reducing colorectal cancer death rates;
- reducing death rates from coronary heart disease for the total population as well as for minorities;
- reducing the incidence of AIDS among children and males, and the prevalence of HIV infection among mothers of newborns;
- reducing death rates from AIDS;
- reducing the motor vehicle death rate for the population as a whole and among youths 15 through 24 years of age;
- reducing deaths and injuries from falls for people aged 65 through 84 years; and
- reducing work-related deaths among construction workers.

In a number of areas clear trends are not evident, and the likelihood of achieving year 2000 objectives in these areas is still too uncertain to predict.

Finally, in several key areas it is already apparent that achieving the year 2000 target is unlikely, including:

- the percentage of New Jerseyans without health insurance or without a primary care provider;
- the percentage of babies whose mothers received prenatal care, and the percentage of babies born with low birth weight;
- the homicide death rate for minority males aged 15 through 19;
- the prevalence of smoking and other drug use among high school students; and
- the percentage of women who take advantage of Pap tests to screen for cervical cancer, and the rate of cervical cancer deaths among women over 65.

These trends are disappointments, but an inevitable risk when ambitious goals are set. They should not overshadow the genuine progress that has been achieved in other areas.

In New Jersey, as in the rest of the nation, minority populations generally experience disproportionately more health problems and higher rates of death from preventable causes. Healthy New Jersey 2000 objectives were set, when possible, to identify separate targets for minority populations which, if achieved, would narrow the gaps between minority and majority groups. In its draft Healthy People 2010, the federal government is proposing to go further and eliminate gaps or disparities in health status based on race, ethnicity, or other factors. New Jersey will also be examining this issue as we set our year 2010 targets. For example, although we may achieve our year 2000 objective for reducing black infant mortality, we have already recognized that narrowing the gap between black infants and the rest of the population is not enough. Starting in 1996, the Department convened a Blue Ribbon Panel to recommend ways to reduce black infant mortality even further, to bring us to the ultimate goal of eliminating the differences in infant mortality.

Our experience with the public health agenda for the year 2000 has convinced us of the wisdom of setting comprehensive goals and objectives, and tracking our progress in meeting them in a systematic and public fashion. This document provides a benchmark for developing goals, objectives, and strategies for the next decade.

Organization of This Update

Healthy New Jersey 2000 identified eleven priority areas. The 1996 update retained these goals, with minor modifications. This update follows the previous update and is divided into chapters focusing on each of the following priority areas:

> **Increase Access to Preventive and Primary Care**
> **Improve Infant, Child Health and Maternal Outcomes**
> **Improve Adolescent Health**
> **Prevent, Detect and Control Cancer**
> **Prevent, Detect and Control Cardiovascular and Other Vascular Diseases**
> **Prevent and Control AIDS and HIV Infection**
> **Prevent and Control Sexually Transmitted Diseases**
> **Prevent and Control Vaccine-Preventable and Other Infectious Diseases**
> **Prevent and Control Injuries**
> **Reduce Occupational and Environmental Hazards**
> **Reduce the Rates of Mortality and Morbidity Due to Addiction**

For each priority area there are specific objectives, i.e. target indicators with target levels to be achieved by the end of the year 2000. As an example, the first objective for Infant, Child Health, and Maternal Outcomes is: "Reduce the number of infant deaths per 1,000 live births to 7.0 infant deaths in the total population and 11.0 in the black population."

A few objectives appear in several different chapters. For example, an objective related to reducing smoking by adolescents also appears in the chapters on adolescent health, cancer, and addictions. Generally, however, objectives are unique to each priority area.

Each chapter contains:

- a brief introduction;

- an overview of the likelihood of achieving each chapter objective;

- a data update for each objective, showing the most complete data available since the benchmark year, with a brief interpretation of the data; and

- a discussion that focuses on major accomplishments and initiatives underway, as well as significant challenges.

For many objectives, year 2000 targets were set for the population as a whole, as well as some subpopulations, often defined by age or race. There were serious data limitations which constrained the ability of the authors of Healthy New Jersey 2000 to set separate targets for different minority groups. For those indicators which require population estimates for denominators in order to calculate rates, such as mortality and incidence rates, or percentages, it is necessary to rely on Census Bureau population estimates. In 1990-91, when Healthy New Jersey 2000 was developed, the Census Bureau provided estimates only for "whites" and "all other races." Accordingly, many of New Jersey's year 2000 objectives include specific targets

for "minority" populations, defined as all races other than white, rather than separate targets for all the racial groups with substantial representation in New Jersey, as well as targets for ethnic groups, such as Hispanics.

It should be noted that some objectives for Healthy New Jersey 2000 do contain specific targets for "blacks" and "Hispanics" rather than "minorities." Generally, these involve rates or percentages where denominators are derived from birth certificate data. Since 1989, New Jersey's birth certificate has had detailed coding for the race and ethnicity of an infant's parents, making it possible to set targets for more specific subpopulations.

The Census Bureau has subsequently developed population estimates for the following racial groups: white, black, American Indian, and Asian/Pacific Islanders, as well as for persons of Hispanic origin. The availability of these estimates should, when a subpopulation is large enough in New Jersey, make it easier to set targets for various minority groups when developing Healthy New Jersey 2010. Other challenges remain, however, in the Department's efforts to collect accurate data on race and ethnicity. The Department places great priority on enhancing its ability to better collect and report health data broken down by race and ethnicity, in order to support efforts to identify and address disparities.

At the time this update was prepared, the Department of Health had become the Department of Health and Senior Services. There is no priority area in Healthy New Jersey 2000 devoted exclusively to the health of older New Jerseyans. There are, however, many objectives throughout the other priority areas that have specific targets for people aged 65 and over. Appendix I lists such objectives. Consistent with the conviction that resulted in the consolidation of all services for seniors into one department of state government, the Department will discuss with our partners the best way to make seniors' health a separate priority focus of our agenda for 2010.

Highlights

Objectives Likely To Be Achieved

Priority Area 1

- Reduction in years of potential life lost for minorities and the total population.

Priority Area 2

- Reduction in infant deaths for the total population.

Priority Area 3

- Reduction in birth rates for all females and minorities aged 10-14.
- Reduction in birth rates for all females and minorities aged 15-19.
- Reduction in motor vehicle fatality rate for youth.
- Reduction in suicide rate for young white males.

Priority Area 4

- Reduction in the breast cancer death rate for females aged 50- 64, 65 and over, and the total population.
- Increase in the percentage of women aged 40 and over who received clinical breast exams and mammograms.
- Reduction in the lung cancer death rate for minorities and the total population.
- Reduction in the colorectal cancer death rate.
- Reduction in the cervical cancer death rate for minority females.

Priority Area 5

- Reduction in coronary heart disease death rates for minorities and the total population.
- Reduction in coronary heart disease death rates for minorities and the total population aged 45-64.
- Reduction in cerebrovascular disease death rates for minorities.

Priority Area 6

- Reduction in the incidence of AIDS among children; white non- Hispanic males, 25-44; black non-Hispanic males, 25-44; and Hispanic males, 25-44.
- Reduction in HIV death rates for persons 25-44 and the total population.
- Reduction in percentage of mothers of newborns with HIV positive readings.

Priority Area 7

- Reduction in incidence of syphilis for minorities and the total population.

Priority Area 8

- Reduction in measles incidence.
- Increase in immunization for H. Influenza b in publicly funded clinics.

Priority Area 9

- Reduction in motor vehicle death rate for youths, 15-24, and the total population.
- Increase usage of seat belts amongst adults.
- Reduction in deaths from falls for people aged 65-84.
- Reduction in suicide rates for youth aged 15-24 and white males 65 and over.
- Reduction in hospitalizations due to head/spinal cord injuries.

Priority Area 10

- Reduction in work-related death rate for construction workers.
- Increase in the number of schools with approved asbestos management plans.
- Increase in asbestos removal projects passing first inspection.

Priority Area 11

- Reduction in alcohol-related motor vehicle death rates for the total population and youth aged 15-24.
- Reduction in cirrhosis death rates for the total population and minority males.

Highlights

Objectives Unlikely To Be Achieved

Priority Area 1

- Reduction in the percentage of persons under age 65 with no health insurance.
- Reduction in the percentage of workers under 65 and their dependents without health insurance.
- Increase in the percentage of residents with a primary care provider.
- Reduction in hospitalization rate for ambulatory care sensitive conditions.
- Increase in people served by fluoridated water systems.

Priority Area 2

- Reduction in the percentage of low birth weight babies.
- Reduction in the percentage of very low birth weight babies.
- Increase in the percentage of mothers of newborns receiving early prenatal care.
- Reduction in the percentage of mothers of newborns receiving no prenatal care.
- Increase in the percentage of eligible people receiving WIC services.
- Increase in the percentage of women abstaining from tobacco during pregnancy.
- Reduction in maternal death rate.

Priority Area 3

- Increase in the percentage of adolescent females receiving family planning services.
- Reduction in smoking prevalence among high school students.
- Reduction in the percentage of high school students who have used cocaine and marijuana.
- Reduction in the homicide rate for minority males aged 15 through 19.

Priority Area 4

- Reduction in the prevalence of cigarette smoking among persons 20 and older, and high school students.
- Increase in the average daily servings of fruits and vegetables.
- Reduction in cervical cancer death rate for females aged 65 and over.
- Increase in Pap tests for minority females, females aged 65 and over, and the total population.

Priority Area 5

- Reduction in cerebrovascular disease death rate for persons aged 65 and over.
- Reduction in end stage-renal disease rates for the total population.

- Increase in proportion of adults aged 18 and over who have had their blood pressure checked.
- Increase in the proportion of adults aged 18 and over who have had their cholesterol checked.

Priority Area 7

- Reduction in incidence of congenital syphilis for the total population.

Priority Area 8

- Reduction in the annual incidence of active tuberculosis for minorities and the total population.
- Reduction in the annual incidence of Lyme disease cases.

Priority Area 9

- Reduction in motor vehicle death rate for persons 70 and older.

Priority Area 10

- Reduction in the number of workers with occupational exposure causing high blood lead levels.

Priority Area 11

- Reduction in the percentage of persons aged 18 and over who consumed five or more alcoholic drinks per occasion.
- Reduction in time between first use and treatment for alcohol and other drugs.
- Increase in the number of addicted persons treated annually for alcohol.

Highlights

Objectives for Which Achievement Is Uncertain

Priority Area 1

- Increase life expectancy at birth for minorities and the white population.
- Establishment of risk assessments in publicly funded clinics.

Priority Area 2

- Increase in the percentage of women abstaining from alcohol during pregnancy.
- Reduction in infant death rate for blacks.

Priority Area 3

- Decrease the percentage of high school students who have used alcohol.
- Reduction in alcohol-related motor vehicle fatality rate for youth aged 15 through 19.

Priority Area 4

- Reduction in the cervical cancer death rate for all females.

Priority Area 5

- Reduction in cerebrovascular disease death rates for minorities aged 45-64, persons aged 45-64, and the total population.
- Reduction in end stage-renal disease rate for blacks.
- Increase the number of persons aged 18 and over who participated in physical activity.

Priority Area 6

- Decrease the incidence of AIDS among black non-Hispanic females, aged 15-44, and Hispanic females, aged 15-44.

Priority Area 7

- Reduction in the incidence of congenital syphilis for minorities.
- Reduction in the incidence of gonorrhea for the total population.
- Reduction in the incidence of chlamydia for the total population.

Priority Area 8

- Increase in immunization levels for measles in children by age two.

- Increase in immunization for Hepatitis-B in infants of surface-antigen positive women treated in publicly funded clinics.

Priority Area 9

- Reduction in death rate from falls for people aged 85 and over.
- Reduction in homicide death rates among minority males aged 15-44, and females aged 15-44.

Priority Area 10

- Reduction in work-related hospitalizations for acute lung diseases.
- Increase the number of hazardous waste sites evaluated for potential human exposure pathways.

Priority Area 11

- Reduction in the percentage of high school students who have used alcohol.
- Reduction in drug-related death rate.
- Increase in the number of addicted persons treated annually for drugs other than alcohol.

Priority Area 1

Increase Access to Preventive and Primary Care

Introduction

Access to primary and preventive health care services is essential to improving the health status of New Jerseyans. Preventive and primary care includes immunizations, periodic examinations, screenings, and treatment services delivered in doctors' offices, clinics, hospitals, and a variety of other settings. It also includes the care received when patients first bring their problems to providers. People without access to primary care are at greater risk of death and disability since it is this care which can prevent illness from striking or stop it at an early stage when treatment is relatively simple and inexpensive.

Studies consistently show that having insurance is one of the most important prerequisites for having access to care, and Healthy New Jersey 2000 set some very ambitious targets for reducing the percentage of the population that is uninsured. Access begins, but does not end with health insurance. Providers must be available, willing, and able to provide services in ways that are appropriate to the populations they serve, and people must take advantage of the available preventive and primary health services. Therefore, objectives were also set to measure what proportion of New Jerseyans have a primary care provider, as well as improvement in indicators of health status, such as life expectancy, years of potential life lost, and hospitalizations for conditions that ordinarily are manageable in primary care settings.

New Jersey has made considerable progress in preventing premature mortality. However, it is unlikely we will meet other year 2000 access to care objectives. Major initiatives currently underway to provide health insurance to uninsured children in New Jersey should significantly improve access for New Jerseyans under the age of 19.

Outlook For Reaching Specific Objectives

	Achieve target:	Likely	Unlikely	Uncertain
1A.	Reduction in the percentage of persons under age 65 with no health insurance:			
	total population		✔	
	black		✔	
	Hispanic		✔	
1B.	Reduction in the percentage of workers under 65 and their dependents without insurance		✔	
1C.	Increase in the percentage of residents with a primary care provider:			
	total population		✔	
	black		✔	
1D.	Reduction in hospitalizations for ACS conditions:			

		under 65 years	✔	
		under 5 years	✔	
1E.	Reduction in years of potential life lost for:			
		total population	✔	
		minority population	✔	
1F.	Increase in life expectancy for:			
		white population		✔
		minority population		✔
1G.	Increase in people served by fluoridated water systems		✔	
1H.	Establishment of risk assessments in publicly funded clinics			✔

Data Update

1A. Reduce the non-institutionalized, civilian population under age 65 with no health insurance coverage to:

3.0 percent in the total population
3.0 percent in the black (non-Hispanic) population
3.0 percent in the Hispanic population

Achieve target:	Likely	Unlikely	Uncertain
total population		✔	
black		✔	
Hispanic		✔	

Percent With No Health Insurance

Year	Total	Black	Hispanic
1989	11.7	16.0	25.0
1992	14.8	18.9	27.9
1993	15.5	21.6	29.1
1994	14.7	16.0	27.7
1995	16.2	16.4	28.5
1996	19.1	26.8	29.6
1997	18.4	N/A*	N/A*

*Not available

In a trend that mirrors the national experience, there has been a substantial decline in the percentage of the population with health insurance coverage since the baseline year of 1989. During this period, the black population has consistently had a higher uninsured rate than the total population, and the percentage of Hispanics without health insurance has not been under 25

percent.

Data are derived from the Census Bureau's Current Population Survey, administered in March of each year. The survey is intended to measure a variety of socioeconomic variables nationally, including the percentage of the population that had no insurance during the entire previous year. Research suggests, however, that survey respondents may misunderstand the survey questions, and that the data reflect a combination of people uninsured for both short and long periods of time. Because the survey is designed to obtain national estimates, the sample size for New Jersey respondents is relatively small. This leads to large standard errors in the estimates, and explains at least some of the variation in the numbers from year to year. Nevertheless, there is an overall trend of increasing numbers of New Jerseyans without health insurance coverage, and the year 2000 objective is unlikely to be met.

1B. Reduce the percentage of full-time employed persons under 65 years of age and their spouses and dependents who are uninsured to:

2.0 percent

<u>Achieve target:</u>　　<u>Likely</u>　　<u>Unlikely</u>　　<u>Uncertain</u>

✔

Percent Uninsured

Year	Percent
1988	7.7
1992	9.5
1993	11.9
1994	12.3
1995	13.7
1996	15.8

Once again, in a trend that is consistent with the national experience, the percentage of employed persons under the age of 65 and their spouses and dependents who are uninsured more than doubled from 7.7 percent in 1988 to 15.8 percent in 1996.

1C. Increase the percentage of residents who have a source of primary care to:

98 percent for the total population
98 percent for the black population

<u>Achieve target:</u>　　<u>Likely</u>　　<u>Unlikely</u>　　<u>Uncertain</u>

total population　　　　　　　　✔

black　　　　　　　　　　　　　✔

Percent With Primary Care Source

Year	Total	Black
1986	84.4	84.2

1995	87.5	90.1
1996	83.2	79.3

The percentage of New Jerseyans with access to primary care is hovering around 85 percent for both the total population and the black population, according to baseline data from a survey sponsored by the Robert Wood Johnson Foundation and more recent data available from the Department's Behavioral Risk Factor Surveillance System, an annual survey of adults about behaviors and activities which affect their health status. Since the sample sizes for the survey are relatively small, there is a large standard error which may account for the fluctuations. However, without an obvious upward trend, it appears unlikely that the year 2000 targets of 98 percent will be met.

1D. Reduce hospitalizations of state residents for Ambulatory Care Sensitive (ACS) conditions per 1,000 age-specific population to:

12.0 for residents under 65 years
27.0 for residents under 5 years

Achieve target:	Likely	Unlikely	Uncertain
under 65 years		✔	
under 5 years		✔	

Rate Of ACS Hospitalizations

Year	Under 65	Under 5
1993	18.6	35.0
1994	18.4	32.1
1995	18.2	35.0
1996	17.3	31.2

Ambulatory Care Sensitive (ACS) conditions are those for which timely and effective outpatient care could have reduced the risk of hospitalization. In some cases, this care could prevent the onset of an illness or condition; in others, it could help control an acute episode or manage a chronic condition. Childhood asthma is an example of an ACS condition that should be amenable to management outside the hospital. Hospitalization rates for ACS conditions provide an indicator of how well New Jerseyans are accessing primary care. Differential targets are set for young children and adults, because a higher rate of hospitalizations for ACS conditions is expected for young children in the ordinary course of events.

The hospitalization rate for ACS conditions among the population under 65 has been slowly decreasing, while that for young children has fluctuated. In both cases, however, it is unlikely that the year 2000 targets will be achieved.

1E. Reduce the years of potential life lost (YPLL) per 100,000 population under 65 years of age to:

5,200.0 for the total population

8,900.0 for the minority population

Achieve target:	Likely	Unlikely	Uncertain
total population	✔		
minority population	✔		

YPLL Before Age 65

Year	Total	Minority
1985	5,449.7	8,934.1
1986	5,534.8	9,340.8
1987	5,714.4	10,043.2
1988	5,838.0	10,484.4
1989	5,611.1	10,098.6
1990	5,437.1	9,887.1
1991	5,477.1	9,828.1
1992	5,483.5	9,659.6
1993	5,505.9	9,592.9
1994	5,432.0	9,112.8
1995	5,323.4	8,198.5

The YPLL rate is used to reflect trends in premature mortality. Major contributors to YPLL in New Jersey are cancer, HIV infection, injuries, and heart disease. The YPLL rate represents the summation of all the years of life not lived to a defined upper limit (in this case, age 65) by those who died during the year at ages less than the specified limit.

Since peaking in 1988, the rate of YPLL for both the total population and the minority population has been declining. For the total population, it appears that the target YPLL rate of 5,200 will be met by the year 2000. The minority population met and surpassed its objective of 8,900 years in 1995. While the outlook is good for both groups and the gap is narrowing, the minority YPLL rate remains one and a half times the rate for the population as a whole.

1F. Increase life expectancy at birth, in years to:

77.9 for the white population
75.0 for the minority population

Achieve target:	Likely	Unlikely	Uncertain
white population			✔
minority population			✔

Life Expectancy At Birth, In Years

Year	White	Minority
1987-1989	75.8	70.7
1988-1990	76.3	71.0
1989-1991	76.6	71.1

1990-1992	76.9	71.3
1991-1993	77.0	71.4
1992-1994	77.1	71.8
1993-1995	77.1	71.8

Based on moving three year averages, life expectancy between 1993 and 1995 has improved slightly over that in the baseline years of 1987 through 1989. This is true for both the white and minority populations, with the white population having only a minor improvement (0.2 years) over the minority population. However, whites born in 1993 through 1995 are expected to live 5.3 years longer, on average, than minorities. At the current pace of these trends, it is not certain that either population will meet its year 2000 objective.

1G. Increase the proportion of people served by community water systems providing optimal levels of fluoride to:

62.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Population with Fluoride

Year	Percentage
1993	14.7
1998	19.5

Based on the available data, less than 20 percent of New Jerseyans were served by optimally fluoridated water systems. The year 2000 objective is unlikely to be met.

1H. Establish health risk assessments for sexually transmitted diseases (STDs), HIV infection, and vaccine-preventable and other infectious diseases, specifically hepatitis B and tuberculosis, in Department of Health and Senior Services funded health clinics by the year 2000.

There are no data for this objective.

Discussion

Most Americans have either public or private health insurance, but the percentage of those without insurance has steadily risen over the past decade, reaching 43.4 million or 18.2 percent of Americans. Since almost all Americans over age 65 are covered by the federal government's Medicare program, lack of insurance is primarily a problem for those under age 65; especially the working poor and their families under age 65 were uninsured in 1997. For many years it has been the case that the majority of uninsured Americans - 79 percent in 1995 - live in families where there is at least one full-time worker. Because employers offer, and employees accept, health insurance coverage on a voluntary basis, it is not surprising that employment-based health insurance coverage has never been universal. Traditionally, small employers, particularly those with fewer than 25 employees, have been less likely to offer health insurance than their larger counterparts. Typically, they cite the cost of such insurance as a major barrier. But in the past decade, other factors have come into play, so that the percentage of Americans with employer-based coverage

has actually declined, from 69.2 percent in 1987, to 64 percent in 1996. This trend has persisted even during a period of economic growth. Researchers have suggested that the primary reason for this decline is not that employers are dropping coverage, but that fewer employees are taking up coverage, due to the rapidly increasing cost. From the mid-80s until the mid-90s health care costs, including insurance premiums, rose very rapidly, at rates far exceeding the general growth in consumer prices in the nation. Employers responded in a variety of ways, including shifting in large numbers to managed care insurance plans. But their primary response has been to require employees to pay more of the overall cost of insurance premiums. In 1996, workers had to contribute an average of $1,615 per year, or about 30 percent of the total premium for family coverage. Not surprisingly, some workers, particularly those with lower wages, have chosen not to participate in employer-sponsored health plans. Between 1987 and 1996, the proportion of workers participating in employer plans to which they have access fell from 93 percent to 89 percent.[1]

New Jersey has not been immune to this national trend and has also experienced substantial growth in the number of uninsured over the past decade. In developing strategies to address this problem, New Jersey has decided to focus on children and has set itself the goal of ensuring that all children in the state have access to comprehensive and affordable health insurance. The first step toward achieving this goal was the launching in 1997 of NJ Kidcare, a program to provide subsidized coverage to uninsured children living in families with incomes at or below twice the poverty level ($32,900 for a family of four). Families pay at most a $15/month premium to cover their eligible children under NJ Kidcare. The state intends to expand this program on a sliding fee schedule basis, with greater involvement of employers, until affordable health insurance is available to nearly every child in the state.

New Jersey has also reaffirmed its historic commitment to maintaining access to health care for the uninsured. Under state law, every hospital in the state must provide needed care to all patients who present for treatment, regardless of their ability to pay. In 1997, legislation was enacted which increased the amount of funding available to hospitals in the state to reimburse them for providing care to the indigent. At the same time, stable funding sources, including revenues from a substantially increased cigarette tax, were identified to support charity care on an ongoing basis. A 1997 study of data from the Robert Wood Johnson-sponsored Community Tracking Study Household Survey revealed that uninsured people in the Newark metropolitan area have significantly fewer problems than do their counterparts in ten other urban areas in getting access to health care when they need it.[2] This suggests that New Jersey's health care safety net is working as intended. Efforts are now underway to design a major pilot program to test ways to provide more primary and preventive care through the charity care system, using managed care principles. This pilot should begin operation in 1999.

One other way in which New Jersey mirrors national trends is in the rapid shift of those who are insured, either through employers or the Medicaid program, into managed care plans. Managed care has been the subject of much controversy, but one clear benefit of managed care is its emphasis on preventive and primary care. Under traditional indemnity insurance it was not always easy to get coverage for such care, creating financial barriers to access. New Jersey monitors the performance of managed care plans, publishing an annual report card beginning in 1997 that includes specific measures of a plan's success in delivering preventive and primary care. For example, the state looks at the percentage of children up to two years of age who have received appropriate immunizations, as well as breast and cervical cancer screenings for women and eye care screenings for diabetics. Over time, health care plans are expected to improve areas of

weakness identified in the report cards.

Although it is either uncertain or unlikely that New Jersey will reach its ambitious year 2000 access targets in the areas of having a regular source of primary care, hospitalizations for ACS conditions, and improvement in life expectancy, it is encouraging that there has been some improvement in these areas. The continuing disparities between the population at large and minority populations remain a source of great concern, however. In many of the other priority areas of Healthy New Jersey 2000, reducing the disparities that result in these overall differences in health status is a major focus of the Department's efforts.

Increasing the percentage of people served by optimally fluoridated community water systems was established as an objective, because this was seen as a cost-effective means to deliver preventive dental health care to many New Jerseyans. Unfortunately, there has been no progress on this front. New Jersey's strong tradition of home rule, coupled with continuing controversies about the benefits and perceived potentially adverse effects of fluoride, has resulted in New Jersey ranking among the lowest states in water fluoridation. The Department is pursuing alternative strategies to promote oral health, including education and promotion of fluoride mouth rinses and fluoride supplements in areas where the water supply is not fluoridated.

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[1]"How Well does the Employment-Based Health Insurance System Work for Low-Income Families?", Ellen O'Brien and Judith Feder, issue paper for the Kaiser Commission on Medicaid and the Uninsured, September, 1998

[2]"Ability to Obtain Medical Care for the Uninsured - How Much Does it Vary Across Communities?" Cunningham, Peter J. And Kemper, Peter. Journal of the American Medical Association, September 9, 1998, Vol 280, No. 10, pp. 921-927.

Objective 1A. Reduce the non-institutionalized, civilian population under age 65 with no health insurance coverage to:

3.0 percent in the total population
3.0 percent in the black (non-Hispanic) population
3.0 percent in the Hispanic population

**1A. POPULATION UNDER 65 YEARS OF AGE WITH NO HEALTH INSURANCE COVERAGE
TOTAL, BLACK, AND HISPANIC POPULATIONS
NEW JERSEY, 1992-2000 AND YEAR 2000 OBJECTIVE**

SOURCE: UNITED STATES CENSUS BUREAU, CURRENT POPULATION SURVEY
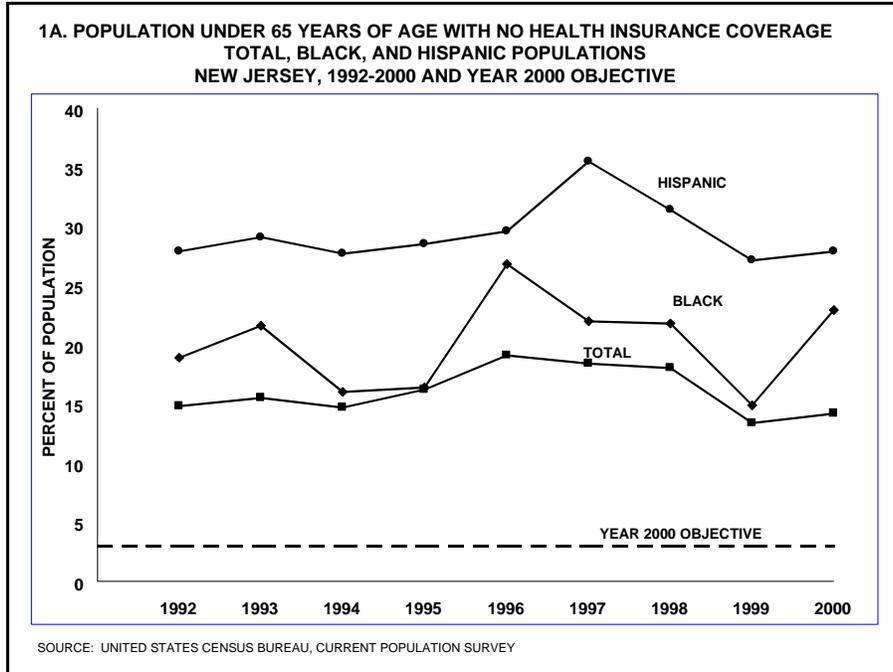
Objective 1B. Reduce the percentage of full-time employed persons under 65 years of age and their spouses and dependents who are uninsured to: 2.0 percent

**1B. POPULATION WITHOUT HEALTH INSURANCE COVERAGE WHO ARE UNDER 65 YEARS OF AGE
AND EMPLOYED OR A SPOUSE OR DEPENDENT OF AN EMPLOYED PERSON
NEW JERSEY, 1992-2000 AND YEAR 2000 OBJECTIVE**

SOURCE: UNITED STATES CENSUS BUREAU, CURRENT POPULATION SURVEY

20
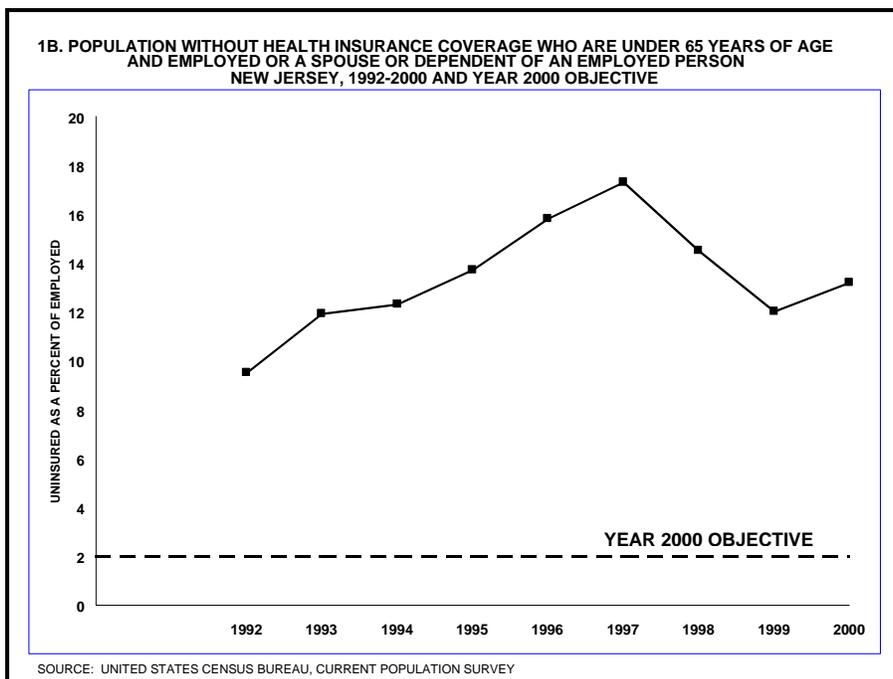
Objective 1C. Increase the percentage of adult residents who have a source of primary care to:

98 percent for the total population
98 percent for the black population

1C. PERSONS WHO HAVE ACCESS TO PRIMARY CARE
NEW JERSEY, 1993, 1995, 1996, AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
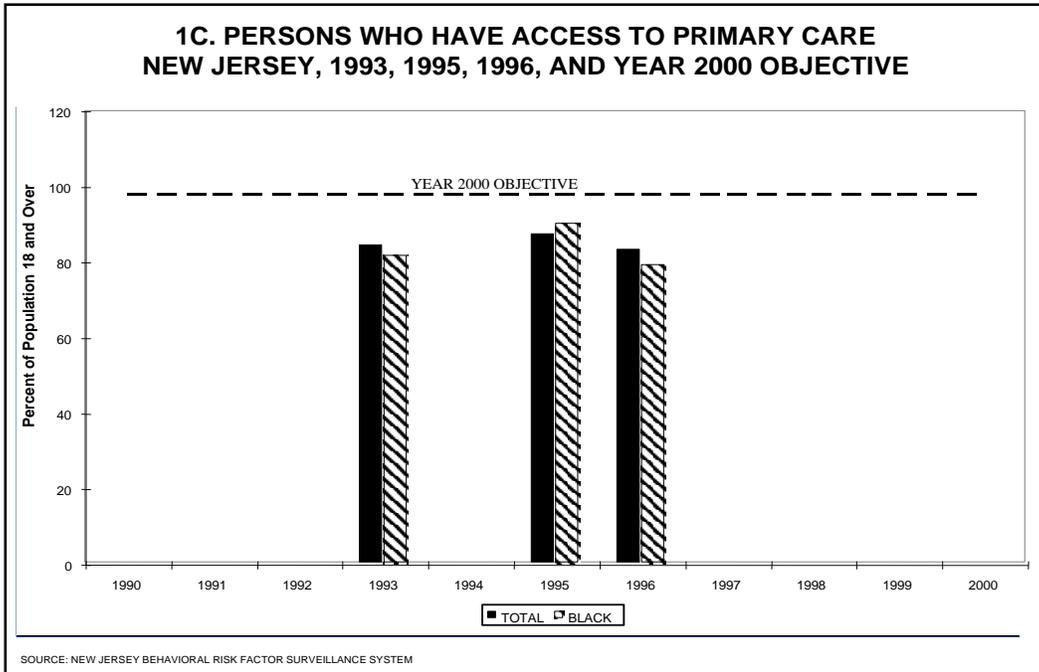
Objective 1D. Reduce the hospitalizations of state residents for Ambulatory Care Sensitive (ACS) conditions per 1,000 age-specific population to:

12.0 for residents under 65 years
27.0 for residents under 5 years

1D. RESIDENT HOSPITALIZATION RATE FOR
AMBULATORY CARE SENSITIVE (ACS) CONDITIONS
NEW JERSEY, 1994-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, HEALTH CARE MARKET ANALYSIS SYSTEM
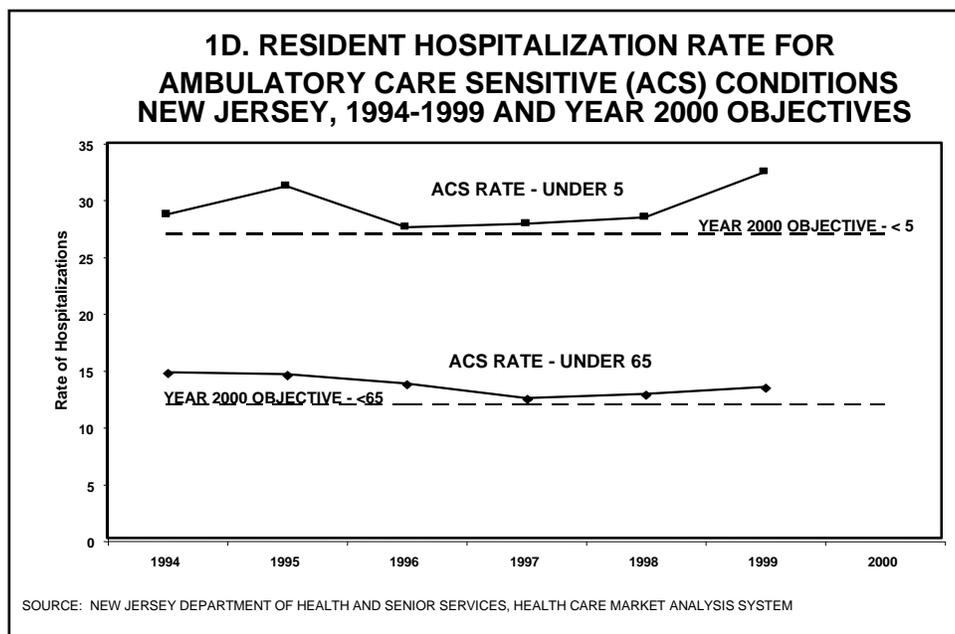
Objective 1E. Reduce the Years of Potential Life Lost (YPLL) per 100,000 Population Under 65 Years of Age to:

5,200.00 for the total population
8,900.00 for the minority population

1E. YEARS OF POTENTIAL LIFE LOST (YPLL) BEFORE AGE 65 BY RACE NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
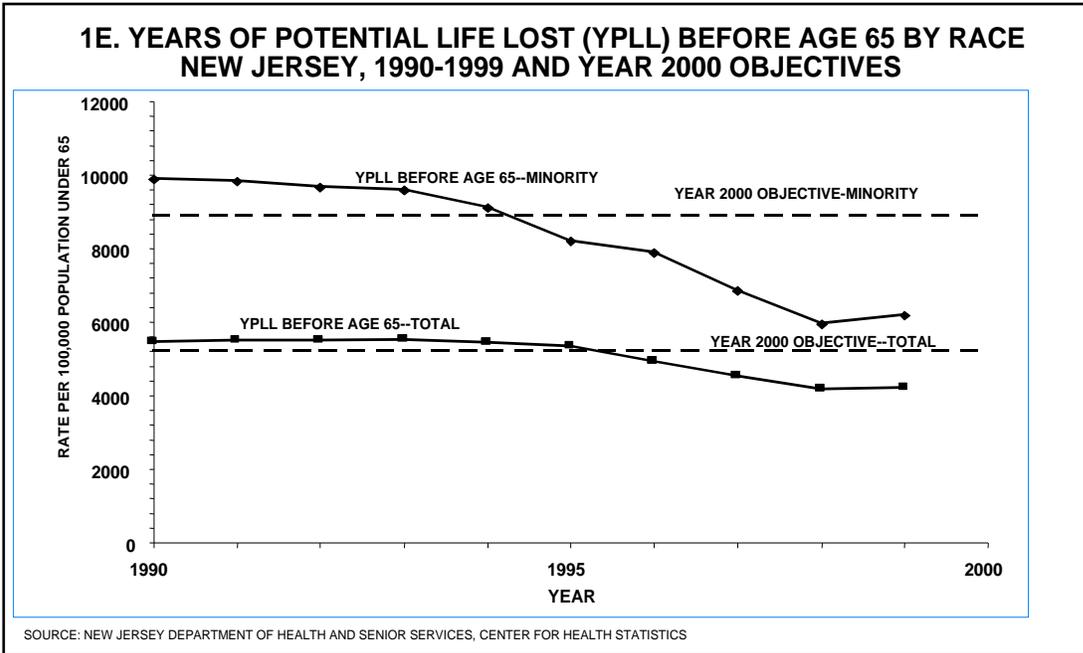
Objective 1F. Increase Life Expectancy at Birth, in Years, to:
77.9 for the white population
75.0 for the minority population

1Fa. LIFE EXPECTANCY AT BIRTH, IN YEARS, FOR THE WHITE POPULATION
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

LIFE EXPECTANCY IN YEARS

1990   1995   2000
YEAR
SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

1Fb. LIFE EXPECTANCY AT BIRTH, IN YEARS, FOR THE MINORITY POPULATION
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

LIFE EXPECTANCY IN YEARS

1990   1995   2000
YEAR
SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

Objective 1G. Increase the Proportion of People Served by Community Water Systems Providing Optimal Levels of Fluoride to:

62.0 percent

1G. PERCENTAGE OF PEOPLE SERVED BY COMMUNITY WATER SYSTEMS PROVIDING OPTIMAL LEVELS OF FLUORIDE NEW JERSEY, 1993, 1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

PERCENTAGE OF PEOPLE SERVED

70
60
50
40
30
20
10
0

1993   YEAR   1998

SOURCE: NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
IN 1993, THE ESTIMATE EXCLUDED WATER SYSTEMS SERVING FEWER THAN 6,000 PEOPLE

Priority Area 2

Improve Infant, Child Health And Maternal Outcomes

Introduction

Infant and maternal mortality are key indicators of overall health in a society, since these deaths are largely preventable. The strongest predictor of infant survival and subsequent quality of life is infant birth weight, and the most important risk factors associated with low birth weights are the lack of adequate prenatal care and late access to care. Maternal deaths defined as the death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management are also largely due to lack of early and adequate prenatal care. Improving these outcomes requires a sound primary health care infrastructure that encourages pregnant women to obtain early prenatal care. Removing financial barriers to care and including culturally competent providers are key components of efforts to promote early prenatal care. It is also crucial to encourage pregnant women to abstain from alcohol and tobacco use during pregnancy. Year 2000 objectives were selected to measure progress not only in birth outcomes, including mortality of both mother and child as well as birth weight, but also in access to prenatal care, and use of alcohol and tobacco during pregnancy.

The number of infant deaths has declined over the past two decades in both the total population and among black infants, but increased again in 1996. It is not clear whether this is just a one-year anomaly in an overall downward trend, as in 1988, or a reversal in the trend. In any event, even if the trend in infant mortality continues downward in future years, significant disparities between white and black infants persist. In the area of maternal deaths it is unlikely that the targets will be achieved, and the rate of maternal death for black women continues to be more than double the rate for the population as a whole.

Outlook For Reaching Specific Objectives

	Achieve target:	Likely	Unlikely	Uncertain
2A.	Reduction in infant deaths for:			
	the total population	✔		
	blacks			✔
2B.	Reduction in low birth weight babies for:			
	the total population		✔	
	blacks		✔	
2C.	Reduction in very low birth weight babies for:			
	total population		✔	
	blacks		✔	
2D.	Increase in mothers receiving early prenatal care for:			
	total births		✔	
	black births		✔	

	Hispanic births	✔	

2E. Reduction in mothers receiving no prenatal care for:

	total births	✔	
	black births	✔	

2F. Increase in use of WIC services ✔

2G. Increase in women abstaining from alcohol and tobacco during pregnancy:

	tobacco	✔	
	alcohol		✔

2H. Reduction in maternal deaths for:

	total women	✔	
	black women	✔	

Data Update

2A. Reduce the number of infant deaths per 1,000 live births to:

7.0 for the total population
11.0 for the black population

Achieve target:	Likely	Unlikely	Uncertain
total population	✔		
blacks			✔

Infant Mortality Rates

Year	Total	Black
1985	10.6	19.3
1986	9.7	19.2
1987	9.3	18.7
1988	9.9	19.6
1989	9.3	19.4
1990	8.8	18.1
1991	8.9	18.6
1992	8.4	18.6
1993	8.4	17.7
1994	7.7	16.6
1995	6.7	13.6
1996	6.9	14.9

The number of infant deaths has declined over the past two decades in both the total population and among black infants. However, the most recent data, from 1996, reflects an upturn. The mortality rate for the total population of infants went below the year 2000 objective in 1995 for the

first time, and is expected to remain below the target level. For black infants there has been a sharp decline in the mortality rate since 1985, but it is not certain the year 2000 objective will be achieved.

2B. Reduce the percentage of infants with birth weight less than 2,500 grams to:

5.0% of total births
9.0% of black births

Achieve target:	Likely	Unlikely	Uncertain
total population		✔	
blacks		✔	

Percent Of Births Less Than 2,500 Grams

Year	Total	Black
1985	6.7	12.4
1986	6.7	12.9
1987	6.8	13.2
1988	6.8	13.7
1989	7.1	14.0
1990	6.9	13.2
1991	7.3	13.9
1992	7.1	13.7
1993	7.5	13.8
1994	7.4	13.6
1995	7.4	13.1
1996	7.5	13.1

In spite of the overall decline in infant mortality, the percentage of newborns with low birth weight (under 2,500 grams, or 5 lbs. 8 ozs.) has continued to rise since 1988, suggesting that lack of adequate prenatal care continues to be a problem. There is an apparent contradiction between decreasing infant mortality and increasing rates of low birth weight babies, since infant mortality was customarily correlated with low birth weight. Technological advancements in hospital neonatal intensive care units (NICUs), which increase the ability of these units to sustain low birth weight infants, along with the regionalization of perinatal services have contributed to the significantly reduced mortality of high risk infants. Despite this technological progress, it remains preferable to focus on preventing low birth weight. The trends to date suggest that the year 2000 objectives will not be achieved.

2C. Reduce the percentage of infants with birth weight less than 1,500 grams to:

1.2% of total births
2.5% of black births

Achieve target:	Likely	Unlikely	Uncertain
total population		✔	

blacks ✔

Percent Of Births Less Than 1,500 Grams

Year	Total	Black
1985	1.3	2.7
1986	1.3	2.6
1987	1.3	2.9
1988	1.4	3.2
1989	1.4	3.0
1990	1.4	3.0
1991	1.5	3.2
1992	1.4	3.2
1993	1.5	3.3
1994	1.5	3.4
1995	1.5	3.3
1996	1.5	3.3

The percentage of very low birth weight infants (under 1,500 grams or 3 lbs. 5 ozs.) has also increased in both the total and black populations over the past decade. Their survival is again largely a tribute to advances in NICU technology. However, the primary objective continues to be prevention of low birth weight through adequate prenatal care, and the year 2000 targets in this area are unlikely to be achieved.

2D. Increase the percentage of live births whose mothers received prenatal care in the first trimester:

90.0% of total births
90.0% of black births*
90.0% of Hispanic births**

Achieve target:	Likely	Unlikely	Uncertain
total births		✔	
black births		✔	
Hispanic births		✔	

Percent With First Trimester Prenatal Care

Year	Total	Black*	Hispanic**
1985	78.5	66.9	N/A
1986	77.8	65.5	N/A
1987	76.3	60.7	N/A
1988	72.9	57.0	N/A
1989	75.3	58.6	67.2
1990	74.6	58.4	66.4
1991	73.4	57.7	65.2
1992	72.9	56.8	64.4

Year			
1993	73.7	57.1	64.1
1994	73.0	58.4	65.1
1995	74.6	61.2	66.7
1996	75.0	60.9	68.6

In 1996, 75.0 percent of all live births were to women who began prenatal care in the first trimester of pregnancy, a lower percent than in 1985. Black (60.9 percent) and Hispanic (68.6 percent) mothers were even less likely to obtain early prenatal care. There have been fluctuations in these percentages from year to year, but the overall trend does not suggest growth in the percentage of women getting early prenatal care, and the year 2000 objective is unlikely to be met. However, caution should be exercised in drawing conclusions from data, since a relatively large percentage of birth records include no information on the receipt of prenatal care. A revision in the birth certificate in 1989 may have led to more accurate reporting on prenatal care received.

_____
*Black births include those to both Hispanic and non-Hispanic women.
**Hispanic births include those to women of all races including blacks.

2E. Decrease the proportion of live births whose mothers received no prenatal care to:*

1.0% of total blacks
3.0% of black births

Achieve target:	Likely	Unlikely	Uncertain
total births		✔	
black births		✔	

Percent Of Births Whose Mothers Had No Prenatal Care

Year	Total	Black
1985	1.2	2.0
1986	1.3	2.8
1987	1.0	2.3
1988	1.1	3.2
1989	1.5	5.2
1990	1.2	4.0
1991	1.2	4.2
1992	1.3	4.6
1993	1.3	4.6
1994	1.3	4.6
1995	1.1	4.2
1996	1.3	4.9

Receiving no prenatal care has even more serious consequences than starting care late in pregnancy, and is more likely to be associated with low birth weight, low Apgar scores (a rating assigned to all newborns reflecting their basic health status), and other negative outcomes. It is difficult to interpret the trend since the baseline year of 1985, because a revision in the birth certificate in 1989 may have resulted in more accurate reporting of prenatal care received. The most recent data available suggest that the year 2000 target reduction in the proportion of total live

births and black births whose mothers received no prenatal care is not likely to be met.
_____

*Unlike Objective 2D, no separate Hispanic objective was set, because the percentage of Hispanic mothers who do not receive any prenatal care has been 1.1 to 1.2 percent since the data became available in 1989. Since this is the same or better than the rate for the entire population, no separate Hispanic target was set.

2F. Increase the percentage of the eligible population served by the Women, Infants and Children Program (WIC) to:

100.0 percent

Achieve target:	Likely	Unlikely	Uncertain
	✔		

Eligible Population Served By WIC

Fiscal Year	Percent Enrolled
1991	49.1
1992	54.3
1993	57.4
1994	59.9
1995	62.1
1996	61.5
1997	62.0
1998	62.0

The Women, Infants, and Children (WIC) program has made substantial progress over the past decade in increasing the percentage of eligible women and children enrolled in the program to 62 percent. Despite this progress, the year 2000 target of enrolling 100 percent of eligible women is unlikely to be met, and questions have been raised about the reasonableness of this target.

2G. Increase the percentage of women who abstain from alcohol and tobacco during pregnancy to:

90.0% abstinence from tobacco
95.0% abstinence from alcohol

Achieve target:	Likely	Unlikely	Uncertain
tobacco abstinence		✔	
alcohol abstinence			✔

Abstinence During Pregnancy

Year	Abstinence From Tobacco	Abstinence From Alcohol
1989	47.5	81.9
1990	80.3	89.3
1991	82.0	90.5
1992	82.8	90.3

1993	85.2	92.3
1994	85.9	92.7
1995	85.8	92.7

The percentages of women who abstained from tobacco and alcohol, respectively, during pregnancy appear to have increased since 1989, when this information was first required to be reported on the birth certificate. At least part of the improvement may have been a result of increased familiarity with the reporting format on the part of those preparing birth certificates. However, the continued improvement may well reflect actual trends. Although the improvement in these measures is encouraging, in the case of tobacco it is unlikely the year 2000 target will be achieved. Reaching the target for alcohol abstinence is uncertain.

2H. Decrease the number of maternal deaths per 100,000 births to:

5.0 for all women
5.0 for black women

Achieve target:	Likely	Unlikely	Uncertain
total women		✔	
black women		✔	

Maternal Mortality Rates

Year	**Total**	**Black**
1994	18.7	44.1
1995	13.9	43.3
1996	13.1	34.7

A maternal death is defined by the World Health Organization as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes." In New Jersey the Medical Society of New Jersey and the Department conduct an annual review of data to develop statistics on the maternal deaths among residents.

It should be noted that the annual number of maternal deaths in New Jersey is very small, ranging from 15 to 22 deaths of all women and 7 to 10 deaths of black women during the three year period measured. As a result, the rates can fluctuate considerably from year to year because of random variation. Nevertheless, the maternal mortality rates for all women and for black women remain well above the target level, and the year 2000 objectives are unlikely to be met. The black maternal mortality rate, although decreasing more rapidly, remains more than twice the rate for all women.

Discussion

Prevention costs less than the alternatives, and the majority of infant mortality is preventable with early and appropriate prenatal care. Blacks and Hispanics obtain prenatal care less often than the

total population of pregnant women and/or begin prenatal care at a later stage of pregnancy. NICU technologies for treating low birth weight infants are effective, but expensive. The average hospital charges for treating surviving infants born at very low birth weights (below 1,500 grams) were $41,000 in 1990, $59,900 in 1991, and $39,600 in 1992. Moreover, NICUs are limited in their ability to treat high-risk, low birth weight newborns, since they intervene after the problem occurs.

Most additional gains in reducing infant mortality and achieving New Jersey's 2000 objectives for infant mortality rates are likely to come from steps taken before birth to improve women's chances of delivering normal birth weight infants. To address the continuing disparity in mortality between black and white infants, the Department convened a Blue Ribbon Panel on Black Infant Mortality. The panel issued a report in September 1997 calling for increasing availability of culturally competent care as well as an outreach campaign to increase awareness among the black community of the problem of infant mortality. A Task Force is developing curriculum and training modules on cultural competency to be used by providers throughout New Jersey. In addition, in 1999 the Department will begin a one million dollar black infant mortality awareness campaign.

New Jersey's WIC program remains a central component of the strategy to improve birth outcomes, and is considered a model for successful outreach, especially to the wide variety of minorities who reside in New Jersey. WIC provides food supplementation, as well as counseling on nutrition and other health matters to low-income pregnant women and their young children. Researchers at the University of Medicine and Dentistry of New Jersey (UMDNJ) concluded in a 1997 study of birth outcomes and delivery costs for Medicaid clients that participation in WIC has positive results. Medicaid clients enrolled in WIC were more likely to get adequate prenatal care, and less likely to have low or very low birth weight babies.

The Department, in cooperation with the Medical Society of New Jersey, operates a maternal mortality review program which examines the circumstances surrounding maternal deaths. Efforts are underway to improve this program by adapting the Florida Pregnancy Associated Mortality Review (PAMR) model. The Florida PAMR model uses a broader definition of pregnancy-associated mortality, defining it as death of a woman from any cause while she is pregnant or within one year of termination of pregnancy. After identifying all cases that match this definition, case summaries of selected cases are abstracted and forwarded to a multidisciplinary team for case review. By adopting the PAMR model New Jersey intends not only to use this broader definition, but also to implement a consistent methodology for medical records abstraction and broaden the case review team to include representatives from a variety of disciplines, such as physicians, nurses, social workers, nutritionists and others. The results of reviews will be used to plan and implement quality improvement activities statewide, directed at both consumers and providers.

Objective 2A. Reduce the number of infant deaths per 1,000 live births to:
7.0 for the total population
11.0 for the black population

2A. INFANT MORTALITY RATE
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
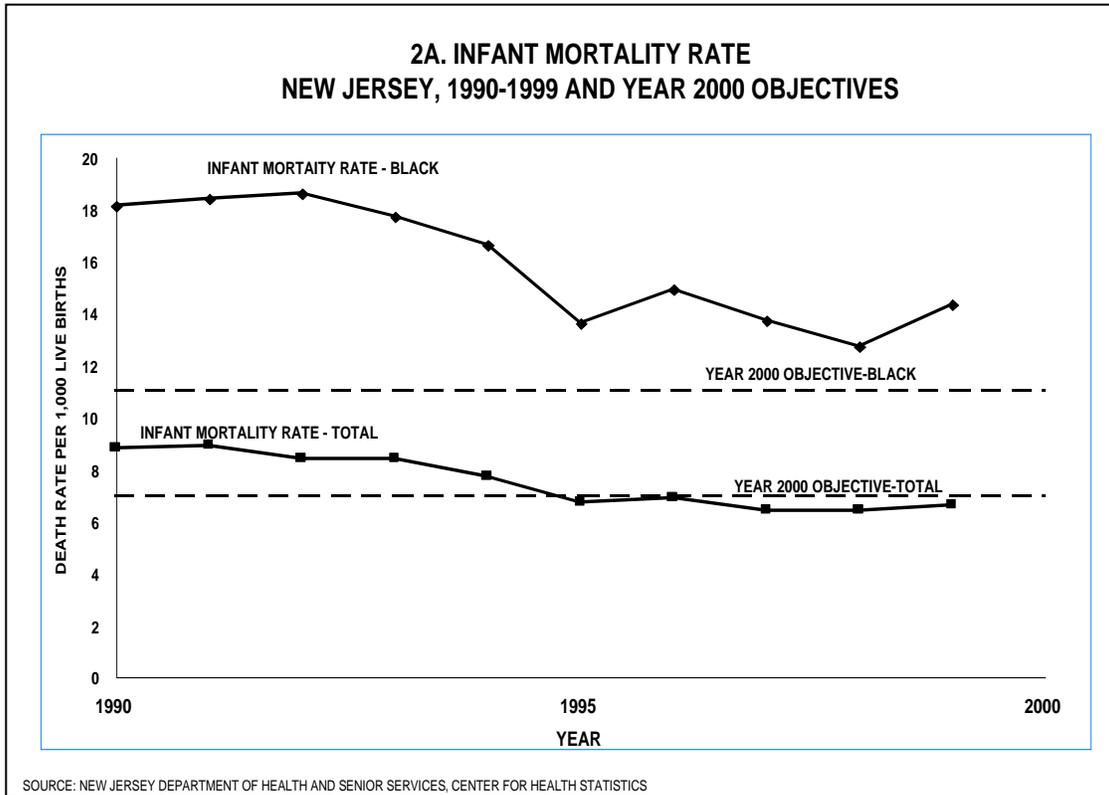
Objective 2B. Reduce the Percentage of Infants with Birth Weight Less Than 2,500 grams to:

5.0% of total births
9.0% of black births

2B. BIRTH WEIGHT LESS THAN 2,500 GRAMS BY RACE
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
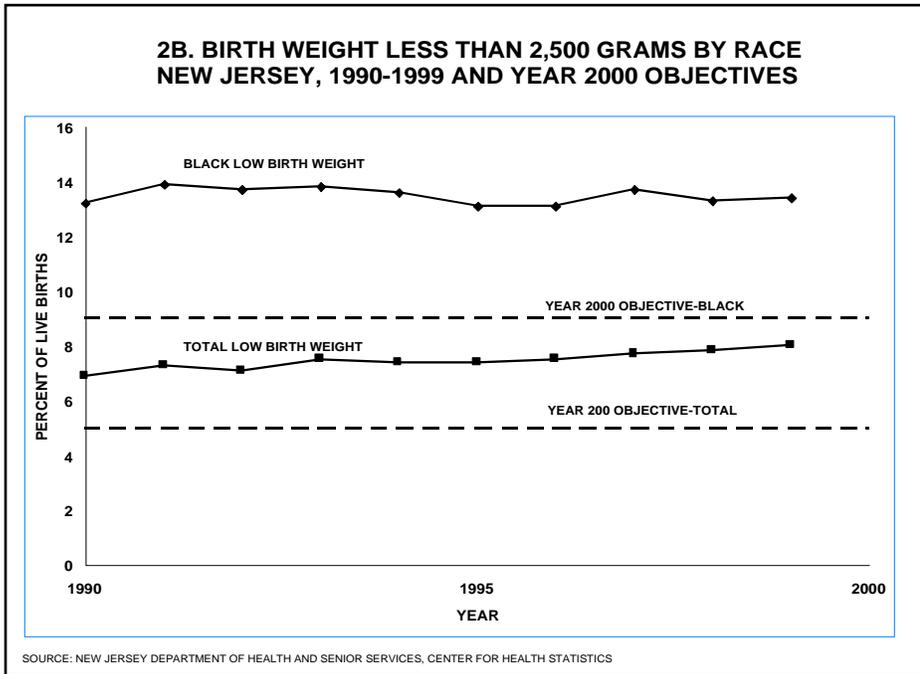
Objective 2C. Reduce the percentage of infants with birth weight less than 1,500 grams to:

1.2% of total births
2.5% of black births

2C. BIRTH WEIGHT LESS THAN 1,500 GRAMS BY RACE
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

2D. Increase the percentage of live births whose mothers received prenatal care in the first trimester:

90.0% of total births
90.0% of black births
90.0% of Hispanic births

2Di. MOTHERS WHO RECEIVED PRENATAL CARE IN THE FIRST TRIMESTER BY RACE
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SERVICES, CENTER FOR HEALTH STATISTICS

2Dii. MOTHERS WHO RECEIVED PRENATAL CARE IN THE FIRST TRIMESTER BY ETHNICITY
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

35
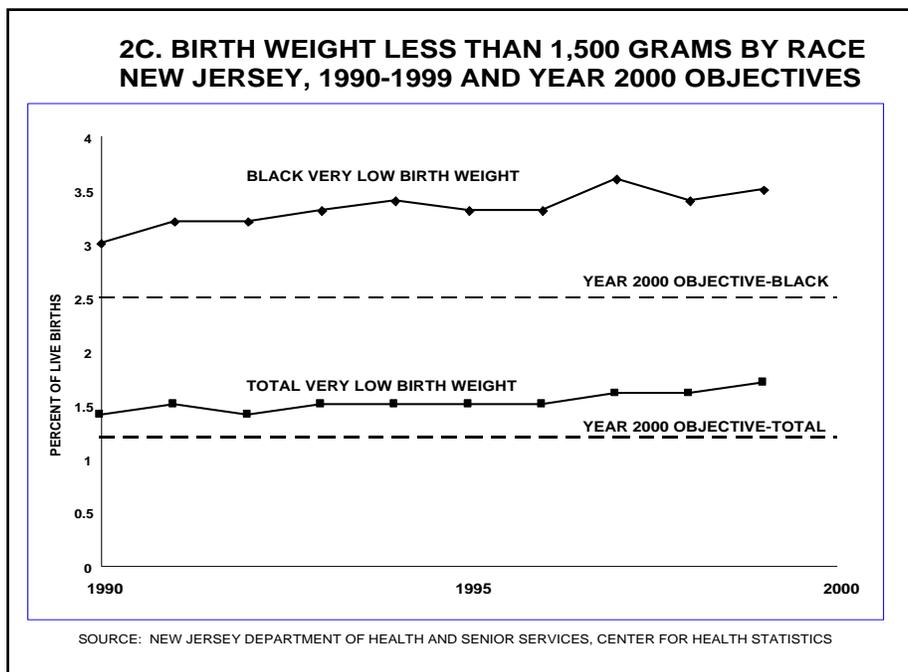
Objective 2E. Decrease the proportion of live births whose mothers received no prenatal care to:

1.0% of total births
3.0% of black births

2E. MOTHERS WHO RECEIVED NO PRENATAL CARE, BY RACE NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
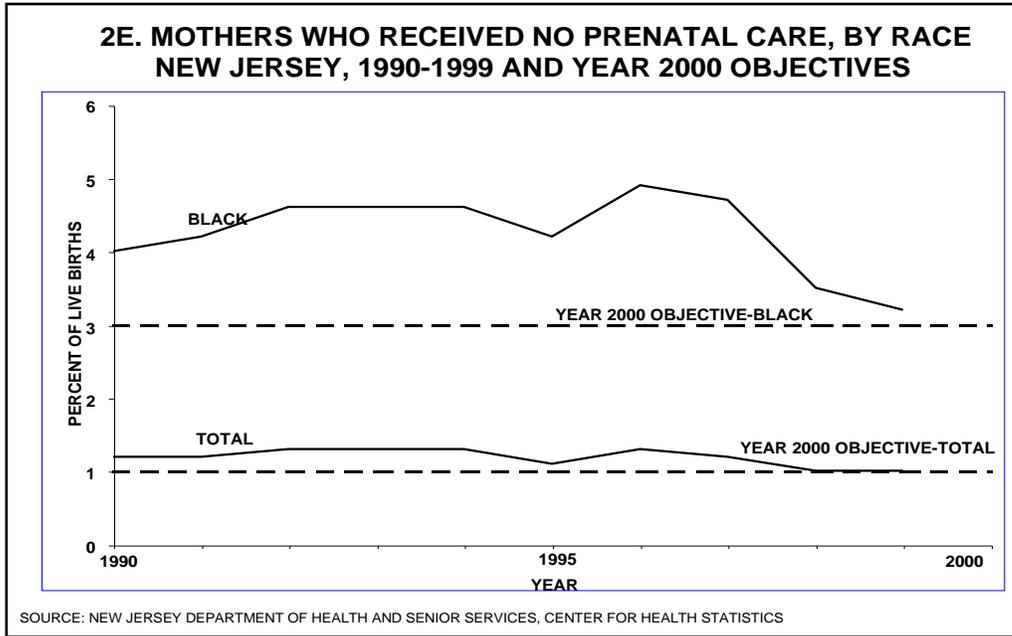
Objective 2F. Increase the percentage of the eligible population served by the Women, Infants, and Children Program to: 100.0 percent

2F. ELIGIBLE POPULATION SERVED BY THE NEW JERSEY WOMEN, INFANTS AND CHILDREN PROGRAM FY 1991-2000 AND THE YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, WOMEN, INFANTS AND CHILDREN PROGRAM
NOTE: PROGRAM DATA ARE FOR FEDERAL FISCAL YEARS

36
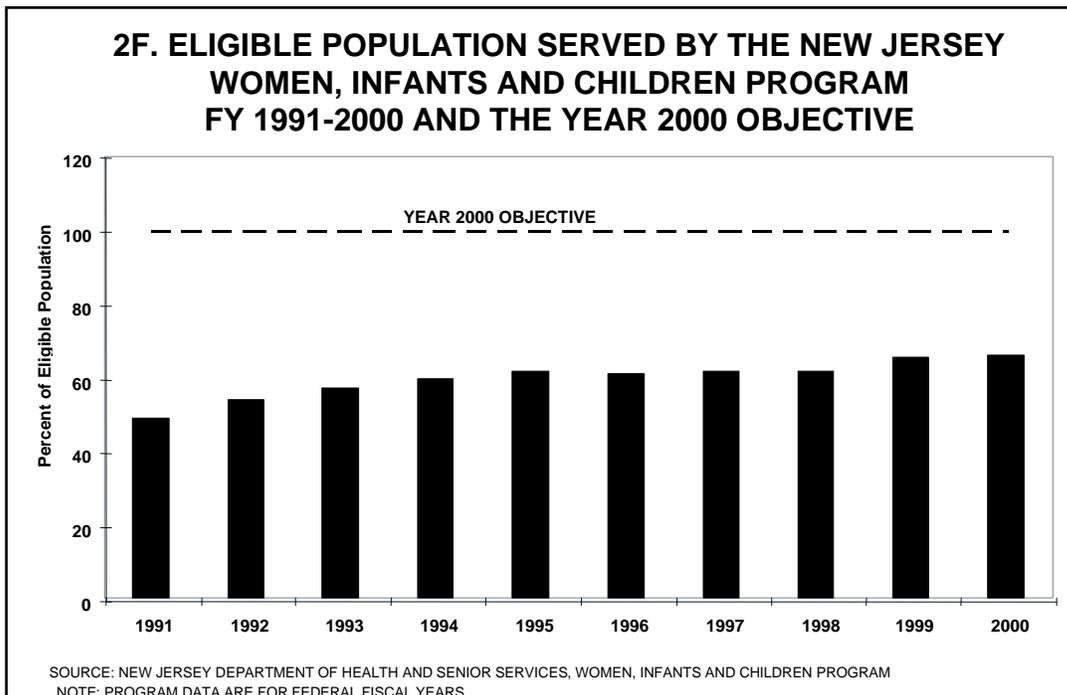
Objective 2G. Increase the percentage of women who abstain from alcohol and tobacco during pregnancy to:

90.0% abstinence from tobacco
95.0% abstinence from alcohol

2G. ABSTINENCE FROM ALCOHOL AND TOBACCO USE DURING PREGNANCY
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

YEAR 2000 OBJECTIVE--ALCOHOL   ALCOHOL

YEAR 2000 OBJECTIVE--TOBACCO

TOBACCO

PERCENT OF LIVE BIRTHS

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
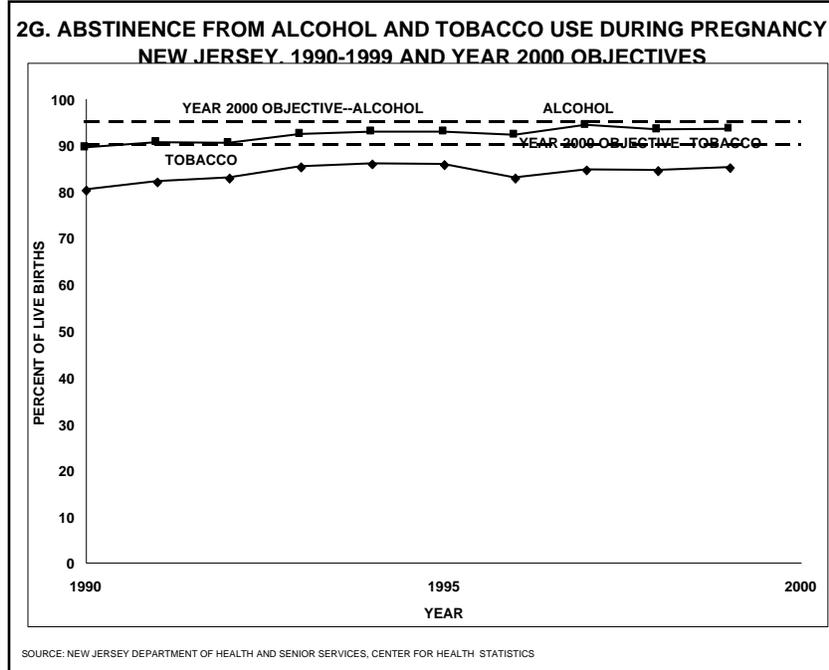
Objective 2H. Decrease the number of maternal deaths per 100,000 births to:
5.0 for all women
5.0 for black women

2H. MATERNAL DEATH RATIOS
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

Death Rate per 100,000 Live Births

YEAR 2000 OBJECTIVE
TOTAL AND BLACK

All women   Black women

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF FAMILY HEALTH SERVICES

37
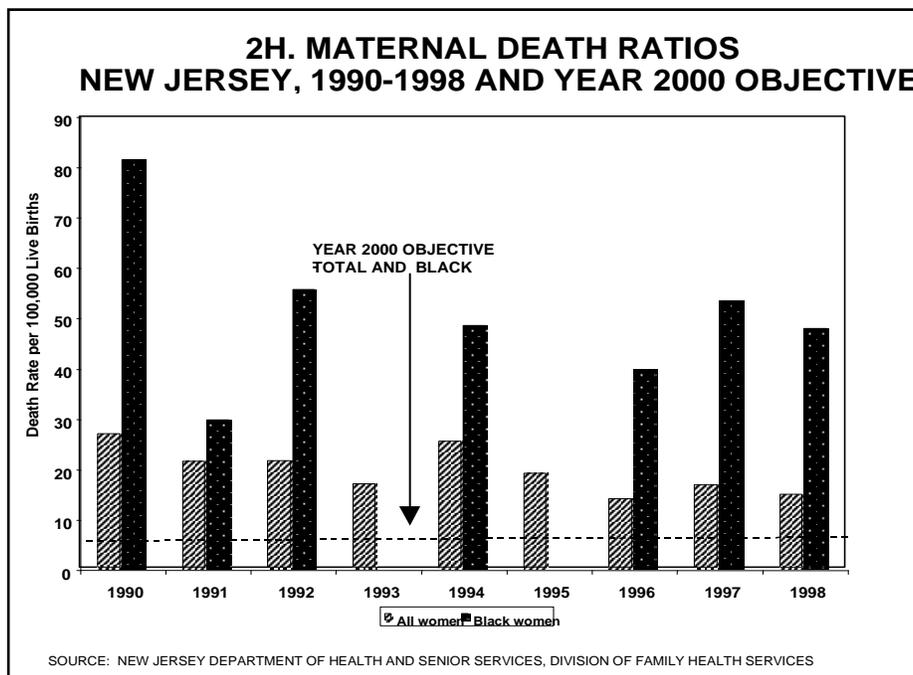
Priority Area 3

Improve the Health of Adolescents

Introduction

There are more than one million adolescents in New Jersey ages 10 through 19. As adolescents move through the transitional years from childhood to adulthood, they face innumerable pressures, decisions, and challenges from both their peers and the adults in their lives. The decisions they make regarding smoking, drug use, drinking, sexual activity, academic performance, and social behavior can have a profound impact on both their health and their futures.

Traditionally, the family is the social institution that fosters the adolescent's sense of community values. Most families still perform that function successfully, but changes in social structure, such as the entry of women into the workforce, the increase in divorces and single-parent households, and the dispersal of the extended family, have challenged families' abilities to provide the guidance and supervision that young people need. Adolescents, particularly economically disadvantaged urban minority and rural youth, can become isolated in subcultures. These groups can promote risk-taking behaviors resulting in disproportionate health problems. The leading problems influencing the health and well-being of adolescents in New Jersey are: injuries, both intentional and unintentional; substance abuse (alcohol, tobacco, marijuana, cocaine and other drugs); unintended pregnancy; and sexually transmitted diseases (including HIV).

It is difficult to reach high risk youth with effective health promotion and disease prevention messages and programs. The outlook for achieving year 2000 goals for adolescents is mixed, but New Jersey will continue to invest in the most promising strategies for persuading young people to avoid risky behaviors.

Outlook For Reaching Specific Objectives

	Achieve target:	Likely	Unlikely	Uncertain
3A.	Reduction in birth rates for:			
	total females, 10-14	✔		
	minority, 10-14	✔		
3B.	Reduction in birth rates for:			
	total females, 15-19	✔		
	minority, 15-19	✔		
3C.	Increase in females receiving family planning services		✔	
3D.	Reduction in smoking by high school students		✔	
3E.	Reduction in high school students who use:			
	alcohol			✔
	cocaine		✔	
	marijuana		✔	
3F.	Reduction in motor vehicle fatality rate for youth	✔		

3G.	Reduction in suicide rate for young white males	✔
3H.	Reduction in homicide rate for young minority males	✔
3I.	Reduction in alcohol-related motor vehicle fatality rate for youth	✔

Data Update

3A. Reduce the total number of births per 1,000 females aged 10 through 14 to:

0.7 in total females
2.0 in minority females

Achieve target:	Likely	Unlikely	Uncertain
total females, 10-14	✔		
minority females, 10-14	✔		

Birth Rates In 10-14 Year Old Females

Year	Total	Minority
1985	0.9	3.4
1986	1.0	3.0
1987	1.1	3.7
1988	1.0	3.0
1989	1.2	3.4
1990	1.1	3.0
1991	1.1	2.9
1992	1.1	3.4
1993	1.1	3.0
1994	1.1	2.9
1995	0.9	2.3
1996	0.8	2.1

Recent declines in the birth rate in the total population of females 10 through 14 years of age, and, in particular, in minority females in this age group, make it appear likely that the year 2000 objectives will be met. Although more years of data are needed to confirm the trend toward a decreased birth rate in this age group, this decline has also been identified in other states and in the nation as a whole.

3B. Reduce the total number of births per 1,000 females aged 15 through 19 to:

25.7 in total females
55.8 in minority females

Achieve target:	Likely	Unlikely	Uncertain
total females, 15-19	✔		

minority females, 15-19   ✔

Birth Rates In 15-19 Year Old Females

Year	Total	Minority
1985	35.9	84.8
1986	35.9	81.5
1987	37.3	84.9
1988	38.6	84.8
1989	41.1	89.5
1990	40.9	83.9
1991	41.6	83.5
1992	39.5	83.8
1993	38.4	77.0
1994	39.2	78.2
1995	37.8	68.8
1996	35.2	66.8

The birth rate among 15 through 19 year old females, while substantially higher than that for 10 through 14 year olds, has been generally decreasing for most of the 1990s, and in recent years has declined substantially reaching below its 1985 level for the total population for the first time in 1996. If current trends continue, the year 2000 birth rate objectives for females in this age group, including minority females, are likely to be achieved.

3C. Increase the number of adolescent females who receive family planning services as a percentage of all adolescent females in need of these services to:

50.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Adolescent Females Who Received Family Planning Services

Year	Percent*
1987	35.7
1990	28.3
1995	21.2

*Adolescent females who were provided publicly funded family planning services (the numerator in these percentages) were defined for the purpose of 1987 and 1990 computations as females under the age of 20. In 1995, the numerator was defined as females under the age of 21. Therefore, the percentages for 1987 and 1990 are not comparable to the 1995 percentage.

Even taking into account the definitional change that occurred in 1995, the percentage of adolescent females who are receiving family planning services relative to those who need them appears to be declining. The year 2000 objective will not be met if this trend continues. It should be noted that, given the decline in adolescent birth rates, this reduction in the proportion of

adolescent females receiving family planning services is counter-intuitive. It may be possible that other programs directed toward prevention of teenage pregnancy have had an effect on birth rates among adolescent females.

3D. Reduce the prevalence of cigarette smoking among high school students to:

20.0 percent

<u>Achieve target:</u>　　<u>Likely</u>　　<u>Unlikely</u>　　<u>Uncertain</u>

✔

High School Students Currently Smoking

Year	Percent*
1980	39.6
1983	41.5
1986	41.2
1989	32.9
1992	33.0
1995	39.8

The percentage of high school students who say that they are currently smoking is obtained from surveys conducted every three years by the New Jersey Department of Law and Public Safety. The percentages include students who report smoking "on occasion" as well as those who say they smoke from "less than" to "more than" half a pack of cigarettes per day. Results from these surveys have fluctuated over the recent past, but have shown no indication of a decline in the percentage of students who currently smoke. The data above do not reflect the potential impact of more recent interventions to reduce youth smoking. However, since the 1995 prevalence of smoking was about twice the target level, it seems unlikely that the objective will be met by the year 2000.

3E. Decrease the percentage of high school sophomore, juniors and seniors who have used the following substances in the past 30 days to:

37.0% for alcohol
9.0% for marijuana
1.6% for cocaine

<u>Achieve target:</u>　<u>Likely</u>　　<u>Unlikely</u>　　<u>Uncertain</u>

alcohol　　　　　　　　　　　　　　　✔

marijuana　　　　　　　✔

cocaine　　　　　　　　✔

Percent Who Used In The Past Thirty Days

Year	Alcohol	Marijuana	Cocaine
1980	70.2	36.1	6.4

1983	65.9	28.9	7.5
1986	61.9	21.3	7.4
1989	49.6	11.8	2.2
1992	43.9	13.3	2.5
1995	47.4	22.3	3.1

The percentage of high school students who reported having used alcohol in the thirty days prior to interview in the Department of Law and Public Safety's surveys declined steadily from 1980 through 1992. It appeared likely that the year 2000 objective would be met until the 1995 results indicated a reversal in the downward trend. Due to the increase in reported use of alcohol in the most recent survey, achievement of the objective is now uncertain.

A similar trend occurred in the reported use of marijuana by high school students. The percentage of students who said they had used marijuana in the past 30 days dropped dramatically from 36 percent in 1980 to 13 percent in 1992, then increased in 1995 to 22 percent. It does not now seem likely that the year 2000 target will be met.

The percentage of students who report using cocaine is small relative to the reported use of alcohol and marijuana, and this percentage also declined during the 1980s. It appears from the past two surveys, however, that the percentage of students using cocaine is increasing, and this objective also will not be met.

3F. Decrease the number of deaths per 100,000 population aged 15 through 19 caused by motor vehicles to:

15.0

Achieve target: Likely   Unlikely   Uncertain

✔

Motor Vehicle Fatality Rate
Year	Youth Aged 15 Through 19
1985	23.5
1986	21.4
1987	22.5
1988	24.7
1989	18.9
1990	21.4
1991	15.6
1992	17.9
1993	18.1
1994	13.7
1995	16.9
1996	15.3

Over the past decade the overall trend in the death rate from motor vehicle-related injuries among the 15 through 19 year age group has been a declining one, and the year 2000 objective was actually achieved in 1994. Despite substantial fluctuation in the rate from year to year, which

makes it difficult to predict the trend, it now seems more likely than not that the year 2000 target will be achieved.

3G. Decrease the number of suicides per 100,000 white males aged 15 through 19 to:

5.7

Achieve target: <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Suicide Death Rate

Year	White Males 15 Through 19
1985	14.6
1986	12.9
1987	11.0
1988	14.6
1989	10.9
1990	11.3
1991	7.8
1992	6.2
1993	10.5
1994	6.8
1995	11.8
1996	3.6

Although the suicide death rate among young white males has declined since 1985 and virtually reached the target level in 1992 and 1994, the rate tends to fluctuate from year-to-year. This is due to the relatively small yearly number of suicides in this age group. However, in order to achieve the year 2000 objective, rates for some years must be lower than the target rate. This happened in 1996, and it now seems likely the year 2000 target can be achieved.

3H. Decrease the number of homicides per 100,000 minority males aged 15 through 19 to:

30.0

Achieve target: <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Homicide Rate

Year	Minority Males 15 Through 19
1985	30.6
1986	26.5
1987	45.2
1988	58.3
1989	32.6
1990	30.9
1991	40.5

1992	47.9
1993	54.0
1994	46.2
1995	55.8
1996	60.3

The death rate from homicide among 15 through 19 year-old minority males varies widely from year to year in New Jersey, due to the relatively small numbers of deaths from this cause. There may be other factors which are related to the fluctuations in the number of homicides in this age group. The year 2000 target was essentially met in 1990, but has increased dramatically since then. If current trends continue, this objective will not be achieved by the year 2000.

3I. Decrease the number of deaths per 100,000 youth aged 15 through 19 due to alcohol-related motor vehicle fatalities to:

2.0

Achieve target: Likely   Unlikely   Uncertain

<div align="center">✔</div>

Alcohol-Related Motor Vehicle Fatalities

Year	Youth Aged 15 Through 19
1988	6.4
1989	3.8
1990	6.3
1991	3.1
1992	2.7
1993	3.5
1994	2.0
1995	2.2
1996	3.6

Deaths in motor vehicle accidents in which alcohol was involved have decreased dramatically among the youngest drivers over the past ten years. In fact, the year 2000 objective was reached in 1994. However, in the following two years, the death rate rose to its highest point since 1990. Some of this fluctuation may be due to the relatively small numbers involved. Data from subsequent years will be required to determine whether the trend has actually reversed. At this time, the prospects for reaching the target level for a sustained period of time are uncertain.

Discussion

The problems and issues that adolescents face do not occur in isolation. Efforts to improve the health status of our youth must incorporate a broader-based risk reduction approach. The same teen at risk for contracting STDs may also be at risk for HIV infection, teen pregnancy, injury, and substance use. Collaboration among government agencies, health care providers, community-based agencies, parents, and other concerned individuals can bridge the gaps between programs and service systems and address issues comprehensively.

Lack of access to appropriate and regular sources of primary health care is a major health concern for many adolescents. This is due to, or compounded by, the fact that many adolescents do not have health insurance. The new NJ KidCare program offers comprehensive, low-cost insurance coverage to all eligible uninsured children through 18 years of age living in families with incomes under 200 percent of the federal poverty level.

Teen pregnancy is a critical public health issue. There are nearly 10,000 births to 10 through 19 year-olds in New Jersey each year. Adolescent pregnancy affects the health, education, social and economic future of both the mother and her child. Pre-teen and teenaged mothers are less likely to complete high school or college and are more likely to live in poverty and require public assistance. Pre-teen and teen mothers have higher rates of low birth weight babies than other age groups. Adolescents are less likely to seek out prenatal care, yet prenatal care remains the most effective intervention in promoting the birth of a healthy child.
While rates of births to adolescents have declined substantially, with the most dramatic decreases occurring among young minority females, the numbers are still too high. The disparity in teen birth rates between minorities and the total population also remains too large. Education, abstinence promotion, peer and adult support, and access to contraception are prevention methods that have contributed to the declining rates of adolescent pregnancy in New Jersey. State-funded agencies that provide confidential family planning health and education services to adolescents and women are available in each county.

There are also Healthy Mothers, Healthy Babies initiatives which provide special outreach programs to adolescents in cities with high rates of adolescent pregnancy. In addition, new programs for adolescent parents have been created in Newark and Cumberland County, the areas with the highest adolescent pregnancy rates. Besides educating the adolescent mothers in how to be good parents and care for their children, these programs also aim to prevent repeat pregnancies in these young women.

Adolescents need to avoid not only risky behaviors that result in pregnancy, but also those that lead to sexually transmitted diseases, particularly HIV/AIDS. One technique that has proven successful in influencing adolescent behavior is using teens to bring health messages to other teens. In 1996, the Department launched a high school peer leadership program for HIV and AIDS, which trains high school students to educate their peers about behaviors that increase the risk of HIV infection. Each year 800 students from over fifty schools receive training in peer education.

There is a high correlation between alcohol and drug use and unintentional injuries and violence. Unintentional injuries, including motor vehicle fatalities, accidental poisoning and drowning, are the leading cause of death for all youth ages 10 through 21. However, among black males aged 10 through 21, homicide is the leading cause of death. Unfortunately, the most recent data indicate increases in the use of tobacco, alcohol, and illegal drugs among adolescents, reversing a long term trend of declining use of these substances.

Recognizing that it is critical to begin educating adolescents before they reach high school age on the need to avoid substance use, in 1997 the Department launched a middle school peer leadership program focusing on tobacco, alcohol, and drugs. This program builds on the same principle that has proven successful among high school students for HIV/AIDS education. As of December, 1998, 74 schools have participated in the program. Over 900 adolescents and 225 adults have been trained.

Reducing tobacco use by adolescents has been a major focus of recent Department efforts. In addition to the middle school program, New Jersey significantly increased its cigarette excise tax, from $0.40 to $0.80 per pack in 1998. Teenagers have been proven to be especially sensitive to tobacco price increases, and it is expected that this measure will help reduce teen smoking. For several years the state has also stepped up its enforcement of tobacco age-of-sale laws, greatly increasing retailer compliance with restrictions on sales of these products to minors. Finally, in 1997 the Department launched an anti-smoking media campaign, targeted to teens and employing print, radio, TV and Internet outlets.

With the acceptance by New Jersey and 45 other states of a settlement of lawsuits against the tobacco industry to recover the costs of publicly-funded health care for smokers, New Jersey will begin receiving roughly $300 million per year for 25 years, beginning in 2000. Governor Whitman has called for dedicating all of these funds to health purposes, including a comprehensive tobacco control program. Building on its current initiatives the Department is developing a major tobacco control effort, to be implemented upon receipt of the tobacco settlement funds.

In addition to these statewide efforts, the Department also supports programs targeted to areas of need. Community Partnership for Healthy Adolescents grants have been awarded to community-based coalitions in 11 communities to assist in coordinating existing adolescent health programs, and to expand outreach and health promotion activities. There are also School-Based Youth Services programs in 30 New Jersey schools, which make it easier for adolescents to get access to health services.

Objective 3A. Reduce the total number of births per 1,000 females aged 10 through 14 to:
0.7 in total females
2.0 in minority females

3A. BIRTHS TO FEMALES 10-14 YEARS OF AGE BY RACE
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH & SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
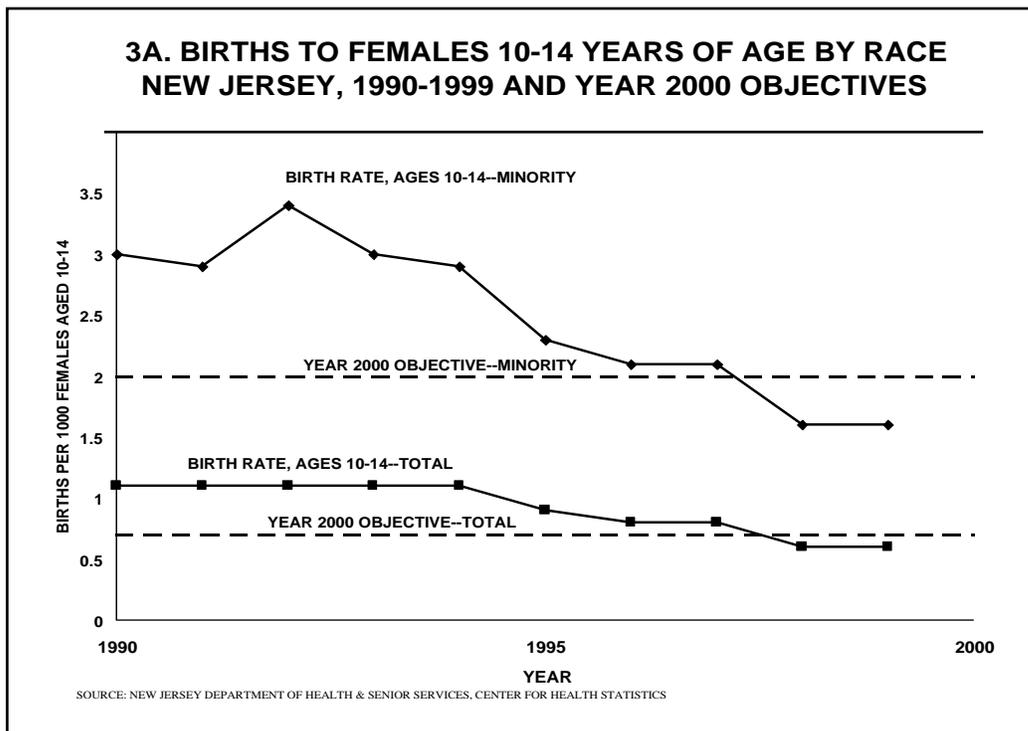
Objective 3B. Reduce the total number of births per 1,000 females aged 15 through 19 to:
25.7 in total females
55.8 in minority females

3B. BIRTHS TO FEMALES 15-19 YEARS OF AGE BY RACE NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

BIRTH RATE, AGES 15-19--MINORITY

YEAR 2000 OBJECTIVE--MINORITY

BIRTH RATE, AGES 15-19--TOTAL

YEAR 2000 OBJECTIVE--TOTAL

y-axis: BIRTHS PER 1000 FEMALES AGED 15-19 (0 to 100)
x-axis: YEAR (1990, 1995, 2000)

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
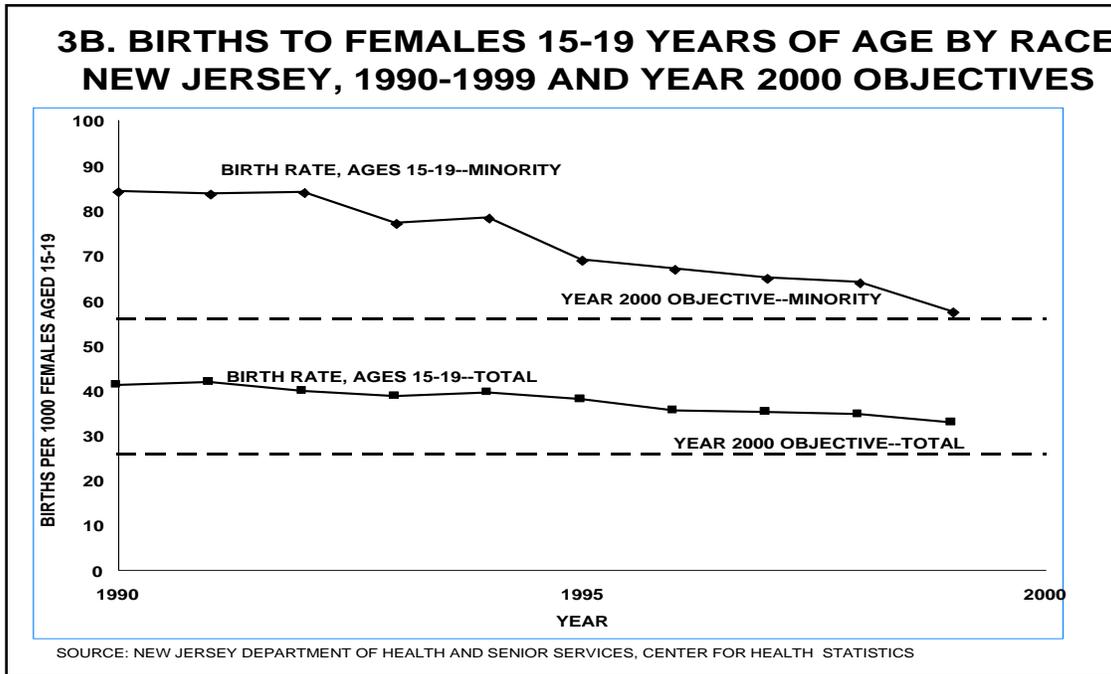
Objective 3C. Increase the number of adolescent females who receive family planning services as a percentage of all females in need of these services to:
50.0 percent

3C. ADOLESCENT FEMALES WHO RECEIVE FAMILY PLANNING SERVICES AS A PERCENTAGE OF ALL ADOLESCENT FEMALES IN NEED OF SERVICES NEW JERSEY: 1995-2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

y-axis: Percentage of Adolescent Females (0 to 60)
x-axis: 1990, 1992, 1994, 1996, 1998, 2000

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF FAMILY HEALTH SERVICES
THE ALAN GUTTMACHER INSTITUTE

Objective 3D. Reduce the prevalence of cigarette smoking among high school students to: 20.0 percent

**3D. PREVALENCE OF CIGARETTE USE* AMONG HIGH SCHOOL STUDENTS
NEW JERSEY, 1989-1998 AND YEAR 2000 OBJECTIVE**

SOURCE: SURVEY REPORTS -"DRUG AND ALCOHOL USE AMONG NEW JERSEY HIGH SCHOOL STUDENTS"
*INCLUDES THOSE WHO SMOKE ON OCCASION AS WELL AS REGULAR SMOKERS
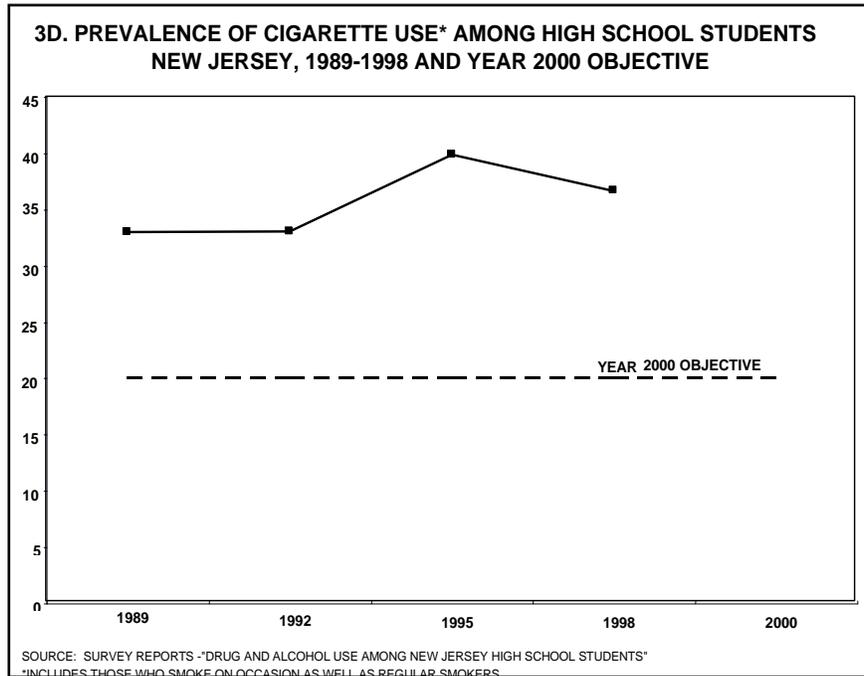
Objective 3E. Decrease the percentage of high school sophomore, juniors, and seniors who have used the following substances in the past 30 days to:
37.0% for alcohol
9.0% for marijuana
1.6% for cocaine

3E. HIGH SCHOOL STUDENTS WHO REPORT USE OF SELECTED SUBSTANCES IN THE PAST THIRTY DAYS NEW JERSEY, 1989-1998 AND YEAR 2000 OBJECTIVE

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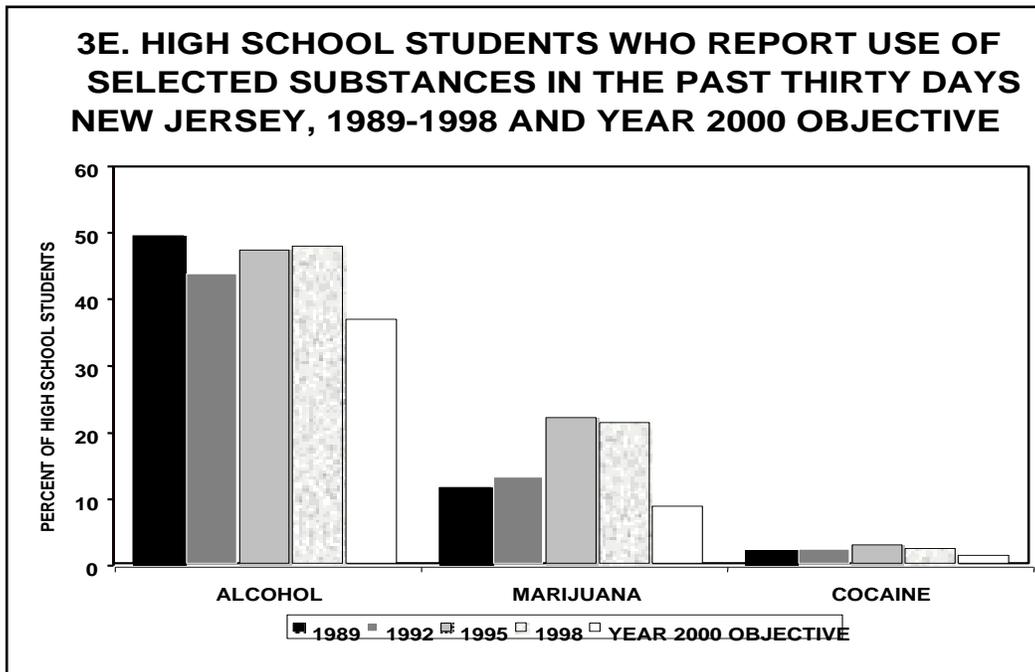
Objective 3F. Decrease the number of deaths per 100,000 population aged 15 through 19 caused by motor vehicles to: 15.0

**3F. MOTOR VEHICLE FATALITY RATE, AGES 15-19
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVE**

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
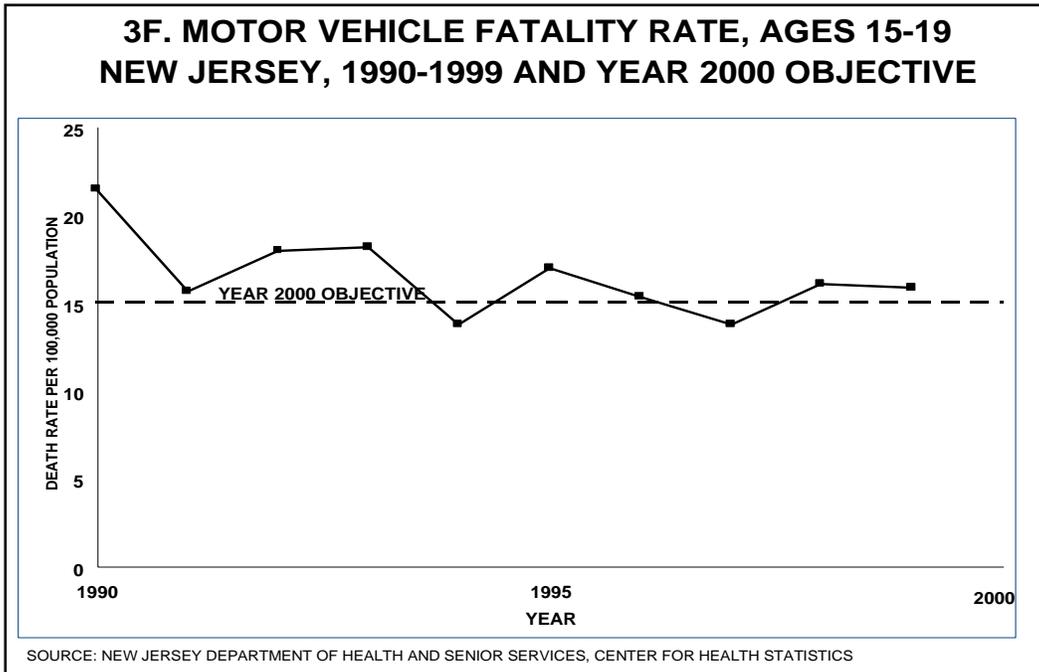
Objective 3G. Decrease the number of suicides per 100,000 white males 15 through 19 to: 5.7

**3G. SUICIDE DEATHS AMONG WHITE MALES AGED 15 - 19
NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVE**

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
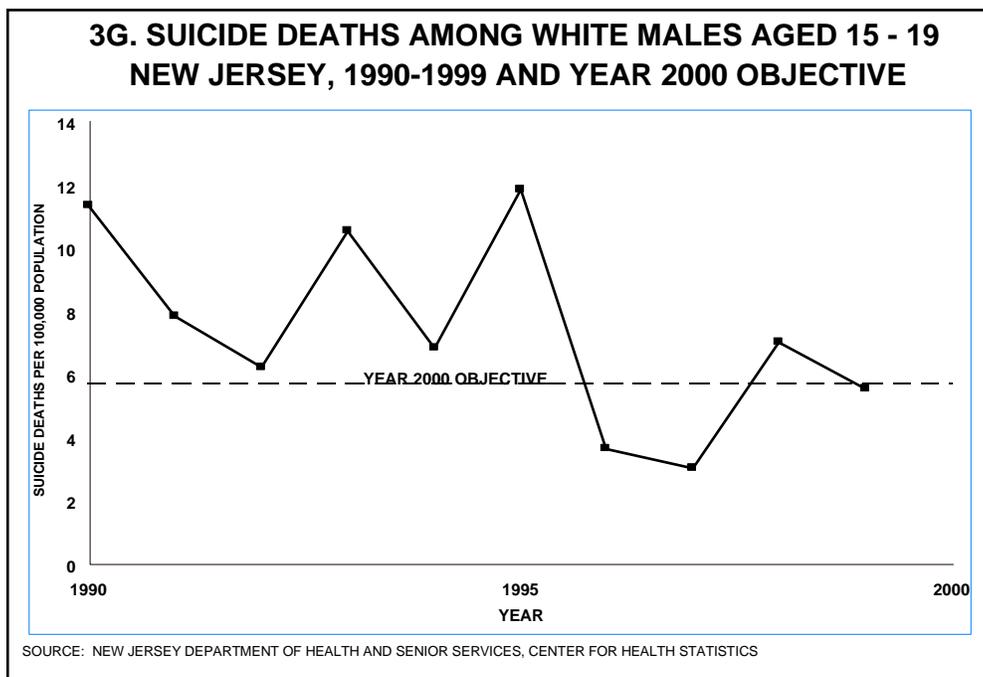
Objective 3H. Decrease the number of homicides per 100,000 minority males ages 15 through 19 to: 30.0

3H. HOMICIDE DEATHS AMONG MINORITY MALES AGED 15-19 NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
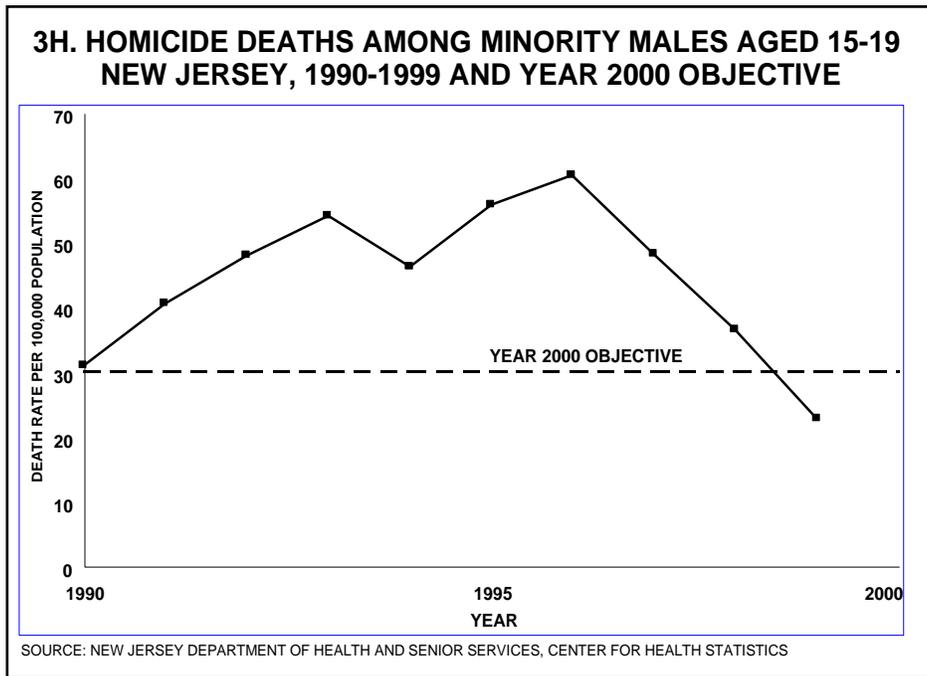
Objective 3I. Decrease the number of deaths per 100,000 youth aged 15 through 19 due to alcohol-related motor vehicle fatalities to: 2.0

3I. ALCOHOL-RELATED MOTOR VEHICLE FATALITIES, AGES 15-1 NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF LAW AND PUBLIC SAFETY, DIVISION OF HIGHWAY TRAFFIC SAFETY

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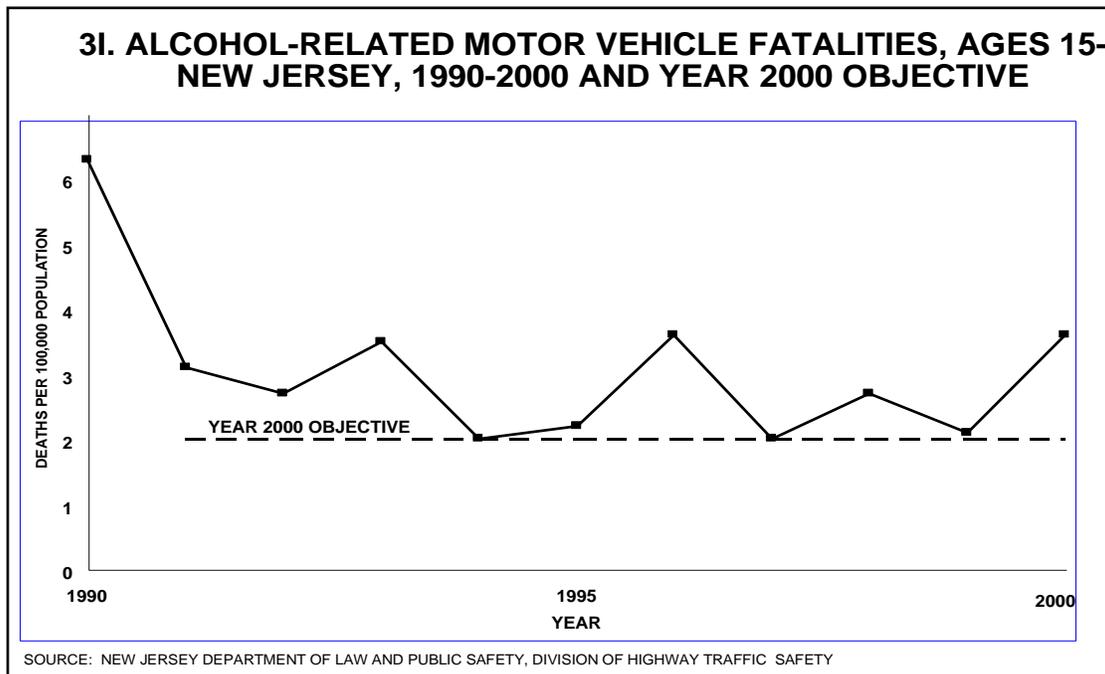
Priority Area 4

Prevent, Detect, and Control Cancer

Introduction

Statewide incidence rates for most cancers diagnosed among New Jersey residents declined from 1992 through 1996. For the major preventable/treatable forms of cancer - breast and cervical, colorectal, prostate and lung - New Jersey has made great progress and appears to be on track to meet most of the year 2000 objectives. Nevertheless, cancer remains second only to heart disease as the leading cause of death in New Jersey. Furthermore, the persistence of tobacco usage among adolescents and the increased incidence of malignant melanoma, a skin cancer strongly linked to sun exposure, are causes for concern. The outlook for achieving all of New Jersey's year 2000 cancer-related objectives is mixed.

Outlook For Reaching Specific Objectives

	Achieve target:	Likely	Unlikely	Uncertain
4A.	Reduction in the female breast cancer death rate for:			
	the total population	✔		
	females, 50-65	✔		
	females, 65 and over	✔		
4B.	Increase in clinical breast exams and mammograms	✔		
4C.	Reduction in the lung cancer death rate for:			
	the total population	✔		
	minority males	✔		
4D.	Reduction in cigarette smoking for:			
	persons 20 and older		✔	
	high school students		✔	
4E.	Reduction in the colorectal cancer death rate	✔		
4F.	Increase in the average daily servings of fruits and vegetables		✔	
4G.	Reduction in the cervical cancer death rate for:			
	total females			✔
	minority females	✔		
	females, 65 and over		✔	
4H.	Increase in Pap tests for:			
	total females		✔	
	minority females		✔	
	females, 65 and over		✔	

Data Update

4A. Reduce breast cancer deaths per 100,000 females to:

22.7 for total female population (age-adjusted)
72.5 for females aged 50-64 years
130.2 for females aged 65 and over

Achieve target:	Likely	Unlikely	Uncertain
all females	✔		
females, 50-64	✔		
females, 65 and over	✔		

Death Rates From Breast Cancer

Year	Total, Age-Adjusted	50-64 Years	65 And Over
1985	28.2	93.8	153.6
1986	26.4	85.3	150.7
1987	25.6	82.8	149.7
1988	25.8	83.2	147.2
1989	27.1	84.4	161.5
1990	25.5	78.5	154.1
1991	27.2	83.5	168.2
1992	25.4	77.9	158.2
1993	23.6	77.8	156.2
1994	24.1	68.7	155.8
1995	23.3	65.1	152.7
1996	21.9	67.6	146.9

New Jersey reached its year 2000 objective for the age-adjusted breast cancer death rate in the total population of females in 1996.

The age group that is responsible for the decreasing trend in the overall breast cancer death rate is females 50 through 64 years of age. The death rate in this group reached the year 2000 objective in 1994 and may by the year 2000 go even lower.

Women aged 65 and over, who are at higher risk of breast cancer, now seem likely to achieve the year 2000 target. The death rate in this group is more than twice the rate in the preceding age group and had been fairly stable from 1985 to 1994. Since 1994, however, the rate has declined, perhaps reflecting greater use by older women of breast cancer screening opportunities.

4B. Increase the percentage of women aged 40 and over who received a clinical breast examination and a mammogram within the past year to:

60.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Women Receiving Breast Exams And Mammograms

Year	Percent
1991	42.4
1992	42.2
1993	42.5
1994	40.6
1995	42.1
1996	46.1
1997	50.6

Estimates of the percentage of women who have received a clinical breast examination and a mammogram within the year previous to being interviewed are obtained from the Behavioral Risk Factor Surveillance System. Questions addressing these topics have been included in the survey annually since 1991. The resulting estimates indicate an increase in prevalence of mammograms and clinical breast exams in women aged 40 and over in recent years. In view of this most recent trend, it appears that this objective may be met by the year 2000.

4C. Reduce deaths due to lung cancer per 100,000 population to:

41.7 for the total population (age-adjusted)
68.9 for minority males (age-adjusted)

Achieve target: Likely   Unlikely   Uncertain

the total population   ✔

minority males   ✔

Age-Adjusted Death Rates

Year	Total	Minority Males
1985	38.2	78.8
1986	38.6	75.0
1987	38.6	71.4
1988	37.7	68.3
1989	39.1	73.9
1990	39.5	71.5
1991	38.8	72.2
1992	37.7	64.3
1993	38.8	69.8
1994	37.3	63.3
1995	37.3	57.9
1996	36.7	55.0

The target death rates for lung cancer among the total population and minority males were

designed to avoid increases in the baseline death rates. While these targets might look too low in comparison to those for other types of cancer, they reflect the fact that there is currently no means of early detection and treatment for lung cancer. Improvements in the lung cancer death rate are achieved primarily through prevention measures, such as reductions in smoking. The effects of prevention on death rates take longer to be realized. For the population as a whole, the lung cancer death rate has remained relatively unchanged since 1985, and the year 2000 objective is likely to be met. For minority males the target was achieved in 1992, and the trend since then has been dramatic further improvement. However, the lung cancer death rate for minority males continues to be substantially higher than for the total population.

4D. Reduce the prevalence of cigarette smoking to:

15.0% in persons aged 20 and over
20.0% in high school students

Achieve target:	Likely	Unlikely	Uncertain
persons 20 and older		✔	
high school students		✔	

Percent Currently Smoking

Year	Persons 20 And Over	Year	High School Students
1991	22.2	1980	39.6
1992	20.5	1983	41.5
1993	19.0	1986	41.2
1994	23.0	1989	32.9
1995	20.0	1992	33.0
1996	22.7	1995	39.8
1997	21.0		

The percentage of persons aged 20 and over who report that they currently smoke can be estimated based on survey data from the Behavioral Risk Factor Surveillance System. According to this survey, the trend since 1991 has been stable, and it is not likely that the year 2000 objective for adults will be met.

The estimates of smoking prevalence among high school students are obtained from surveys conducted every three years by the New Jersey Department of Law and Public Safety. The percentages include students who report smoking "on occasion" as well as those who say they smoke from "less than" to "more than" half a pack of cigarettes per day. Results from these surveys have fluctuated over the recent past, but have shown no indication of a decline in the percentage of students who currently smoke. Moreover, the prevalence of smoking among students is almost twice as high as among adults (taking into account that the data came from two different sources). The data on student smoking do not reflect the potential impact of more recent interventions to reduce youth smoking. However, since the 1995 prevalence of student smoking was about twice the year 2000 target level, it is unlikely the objective will be met.

4E. Reduce colorectal cancer deaths per 100,000 population to:

13.2 for the total population (age-adjusted)

Achieve target: <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Colorectal Cancer Death Rate

Year	Age-Adjusted Rate
1985	18.6
1986	16.7
1987	17.5
1988	17.1
1989	16.7
1990	15.9
1991	15.8
1992	15.4
1993	15.3
1994	15.6
1995	15.0
1996	14.3

The death rate from colorectal cancer has declined for more than a decade. The original year 2000 target was met early in the decade, after which it was revised downward, in order to promote further progress. The most recent data suggest this revised target will also be achieved.

4F. Increase the average daily servings of fruits and vegetables (including legumes) in the population aged 18 and over to:

5.0 or more

Achieve target: <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Daily Servings Of Fruits And Vegetables

Year	Average
1991	3.8
1992	3.9
1993	N/A
1994	4.2
1995	4.1
1996	4.1
1997	3.9

There has not been any meaningful change in the average number of daily servings of fruit and vegetables consumed by New Jersey adults since 1991, when the Behavioral Risk Factor Surveillance System first began gathering data on this behavior. This objective was included to focus attention on the importance of a healthy diet, since there is recent scientific evidence suggesting that diet can play an important role in reducing the risk of some cancers.

New Jerseyans have consistently reported consuming on average about four fruits and/or vegetables per day. The target of five per day for the year 2000 is unlikely to be met.

4G. Reduce cervical cancer deaths per 100,000 females to:

1.3 for total females (age-adjusted)
2.6 for minority females (age-adjusted)
3.2 for females aged 65 and over

Achieve target:	Likely	Unlikely	Uncertain
total females			✔
minority females	✔		
females 65 and over		✔	

Cervical Cancer Death Rate Per 100,000

Year	Total Females Age-Adjusted	Minority Females Age-Adjusted	Females 65 & Over
1985	2.8	5.1	11.0
1986	2.9	5.6	9.0
1987	2.8	7.0	10.7
1988	2.7	5.7	6.4
1989	3.1	7.6	11.1
1990	2.9	5.6	9.2
1991	2.6	6.1	9.1
1992	2.5	4.3	9.0
1993	2.5	5.7	8.6
1994	2.9	5.1	8.8
1995	2.7	4.7	10.6
1996	2.5	4.0	8.4

The availability of the Pap test for early detection of cervical cancer led to dramatic decreases in both the national and New Jersey death rates from this type of cancer in the 1970s and into the 1980s. For the total population of females, there has been only minimal decline in these rates since the mid-1980s. Achievement of the objective is uncertain.

Age-adjusted death rates from cervical cancer remain almost twice as high in minority women as in the total population of females. The rate of decrease has been sharper for minority women, however, making achievement of the year 2000 objective more likely.

Given current trends, it is unlikely that the cervical cancer death rate objective for women 65 and over will be met by the year 2000.

4H. Increase the percentage of women (with uterine cervix) who had a Pap smear in the past two years to:

85.0% among total females

85.0% among minority females
70.0% among females 65 years and over

Achieve target:	Likely	Unlikely	Uncertain
total females		✔	
minority females		✔	
females 65 and over		✔	

Percent Of Women With Pap Smear

Year	Total Females	Minority Females	Females 65 & Over
1991	78.5	77.6	60.8
1992	74.4	73.7	49.4
1993	77.3	70.2	63.2
1994	75.6	76.4	61.3
1995	77.3	77.1	62.4
1996	76.2	69.9	47.6
1997	78.2	76.6	62.5

According to survey data from the Behavioral Risk Factor Surveillance System, there has been no change since 1991 in the percentage of women with an intact uterus who had a Pap test in the two years prior to being interviewed. These findings are consistent with the lack of substantial further decline in the death rate for cervical cancer. Of particular concern is the relatively low rate of Pap tests reported by elderly women. It is unlikely that the year 2000 objectives will be met.

Discussion

Cancer is not one disease, but a group of diseases characterized by uncontrolled cell growth. Each type of cancer has different risk factors as well as different intervention strategies. With the exception of malignant melanoma, incidence rates in New Jersey for the major preventable/treatable cancers have declined in recent years. In the case of melanoma, the incidence rate, although low, has been increasing.

Strategies to reduce cancer morbidity and mortality have tended to be disease-specific. While this is generally appropriate, the Department recognized the need for better coordination of efforts across types of cancer, among all involved groups. A key first step in taking a more comprehensive approach to cancer was the convening of all key stakeholders in a Breast Cancer Summit in 1995. A comprehensive set of recommendations resulting from the summit was published in that year. In November, 1997, a similar Prostate Cancer Summit was convened. The report of the Summit's findings was published in September, 1998. This was particularly timely, given the growing recognition of the need to more vigorously promote prostate cancer awareness, early detection and treatment, particularly among minority males. Building on these earlier efforts to convene the full range of stakeholders engaged in various types of cancer, the Department formed in 1998 the New Jersey Coalition to Promote Cancer Prevention, Early Detection and Treatment. The Coalition is developing an initial plan for comprehensive cancer control in the state, and will be working to refine and implement this plan. The plan is designed to focus available resources efficiently and appropriately, through better coordination of Coalition members'

efforts and systematic use of epidemiological data.

The plan recognizes, however, that disease-specific intervention strategies will continue to be necessary. For breast, cervical, lung, colorectal, prostate and skin cancer, the key strategies for reducing death rates concentrate on prevention and/or screening, early detection and treatment. In addressing these six types of cancer, the Coalition is taking a broader approach than Healthy New Jersey 2000, which has objectives related to breast, lung, colorectal and cervical cancer.

The Department's prevention efforts are focused largely on lung cancer. For lung cancer, unlike many other cancers, early detection and treatment have not yet proven effective in reducing deaths from this disease. The most effective interventions are those that focus on reducing exposure to environmental risks, primarily tobacco. Because tobacco is addictive, prevention efforts are focused on adolescents. Research shows that most adult smokers began experimenting with tobacco during their teen years. The most recent data are not encouraging in terms of the prevalence of smoking among teens. However, these data do not reflect more recent major initiatives undertaken by the Department to address teen smoking. These are discussed at greater length in Priority Areas 3 and 11. Funds from the tobacco settlement, which should be available starting in 2000, will be used for a comprehensive program designed not only to discourage youth from taking up smoking, but also to assist smokers of all ages in their efforts to quit.

One trend that is very encouraging is the reduction in the age-adjusted lung cancer death rate among minority males, a decrease that is attributable to the progress made in the previous decade in reducing the prevalence of smoking among this population. With a comprehensive tobacco control program, New Jersey should be able to make much more progress in reducing deaths from lung cancer.

For breast and cervical cancer, early detection and treatment are effective in reducing the death rate. Minority and elderly women lag behind the total population in their use of screening tests, such as the Pap test, clinical breast examination, and mammography. Since 1993, the New Jersey Breast and Cervical Cancer Control Initiative has provided intensive education, outreach and screening to ensure that all women, regardless of economic status, are aware of the screening guidelines and have access to quality screening services. In 1996, 3,700 women were screened under the auspices of this program. The Department is also conducting a pilot test of a comprehensive wellness program developed by the National Caucus and Center for the Black Aged. This pilot is focusing on low-income African-American females residing in senior housing in Mercer and Camden counties. The "wellness" components additionally include breast and cervical cancer, nutrition, physical activity, and injury prevention.

Since January, 1998, Medicare has covered the annual cost of mammography and Pap tests for women 65 and over. In order to assure that women in this age group take advantage of these newly covered services, the Department will be continuing its partnership with the Peer Review Organization of New Jersey (PRO) and other private and voluntary organizations involved in cancer control for education and outreach.

The continued reduction in the death rate from colorectal cancer is encouraging. Nevertheless, the lack of progress toward the year 2000 objective of average daily consumption of five servings of fruits and vegetables per day is a cause of great concern, as evidence continues to mount concerning the health benefits that derive from a balanced diet not only for colorectal and other cancers, but also for cardiovascular and other serious diseases. One concrete step the

Department has taken to promote a better diet is its Senior Farmers Market initiative, a pilot program in four municipalities to provide 500 low-income seniors with vouchers to purchase fresh fruits and vegetables from farmers markets during the New Jersey growing season. The Department will continue to look for other opportunities to promote healthy eating behaviors among New Jerseyans. In terms of early detection for colorectal cancer, Medicare has also introduced coverage for colorectal cancer screening, and the Department is again working with the PRO to alert older adults to this benefit.

Healthy New Jersey 2000 does not contain goals for prostate cancer or malignant melanoma. Malignant melanoma incidence rates have been rising at a rate of 4 percent per year, even though this type of skin cancer is largely preventable through reducing sun exposure. Prostate cancer is the third leading cause of cancer death among men in New Jersey. These two types of cancer are being addressed in the state's comprehensive cancer control plan. Once again the focus is on prevention, in the case of melanoma, and education, early detection and treatment for both melanoma and prostate cancer. The Department will encourage men age 50 and over, and black men 40 and older, to complete the PSA test and digital rectal exam.

Objective 4A. Reduce breast cancer deaths per 100,000 females to:
22.7 for the total female population (age-adjusted)
72.5 for females aged 50-64 years
130.2 for females aged 65 and over

4Ai. AGE-ADJUSTED FEMALE BREAST CANCER DEATH RATE NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

4Aii. FEMALE BREAST CANCER DEATH RATES BY AGE NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

60
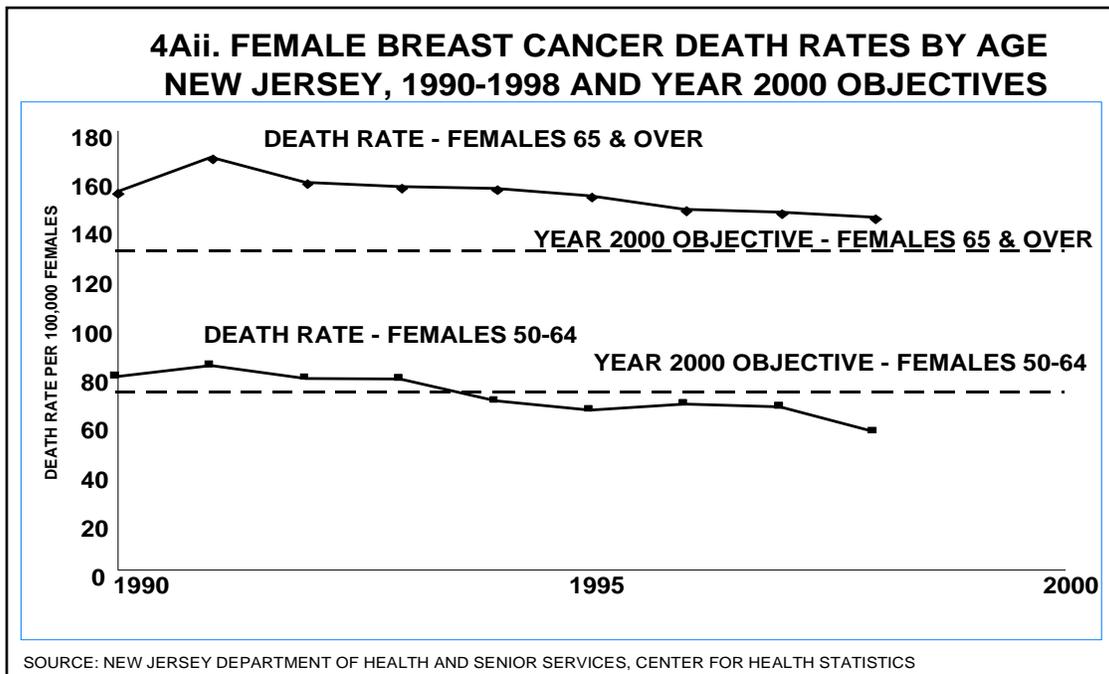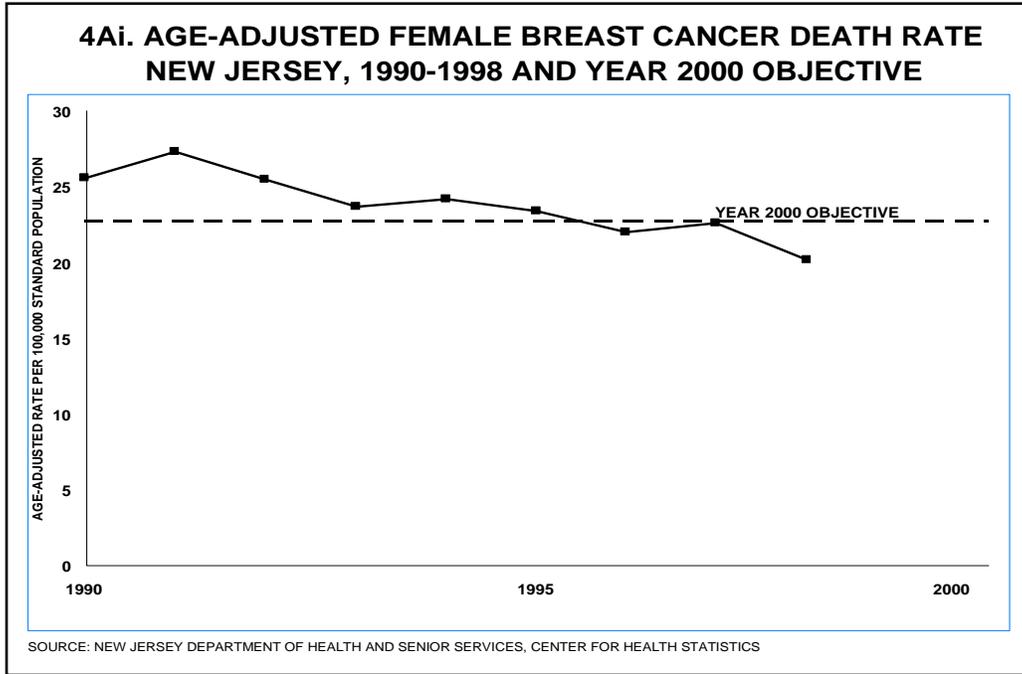
Objective 4B. Increase the percentage of women aged 40 and over who received a clinical breast examination and a mammogram within the past year to:
60.0 percent

4B. WOMEN AGED 40 AND OVER WHO RECEIVED A CLINICAL BREAST EXAMINATION AND A MAMMOGRAM WITHIN THE PAST YEAR NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
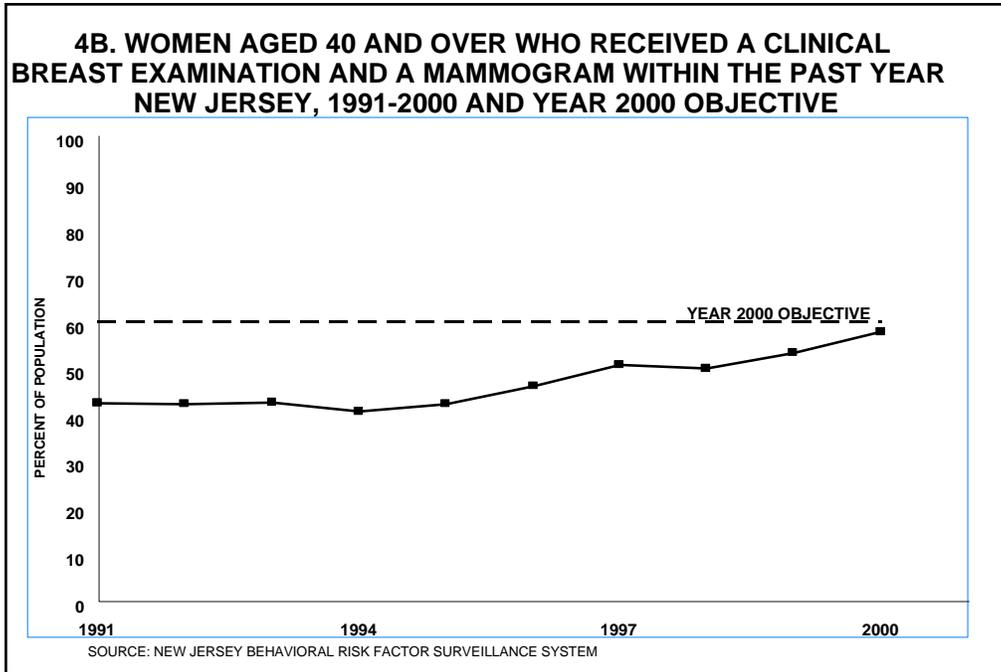
Objective 4C. Reduce deaths due to lung cancer per 100,000 population to:
41.7 for the total population (age-adjusted)
68.9 for minority males (age-adjusted)

4C. AGE-ADJUSTED LUNG CANCER DEATH RATES, TOTAL AND MINORITY MALES NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
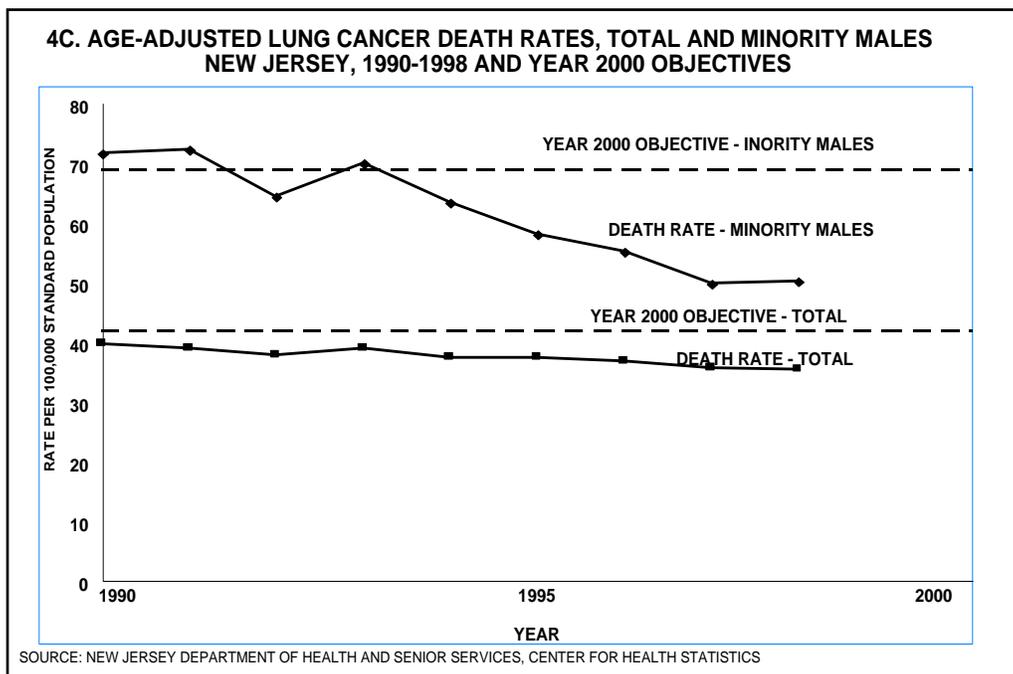
Objective 4D. Reduce the prevalence of cigarette smoking to:
15.0% in persons aged 20 and over
20.0% in high school students

4Di. PERSONS 20 + WHO ARE CURRENTLY SMOKING CIGARETTES NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVE

SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

4Dii. PREVALENCE OF CIGARETTE USE* IN HIGH SCHOOL STUDENTS NEW JERSEY, 1989-1998 & YEAR 2000 OBJECTIVE

SOURCE: SURVEY REPORTS -"DRUG AND ALCOHOL USE AMONG NEW JERSEY HIGH SCHOOL STUDENTS"
*INCLUDES THOSE WHO SMOKE ON OCCASION AS WELL AS REGULAR SMOKERS
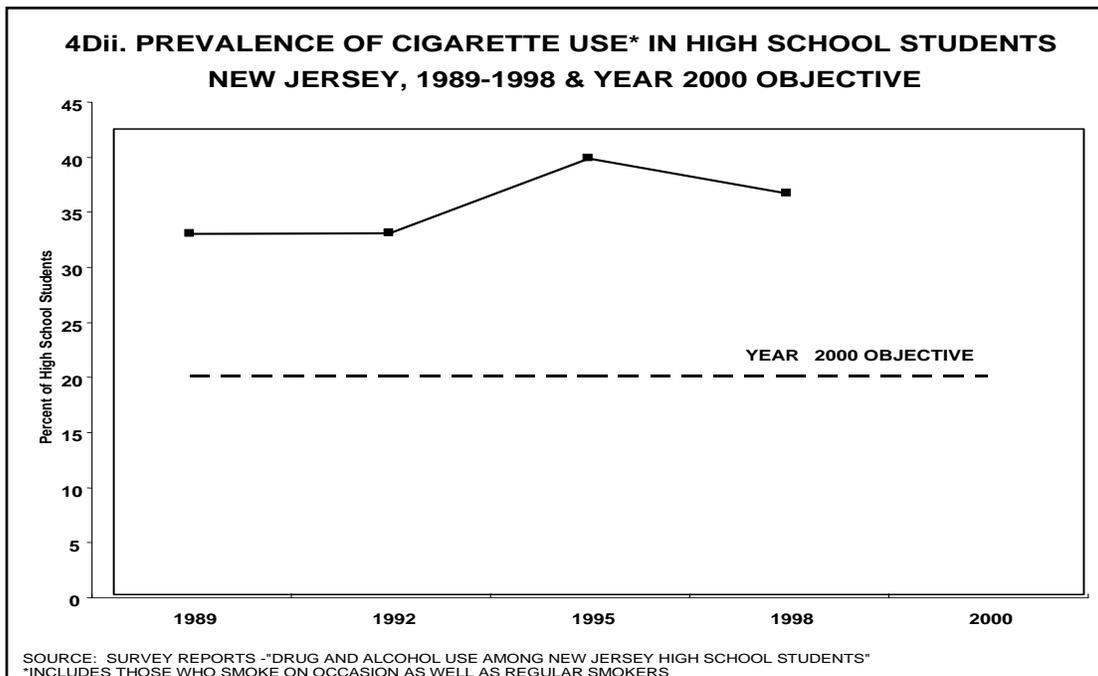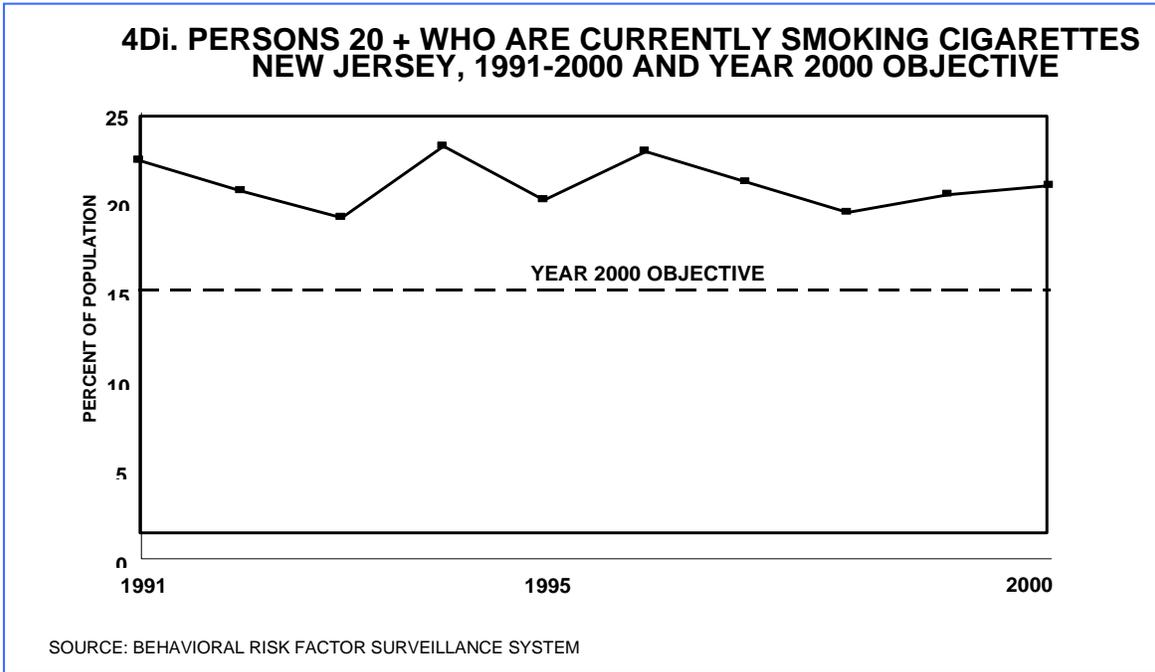
Objective 4E. Reduce colorectal cancer deaths per 100,000 population to:
13.2 for the total population (age-adjusted)

4E. AGE-ADJUSTED COLORECTAL CANCER DEATH RATE
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

ORIGINAL YEAR 2000 OBJECTIVE

REVISED YEAR 2000 OBJECTIVE

AGE-ADJUSTED RATE /100,000 STANDARD POPULATION

NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
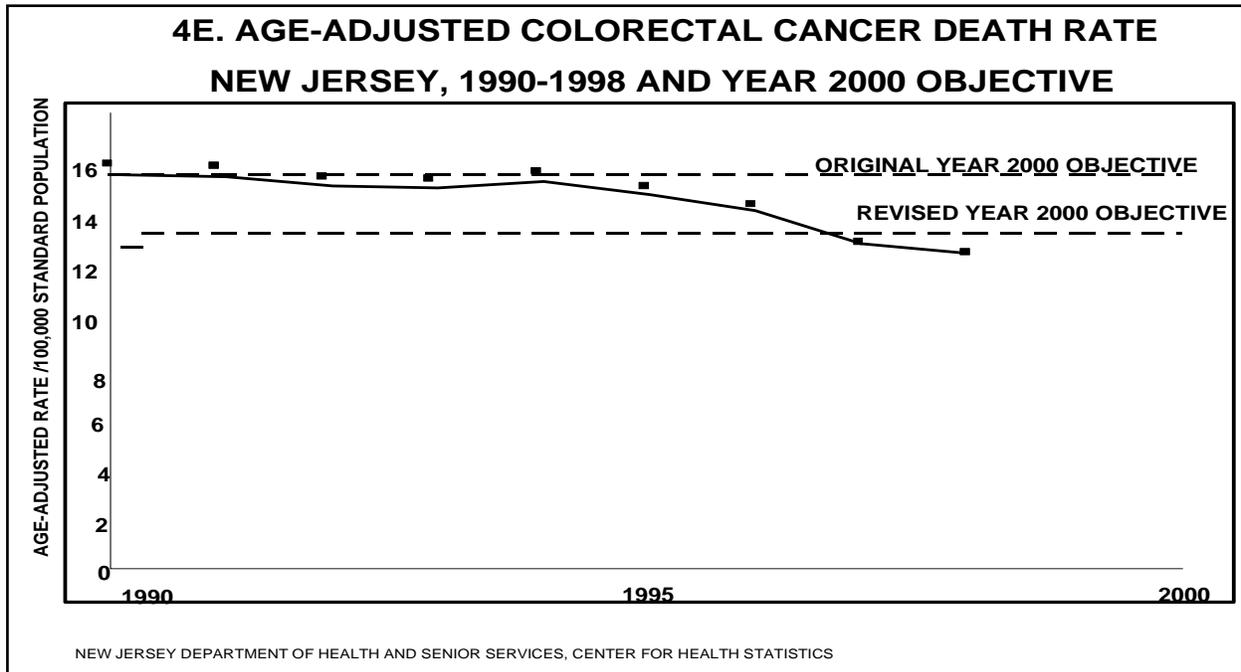
Objective 4F. Increase the daily servings of fruits and vegetables (including legumes) in the population 18 and over to: 5.0 or more

4F. AVERAGE DAILY SERVINGS OF FRUITS AND VEGETABLES
IN THE POPULATION AGED 18 AND OVER
NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

4G. Reduce cervical cancer deaths per 100,000 females to:
                        1.3 for total females (age-adjusted)
                        2.6 for minority females (age-adjusted)
                        3.2 for females aged 65 and over

4Gi. AGE-ADJUSTED CERVICAL CANCER DEATH RATES NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

4Gii. CERVICAL CANCER DEATH RATE, AGED 65 AND OVER NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

Objective 4H. Increase the percentage of women (with uterine cervix) who had a Pap smear in the past two years to:

85.0% among total females
85.0% among minority females
70.0% among females 65 years and over

**4Hi. WOMEN WITH UTERINE CERVIX WHO HAVE HAD A PAP SMEAR DURING THE PAST TWO YEARS, BY RACE
NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVES**

YEAR 2000 OBJECTIVE - TOTAL & MINORITY

PERCENT OF POPULATION

1991   1994   1997   2000

TOTAL   MINORITY

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
NOTE: MINORITY YEAR 2000 OBJECTIVE WAS REVISED 12/03/93 FROM 80% TO 85%

**4Hii. WOMEN 65+ WITH UTERINE CERVIX WHO HAVE HAD A PAP SMEAR DURING THE PAST TWO YEARS
NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVES**

YEAR 2000 OBJECTIVE

PERCENT OF POPULATION

1991   1994   1997   2000

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

65

Priority Area 5

Prevent, Detect and Control Cardiovascular and Other Vascular Diseases

Introduction

Cardiovascular disease is the leading cause of death in New Jersey and the United States. The main forms of cardiovascular disease (CVD) are coronary heart disease, which can lead to heart attack, and cerebrovascular disease (stroke). The cost of cardiovascular diseases and stroke for 1998 is estimated at $274.2 billion nationally, according to the American Heart Association. Key modifiable risk factors include cigarette smoking, high blood pressure, high blood cholesterol, excessive body weight, and physical inactivity. Diabetes is also a major risk factor that may be modified to a certain degree.

New Jersey will likely meet most of its year 2000 objectives for reduction of coronary heart and cerebrovascular diseases. The likelihood of achieving other year 2000 objectives, including reduction in renal disease, increasing physical activity, and the evaluation of blood pressure and cholesterol remains uncertain.

Outlook For Reaching Specific Objectives

Achieve target:	Likely	Unlikely	Uncertain
5Ai. Reduction in coronary heart disease death rates for:			
total population	✔		
minorities	✔		
5Aii. Reduction in coronary heart disease death rates for persons 45-64:			
total population	✔		
minorities	✔		
5B. Reduction in cerebrovascular disease death rates for:			
total population			✔
minorities	✔		
persons 45-64			✔
minorities 45-64			✔
persons 65 and over		✔	
5C. Reduction in end stage-renal disease rates for:			
total population		✔	
blacks			✔
5D. Increase in physical activity			✔
5E. Increase in adults with blood pressure checks		✔	
5F. Increase in adults with cholesterol		✔	

checks

Data Update

5Ai. Reduce deaths due to coronary heart disease per 100,000 population to:

107.2 for the total population (age-adjusted)
99.8 for minorities (age-adjusted)

Achieve target:	Likely	Unlikely	Uncertain
total population	✔		
minorities	✔		

Death Rates From Coronary Heart Disease

Year	Total Age-Adjusted	Minority Age-Adjusted
1985	162.4	161.0
1986	153.6	152.9
1987	147.5	148.5
1988	144.6	142.8
1989	129.2	129.3
1990	121.6	121.3
1991	118.4	127.0
1992	117.3	119.4
1993	108.8	115.8
1994	110.1	108.9
1995	107.1	102.5
1996	102.5	100.8

Except for a slight increase in 1994, the age-adjusted death rate from coronary heart disease among the total population has declined steadily since 1985, to the point where the 1996 rate represents a more than one-third reduction in the death rate due to this cause. The same is true for the minority population, with the exception of an increase in 1991. After age-adjustment has been done, the death rates are similar for both the total and the minority populations. For the population as a whole, New Jersey's year 2000 objective has been achieved. For minorities, the rate still remains slightly above the target, but it should be reached by the year 2000.

5Aii. Reduce deaths due to coronary heart disease per 100,000 population aged 45 through 64 years to:

154.7 for the total population
161.1 for minorities

Achieve target:	Likely	Unlikely	Uncertain
total population	✔		

minorities ✔

Death Rates From Coronary Heart Disease

Year	Total 45-64	Minorities 45-64
1985	255.0	283.0
1986	237.0	259.5
1987	224.2	252.9
1988	211.0	232.0
1989	187.5	217.1
1990	169.5	195.3
1991	167.2	202.7
1992	158.7	193.0
1993	143.2	173.1
1994	152.2	167.7
1995	143.7	159.8
1996	131.8	154.0

The patterns of the declines in death rates among the total and minority populations aged 45 through 64 are similar but even more dramatic than the respective age-adjusted declines for the total and the minority populations, with a 48.3 percent reduction in the death rate for the total population in this age bracket over the time period, and a 45.6 percent reduction for minorities in this age bracket. It appears likely that the year 2000 objective will be reached for both the total population and minorities in this age bracket. As of 1996, however, the death rate from coronary heart disease for minorities aged 45 through 64 remained higher than that for the total population this age.

5B. Reduce deaths due to cerebrovascular diseases per 100,000 population to:

20.8 for the total population (age-adjusted)
32.0 for minorities (age-adjusted)
22.8 for the population aged 45-64 years
44.9 for minorities aged 45-64 years
283.8 for the population aged 65 and over

Achieve target:	Likely	Unlikely	Uncertain
total population			✔
minorities	✔		
total 45-64			✔
minorities 45-64			✔
total 65 and over		✔	

Death Rates From Cerebrovascular Disease

Year	Total Age-	Minorities Age-	Total 45-	Minorities 45-	Total

	Adjusted	Adjusted	64	64	65+
1985	29.7	47.1	37.9	71.9	395.2
1986	28.3	42.5	34.1	65.7	382.9
1987	28.5	43.5	36.9	68.8	381.3
1988	27.3	42.2	33.4	69.2	357.2
1989	25.4	38.7	31.6	60.2	345.3
1990	24.7	37.4	29.5	55.4	331.3
1991	24.7	41.9	31.8	66.0	331.2
1992	22.6	34.6	25.7	49.7	324.0
1993	23.1	33.0	26.1	49.1	323.8
1994	23.8	35.7	28.3	62.4	334.9
1995	23.8	34.2	28.6	49.8	340.4
1996	23.0	32.7	27.5	53.7	338.9

In all five of the populations considered, the death rates from cerebrovascular disease, or stroke, declined between 1985 and 1996, but exhibited considerable year-to-year fluctuations. The year 2000 target for minorities of all ages is likely to be achieved, but both this rate and the rate for 45-through 64-year-olds are consistently higher among minorities than among the total population. It is uncertain whether the targets for the age-adjusted total population, or those aged 45 to 64 will be reached, and it is unlikely that the target for the population 65 and over will be achieved.

5C. Reduce end-stage renal disease as a complication of diabetes per 1,000 diabetics over the age of 18 to:

1.8 for the total population
12.0 for blacks

Achieve target:	Likely	Unlikely	Uncertain
total population		✔	
blacks			✔

End-Stage Renal Disease As
A Complication Of Diabetes Rates

Year	Total	Blacks
1991	2.8	13.2
1992	2.9	N/A*
1993	3.2	7.0
1994	3.4	6.2
1995	4.7	9.6

* Not available

Although end stage-renal disease (ESRD) has other causes, its chief causes are complications from diabetes and/or high blood pressure. These complications may be reduced through preventive interventions, such as diet or exercise. ESRD prevalence rates in the total diabetic population in New Jersey are rising, making it unlikely that the year 2000 objective will be met. Due to the small numbers of black diabetics, the New Jersey prevalence estimates presented

above are not reliable to use in predicting whether the year 2000 objective will be met.

5D. Increase the number of persons aged 18 and over who participated in physical activity for at least 30 minutes three or more times per week during the past month to:

42.5 percent

Achieve target: Likely   Unlikely   Uncertain

✔

**Percentage Of Persons Aged 18 And Over Who
Participated In Physical Activity For At Least 30 Minutes
Three Or More Times Per Week During The Past Month**

Year	Percentage
1991	38.6
1992	34.8
1993	N/A*
1994	37.6
1995	41.1
1996	40.5
1997	35.9

*Not available

Despite year-to-year fluctuations in the percentage of adults participating in regular physical activity, the overall trend reflects little change. The fluctuations are largely the result of small sample size in the Behavioral Risk Factor Surveillance System Survey. It is uncertain whether the year 2000 goal will be achieved.

5E. Increase the proportion of persons aged 18 and over who have had their blood pressure checked by a health professional within the past two years to:

96.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

**Percentage Of Persons Aged 18 And Over Who
Have Had Their Blood Pressure Checked By A
Health Professional Within The Past Two Years**

Year	Percentage
1991	95.1
1992	94.1
1993	95.0
1994	N/A*
1995	95.2
1996	N/A*
1997	94.4

*Not available

While the percentage of New Jersey adults having their blood pressure checked has been high since data first became available through the Behavioral Risk Factor Surveillance System, it does not appear to be increasing. It appears unlikely that the year 2000 objective of 96 percent will be achieved.

5F. Increase the proportion of persons aged 18 and over who have had their blood cholesterol checked by a health professional within the past five years to:

82.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

**Percentage Of Persons Aged 18 And Over Who Have Had Their
Blood Pressure Checked By A Health
Professional Within The Past Five Years**

Year	Percentage
1991	72.9
1992	68.4
1993	71.5
1994	N/A*
1995	73.2
1996	75.7
1997	75.3

*Not available

Behavioral Risk Factor Surveillance System survey data indicates that the percentage of New Jersey adults who have gotten their blood cholesterol checked within the past five years has varied between 68 and 76 percent. The year-to-year fluctuations reflected in the data above are largely due to small sample size. However, with the lack of a clearly increasing trend in the proportion of respondents who report having this test, it appears unlikely that the year 2000 objective will be met.

Discussion

Over the past decade, cardiovascular disease death rates in New Jersey have declined, dramatically so in the case of coronary heart disease. Nevertheless, cardiovascular disease remains the leading cause of death in New Jersey and the United States. The main forms of cardiovascular disease (CVD) are coronary heart disease, which can lead to heart attack, and cerebrovascular disease (stroke). In 1996, these two forms of CVD accounted for 23,169 deaths of New Jersey residents.

Most CVD develops over time as the result of the narrowing of blood vessels by fatty deposits. Many factors influence not only whether a person develops CVD, but also how rapidly the disease progresses. Some of the risk factors are fixed; others are modifiable. The fixed risk factors are: age - persons aged 40 and older are at increased risk; gender - CVD is more common among

men; and genetic background - persons with a family history of the disease are more susceptible than the general population.

Key modifiable risk factors include cigarette smoking, high blood pressure, high blood cholesterol, excessive body weight, and physical inactivity. Diabetes is also a major risk factor that may be modified to a certain degree. Year 2000 objectives and Departmental strategies focus on modifiable risk factors, primarily smoking and diabetes, as well as on improving the quality of and access to treatment for CVD.

A smoker's risk of heart attack is more than twice that of a nonsmoker. Studies have also shown cigarette smoking to be an important risk factor for stroke. Evidence also indicates that secondhand exposure to smoke may increase the risk of heart disease. The Department's comprehensive tobacco-reduction initiatives are discussed in detail in priority areas 3 and 11.

Diabetes is a major risk factor for stroke, and is now recognized as a major risk factor for coronary heart disease as well. People with diabetes are two to four times more likely to have heart disease, stroke, or end stage renal disease (ESRD). People with diabetes may avoid or delay CVD by controlling the other risk factors. In addition, to controlling blood sugar levels, it is especially important for diabetics to control weight and blood cholesterol with a low-saturated-fat, low-cholesterol diet and regular exercise. It is also important to lower high blood pressure and avoid smoking. The prevalence of ESRD is an indicator not only of complications of diabetes, but also of high blood pressure.

The Department's Diabetes Control Program works to decrease the prevalence of complications from diabetes, through community-based outreach and education, as well as provision of preventive services to low-income, uninsured diabetics. Beginning in 1997, the Department also monitors the quality of preventive services provided to diabetics in its annual performance report on managed care health insurance plans.

Much of the progress in reducing CVD death rates may be attributable to improvements in treatment, which is a major priority for the Department. The Department convened a cardiovascular health advisory panel, consisting of a wide range of experts as well as consumer representatives, to assist in promoting improvements in cardiovascular health policy. Initiatives undertaken since this panel was convened include improved access through expansion of the number of low-risk diagnostic cardiac catheterization laboratories and cardiac surgery centers in the state. The Department has also supported use of portable defibrillators, which increase the chance that someone having a heart attack will survive. In addition, beginning in 1997 the Department has released reports comparing patient mortality rates for the hospitals and surgeons performing coronary artery bypass graft (CABG) surgery, one of the major treatments for CVD. For the first time, consumers have comparative information on hospitals and surgeons to help them make decisions about their care. The report's greatest impact, however, is on hospitals and doctors, who use it to make changes to improve the quality of services.

The Department is also committed to improving the access of minorities to cardiac services, and holds hospitals accountable for their provision of preventive health programs, diagnostic procedures, and cardiac surgery to minorities.

In recent years, improvements have been made in treatment for one type of stroke, acute ischemic strokes. Persons suffering from this type of stroke can significantly benefit from thrombolytic

therapy, so long as it is administered within a three-hour period following onset of stroke symptoms. Because of the need to first diagnose what type of stroke has occurred, thrombolytic therapy is available only in a hospital setting. The Department has convened an advisory committee to assess provision of stroke care in New Jersey.

Advances in treatment have accomplished a great deal, but controlling modifiable risk factors remains the most cost-effective intervention to reduce the impact of CVD. The Department will continue to explore ways to promote healthy cardiovascular behaviors.

Objective 5Ai. Reduce deaths due to coronary heart disease per 100,000 population to:

107.2 for the total population (age-adjusted)
99.8 for minorities (age-adjusted)

5Ai. AGE-ADJUSTED CORONARY HEART DISEASE DEATH RATES
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
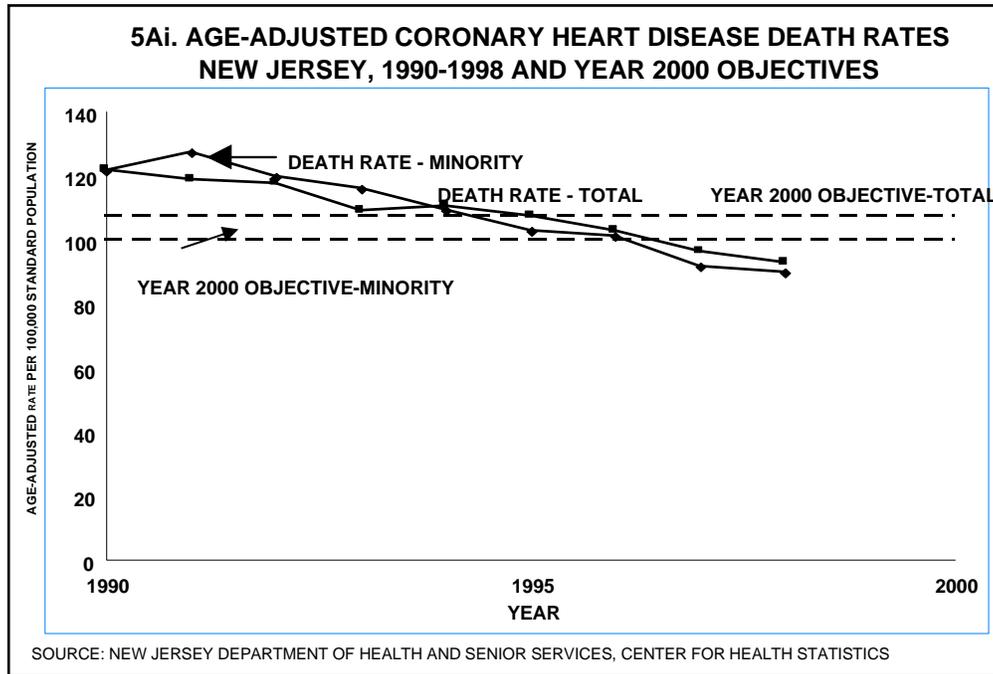
Objective 5Aii. Reduce deaths due to coronary heart disease per 100,000 population aged 45 through 64 to:

154.7 for the total population
161.1 for minorities

5Aii. CORONARY HEART DISEASE DEATH RATES, AGES 45-64
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

74
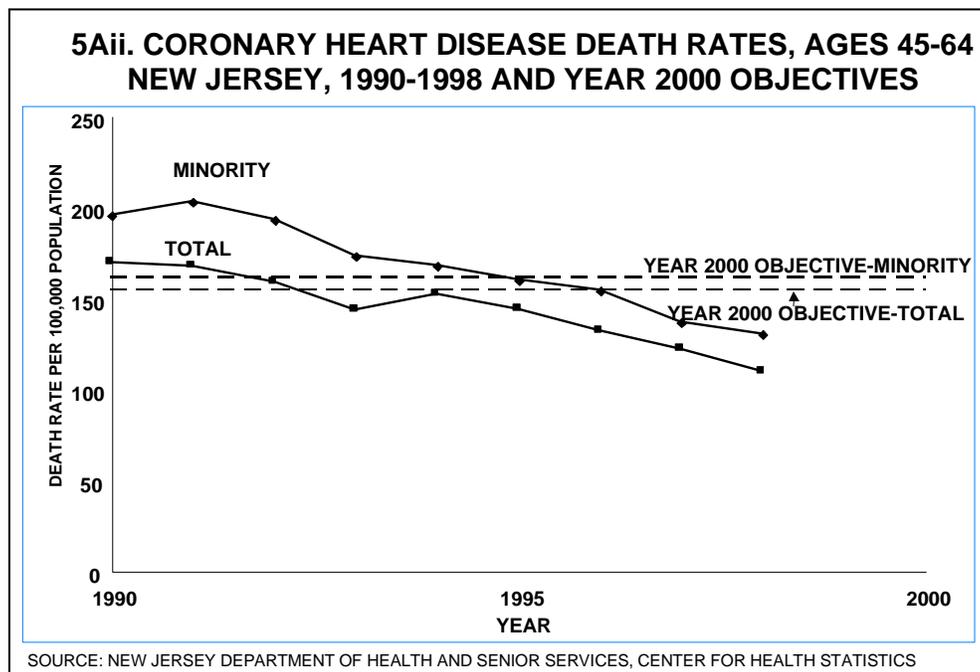
Objective 5B. Reduce deaths due to cerebrovascular diseases per 100,000 population to:

20.8 for the total population (age-adjusted)
32.0 for minorities (age-adjusted)
22.8 for the population aged 45-64 years
44.9 for minorities aged 45-64 years
283.8 for the population aged 65 and over

5Bi. AGE-ADJUSTED CEREBROVASCULA DISEASE DEATH RATES NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

5Bii. CEREBROVASCULAR DISEASE DEATH RATES, AGES 45-64 NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

**5Biii. CEREBROVASCULAR DISEASE DEATH RATES, AGES 65 AND OVER
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE**

YEAR 2000 OBJECTIVE

DEATH RATE PER 100,000 POPULATION

YEAR
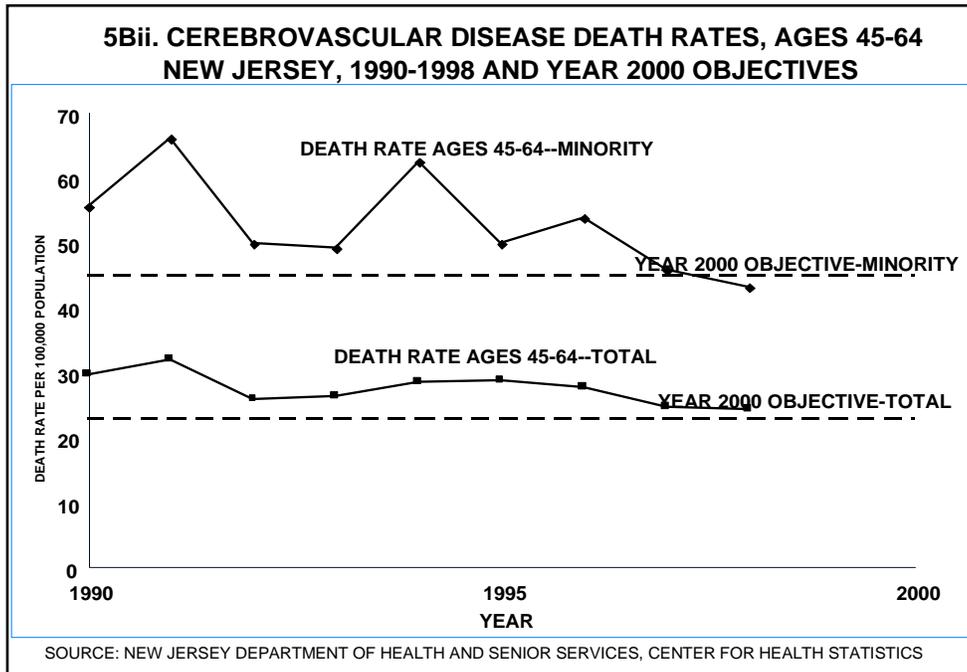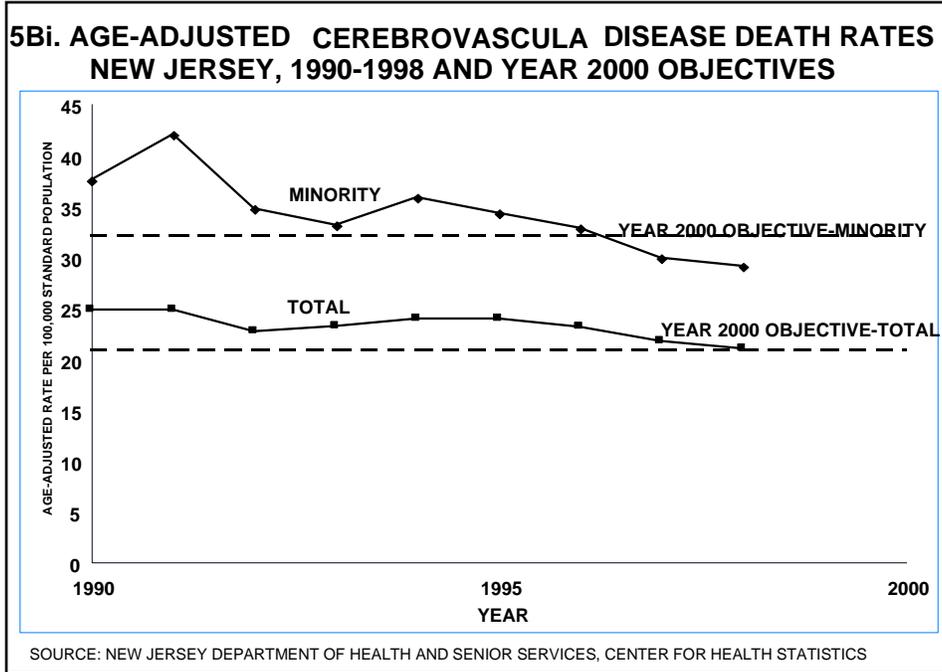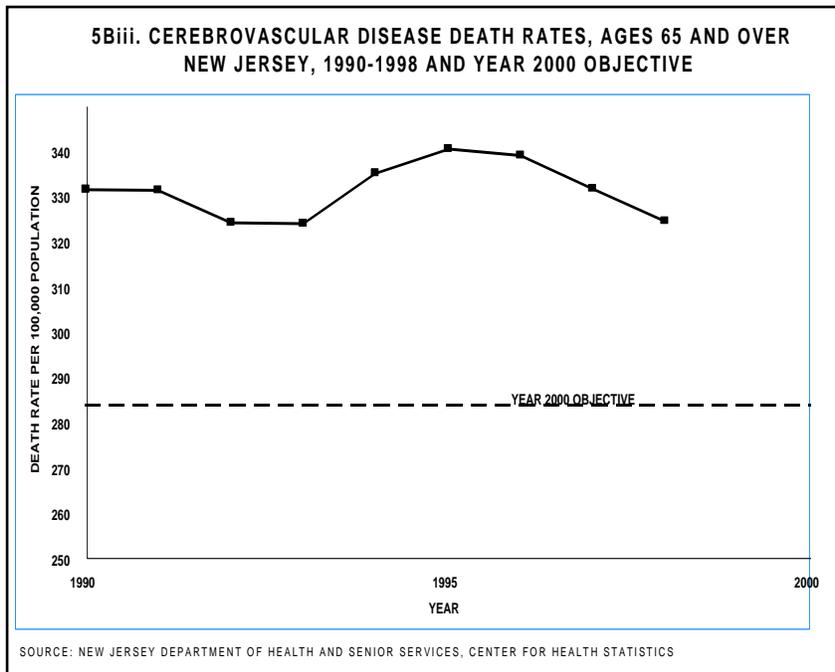
Objective 5C. Reduce end-stage renal disease as a complication of diabetes per 1,000 diabetics over the age of 18 to:
1.8 for the total population
12.0 for blacks

**5C. END-STAGE RENAL DISEASE AS A COMPLICATION OF DIABETES
NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVES**

YEAR 2000 OBJECTIVE - BLACKS

BLACK

RATE PER 1,000 DIABETICS

TOTAL

YEAR 2000 OBJECTIVE - TOTAL
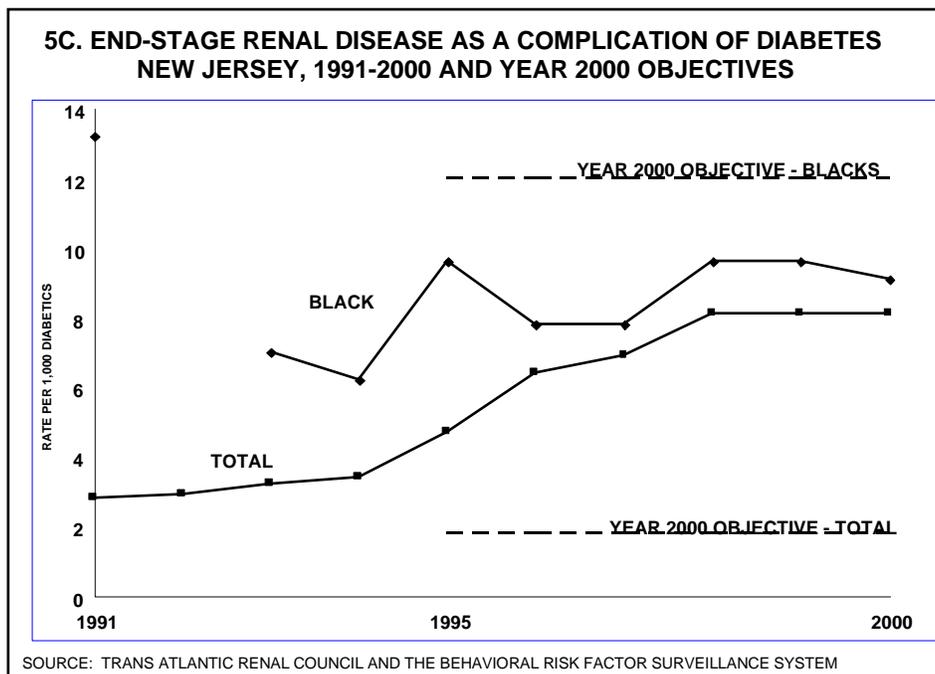
**Objective 5D. Increase the number of persons aged 18 and over who participated in physical activity at least 30 minutes three or more times per week during the past month to: 42.5 percent**

5D. PERSONS AGED 18 AND OVER WHO PARTICIPATED IN PHYSICAL ACTIVITY
FOR AT LEAST 30 MINUTES 3 OR MORE TIMES PER WEEK DURING THE PAST MONTH
NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
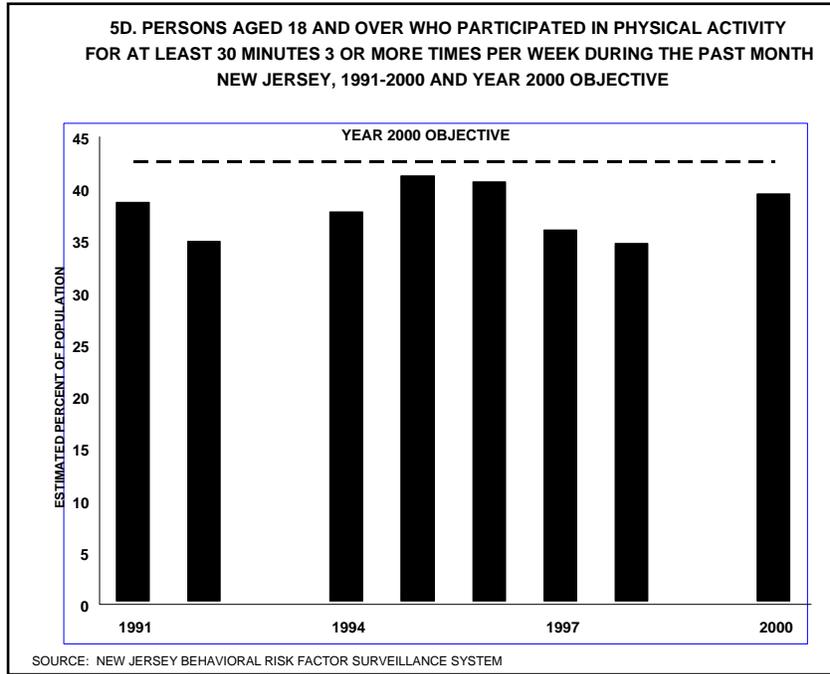
Objective 5E. Increase the proportion of persons 18 and over who have had their blood pressure checked by a health professional within the past two years to: 96.0 percent

5E. PERSONS AGED 18 AND OVER WHO HAVE HAD THEIR BLOOD PRESSURE
CHECKED BY A HEALTH PROFESSIONAL WITHIN THE PAST 2 YEARS
NEW JERSEY, 1991-1999 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

77
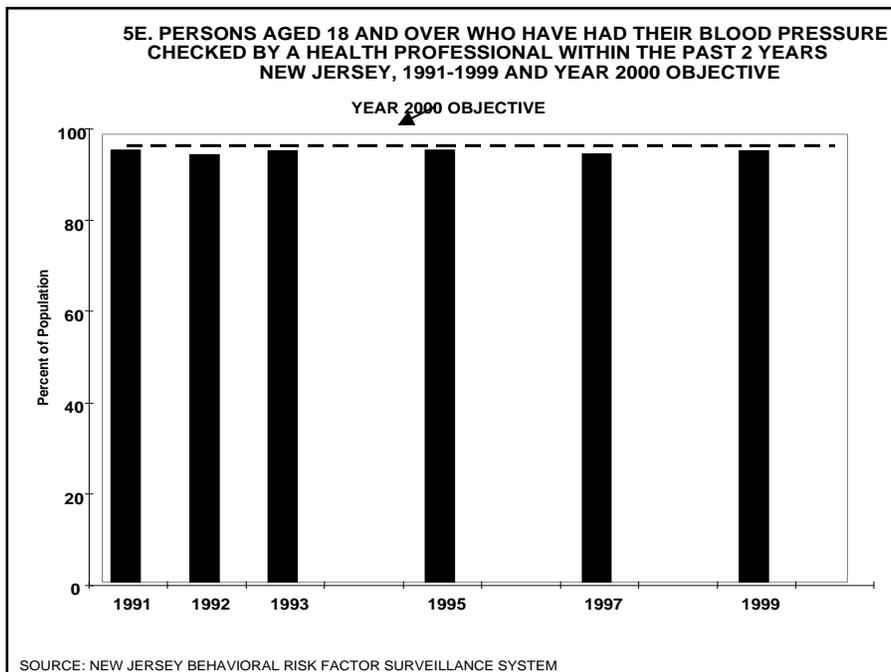
**Objective 5F. Increase the proportion of persons aged 18 and over who have had their blood cholesterol checked by a health professional within the past five years to: 82.0 percent**

5F. PERSONS AGED 18 AND OVER WHO HAVE HAD THEIR BLOOD CHOLESTEROL CHECKED BY A HEALTH PROFESSIONAL WITHIN THE PAST 5 YEARS NEW JERSEY, 1991-1999 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
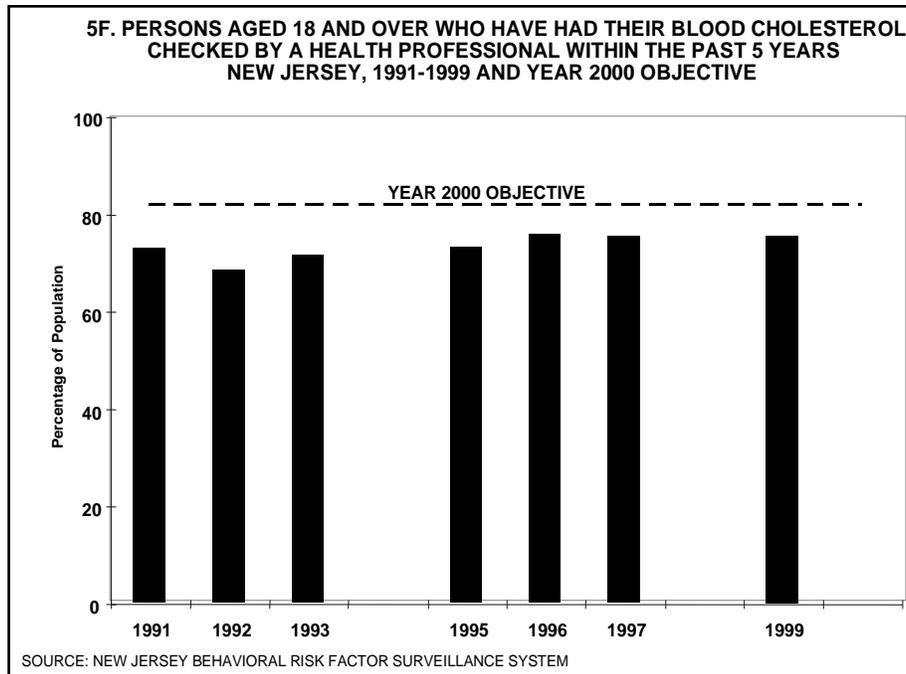
Priority Area 6

Prevent and Control AIDS and HIV Infection

Introduction

The incidence and prevalence of AIDS continue to be a major concern in the state of New Jersey. However, the expansion of a comprehensive intervention program, including prevention efforts and access to effective drug therapies, has had a very significant positive impact.

The incidence of AIDS in New Jersey has declined and it appears likely that most of the year 2000 incidence targets will be met. However, the AIDS incidence rates among minority women continue to be a source of concern. One of the most encouraging signs has been the trend in the AIDS/HIV death rate. In 1996 there was, for the first-time since this data has been collected, a decline in the HIV/AIDS death rate from the previous year. It is likely New Jersey will reach its year 2000 objective for an actual decline in this rate.

Outlook For Reaching Specific Objectives

Achieve target:	Likely	Unlikely	Uncertain
6A. Decrease the AIDS incidence among:			
Children	✔		
White non-Hispanic males, 25-44	✔		
Black non-Hispanic males, 25-44	✔		
Black non-Hispanic females, 15-44			✔
Hispanic males, 25-44	✔		
Hispanic females, 15-44			✔
6B. Reduction in HIV death rates for:			
total population	✔		
persons 25-44	✔		
6C. Reduce mothers of newborns with HIV	✔		

Data Update

6A. Decrease the incidence of AIDS per 100,000 population in each category to:

5.3 in the pediatric population aged 0-9 years
37.0 in white non-Hispanic males 25-44 years
349.1 in black non-Hispanic males 25-44 years
98.9 in black non-Hispanic females 15-44 years
145.6 in Hispanic males 25-44 years
19.8 in Hispanic females 15-44 years

Achieve target:	Likely	Unlikely	Uncertain
children	✔		
white non-Hispanic males, 25-44	✔		
black non-Hispanic males, 25-44	✔		
black non-Hispanic females, 15-44			✔
Hispanic males, 25-44	✔		
Hispanic females, 15-44			✔

AIDS Incidence Rates

Year	Total Aged 0-9	White Non-Hispanic Males 25-44	Black Non-Hispanic Males 25-44	Black Non-Hispanic Females 15-44	Hispanic Males 25-44	Hispanic Females 15-44
1990	7.2	53.2	498.2	145.3	209.4	34.0
1991	4.6	57.0	495.3	139.0	201.5	49.3
1992	4.8	72.1	608.9	203.9	243.3	61.7
1993	7.8	90.6	828.1	309.0	335.5	88.9
1994	5.1	67.9	706.1	233.1	251.3	73.8
1995	4.1	56.8	621.7	212.8	235.2	69.4
1996	2.0	41.7	487.2	190.8	194.5	53.3

Despite the major increases in the incidence rates which resulted from a revision in 1993 by the federal government in the definition of AIDS, New Jersey's rates have declined in each of the high-risk groups in every year since. The incidence rate in children through 9 years of age reached the year 2000 objective in 1994 and continues to decline. Among white, non-Hispanic males, 25 through 44 years of age, the rate had decreased by 1996 to a point virtually meeting the year 2000 target. The rates in the black, non-Hispanic male population and the Hispanic male population, 25 through 44 years, are also declining at rates which make the achievement of the year 2000 targets for these groups likely. The only uncertainty lies with the population of females, 15 through 44 years, both black, non-Hispanic and Hispanic. For both of these groups, the incidence rate is declining, but it is unclear whether the rate of decline is sufficient to meet the target levels in the year 2000.

6B. Decrease the death rates due to HIV infection per 100,000 population to:

12.1 in the total population, age-adjusted
30.1 in the population aged 25-44 years

Achieve target:	Likely	Unlikely	Uncertain
total population	✔		
persons 25-44	✔		

Death Rates Per 100,000 Population

Year	Total Age-Adjusted	Population 25-44 Years
1988	14.9	36.7
1989	19.3	49.1
1990	19.9	49.9
1991	23.1	57.2
1992	24.4	60.0
1993	27.2	66.5
1994	28.3	68.3
1995	29.5	69.5
1996	20.3	48.9

Between 1988 and 1995, the death rate from HIV infection increased at a steady, albeit slowing, rate annually. In 1996, however, there was an actual decline in the death rate, both for the total population and persons aged 25 through 44 years. This reversal in the trend is probably primarily due to the new medical treatments available to persons with AIDS/HIV infection, which have extended survival for some. It may also reflect the decline in incidence noted in Objective 6A. It is likely that the year 2000 health objectives will be met.

6C. Decrease the percentage of HIV-positive readings in mothers of newborns to:

0.30 percent

<u>Achieve target:</u>   <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Percent HIV Positive Readings In Mothers Of Newborns

Year	Percent
1988	0.49
1989	0.52
1990	0.49
1991	0.56
1992	0.45
1993	0.36
1994	0.35
1995	0.31
1996	0.31
1997	0.27

The year 2000 target was achieved in 1995, and the trend suggests maintenance of this objective, or even improvement over the target level.

Discussion

In 1996, HIV/AIDS infection dropped in the ranking of leading causes of death in New Jersey to eighth place, from sixth in 1995. However, it remains the leading cause of death for black men aged 25 through 44 and black women aged 15 through 44. It is the second leading cause of death

for white men aged 25 through 44, and is tied with unintentional injuries as the second leading cause of death for white women in this age group. Because women infected with HIV are the major source of infection for infants, the trends in women's HIV/AIDS mortality are related to HIV/AIDS incidence in children. New Jersey has the second highest incidence rate for pediatric AIDS cases in the country (defined as children from birth through nine years of age).

During the 1980s and into the early 1990s, AIDS incidence and death rates increased almost every year in New Jersey. In recent years, however, the incidence rate has declined, as has the overall mortality rate. There has also been a change over the past decade in the impact of AIDS on different segments of New Jersey's population. The following trends have emerged:

- The number of AIDS cases among heterosexual injecting drug users has increased steadily. ·
- AIDS and HIV infection have increased in minority women and children. Eighty-seven percent of New Jersey's pediatric cases are black or Hispanic. ·
- Heterosexual contact cases are increasing very rapidly, accounting for about 16 percent of all HIV and AIDS cases ever reported in New Jersey. The vast majority of cases infected by heterosexual contact are black or Hispanic, more than half of whom are female partners of injecting drug-using men. ·
- The proportion of cases among blacks and Hispanics has steadily increased. These groups account for nearly three-quarters of New Jersey AIDS cases and more than 79 percent of those infected with HIV who have not progressed to AIDS, even though they are less than 20 percent of the State's population. ·

With the increasing impact of the HIV/AIDS epidemic, New Jersey focused on creating and expanding a comprehensive intervention, prevention, care, and treatment network. This network, which initially started as an unrelated group of counseling, testing, and prevention programs sprinkled across the state, quickly grew to a coordinated system of comprehensive programs where quality care, treatment, and prevention programs were established in every county.

With considerable community and stakeholder involvement, the Department developed in 1994 a comprehensive HIV prevention plan for New Jersey. As a result of this plan, prevention efforts are targeted to special populations, including injecting drug users, women at risk of heterosexual transmission, men who have sex with men, and infants infected before birth.

In 1994 a clinical trial involving HIV positive pregnant women demonstrated that Zidovudine (ZDV/AZT) taken during pregnancy is effective in reducing the transmission of HIV infection from mother to child. Since then, New Jersey has made a concerted effort to educate both health care providers and women of childbearing age of the benefits of HIV testing and use of ZDV/AZT for pregnant women who test positive. A law was passed to require providers to counsel pregnant women about these benefits. As a result of these and other measures, the incidence of pediatric AIDS has declined substantially, even though it is still high by national standards.

HIV testing of individuals at risk for infection increased from testing 2,400 in 1986 to more than 65,000 in 1997. Counseling and testing have also been made available to patients at clinics for sexually transmitted diseases, prenatal and family planning clinics, drug treatment programs and TB clinics. Infected individuals among those tested are referred to a network of early intervention programs, where they can receive state of the art treatment for HIV disease. With the emergence and availability of anti-retroviral medications such as AZT, 3TC and ddI in the 1980s and early 1990s, and more powerful drugs such as protease inhibitors and non-nucleoside reverse

transcriptase inhibitors in the 1990s, New Jersey has provided a network of care for an estimated 12,000 individuals infected with HIV. Through this network, infected individuals are also able to access other ancillary services to address a multitude of health concerns for them and /or family members.

The federal Ryan White Care Act of 1990 created funding for cities and/or regions (such as Newark, Jersey City, and Paterson) which were hit the hardest by the HIV/AIDS epidemic. The greatest growth and impact of Ryan White funding has been in providing financial assistance to uninsured or underinsured patients with HIV to purchase life-sustaining drugs through the state's AIDS Drug Distribution Program (ADDP). Each year, more than 2,600 individuals with HIV directly benefit by having their drugs (many of which cost $5,000 annually) paid for by the ADDP program. ADDP permits these individuals to gain access to critical and lifesaving drug therapies while maintaining an acceptable standard of living.

As a result of these programs, progress has been made in reducing the incidence of AIDS within designated populations, and in decreasing the rate at which New Jersey citizens are dying from HIV infection. Despite this progress, the toll that AIDS is taking, especially in minority communities, remains too high. The Department will continue to make its efforts to reduce the spread of HIV infection one of its highest priorities.

Objective 6A. Decrease the incidence of AIDS per 100,000 population in each category to:

5.3 in the pediatric population aged 0-9 years
37.0 in white non-Hispanic males 25-44 years
349.1 in black non-Hispanic males 25-44 years
98.9 in black non-Hispanic females 15-44 years
145.6 in Hispanic males 25-44 years
19.8 in Hispanic females 15-44 years

6Ai. INCIDENCE OF AIDS PER 100,000 POPULATION FOR BLACK NON-HISPANIC MALES AND FEMALES NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF AIDS PREVENTION AND CONTROL

6Aii. INCIDENCE OF AIDS PER 100,000 POPULATION FOR HISPANIC MALES AND FEMALES NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF AIDS PREVENTION AND CONTROL
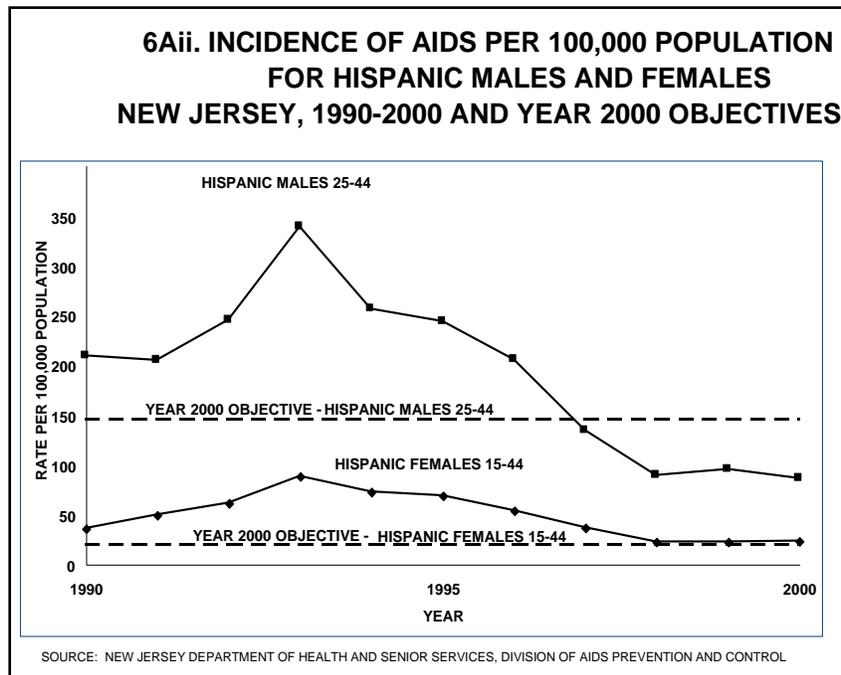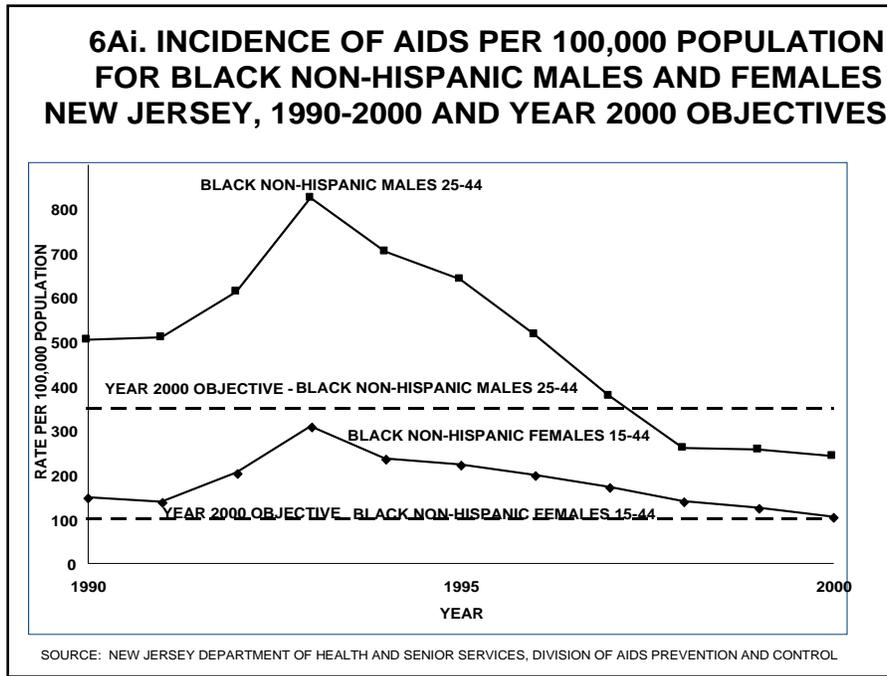
Objective 6B. Decrease the death rates due to HIV infection per 100,000 population to:
12.1 in the total population, age-adjusted
30.1 in the population aged 25-44

6Bi. AGE-ADJUSTED HIV INFECTION DEATH RATES
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

AGE-ADJUSTED RATE PER 100,000 STANDARD POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

6Bii. HIV INFECTION DEATH RATES, AGES 25-44
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

DEATH RATE PER 100,000 POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
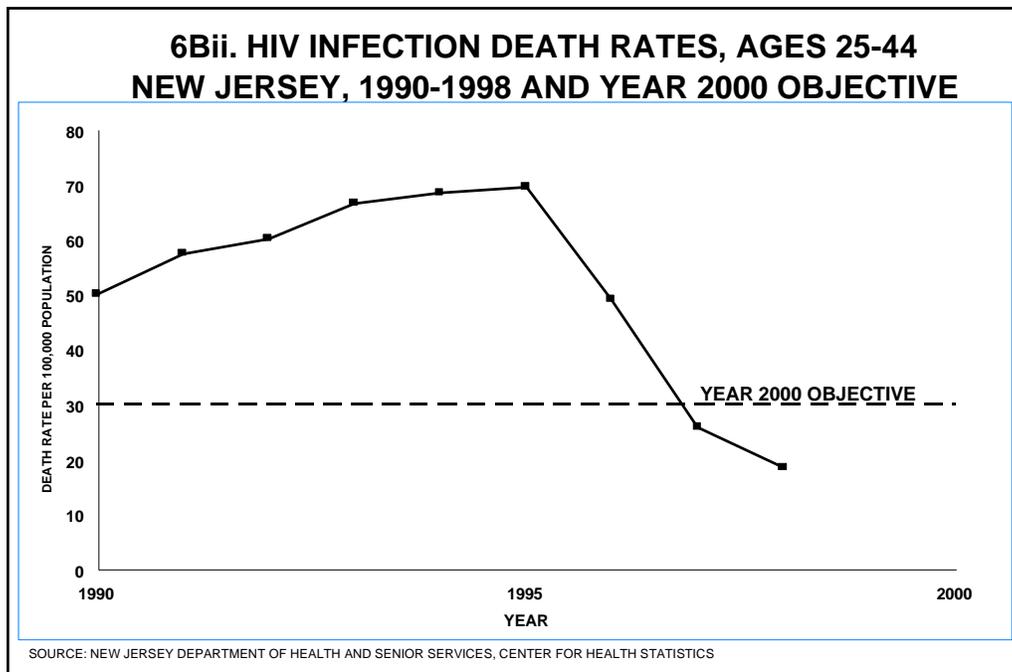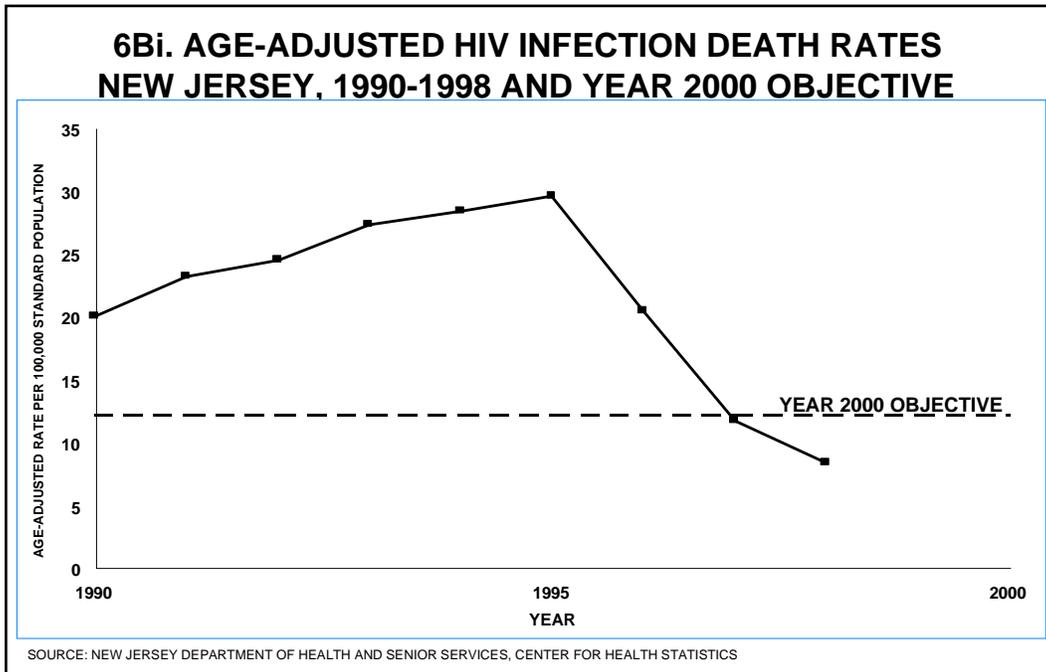
Objective 6C. Decrease the percentage of the HIV-positive readings in mothers of newborns to:

0.30 percent

**6C. PERCENT HIV POSITIVE READINGS IN MOTHERS OF NEWBORNS
NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVE**

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF AIDS PREVENTION AND CONTROL
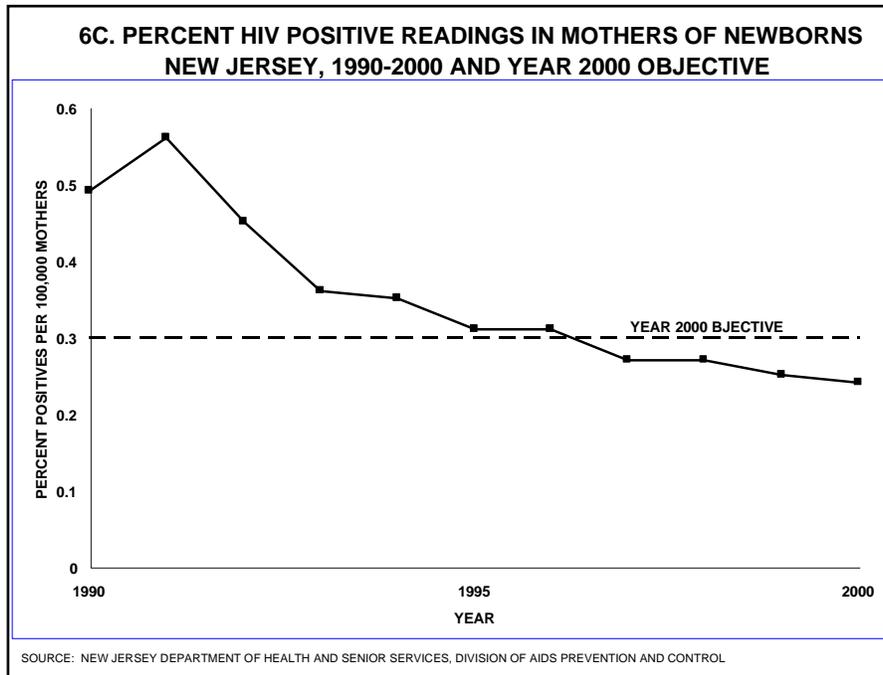
Priority Area 7

Prevent and Control Sexually Transmitted Diseases

Introduction

Sexually transmitted diseases (STDs) continue to be a major health problem in New Jersey. More than 20 organisms and syndromes are transferred through sexual contact, including genital herpes, HIV, and hepatitis B. The Department has chosen to concentrate on addressing syphilis, gonorrhea, and chlamydia due to the greater incidence and prevalence of these diseases.

The year 2000 objectives for most types of syphilis are likely to be met, but the outlook for other STD objectives is uncertain.

Outlook For Reaching Specific Objectives

Achieve target:	Likely	Unlikely	Uncertain
7A. Reduction in syphilis:			
the total population	✔		
minorities	✔		
7B. Reduction in congenital syphilis for:			
total population		✔	
minorities			✔
7C. Reduction in gonorrhea for the total population			✔
7D. Reduction in chlamydia for the total population			✔

Data Update

7A. Reduce primary and secondary syphilis incidence per 100,000 population to:

65.0 for minorities

Achieve target:	Likely	Unlikely	Uncertain
the total population	✔		
minorities	✔		

Incidence Rates Of Primary And Secondary Syphilis

Year	Total	Minorities
1985	10.0	N/A*
1986	8.8	N/A*
1987	9.8	N/A*
1988	14.2	N/A*
1989	19.5	N/A*
1990	22.0	N/A*
1991	14.1	N/A*

1992	7.7	34.4
1993	4.2	17.1
1994	3.0	13.1
1995	2.4	9.9
1996	2.2	7.8

Since 1990, the incidence rate of primary and secondary syphilis for the population as a whole has been on the decline. The year 2000 objective was achieved in 1992 and has continued to decline since then.

Breaking the available data down by race to produce a minority incidence rate is problematic, due to a high proportion of cases where race was not reported. Data on incidence in the minority population for years prior to 1992 have been found to be invalid. Incidence rates for minorities in recent years have declined, and are well below the target established at the beginning of this decade, when reliable minority data were not available. Minority rates, despite their decline, remain higher than rates for the total population.

7B. Reduce congenital syphilis incidence per 100,000 live births to:

30.0 for the total population
100.0 for minorities

Achieve target:	Likely	Unlikely	Uncertain
the total population		✔	
minorities			✔

Incidence Rates Of Congenital Syphilis

Year	Total	Minorities
1985	2.8	4.5
1986	9.2	22.0
1987	10.6	46.7
1988	5.1	19.3
1989	10.7	43.2
1990	63.5	248.4
1991	33.8	N/A*
1992	88.0	N/A*
1993	142.6	N/A*
1994	153.0	N/A*
1995	100.1	N/A*
1996	118.9	316.5
1997**	88.5	213.3

*Not available.
**Data for the 1997 are provisional.

The data above indicate a sharp increase in the reported incidence of congenital syphilis from 1989 to 1990. This was due in large part to changes by the Centers for Disease Control and Prevention

in the guidelines for classifying and reporting cases of the disease. The new definition includes stillbirths and all infants whose mothers have untreated or inadequately treated syphilis at delivery. Thus, an increase in total reported cases of congenital syphilis was anticipated. However, the trend since this change reflects continuing and large increases in the incidence of congenital syphilis in the total population, making it unlikely that the year 2000 target will be reached.

Minority syphilis rates for the period 1991 through 1995 are not available. However, data for 1996 and preliminary data for 1997 indicate the rate is well above the target level but declining. Therefore, achievement of the year 2000 objective is uncertain.

7C. Reduce gonorrhea incidence per 100,000 population to:

100.0 for the total population

Achieve target:	Likely	Unlikely	Uncertain
			✔

Incidence Rates Of Gonorrhea

Year	Percent
1985	261.0
1986	257.3
1987	223.5
1988	212.7
1989	183.5
1990	190.5
1991	135.3
1992	89.0
1993	82.1
1994	66.1
1995	72.3
1996	109.2

The incidence rate of gonorrhea had been declining until 1995, when it began rising again. For four years (1992 through 1995), the rate had been below the year 2000 objective of 100 cases per 100,000 population. However, the 1996 rate was once again above the target. This apparent increase is likely due to a change in the surveillance system in 1995 from a provider-based system to a laboratory-based system. Subsequent years of data are needed to determine if this apparent increase is due to the change in the surveillance system or if the incidence of gonorrhea is truly no longer declining.

7D. Reduce chlamydia trachomatis incidence per 100,000 population to:

170.0 for the total population

Achieve target:	Likely	Unlikely	Uncertain
			✔

Incidence Rates Of Chlamydia

Year	Rate
1991	22.1
1992	50.5
1993	34.9
1994	23.2
1995	51.0
1996	153.6

Since there was no requirement to report cases of chlamydia until 1990, the first year for which data are available is 1991. In 1995, surveillance moved from a provider-based system to a laboratory-based system, causing a dramatic increase in the number of cases reported, resulting in an apparently higher incidence rate. Subsequent years of data will be required to determine what the trend in chlamydia incidence is, as well as an appropriate target for improvement. The original objective was borrowed from Healthy People 2000, which used a target incidence rate for non-gonococcal urethritis, since there was no national chlamydia surveillance system at that time.

Discussion

The incidence of primary and secondary syphilis is highest in those aged 25 through 29. Syphilis rates increased substantially from 1986 through 1990, coinciding with an increase in crack cocaine usage. The more recent decrease in syphilis may be due in part to sexual behavior changes in response to the HIV epidemic. Evidence increasingly confirms an association between genital ulcer disease, including infectious syphilis, and spread of HIV through sexual contact. HIV prevention and syphilis control activities build upon and support each other.

Gonorrhea is the key indicator of progress in reducing STDs among populations with the highest disease rates. Incidence is highest among those aged 15 through 19. Despite the recent upward turn in incidence rates for gonorrhea, the number of cases declined almost 60 percent between 1985 and 1996.

Chlamydia is the most common sexually transmitted bacterial pathogen in the United States, causing an estimated four million acute infections each year. In New Jersey, chlamydia is thought to be two to three times more common than gonorrhea. Uncomplicated chlamydia infection may exhibit no symptoms or signs of infection. Left untreated, however, chlamydia infection can cause serious complications. Because chlamydia is most prevalent in women and children, the screening of sexually active women is recommended by the U.S. Prevention Health Services Guidelines as a routine element of primary care.

The Department uses surveillance, prevention, and treatment to control STDs. It supports forty-five sexually transmitted disease clinics throughout the twenty-one counties of New Jersey, as well as funding education and screening services in a variety of other public health settings. To bolster its surveillance system the Department moved to direct reporting of test results by laboratories. Positive results are sent to local clinics for follow-up. Neonatal and prenatal positive results have the highest priority, in order to prevent congenital syphilis.

Objective 7A. Reduce primary and secondary syphilis incidence per 100,000 population to:

10.0 for the total population
65.0 for minorities

7A. PRIMARY AND SECONDARY SYPHILIS INCIDENCE RATES NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVES

YEAR 2000 OBJECTIVE - MINORITY

INCIDENCE - MINORITY

INCIDENCE - TOTAL

YEAR 2000 OBJECTIVE - TOTAL

Rate per 100,000 Population

1990   1995   2000
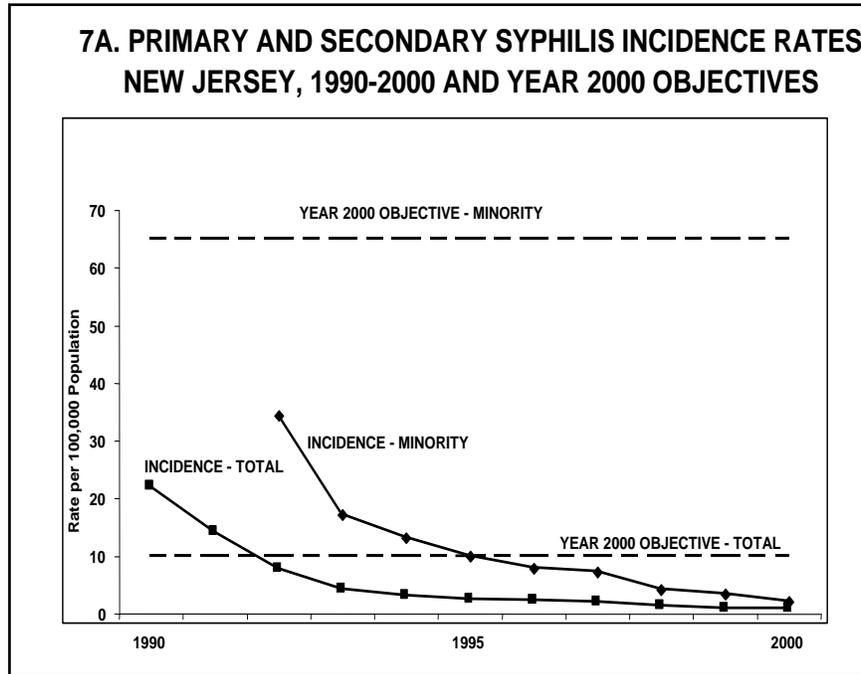
Objective 7B. Reduce congenital syphilis incidence per 100,000 live births to:
30.0 for the total population
100.0 for minorities

7B. CONGENITAL SYPHILIS INCIDENCE RATE NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

RATE PER 100,000 LIVE BIRTHS

MINORITY

TOTAL

YEAR 2000 OBJECTIVE - MINORITY

YEAR 2000 OBJECTIVE-TOTAL

1990   1995   2000
YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
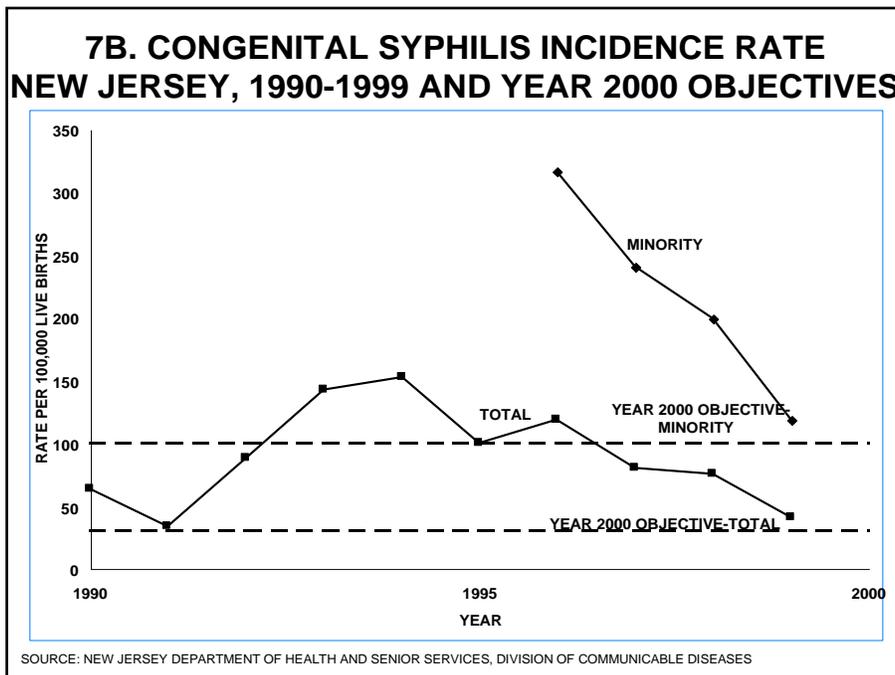
Objective 7C. Reduce gonorrhea incidence per 100,000 population to:
100.0 for the total population

7C. GONORRHEA INCIDENCE RATE
NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVE

ORIGINAL YEAR 2000 OBJECTIVE

REVISED YEAR 2000 OBJECTIVE

RATE PER 100,000 POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
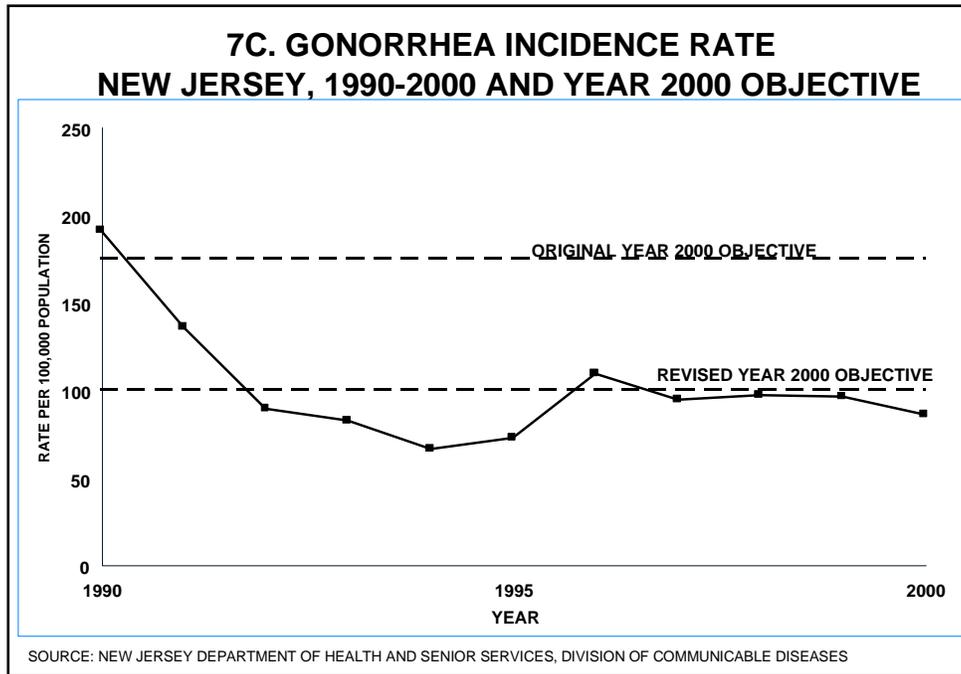
Objective 7D. Reduce chlamydia trachomatis incidence per 100,000 population to:
170.0 for the total population

7D. CHLAMYDIA INCIDENCE RATE
NEW JERSEY, 1991-2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

INCIDENCE PER 100,000 POPULATION

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
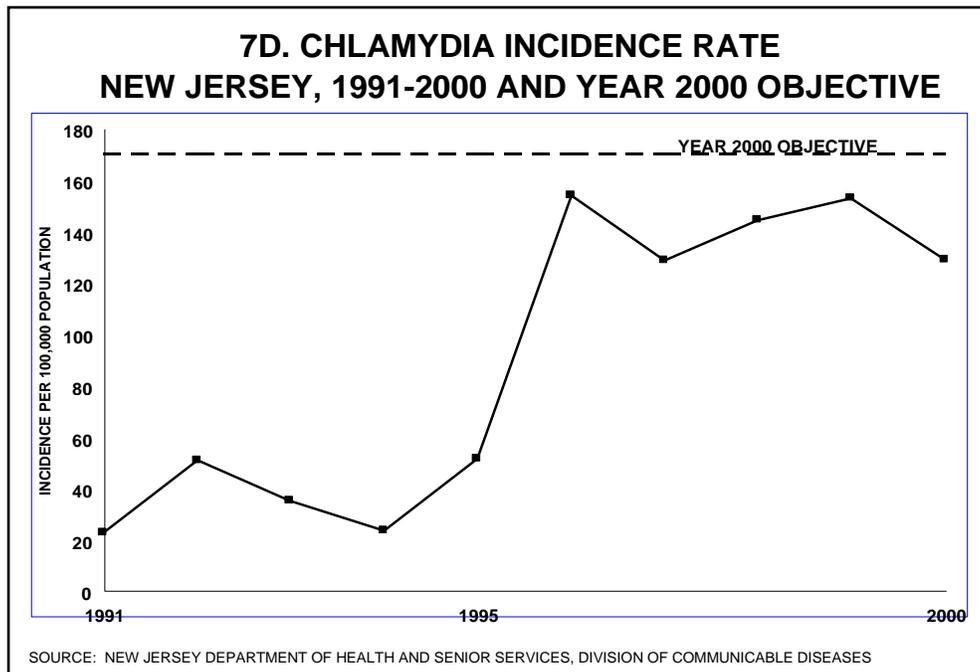
Priority Area 8

Prevent and Control Vaccine-Preventable and Other Infectious Diseases

Introduction

Control of communicable infectious diseases remains a fundamental part of public health programs throughout the world. Although noninfectious diseases have gained increasing prominence and attention, infectious diseases remain a significant potential threat to the health of New Jersey citizens. For diseases for which vaccines are available, immunization is the most cost-effective method of controlling these diseases through prevention. For other diseases, like tuberculosis (TB), efforts are concentrated on identification and effective treatment of infected individuals, to reduce the risk of the disease being spread. The Department has made great progress in immunization of young children, and in recent years has also made immunizing seniors against influenza and pneumonia a priority. The outlook for attaining the year 2000 objectives is mixed, however.

Outlook For Reaching Specific Objectives

Achieve target:	Likely	Unlikely	Uncertain
8A. Reduction in measles incidence	✔		
8B. Increase in immunization for measles			✔
8C. Increase in immunization for H. Influenza b	✔		
8D. Surface-antigen-positive women			✔
8E. Reduction in tuberculosis rate for:			
total population		✔	
minorities		✔	
8F. Reduction in Lyme disease cases		✔	

Data Update

8A. Decrease the annual incidence of measles (rubeola) by the year 2000 to:

0 cases

Achieve target:	Likely	Unlikely	Uncertain
	✔		

Incidence Of Measles

Year	Total
1985	30
1986	911
1987	39
1988	405
1989	462
1990	473

93

1991	1,138
1992	42
1993	12
1994	175
1995	8
1996	3

After experiencing major outbreaks of measles (rubeola) in 1986 and 1991, the incidence of the disease has decreased greatly. Though the number of cases rose in 1994 as a result of a college outbreak, it quickly returned to a very low level in 1995 and remained there in 1996. The Department will continue active surveillance and rigorous immunization efforts to reach the objective of being measles-free by the year 2000. It appears likely the objective will be achieved by the year 2000.

8B. Increase immunization levels for measles (rubeola) in children by age two to:

90.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Percent Of First Grade Students

Year	Percent
1992	64.5
1993	72.4
1994	82.4
1995	81.1
1996	83.6
1997	83.9

Based on the Retrospective School Immunization Survey, immunization levels for measles (rubeola) in children by age two increased by 30 percent from 64.5 percent in 1992 to 83.9 percent in 1997. Information gathered retrospectively on six-year-olds between 1992 and 1997 reflects the immunization status of two-year-old children in 1988 through 1993. The first year these data were available was 1992. It is uncertain whether the objective of 90 percent coverage of children by age two can be achieved by the year 2000, since the rate of increase declined after 1994 and immunization levels have remained fairly steady since then.

8C. Increase immunization levels for H. Influenzae type b started under age one in publicly funded clinics to:

98.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Percent Of Infants

Year	Percent
1993	96
1994	97
1995	100
1996	100
1997	97

H. Influenzae type b (Hib) is a disease, most common among children less than five years old, which can cause meningitis and other serious complications. Because it was not possible to account for Hib vaccinations given in the private sector, this objective was revised in 1996 to apply to infants under one year for whom data are now collected in publicly-funded clinics. The 1993 baseline measure for this group of infants was 96 percent. By 1995, the data indicated that all children seen in publicly-funded clinics were immunized for Hib. In 1997, the percentage of immunized children dropped to 97 percent. It remains likely, however, that the year 2000 objective of immunization of 98 percent of infants in publicly-funded clinics will be attained.

8D. Increase immunization levels for hepatitis-B in infants of surface-antigen-positive women treated in publicly-funded clinics by year 2000 to:

90.0 percent

Achieve target: Likely   Unlikely   Uncertain

Percent Of Infants

| Year	Percent
1994	75
1995	40
1996	74
1997	78

By 1995, a statewide public sector perinatal Hepatitis B Prevention Program had been implemented in all 21 New Jersey counties. All pregnant women receiving care in these agencies are being screened for hepatitis B and, if affected, tracked throughout the perinatal period. By 1997, more than 165 surface antigen positive pregnant women had been identified and were being tracked until delivery. After delivery, their infants were tracked. However, the percentage of infants immunized by eight months of age is not increasing very rapidly, and active maintenance of this program would be needed to assure that this objective is met.

More recently, it has become standard medical practice to recommend immunization of all newborns against hepatitis B. Data is not yet available on how many infants are being immunized statewide.

8E. Decrease the annual incidence of active tuberculosis per 100,000 population to:

4.4 for the total population

13.5 for minorities

Achieve target:	Likely	Unlikely	Uncertain
total population		✔	
minorities		✔	

Incidence Rates Of Tuberculosis

Year	Total	Minorities
1986	9.5	31.5
1987	9.7	33.4
1988	10.3	35.5
1989	12.3	40.8
1990	12.5	41.8
1991	12.7	42.3
1992	12.6	42.6
1993	11.6	36.7
1994	10.8	35.9
1995	10.7	34.5
1996	10.3	31.7

The incidence rate of active tuberculosis (TB) in the total population increased steadily from 1986 through 1991, and then began a steady decline through 1996. The same is true for minorities; the peak came in 1992 for that population. The rates for each group, however, have not gone below their original 1986 levels. During the entire ten year period, the incidence rate of TB for the minority population has been more than three times that of the total population. It is unlikely that either year 2000 TB objective will be achieved.

8F. Decrease the annual incidence of Lyme Disease (with rash) by the year 2000 to:

275 cases per year

Achieve target:	Likely	Unlikely	Uncertain
		✔	

Annual Incidence Of Lyme Disease (With Rash)

Year	Number
1988	550
1989	680
1990	707
1991	745
1992	559
1993	656
1994	1,306
1995	1,447
1996	1,719

Since 1988, the annual incidence of Lyme disease (with rash) has increased over 200 percent. The number of cases has consistently far exceeded the year 2000 objective. This has occurred despite significant prevention education and tick control efforts throughout the state. It is doubtful that the year 2000 objective will be reached.

Discussion

Vaccines are by far the most effective and inexpensive methods for the prevention and control of communicable diseases. Vaccines against such diseases as measles, poliomyelitis, diphtheria, and pertussis were accepted without question as safe and cost effective when epidemics of these diseases were rampant. Today, measles, poliomyelitis, diphtheria, and pertussis have been brought under control in the United States by improved social and environmental conditions and through systematic use of effective vaccines. The infrequent occurrence of these diseases has caused many individuals to question the need to continue to use these vaccines. However, these diseases have not been eradicated from the world and the use of these vaccines cannot be relaxed without risking the return of epidemics of these diseases.

New Jersey remains vulnerable to epidemics of infectious disease and this vulnerability has particularly negative implications for the young. For the period 1986 through 1993, New Jersey ranked fifth highest in the nation in the number of measles cases occurring per 100,000 population. By 1996, however, New Jersey attained the highest immunization coverage levels and the fewest number of measles cases in its history, but further progress must be made in order to achieve the year 2000 objectives. Improving initial immunization levels among unvaccinated preschool children, historically the most vulnerable and problematic population in New Jersey for this disease, is crucial to reaching the goal.

A number of cooperative public/private efforts have been launched to screen preschool-aged children for their immunization status, directly immunize them or refer them for immunization as needed, and track the ongoing immunization status of children least likely to be protected. Additional federal, state, and private resources have been directed toward these efforts. One of the most ambitious and promising initiatives underway is the development of an electronic immunization registry that not only tracks immunizations, but also facilitates reminders to parents of children who are overdue for particular immunizations and allows providers to assess their own record in immunizing children in their practices. Beginning in 1995, this system has been piloted in Camden, where it has already had a major impact in raising immunization rates.

Beginning in 1997, the Department has issued annual performance reports for commercial managed care plans in New Jersey, including a measure of their success in providing all age-appropriate immunizations to enrolled children two years of age and under. In the November, 1998 performance report, an average of 67 percent of young children enrolled in New Jersey HMOs were fully immunized. However, one HMO achieved an 83 percent rating. The Commissioner issued a challenge to all HMOs to achieve, for all preventive health measures, a target five points higher than the best performer's 1998 record by the year 2000 performance report. For immunization, the target would be 88 percent. HMOs are being required to submit action plans to indicate how they plan to achieve these targets. Their efforts should bring the state as a whole considerably closer to its year 2000 targets.

Other immunization initiatives are also underway. In the greater Newark area, where immunization

levels are lower than the statewide averages for New Jersey children, the Department is participating in Partnership to Immunize Newark Kids, a public-private program of comprehensive education, outreach and assessment for both parents and health care providers that will also expand use of the electronic immunization registry.

Special collaborations with the other programs that target areas of need throughout the state, such as the Supplemental Food Program for Women, Infants, and Children (WIC), and Federally Qualified Health Centers, have helped to ensure that increasing numbers of preschool-aged children are vaccinated on time. Also, the increased enrollment of individuals and families in managed care health benefit plans emphasizing preventive services and the implementation of the immunization insurance coverage law to reduce cost barriers should positively influence the immunization of all children from infancy to age 18.

Although the number of people with active tuberculosis in New Jersey is at its lowest point since 1992, TB remains a serious public health problem. Between 1986 and 1992, the incidence of active TB increased 36 percent. After peaking in 1992, active TB cases statewide have declined each year for the past four years. There were 820 cases in 1996, down three percent from the year before and 17 percent since 1992. The occurrence of active TB among children, the emergence of multi-drug resistant strains of TB, and the greater incidence of TB among immigrant populations present special challenges in the prevention and control of TB in New Jersey. In addition, minorities continue to be particularly hard hit.

The Department's TB Program provides support to 36 chest clinics throughout the state by providing TB medications free of charge, medical consultation through the National TB Center at The University of Medicine and Dentistry of New Jersey in Newark, nursing/administrative consultation and training to various health professionals. The Department also assists the state and county correctional facilities in both TB surveillance and prevention activities. In addition, federal and state funds are provided via health service grants to selected clinics throughout the state. The focus of support has been to ensure persons that diagnosed with TB or suspected TB complete a recommended course of treatment. These outreach staff provide directly observed therapy (DOT), which has been proven to be effective in reducing the TB morbidity throughout the state as well as the number of cases with multiple drug resistant TB. In 1997, 87 percent of pulmonary active TB cases under chest clinic supervision were placed on DOT. From 1995 through 1997, New Jersey experienced a 15 percent decrease in morbidity (848 to 718 cases). We anticipate these downward trends to continue in 1998.

Prevention of future cases is another major focus of effort. Contact interviewing and investigations are conducted on all reported TB cases and suspected cases with the capability of transmitting their infection to others. Identified individuals are promptly examined and preventive therapy is initiated. In the event of a large scale investigation in a congregate setting, such as a school or workplace, consultation is provided to local programs. Additionally, since individuals with both TB and HIV infection are considered at high risk for progression to active TB, efforts are also made to identify such persons by offering HIV testing and counseling, and to keep them on an appropriate drug regimen with the use of DOT.

The development of antibiotic resistance among microorganisms is a concern not only for tuberculosis, but for many other infectious diseases as well. Microorganisms are developing resistance to antibiotics at an increasing rate. The New Jersey Department of Health and Senior Services has been monitoring the development of antibiotic resistance in New Jersey since 1991,

and while the increase in resistance has been small, it is a warning that we cannot become complacent. To maintain control over infectious diseases in the future, it will be necessary to be more judicious in the use of antibiotics and to make better use of disease prevention techniques such as vaccines.

The annual incidence of Lyme disease in New Jersey, a tick-borne illness that was first identified a little over a decade ago, has increased more than 200 percent since 1988. Prevention efforts to date have focused on tick control and personal protection against ticks. However, in 1998 two Lyme disease vaccines were developed and are under review by the Federal Food and Drug Administration. Once these vaccines are widely in use there may be a marked difference in the incidence of Lyme disease.

Objective 8A. Decrease the annual incidence of measles (rubeola) by the year 2000 to: 0 cases

8A. MEASLES INCIDENCE
NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
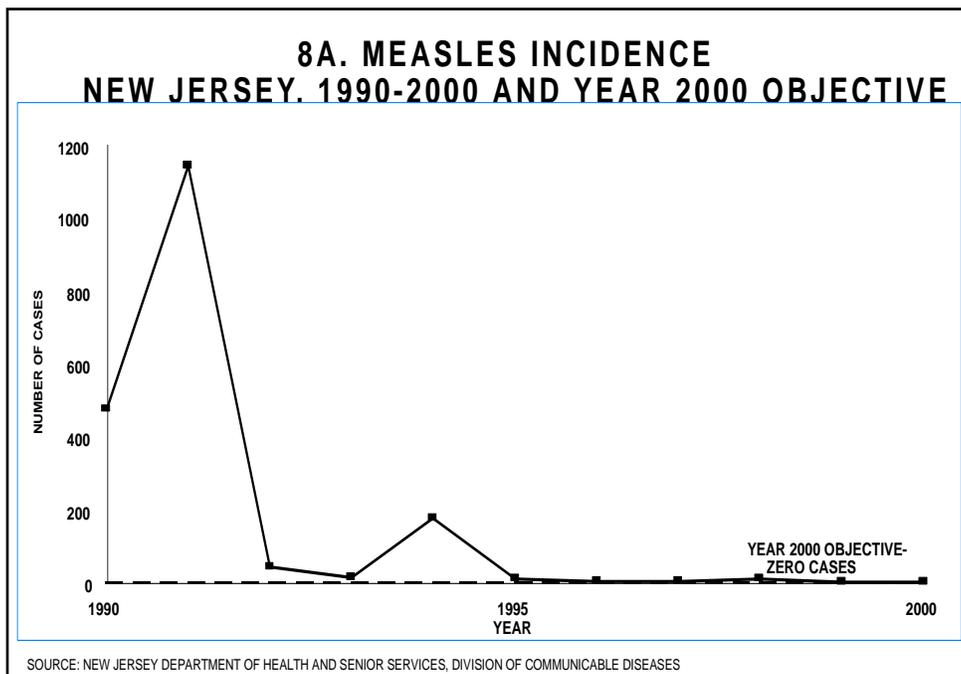
Objective 8B. Increase immunization levels for measles (rubeola) in children by age two to: 90.0 percent

8B. PERCENT OF FIRST GRADE STUDENTS WHO HAD RECEIVED RUBEOLA VACCINE BY 24 MONTHS OF AGE NEW JERSEY, 1992-2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

Percent of First Grade Students

1992   1996   2000

NOTE: DATA OBTAINED RETROSPECTIVELY

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
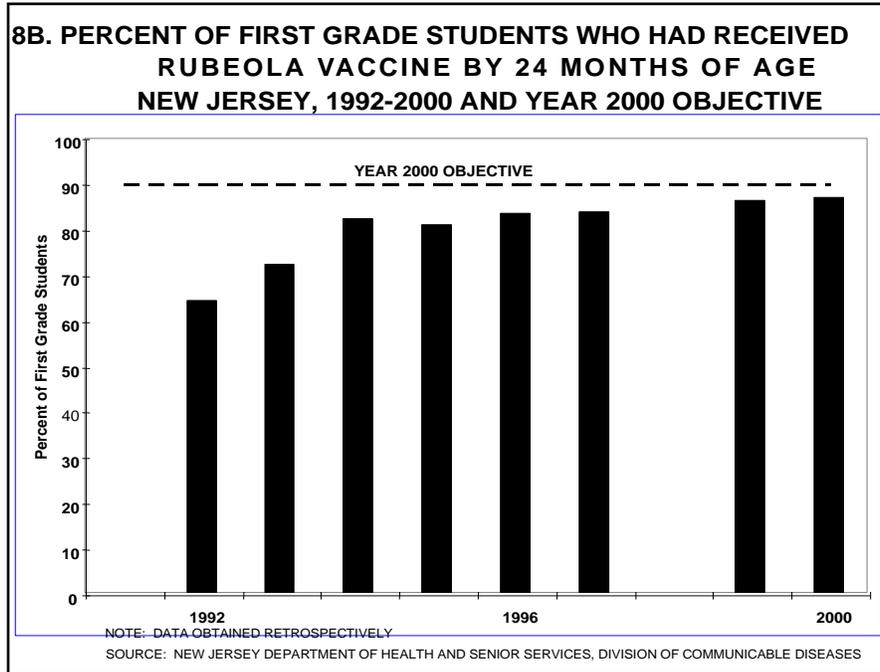
Objective 8C. Increase immunization levels for H. influenzae type b started under age one in publicly funded clinics to: 98.0 percent

8C. PERCENTAGE OF H. INFLUENZAE TYPE B IMMUNIZATIONS STARTED UNDER AGE 1 IN PUBLICLY FUNDED CLINICS NEW JERSEY, 1993-2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

% OF INFANTS SEEN IN PUBLIC CLINICS

1993   1996   2000

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
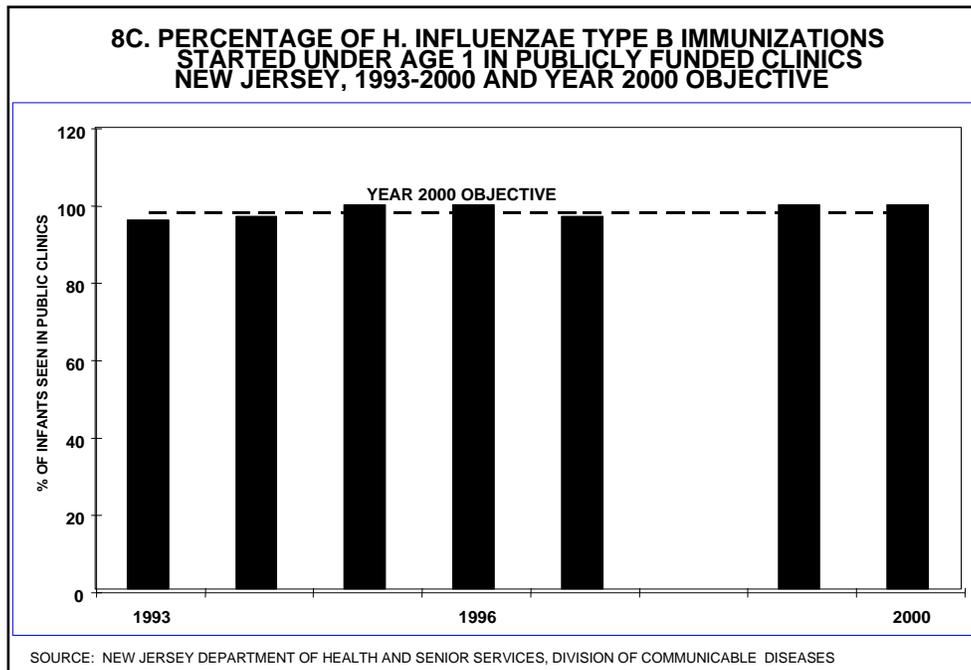
Objective 8D. Increase immunization levels for hepatitis-B in infants of surface-antigen-positive women treated in publicly-funded clinics by year 2000 to:
90.0 percent

8D. PERCENTAGE OF HEPATITIS B IMMUNIZATION IN INFANTS OF SURFACE-ANTIGEN-POSITIVE WOMEN TREATED IN PUBLICLY FUNDED CLINICS NEW JERSEY, 1994-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
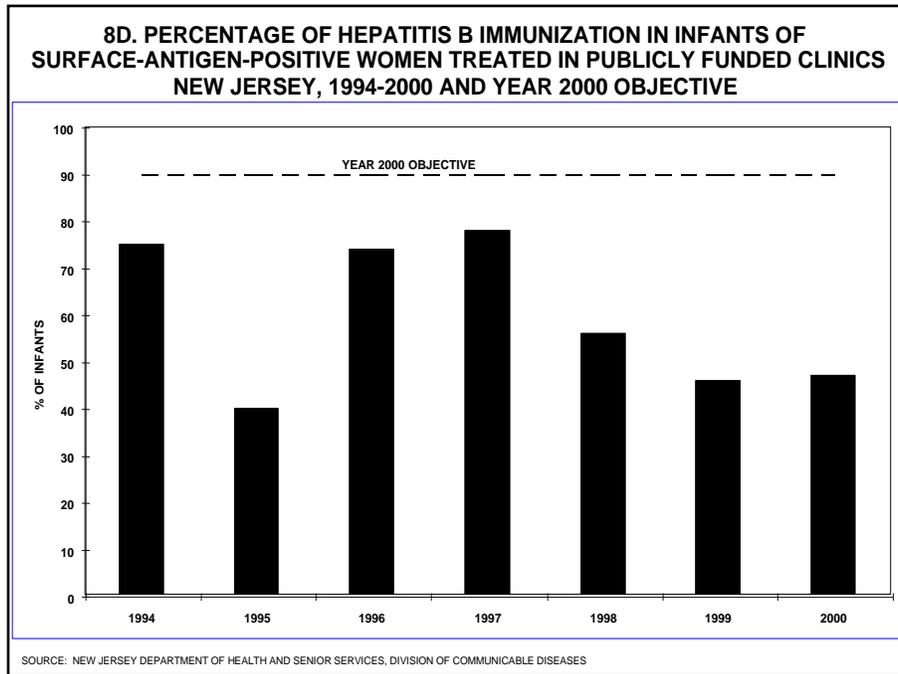
Objective 8E. Decrease the annual incidence of active tuberculosis per 100,000 population to: **4.4 for the total population**
13.5 for minorities

8E. ACTIVE TUBERCULOSIS INCIDENCE RATES NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES

101
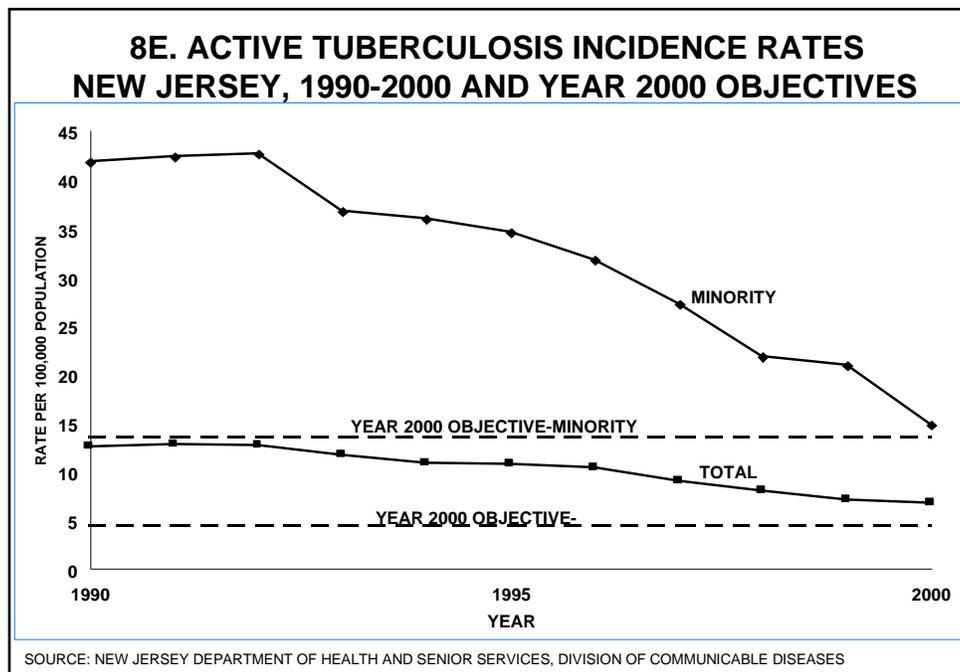
Objective 8F. Decrease the annual incidence of Lyme Disease (with rash) by the year 2000 to: 275 cases per year

8F. LYME DISEASE INCIDENCE
NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF COMMUNICABLE DISEASES
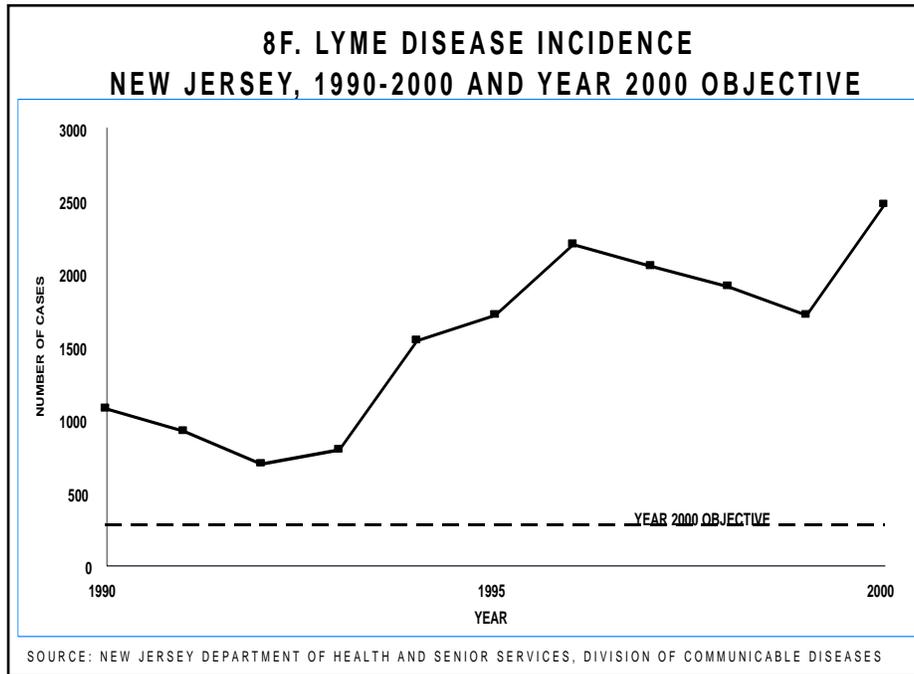
Priority Area 9

Prevent and Control Injuries

Introduction

Injuries, whether intentional or unintentional, are a major cause of death and suffering, as well as increased health care costs. They are the leading cause of death among children and young adults aged one through twenty-four. The economic cost is reported to exceed $224 billion nationally. This is particularly disturbing since injuries are largely preventable. Healthy New Jersey 2000 objectives in the area of injury prevention and control focused on the following major causes of injuries: motor vehicles, falls among the elderly, homicide, and suicide.

New Jersey has made considerable progress during the past decade in reducing injuries, and it appears that many, but not all, of the year 2000 objectives will be met.

Outlook For Reaching Specific Objectives

	Achieve target:	Likely	Unlikely	Uncertain
9A.	Reduction in the motor vehicle death rate for:			
	the total population	✔		
	youths, 15-24 years	✔		
	persons 70 and older		✔	
9B.	Increase in adults using seat belts	✔		
9C.	Reduction in deaths from falls for people:			
	aged 65-84	✔		
	aged 85 and over			✔
9D.	Reduction in homicide death rates among minority:			
	males aged 15-44			✔
	females aged 15-44			✔
9E.	Reduction in suicide rates for:			
	youth aged 15-24	✔		
	white males 65 and over	✔		
9F.	Reduction in hospitalizations due to head/spinal cord injuries	✔		

Data Update

9A. Reduce the number of deaths caused by motor vehicle crashes per 100,000 population to:

11.4 for the total population (age-adjusted)
23.0 for youth aged 15-24 years
20.0 for persons aged 70 and over

Achieve target:	Likely	Unlikely	Uncertain
the total population	✔		
youths, 15-24 years	✔		
persons 70 and older		✔	

Motor Vehicle Fatality Rates

Year	Total Age-Adjusted	15-25 Years	70 And Over
1985	12.0	23.2	20.4
1986	13.0	24.4	20.9
1987	12.8	24.2	21.7
1988	12.8	26.4	24.8
1989	10.9	18.6	21.5
1990	11.3	22.0	23.5
1991	10.5	16.7	23.7
1992	10.5	20.0	19.8
1993	10.0	18.2	26.9
1994	9.3	16.2	20.5
1995	9.9	17.8	22.1
1996	9.9	17.2	23.3

The year 2000 target for the age-adjusted motor vehicle-related fatality rate for the total population was first met in 1990. The latest rate available, for 1996, reflects further improvement beyond the year 2000 target, although there has been some year-to-year fluctuation. For the two high-risk groups identified in this area - persons aged 15 through 24 and the population aged 70 and over - the experience has been mixed.

For youth the year 2000 objective was actually met in 1989 for the first time, and has been met or exceeded every year since then. For older persons, however, there has been fluctuation in the rate for this group from year to year, with an increased death rate in the most recent years. It is particularly striking that the death rate is now lower for the younger than for the older group, a reversal of the relationship observed at the beginning of this monitoring period. At this point, it is not likely that the objective for the older population will be achieved.

9B. Increase the percentage of persons 18 and over who report the use of seat belts either "always" or "nearly always" when driving or riding in a car to:

75.0 percent

Achieve target:	Likely	Unlikely	Uncertain
	✔		

Use Seat Belt "Always" Or "Nearly Always"

Year	Persons 18 And Over
1991	83.4

1992	83.7
1993	83.4
1994	80.0
1995	79.7
1996	81.2
1997	85.6

No state-specific data on self-reported seat belt use were available at the time the year 2000 target was set. Since then, data have become available through the Behavioral Risk Factor Surveillance System, and the percentage of New Jerseyans 18 and over who report that they use a seat belt "always" or "nearly always" when driving or riding in a car has consistently exceeded the target.

9C. Reduce deaths from falls per 100,000 population to:

12.0 for the population aged 65 through 84 years
105.0 for persons aged 85 years and over

Achieve target:	Likely	Unlikely	Uncertain
aged 65-84	✔		
aged 85 and over			✔

Death Rates From Falls And Fall-Related Injuries

Year	65-84 Years	85 Years And Over
1985	17.6	120.5
1986	11.5	106.9
1987	15.9	123.4
1988	14.2	138.9
1989	14.7	131.8
1990	16.7	119.1
1991	12.4	134.0
1992	15.1	129.9
1993	12.7	136.7
1994	15.8	128.2

Deaths from falls are the second-leading cause of unintentional injury deaths among the elderly, after motor vehicle-related fatalities. The death rate from falls is six to ten times as great among those 85 years of age and older as for those 65 through 84. Over the ten year period 1985 through 1994, the death rates from falls among the latter group of "young elderly" has fluctuated, but it appears possible that the year 2000 target may be achieved. For the oldest group, however, there is no clear trend in the death rate from falls, and it is uncertain that their target rate will be met.

9D. Reduce homicide deaths per 100,000 population to:

39.0 in minority males 15-44 years of age
7.0 in minority females 15-44 years of age

Achieve target:	Likely	Unlikely	Uncertain
males aged 15-44			✔
females aged 15-44			✔

Homicide Death Rate

Year	Minority Males, 15-44	Minority Females, 15-44
1985	41.4	14.7
1986	45.0	14.3
1987	40.4	9.6
1988	48.4	10.2
1989	43.9	11.1
1990	43.2	9.3
1991	39.6	12.5
1992	45.9	9.6
1993	47.1	9.6
1994	37.6	7.7
1995	47.4	8.1
1996	42.2	10.1

The homicide death rate among minority males who are 15 through 44 years of age is about three to five times the comparable rate in minority females. Among minority males, the rate reached the year 2000 target level once during the 1990s, but increased again in a subsequent year to a level substantially higher than the target. Because of the continuing fluctuation, it is uncertain that the target objective will be met for minority males by the year 2000.

The homicide rate for minority females in this age group declined substantially from 1991 to 1995, but an increase in 1996 makes achieving the target level by the year 2000 uncertain.

9E. Reduce suicides per 100,000 population to:

7.5 for youth aged 15 through 24
16.2 (revised) among white males aged 65 and over

Achieve target:	Likely	Unlikely	Uncertain
youth aged 15-24	✔		
white males 65 and over	✔		

Suicide Rate

Year	Youth 15-24	White Males 65+
1985	9.2	24.2
1986	8.6	25.9
1987	8.4	39.0
1988	9.5	25.8

1989	8.2	25.5
1990	7.8	26.9
1991	6.3	18.0
1992	7.9	26.3
1993	8.6	23.2
1994	7.6	20.5
1995	8.3	20.5
1996	7.1	19.6

Although the suicide death rate in 15-through 24-year-olds has fluctuated, the year 2000 objective was met in 1991, 1994, and 1996 and it appears likely that the target level will be met in the year 2000.

A revised, more ambitious target suicide death rate for white males 65 and over was set in 1996, because the experience from 1990 through 1995 was so far below the original target. The trend in the most recent years has generally reflected improvement, making it more likely this new target will be met by 2000.

9F. Reduce hospitalizations for head and spinal cord injuries per 100,000 population to:

113.9 admissions

<u>Achieve target:</u>   <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Traumatic Brain And Spinal Cord Injury

Year	Admission Rate
1993	134.0
1994	128.7
1995*	126.8

*Provisional

The year 2000 objective for hospitalizations for head and spinal cord injuries was set without benefit of specific surveillance data on such hospitalizations. A traumatic brain injury surveillance system was established in the Department in 1995, and traumatic brain and spinal cord injury (TBI/SCI) data for the years 1993 through 1995 have been developed to assess progress toward the year 2000 objective. The declining trend in admissions for TBI/SCI over these three years may be correlated with some of the improvements in other objectives related to injury death rates, particularly in the areas of motor vehicle-related fatalities and deaths from falls in the 65 through 84 year age group. If current trends continue, it is likely that the TBI/SCI objective will be met by the year 2000.

Discussion

While the trend in motor vehicle death rates for the population as a whole and for youth has been very encouraging, the lack of improvement for the population aged 70 and over is a source of concern. The Department is sharing these findings with the New Jersey Department of

Transportation.

As one strategy to lessen fall-related injuries among older New Jerseyans, the Department began an osteoporosis prevention effort in 1991. Osteoporosis is primarily a disease of the elderly, resulting in the loss of bone mass. Because osteoporosis makes bones more brittle, and therefore more prone to break as a result of a fall, this is an important area for intervention. Initial activities included the development of a surveillance system to provide baseline data on statewide osteoporosis prevalence. Other components include provider education and consumer outreach. In addition, an exercise and educational program called "Healthy Bones" was developed for older women at risk for osteoporosis.

Older, low-income minority women are a particular area of concern. The Department is field testing a comprehensive wellness program developed by the National Caucus and Center for the Black Aged. This pilot is focusing on low-income African-American females residing in senior housing in Mercer and Camden counties. The "wellness" components include, in addition to injury prevention, preventive efforts targeted to breast and cervical cancer, nutrition, physical activity, and others.

Despite the progress made in reducing deaths among older New Jerseyans due to falls, there is an ongoing need to educate people on ways to safeproof their homes to reduce the likelihood of falls.

The homicide death rate among minorities, particularly young minority males, is a source of great concern. In 1995, the University of Medicine and Dentistry formed the Violence Institute of New Jersey, to foster research into sources of violence as well as effective interventions, and to provide technical assistance to community programs designed to combat violence. The Attorney General has also convened stakeholders to discuss strategies and professional techniques to better equip communities to address teen violence.

The Violence Institute has recently sponsored conferences on child abuse and a conference on violence against women. The Institute has also developed a questionnaire to survey doctors and nurses to assess their ability to adequately respond to elder abuse. Results from the survey will be used to develop programmatic intervention initiatives to address violence.

Objective 9A. Reduce the number of deaths caused by motor vehicle crashes per 100,000 population to:

11.4 for the total population (age-adjusted)
23.0 for youth aged 15-24 years
20.0 for persons aged 70 and over

9Ai. AGE-ADJUSTED MOTOR VEHICLE-RELATED FATALITY RATE NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
CENTER FOR HEALTH STATISTICS

9Aii. MOTOR VEHICLE-RELATED FATALITY RATES BY AGE NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

109
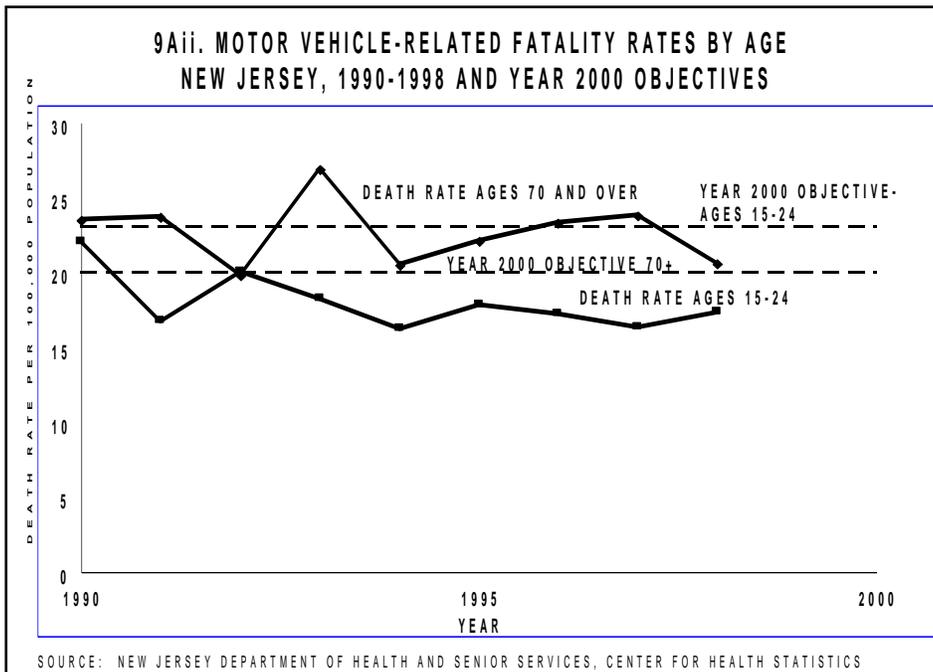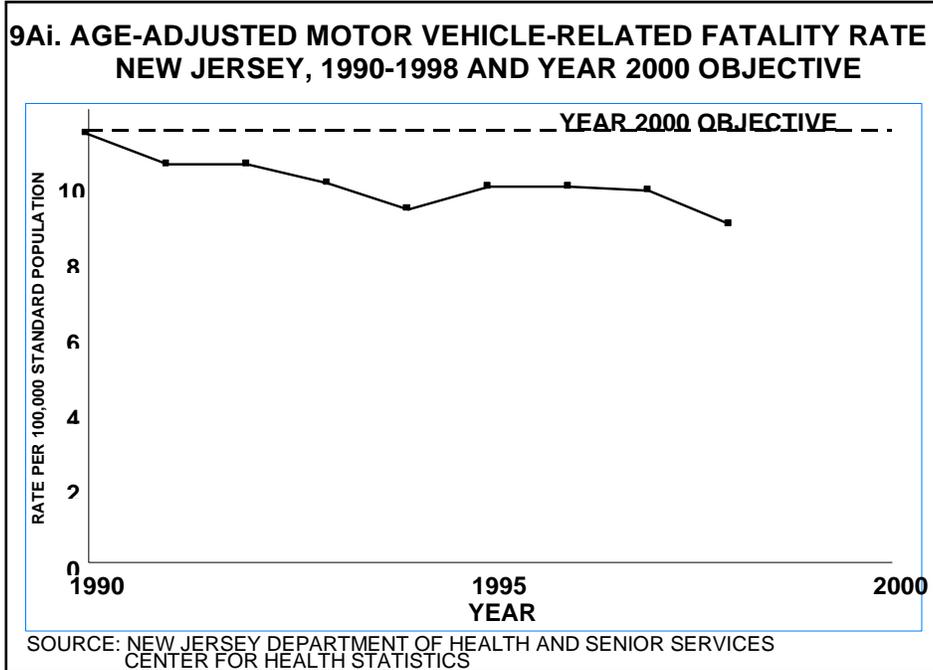
Objective 9B. Increase the percentage of persons 18 and over who report the use of seat belts either "always" or "nearly always" when driving or riding a car to:
**75.0 percent**

9B. PERSONS AGED 18 AND OVER WHO REPORTED USE OF A SEAT BELT
"ALWAYS" OR "NEARLY ALWAYS" WHEN DRIVING OR RIDING IN A CAR
NEW JERSEY, 1991-1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

PERCENT OF ADULT POPULATION

100 · 80 · 60 · 40 · 20 · 0

1991   1994   1997   2000
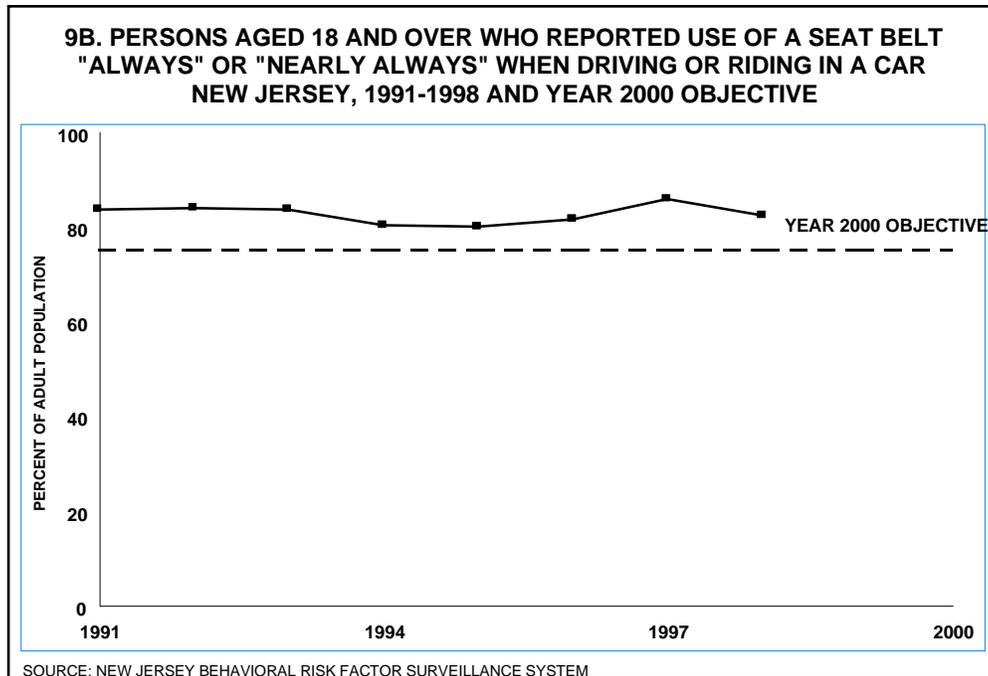
Objective 9C. Reduce deaths from falls per 100,000 population to:
12.0 for the population aged 65 through 84 years
105.0 for persons aged 85 years and over

9C. FALLS AND FALL-RELATED INJURY DEATH RATES BY AGE
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

DEATH RATE PER 100,000 POPULATION

160 · 140 · 120 · 100 · 80 · 60 · 40 · 20 · 0

DEATH RATE - AGES 85 & OVER

YEAR 2000 OBJECTIVE - AGES 85 & OVER

DEATH RATE - AGES 65-84   YEAR 2000 OBJECTIVE - AGES 65-84

1990   1995   2000

NOTE: Underlying cause of death from NCHS' multiple cause-of-death file.
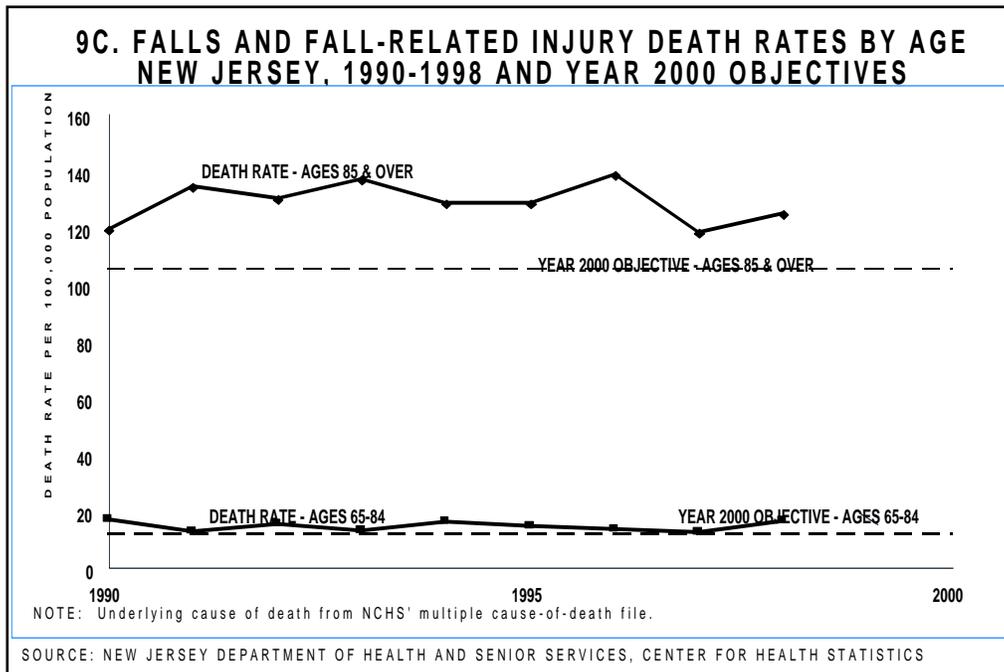
Objective 9D. Reduce homicide deaths per 100,000 population to:
39.0 in minority males 15-44 years of age
7.0 in minority females 15-44 years of age

9D. MINORITY HOMICIDE DEATHS BY AGE AND SEX
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

DEATH RATE - MINORITY MALES 15-44

YEAR 2000 OBJECTIVE
MINORITY MALES - 15-44

DEATH RATE - MINORITY FEMALES 15-44

YEAR 2000 OBJECTIVE
MINORITY FEMALES - 15-44

DEATH RATES PER 100,000 POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
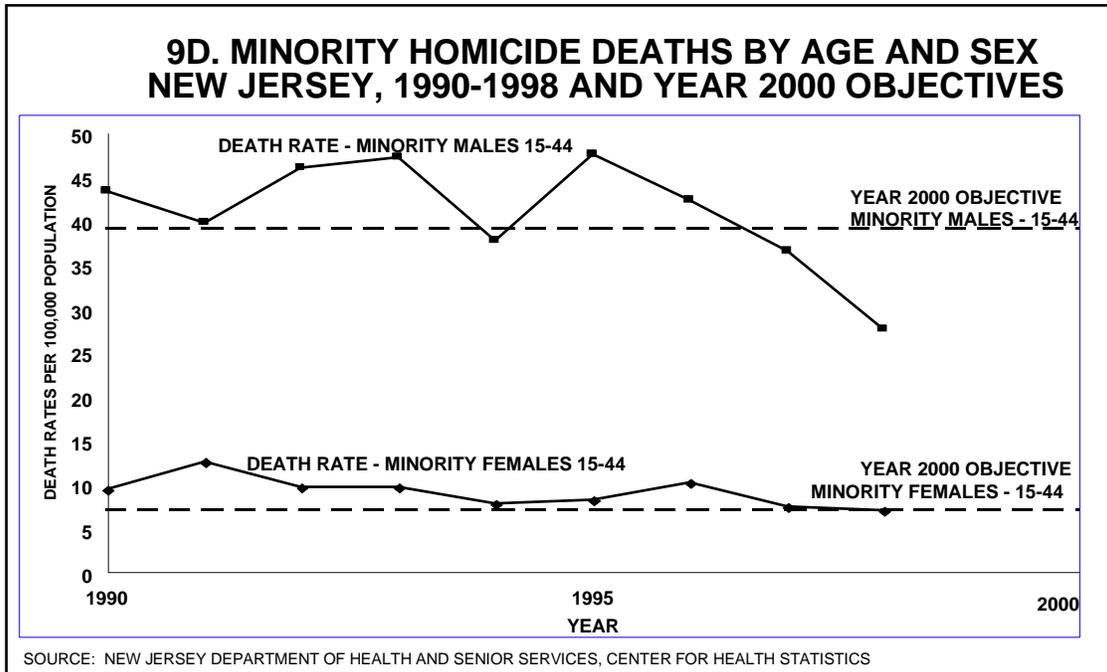
Objective 9E. Reduce suicides per 100,000 population to:
7.5 for youth aged 15 through 24 years
16.2 among white males aged 65 and over

9E. SUICIDE DEATHS BY AGE
NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

DEATH RATE - WHITE MALES 65 & OVER

YEAR 2000 OBJECTIVE
WHITE MALES AGED 65 & OVER

DEATH RATE - AGES 15-24   YEAR 2000 OBJECTIVE - AGES 15-24

DEATH RATE PER 100,000 POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
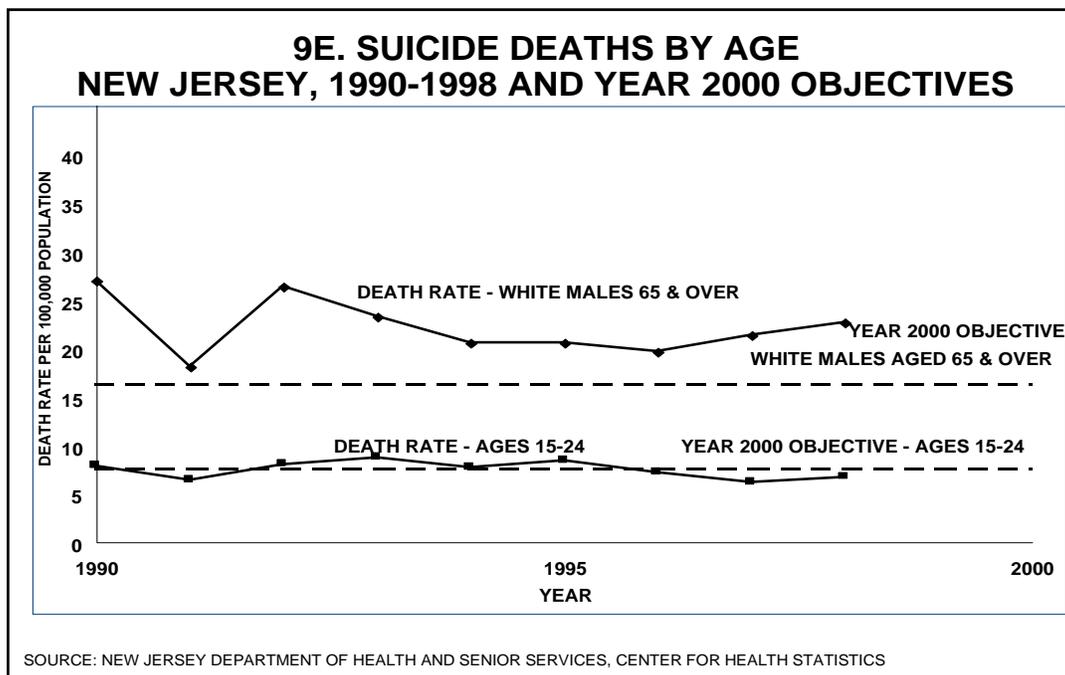
**Objective 9F. Reduce hospitalizations for head and spinal cord injuries per 100,000 to:
113.9 admissions**

9F. HOSPITALIZATIONS FOR HEAD AND SPINAL CORD INJURIES
NEW JERSEY, 1993-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
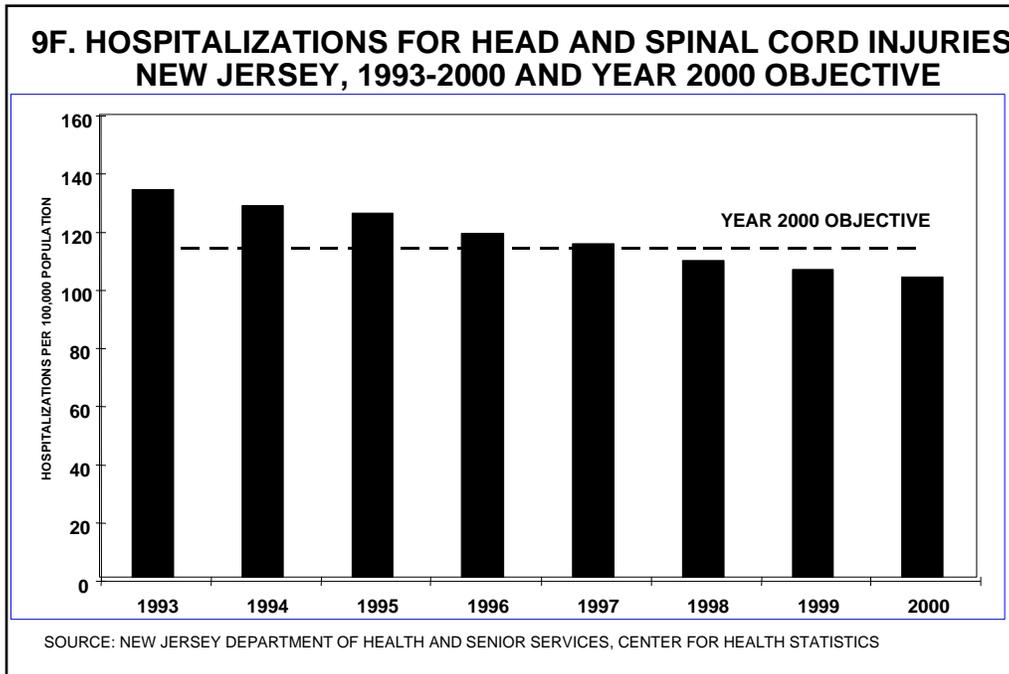
Priority Area 10

Prevent and Control Occupational and Environmental Hazards

Introduction

According to the World Health Organization, "...environmental health comprises those aspects of human health, diseases, and injury that are determined or influenced by factors in the environment. This includes the study of both the direct pathological effects of various chemical, physical, and biological agents, as well as the effects on health of the broad physical and social environment, which includes housing, urban development, land-use and transportation, industry and agriculture."

This is an extremely broad definition, and many health goals and objectives that it could encompass are covered in other priority areas, such as cancers caused by tobacco, or vaccine-preventable diseases. In this priority area, the focus is in the areas of reducing occupational injury and disease, reducing exposure of school children to asbestos, and evaluating sites that might have the potential for human exposure to hazardous waste. Goals in these areas were selected because of the potential severity and magnitude of health consequences due to what are largely preventable causes, in the case of occupational health, or due to environmental conditions which can be controlled, such as asbestos exposure.

Outlook For Reaching Specific Objectives

Achieve target:	Likely	Unlikely	Uncertain
10A. Reduction in construction- related deaths	✔		
10B. Reduction in workers with high lead levels		✔	
10C. Reduction in work-related hospitalizations for acute lung diseases			✔
10D. Increase the number of hazardous waste sites evaluated			✔
10Ei. Increase the number of schools that have approved asbestos plans	✔		
10Eii. Increase in removal projects passing first inspection	✔		

Data Update

10A. Reduce work-related injury deaths per 100,000 construction workers to:

8.5

Achieve target:	Likely	Unlikely	Uncertain
	✔		

Work-Related Injury Death Rates For Construction Workers

Year	Death Rate	Year	Death Rate
1983	14	1990	18

1984	17	1991	18
1985	24	1992	17
1986	17	1993	20
1987	19	1994	13
1988	16	1995	8
1989	16	1996	9.7

Construction workers are defined as individuals who work in the construction industry, i.e. job classifications which are included in Standard Industrial Classifications (SIC) 15 - 17. In 1991, New Jersey began participating in the U.S. Department of Labor's Bureau of Labor Statistics Census of Fatal Occupational Injuries, a program to collect detailed information on every occupational fatality to ensure an accurate count of such injuries and to facilitate development of appropriate prevention strategies. At that time the definition of work-related fatal injuries was also broadened, to include homicides and suicides and to add more reporting sources. Data from 1983 through 1990 shown above were revised under the new protocol.

The work-related injury death rate for construction workers has fallen considerably during the past decade. If this trend continues, it is likely the year 2000 objective will be met.

10B. Reduce the number of workers with occupational exposure causing blood lead concentrations >25 µg/dL of whole blood to:

0

Achieve target: <u>Likely</u>   <u>Unlikely</u>   <u>Uncertain</u>

✔

Exposed Workers With High Blood Lead

Year	Number
1986	687
1987	415
1988	951
1989	1,054
1990	1,154
1991	881
1992	724
1993	704
1994	644
1995	548
1996	534

The number of workers with elevated blood-lead levels has decreased in New Jersey in recent years. This decrease may be due to companies' better controlling exposure to lead during production or a reduction of the number of companies in the state which use lead in their production processes. Despite this improvement, it does not appear likely that the year 2000 target will be achieved.

10C. Reduce the number of adults with occupational or environmental exposures leading to a

hospitalization for acute lung disease to:

90 per year

Achieve target: Likely Unlikely Uncertain

✔

Hospitalizations For Acute Lung Disease

Year	Number
1987	186
1988	176
1989	183
1990	177
1991	153
1992	130
1993	155
1994	126
1995	117
1996	169

It is estimated that 5 to 15 percent of all hospital cases of acute lung diseases such as adult asthma are related to occupational exposures. After several years of decline, hospitalizations for acute lung conditions increased substantially in 1996; however, data for the first three quarters of 1997 show a marked decrease (to 70 cases). At this point it is uncertain whether or not the year 2000 goal will be met.

10D. Increase the number of sites evaluated for potential human exposure pathways to hazardous waste to:

275 sites

Achieve target: Likely Unlikely Uncertain

✔

Sites Evaluated

Year	Number
1988	100
1992	114
1997	174

Hazardous waste sites in New Jersey are designated by the federal Environmental Protection Agency for inclusion on the National Priority List (NPL) and evaluation for potential human exposure pathways. From year to year, the number of sites on the list can change, as remediated sites are removed and newly designated sites are added. As of 1997, health assessments had been completed for 174 sites. Even though there has been a substantial increase in the number of NPL sites evaluated in recent years, there may not be sufficient time to complete the remaining sites currently on the NPL list by the year 2000.

10Ei. Increase K-12 schools which have NJDHSS-approved management plans and have begun to implement these plans to control asbestos hazards, including identification, abatement and reinspection to:

100 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Schools With Approved And Implemented Management Plans

Year	Percent
1988	76
1991	88
1993	99
1997	99.9

Since about 1993 the more than 4,000 public and private New Jersey schools, grades K-12, have been in compliance with the federal mandate to inspect for asbestos-containing material and submit management plans describing how this material will be handled. Schools are required to conduct surveillance activities every six months to detect any changes in the asbestos-containing material identified in the management plan. At least once every 3 years, schools must conduct a reinspection and submit any changes to the management plan to the Department for review and approval. This ongoing activity is monitored closely, and year 2000 objectives should be met.

10Eii. Increase the percentage of K-12 school asbestos removal projects scheduled for completion in a given year that, on first inspection, are found to have complied with federal and state regulations for asbestos removal to:

85.0 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Completed Projects Passing First Inspection

Year	Percent
1988	10
1991	63
1993	60
1997	77

There has been major improvement in the percentage of completed school asbestos abatement projects which are found to be in compliance on their initial inspection with federal and state regulations. It appears likely that this objective can be achieved prior to the year 2000, if the current trend continues.

Discussion

Fatal occupational injuries among construction workers account for approximately 15 percent of all work-related fatal injuries. Each of these deaths contributes on average 26 potential years of work life lost. The Department investigates work-related deaths from falls, electrocutions and machine-related injuries, all of which are common in the construction industry, through the Fatality Assessment and Control Evaluation (FACE) Project. FACE investigation reports, which contain recommendations on ways to prevent similar fatal injuries, are distributed to employers, unions, and workplace health and safety personnel. Information bulletins on selected injuries, FACE Facts and Hazard Alerts, are also distributed to employers and employees as preventive measures. These efforts may have contributed to the reduction in the fatal occupational injury rate in the construction industry during this decade.

In order to lower blood-lead level concentrations in workers, several programs have been initiated. The Department has participated in a collaborative effort with the state Department of Treasury to prevent lead poisoning of workers who are repainting bridges. Contracts for bridge construction and repair projects involving potential lead exposure now contain mandatory health and safety language. The Department analyzes and disseminates its occupational lead toxicity surveillance data, and is actively involved in counseling workers, their employers, and their physicians about prevention and control of lead exposure. The number of workers reported with occupational lead exposure has declined in recent years, but some workers are reported year after year with persistent lead toxicity due to on-going overexposure. This persistence in some individual cases, despite the availability of effective prevention measures, is particularly challenging. The Department does not have authority to enforce health standards for lead at private sector work sites; this is an area under federal Occupational Safety and Health Administration jurisdiction. The Department is committed to continued surveillance and education to improve the control of lead exposure in New Jersey work sites.

Acute lung diseases, such as occupational asthma, that are due to occupational exposures are estimated to comprise 5 to 15 percent of all adult asthma cases, making this a public health problem of considerable concern in New Jersey. However there are no national data systems designed to measure the true magnitude of this problem. New Jersey is one of a few states that systematically collects data on occupational asthma, including data from hospitals. The Department also provides education and consultation on ways to prevent occupation- related acute lung conditions.

Health assessments at hazardous waste sites that are on the National Priority List (NPL) are conducted to evaluate the potential risk to human health posed by these sites. These sites are distributed throughout this densely populated state and many are known to contain heavy metals, industrial solvents, cancer causing compounds and other chemical wastes. Assessments are funded by the federal government and performed by either the U.S. Agency for Toxic Substance and Disease Registry (ATSDR) or the Department.

A Health Assessment is an evaluation of the public health implications posed by a hazardous waste site. Environmental data, health outcome data, and community health concerns are examined in order to: 1) identify human exposures and hazardous conditions associated with a site; 2) assess past, current or future impact on public health; 3) develop health advisories or other health-protective recommendations; or 4) identify populations living or working near the sites for further health studies or educational programs.

In some cases, a Health Assessment may recommend further health study. Health studies may consist of medical and exposure screening, collection and analysis of environmental or biological samples, reviews of disease surveillance data, and epidemiological studies. The objectives of these studies are to increase understanding of the relationship among site contamination levels, actual human exposure to hazardous substances, and adverse human health effects.

As part of a site-related activity, the Department may also develop and disseminate to physicians and other health care providers informational materials on the health effects of toxic substances, specific hazardous waste sites in New Jersey, and resources for additional detailed information. The Department may also carry out community health education programs related to specific site-related concerns.

The Department intends to continue health assessments at the NPL sites until all have been completed. There are additional hazardous waste sites that have been identified by the New Jersey Department of Environmental Protection that do not appear on the NPL, for which federal funding to conduct health assessments is not available. Within the resources available, the Department intends to prioritize non-NPL hazardous waste sites for possible assessment.

Due to state oversight and education of the private contractors doing asbestos removal in New Jersey schools, major improvement in the number of projects passing an initial inspection has occurred since 1988, when only 10 percent of inspected "completed" projects were properly completed. The Department coordinates the statewide asbestos quality assurance program in New Jersey schools, which succeeded in raising the first-time inspection pass rate for completed projects to 77 percent in 1997.

Objective 10A. Reduce work-related injury deaths per 100,000 construction workers to: 8.5


10A. RATE OF WORK-RELATED INJURY DEATHS
OF CONSTRUCTION WORKERS
NEW JERSEY, 1990-1999, AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
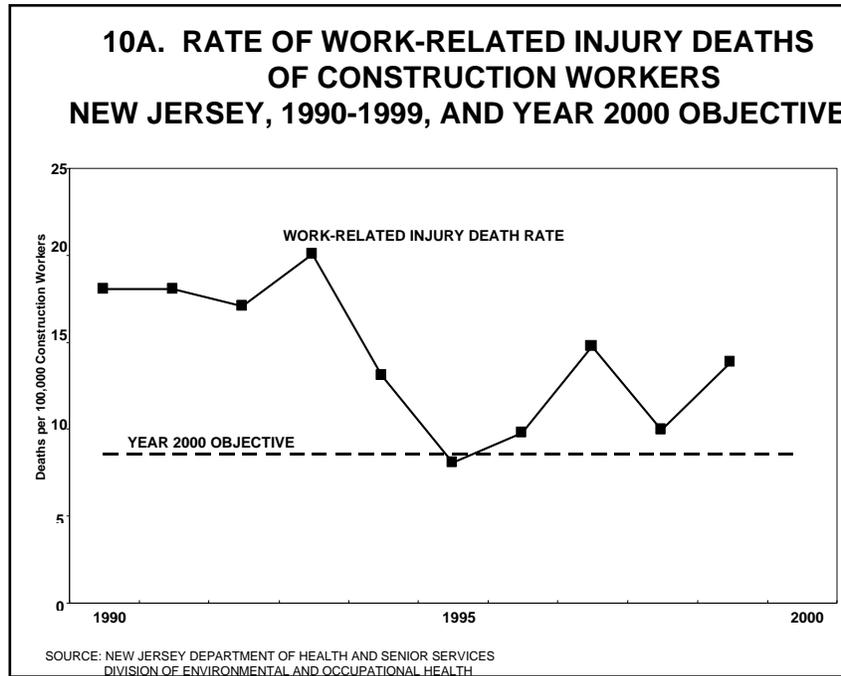
Objective 10B. Reduce the number of workers with occupational exposure causing blood lead concentrations >=25µg/dL of whole blood to: 0

10B. WORKERS WITH OCCUPATIONAL EXPOSURES CAUSING BLOOD
LEAD CONCENTRATIONS >= 25 µg/dL OF WHOLE BLOOD
NEW JERSEY, 1990-2000 AND YEAR 2000

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH SERVICES

119
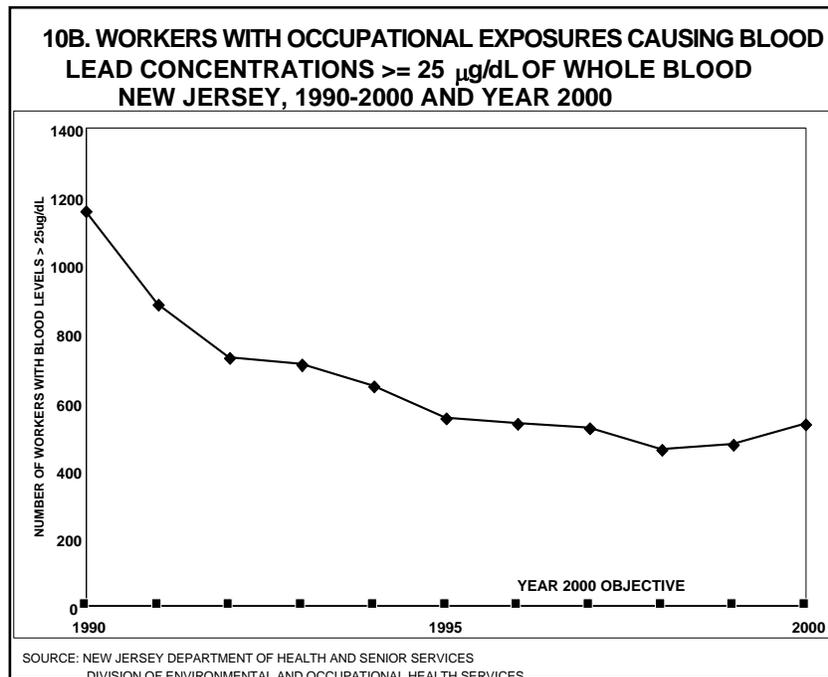
Objective 10C. Reduce the number of adults with occupational or environmental exposures leading to a hospitalization for acute lung disease to:
**90 per year**

10C. ADULTS WITH OCCUPATIONAL OR ENVIRONMENTAL EXPOSUR
LEADING TO HOSPITALIZATIONS FOR ACUTE LUNG DISEASES
NEW JERSEY, 1990-2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

NUMBER OF HOSPITALIZATIONS

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH SERVICES
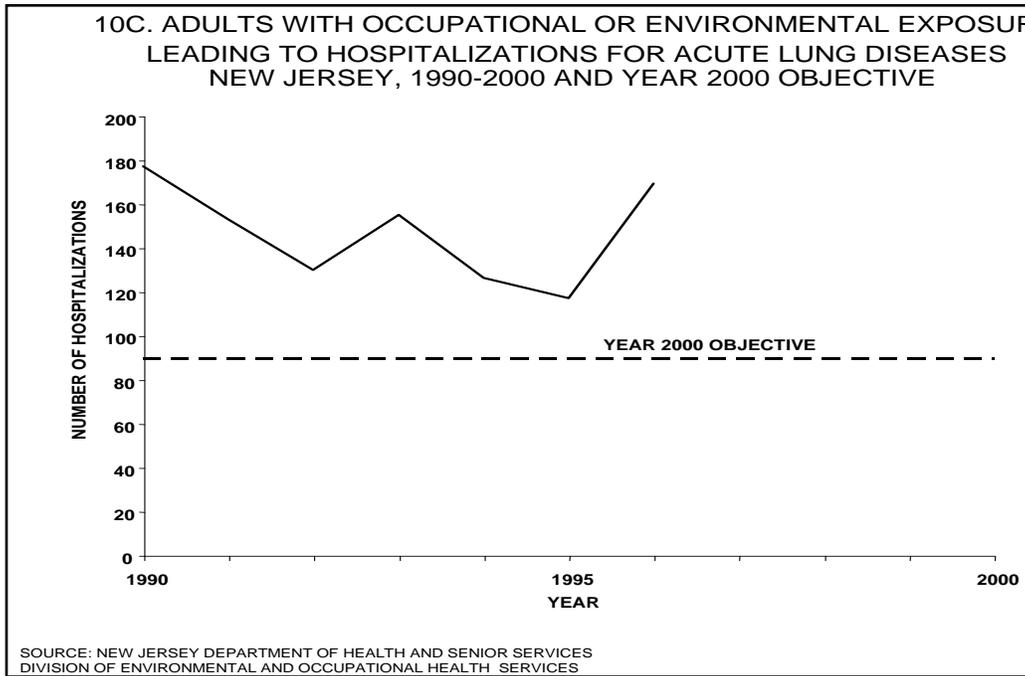
Objective 10D. Increase the number of sites evaluated for potential human exposure pathways to hazardous waste to: 275 sites

10D. NUMBER OF SITES EVALUATED FOR POTENTIAL
HUMAN EXPOSURE PATHWAYS TO HAZARDOUS WASTE
NEW JERSEY, 1988, 1992, 1997, 2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

Number of Sites Evaluated

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH SERVICES
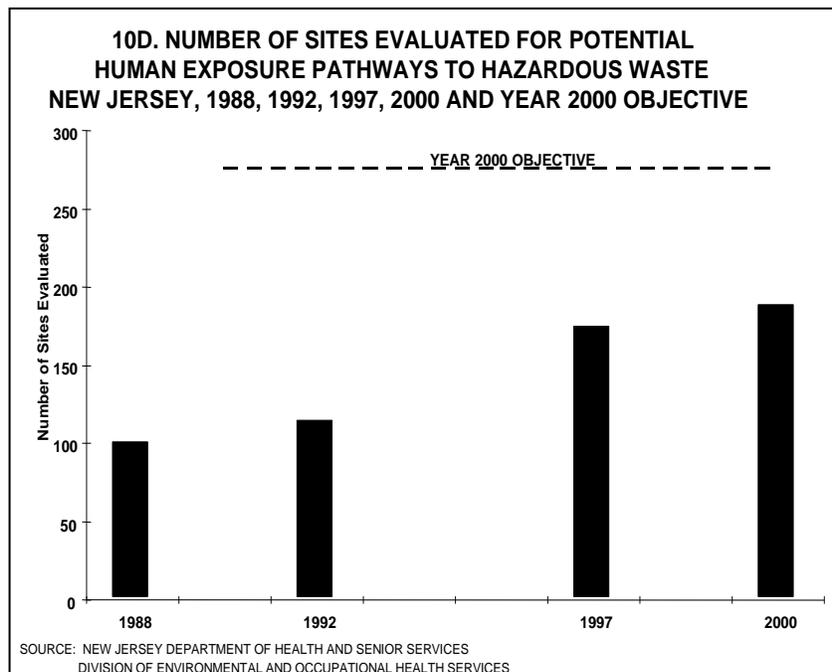
Objective 10Ei. Increase K-12 schools which have NJDHSS-approved management plans and have begun to implement these plans to control asbestos hazards, including identification, abatement, and reinspection to: 100 percent

10Ei. K-12 SCHOOLS WHICH HAVE NJDHSS-APPROVED AND IMPLEMENTED MANAGEMENT PLANS TO CONTROL ASBESTOS HAZARDS NEW JERSEY, 1991, 1993, 1997, 2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

Percent of K-12 Schools

120
100
80
60
40
20
0

1991   1993   1997   2000

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH SERVICES
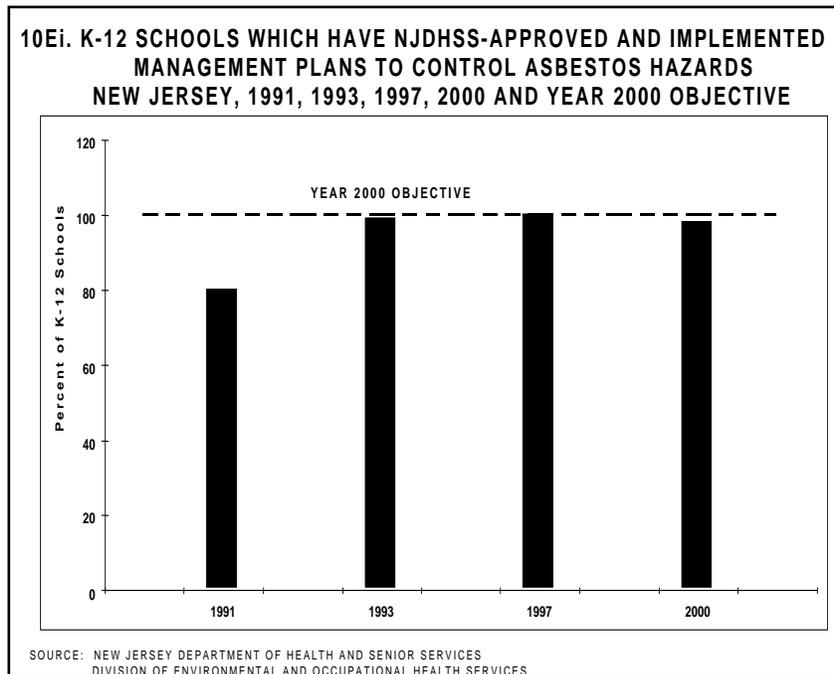
Objective 10Eii. Increase the percentage of K-12 school asbestos removal projects scheduled for completion in a given year that, on first inspection, are found to have complied with federal and state regulations for asbestos removal to:
85.0 percent

10Eii. ASBESTOS REMOVAL PROPERLY COMPLETED IN COMPLIANCE WITH FEDERAL AND STATE REGULATIONS, AS A PERCENTAGE OF PROJECTS IN K-12 SCHOOLS NEW JERSEY, 1988, 1991, 1993, 1997, 2000 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

Percent of Completed Projects

90
80
70
60
50
40
30
20
10
0

1988   1991   1993   1997   2000

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES
DIVISION OF ENVIRONMENTAL, AND OCCUPATIONAL HEALTH SERVICES
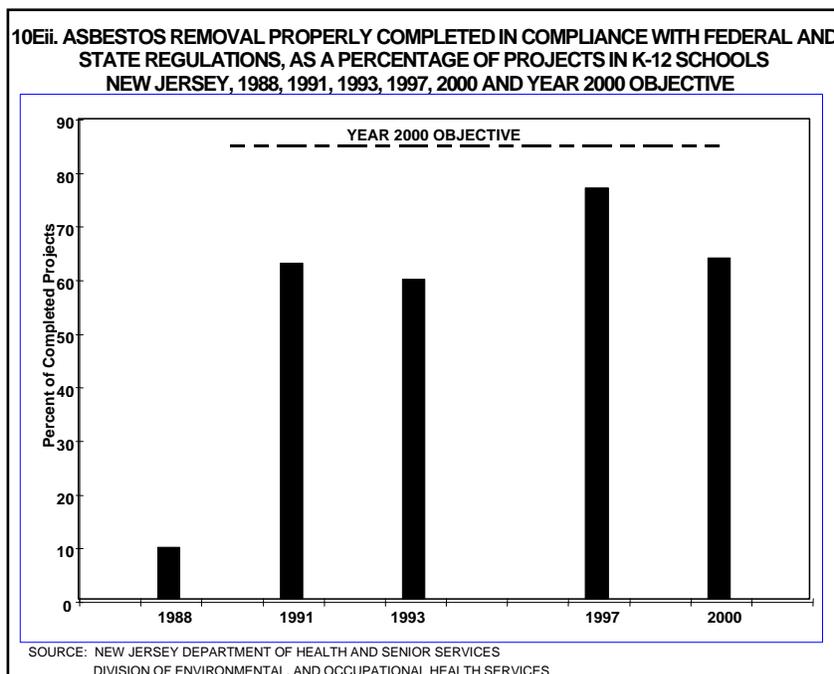
Priority Area 11

Reduce the Rates of Morbidity and Mortality Due To Addiction

Introduction

According to a Brandeis University study, "substance abuse and substance abuse-related problems are among society's most pervasive health and social concerns. Some 100,000 people die each year in the United States as a result of alcohol alone. In addition, illicit drug abuse and related AIDS deaths account for at least 12,000 deaths. It costs every man, woman, and child in America nearly $1,000 annually to cover the costs of health care, law enforcement, motor vehicle crashes, crime and lost productivity due to substance abuse." It is for these reasons that efforts to reduce addictions are a priority for public health in New Jersey.

New Jersey has made considerable gains in meeting year 2000 objectives for decreasing death rates due to alcohol-related motor vehicle accidents and deaths due to cirrhosis. However, it is unlikely that other year 2000 targets will be met.

Outlook For Reaching Specific Objectives

Achieve target:	Likely	Unlikely	Uncertain
11A. Reduction in cigarette smoking among:			
age 20 and over		✔	
high school students		✔	
11B. Increase in pregnant women abstaining from:			
alcohol			✔
tobacco		✔	
11C. Reduction in students using:			
alcohol			✔
marijuana		✔	
cocaine		✔	
11D. Reduction in adult binge drinking		✔	
11E. Reduction in alcohol-related motor vehicle death rates for:			
total population	✔		
age 15-24	✔		
11F. Reduction in cirrhosis death rates for:			
total population	✔		
minority males	✔		
11G. Reduction in drug-related death rate			✔
11H. Reduction in time between first use and treatment for:			
alcohol		✔	
other drugs		✔	

122

11I. Increase in addicted persons treated annually for:
    alcohol ✔
    other drugs ✔

Data Update

11A. Reduce the prevalence of cigarette smoking to:

15.0 percent of the population aged 20 and over
20.0 percent of high school students

	Achieve target:	Likely	Unlikely	Uncertain
	age 20 and over		✔	
	high school students		✔	

Smoking Prevalence

Year	Aged 20 And Over	Year	High School Students
1991	78.5	77.6	60.8
1992	74.4	73.7	49.4
1993	77.3	70.2	63.2
1994	75.6	76.4	61.3
1995	77.3	77.1	62.4
1996	76.2	69.9	47.6
1997	78.2	76.6	62.5

The percentage of persons aged 20 and over who report that they currently smoke can be estimated, based on survey data, from the Behavioral Risk Factor Surveillance System. According to this survey, the trend since 1991 has been stable, and it is not likely that the year 2000 objective for adults will be met.

The estimates of smoking prevalence among high school students are obtained from surveys conducted every three years by the New Jersey Department of Law and Public Safety. The percentages include students who report smoking "on occasion" as well as those who say they smoke from "less than" to "more than" half a pack of cigarettes per day. Results from these surveys have fluctuated over the recent past, but have shown no indication of a decline in the percentage of students who currently smoke. Moreover, the prevalence of smoking among students is almost twice as high as that among adults (taking into account that the data came from two different sources). The data on student smoking do not reflect the potential impact of more recent interventions to reduce youth smoking. However, since the 1995 prevalence of student smoking was about twice the year 2000 target level, it is unlikely the objective will be met.

11B. Increase the percentage of women who abstain from alcohol and tobacco during pregnancy to:

90.0 percent abstinence from tobacco
95.0 percent abstinence from alcohol

Achieve target:	Likely	Unlikely	Uncertain
alcohol			✔
tobacco		✔	

Abstinence During Pregnancy

Year	Tobacco	Alcohol
1989	74.5	81.9
1990	80.3	89.3
1991	82.0	90.5
1992	82.8	90.3
1993	85.2	92.3
1994	85.9	92.7
1995	85.8	92.7

The percentages of women who abstained from tobacco and alcohol, respectively, during pregnancy appears to have increased since 1989, when this information was first required to be reported on the birth certificate. At least part of the improvement may have been a result of increased familiarity with the reporting format on the part of those preparing birth certificates. However, the continued improvement may well reflect actual trends. Although the improvement in these measures is encouraging, in the case of tobacco it is unlikely the year 2000 target will be achieved. Reaching the target for alcohol abstinence in uncertain.

11C. Decrease the percentage of high school sophomores, juniors, and seniors who have used the following substances in the past 30 days to:

37.0 percent for alcohol
9.0 percent for marijuana
1.6 percent for cocaine

Achieve target:	Likely	Unlikely	Uncertain
alcohol			✔
marijuana		✔	
cocaine		✔	

Percent Of Students Who Used In The Past Thirty Days

Year	Alcohol	Marijuana	Cocaine
1980	70.2	36.1	6.4
1983	65.9	28.9	7.5
1986	61.9	21.3	7.4
1989	49.6	11.8	2.2
1992	43.9	13.3	2.5
1995	47.7	22.3	3.1

The percentage of high school students who reported having used alcohol in the thirty days prior to interview in the Department of Law and Public Safety's surveys declined steadily from 1980 through 1992. It appeared likely that the year 2000 objective would be met until the 1995 results indicated a reversal in the downward trend. Due to the increase in reported use of alcohol in the last survey, achievement of the objective is now uncertain.

A similar trend occurred in the reported use of marijuana by high school students. The percentage of students who said they had used marijuana in the past 30 days dropped dramatically, from 36 percent in 1980 to 13 percent in 1992, then increased in 1995 to 22 percent. It does not now seem likely that the year 2000 target will be met.

The percentage of students who report using cocaine is small relative to the reported use of alcohol and marijuana, and this percentage also declined during the 1980s. It appears from the past two surveys, however, that the percentage of students using cocaine is increasing, and this objective will not be met.

11D. Decrease the percentage of persons aged 18 years and older who consumed five or more alcoholic drinks per occasion, one or more times during the past month to:

8.7 percent

Achieve target: Likely   Unlikely   Uncertain

✔

Percent Of Adults

Year	Percent
1991	9.8
1992	11.5
1993	14.1
1994	N/A
1995	14.1
1996	14.9
1997	13.1

Almost one in seven New Jerseyans consumes five or more drinks on one occasion at least once per month. This is an increase over the percent reported at the beginning of this decade for such "binge drinking." Present patterns are not conducive to reaching the year 2000 objective.

11E. Decrease the death rate due to alcohol-related motor vehicle fatalities per 100,000 population to:

2.0 for the total population
5.0 for youth aged 15-24

Achieve target: Likely   Unlikely   Uncertain

total population   ✔

age 15-24 ✔

Death Rates From Alcohol-Related Motor Vehicle Fatalities

Year	Total	Youth Aged 15-24
1988	4.0	6.1
1989	3.6	7.4
1990	3.4	8.2
1991	2.6	5.2
1992	2.5	6.4
1993	2.2	5.3
1994	2.4	6.0
1995	2.4	4.6
1996	2.3	5.1

Among the population as a whole, the death rate from alcohol-related motor vehicle fatalities has been on a fairly steady decline. If the current trend continues, it is likely that the objective of two deaths per 100,000 population will be met by the year 2000.

For youth aged 15 through 24, however, the death rates have fluctuated over the same time period. In general, the rate has declined and it appears possible that the year 2000 target of five deaths per 100,000 persons in this age group will be met.

11F. Decrease the age-adjusted cirrhosis death rate per 100,000 population to:

6.8 for the total population
12.3 for minority males

Achieve target:	Likely	Unlikely	Uncertain
total population	✔		
minority males	✔		

Death Rates From Chronic Liver Disease And Cirrhosis

Year	Total, Age-Adjusted	Minority Males, Age-Adjusted
1985	12.1	26.4
1986	10.5	21.5
1987	10.9	25.9
1988	10.5	22.4
1989	10.6	20.6
1990	9.3	18.8
1991	8.8	17.1
1992	8.4	15.6
1993	8.9	13.5
1994	8.5	15.1
1995	7.7	14.3
1996	7.3	10.6

Epidemiologists have long used chronic liver disease and cirrhosis deaths as an indicator of alcohol abuse prevalence in the population. As overall consumption of alcohol has decreased since 1966, cirrhosis death rates have also steadily declined. In 1992, 1994, 1995, and 1996 chronic liver disease and cirrhosis was displaced as one of the ten leading causes of death in New Jersey.

Since 1985, the age-adjusted death rate from chronic liver disease and cirrhosis has been declining for both the total and the minority male populations. During the late 1980s, the age-adjusted death rate for minority males was slightly more than double that of the total population. In the early 1990s, the minority male rate decreased at a faster rate than that of the entire population. If current trends continue, both populations will meet their targets by the year 2000 and the gap between the minority population and the total population will continue to narrow.

11G. Decrease the age-adjusted drug-related death rate per 100,000 population to:

6.0 for the total population

Achieve target: Likely   Unlikely   Uncertain

✔

**Death Rates From
Drug-Related Causes**

| Year	Total, Age-Adjusted
1985	5.4
1986	6.8
1987	8.2
1988	8.4
1989	6.7
1990	5.4
1991	6.7
1992	8.4
1993	8.9
1994	9.0
1995	10.0
1996	9.1

Drug-related deaths are defined as accidental poisonings by drugs, medicinal substances, and biologicals; accidental drug overdoses are included in this category. After a brief period of decline from 1988 to 1990, the age-adjusted drug-related death rate increased steadily until 1995, when it was almost double the 1990 rate. In that year, drug-related causes were the leading cause of unintentional injury deaths among persons aged 25 through 44. In 1996 the rate declined; it is not certain whether this trend will continue, allowing the year 2000 objective to be reached.

11H. For clients in treatment, decrease the average time between first use and treatment to:

**13.8 years for alcohol
6.2 years for drugs other than alcohol**

Achieve target:	Likely	Unlikely	Uncertain
alcohol		✔	
other drugs		✔	

**Average Number Of Years Between
First Use And Treatment**

Year	Alcohol	Other Drugs
1992	17.3	7.7
1993	14.4	7.4
1994	18.3	7.5
1995	18.9	7.6
1996	19.2	8.1

The elapsed time between first use of a drug and treatment is a measure of early care, which generally leads to less disability and less severe tissue and organ damage. The current trend in seeking treatment for addictions is that addicted persons are waiting an increasingly longer time from their first use until they seek help. If this trend continues, the year 2000 objectives for both alcohol and other drugs will not be met.

11I. Increase the number of persons addicted to alcohol and/or other drugs who are treated in residential or outpatient programs annually to:

**41,449 for alcohol treatment
41,911 for other drug treatment**

Achieve target:	Likely	Unlikely	Uncertain
alcohol		✔	
other drugs			✔

**Number Of Addicted Persons Treated
In Residential Or Outpatient Programs**

Year	Alcohol	Other Drugs
1992	34,541	34,926
1993	30,000	36,721
1994	27,698	40,594
1995	23,170	40,973
1996	22,469	40,663

To decrease morbidity and mortality caused by addiction, the Department seeks to increase the number of persons receiving care and treatment by twenty percent over the 1992 baseline. With an average of 2.8 treatment episodes, many persons recover from their addiction and, for about 30 percent of patients, a single treatment episode is sufficient.

From 1992 through 1996, admissions to treatment for drugs other than alcohol rose to levels near

the year 2000 target. It is not certain, however, whether growth will continue, allowing achievement of the objective.

For alcohol treatment, the trend has been one of declining admissions, and achieving the year 2000 objective is not likely.

Discussion

Addiction illnesses continue to be persistent and widespread, both in the United States and in New Jersey. The use of alcohol and tobacco, drugs which are not illegal, but which are addictive and subject to abuse, also continues to be widespread. It is unlikely that most of the year 2000 objectives for reducing the use and deleterious effects of these substances will be met. It takes many years to change the attitudes and behaviors associated with substance abuse, but prevention is the most effective way to reduce the resulting morbidity and mortality. For those who have developed addictions, the Department will continue its efforts to support effective and accessible treatment programs.

In the area of tobacco use and smoking, the primary emphasis is on prevention, both by changing the societal acceptance of tobacco use and smoking, and making tobacco less readily available to youth. Because 60 percent of current smokers started smoking before age 14 and 90 percent of all new smokers are under age 18, it is important that strategies be directed toward youth and preventing the first use. Programmatic initiatives include the following:

- New Jersey approved an increase from $0.40 to $0.80 per pack in the cigarette excise tax, effective in 1998. Research shows that increased price reduces tobacco consumption by teens, who generally have less to spend than their adult counterparts.
- The Tobacco Age of Sale Enforcement (TASE) Program further reduces the availability of cigarettes and other tobacco products to underage youth by providing grants to local health departments to conduct random, unannounced compliance inspections of licensed tobacco vendors. Non-compliant merchants risk fines and license suspension/revocation.
- In 1997 a comprehensive youth anti-tobacco media campaign, which includes radio ads, TV, print ads, billboards, and a website was launched. It encourages kids to not smoke through messages that have credibility with teens.
- The ASSIST Project works with local coalitions to promote effective anti-tobacco policies at the community level, and, with physicians to help them, help their patients stop smoking.
- The Peer Leadership Program trains youth peer leaders and mentors, who then teach other kids to not smoke.

The most recent data reflected in this update show an increase in tobacco use among high school students, but these data predate the initiation of most of these programmatic initiatives. It is expected that outcomes will improve in future surveys as a result of these interventions.

With the recent settlement of lawsuits by states against the tobacco industry, the Department anticipates having resources to greatly expand its tobacco control program, beginning in the year 2000. During the next decade, the prevalence of smoking in New Jersey should decline significantly.

The age-adjusted drug-related death rate, which encompasses accidental drug overdoses as a component of accidental poisonings, has risen steadily since 1990. In part this may be attributable

to the easy availability of highly concentrated illegal heroin, and the change in route of heroin administration from injection to inhalation.

The outlook for objectives related to alcohol is mixed. Use of alcohol while operating a motor vehicle has proven more amenable to prevention than other types of alcohol-related behavior. The decline in New Jersey's death rate due to alcohol-related motor vehicle fatalities, both for older youth and adults is largely attributable to the state's aggressive policy against drunk driving. This policy includes community education, strict enforcement, stiff penalties, and mandatory post-conviction education and treatment, if appropriate, for all Driving Under the Influence (DUI) offenders prior to relicensing them to drive.

In addition, the age-adjusted death rate from chronic liver disease and cirrhosis continues its two decade decline. Improvement in this area has been particularly promising among minority males, although their death rate is still higher than that of the total population.

On the other hand, the trend for binge drinking is not encouraging. Binge drinking is defined as consumption by a person of five or more drinks on one occasion, and is a high risk behavior with multiple health and behavioral consequences. It is dangerous whether or not it is addictive, because it increases the risk of injury. Unfortunately, an increasing percentage of adults have reported "binge drinking" behavior.

In general, efforts to affect adult alcohol consumption patterns focus on treatment and education. The time lag between first use (of alcohol or other drugs) and first entry into treatment has continued to increase. Concomitantly, the number of alcohol-dependent persons admitted into treatment has declined. The Department is working with the Department of Human Services' Division of Medical Assistance and Health Services to ensure that behavioral managed care programs include treatment for addictions.

Although the data reflects improvement in recent years, there are still too many pregnant women who use tobacco, alcohol and other dangerous drugs during pregnancy, despite the potential negative impact on the fetus posed by use of these substances. Provision of treatment services to pregnant women and women with dependent children continues to be a major federal and state priority. The Department funds specialized treatment for women, with priority for admission given to pregnant women. Treatment services provided by these programs represent a continuum of care which includes short and long term residential, halfway house, outpatient, intensive outpatient, and methadone maintenance.

The Department, in cooperation with the Department of Human Services, has developed a cutting edge approach to removing substance abuse as a barrier to gaining and maintaining employment for welfare recipients in the Work First NJ Program. Using managed care principles, New Jersey has developed a system to identify welfare recipients with potential abuse problems, have them assessed by trained clinicians at their county welfare agencies, and then placed into and moved through treatment according to their individual clinical needs.

Objective 11A. Reduce the prevalence of cigarette smoking to:
15.0% in persons aged 20 and over
20.0% in high school students

11Ai. PERSONS AGED 20 AND OVER WHO ARE CURRENTLY SMOKING CIGARETTES
NEW JERSEY. 1991-2000 AND YEAR 2000 OBJECTIVE

SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

11Aii. PREVALENCE OF CIGARETTE USE* AMONG HIGH SCHOOL STUDENTS
NEW JERSEY, 1989-1998 AND YEAR 2000 OBJECTIVE

*INCLUDES THOSE WHO SMOKE ON OCCASION AS WELL AS REGULAR SMOKERS
SOURCE: NEW JERSEY DEPARTMENT OF LAW & PUBLIC SAFETY. REPORTS "DRUG AND ALCOHOL USE AMONG NEW JERSEY HIGH SCHOOL STUDENTS"

Objective 11B. Increase the percentage of women who abstain from alcohol and tobacco during pregnancy to:

90.0 percent abstinence from tobacco
**95.0 percent abstinence from alcohol**

11B. ABSTINENCE FROM ALCOHOL AND TOBACCO USE DURING PREGNANCY NEW JERSEY, 1990-1999 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS
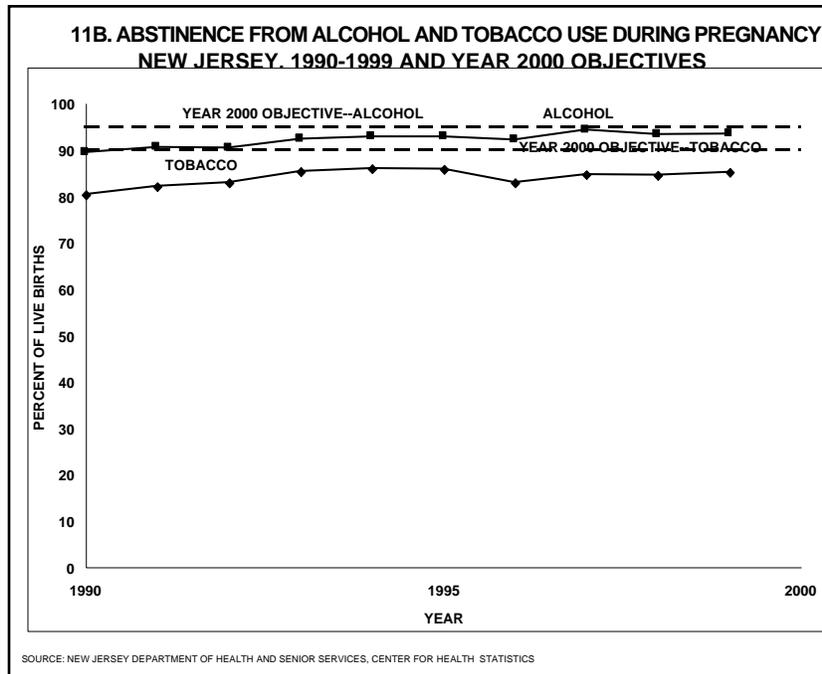
Objective 11C. Decrease the percentage of high school sophomores, juniors, and seniors who have used the following substances in the past 30 days to:

37.0 percent for alcohol
9.0 percent for marijuana
1.6 percent for cocaine

11C. HIGH SCHOOL STUDENTS WHO REPORT USE OF SELECTED SUBSTANCES DURING PAST THIRTY DAYS NEW JERSEY, 1989-1998 AND YEAR 2000 OBJECTIVES

SOURCE: STUDY REPORTS-"DRUG AND ALCOHOL USE AMONG NEW JERSEY HIGH SCHOOL STUDENTS"

132
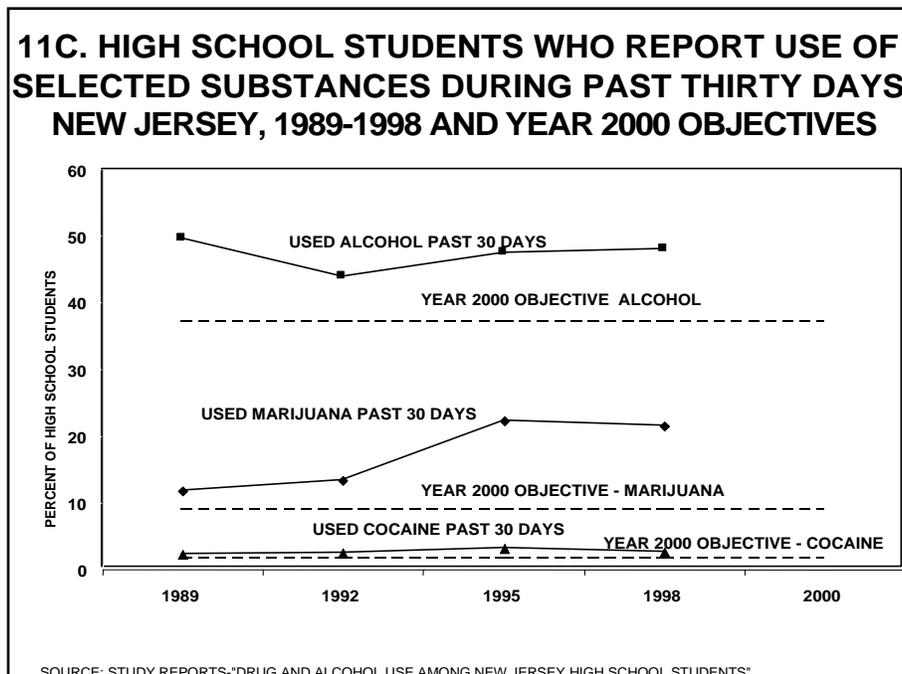
Objective 11D. Decrease the percentage of persons aged 18 years and older who consumed five or more alcoholic drinks per occasion, one or more times during the past month to: 8.7 percent


11D. PERSONS AGED 18 AND OVER WHO CONSUMED FIVE OR MORE ALCOHOLIC DRINKS PER OCCASION, ONE OR MORE TIMES DURING THE PAST MONTH NEW JERSEY, 1991-1999 AND YEAR 2000 OBJECTIVE

SOURCE: THE BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

Objective 11E. Decrease the death rate due to alcohol-related motor vehicle fatalities per 100,000 population to:

2.0 for the total population
**5.0 for youth aged 15-24**

11E. ALCOHOL-RELATED MOTOR VEHICLE FATALITIES PER 100,000 POPULATION NEW JERSEY, 1988-1996 AND YEAR 2000 OBJECTIVES

SOURCE: DEPARTMENT OF LAW AND PUBLIC SAFETY, DIVISION OF HIGHWAY TRAFFIC SAFETY
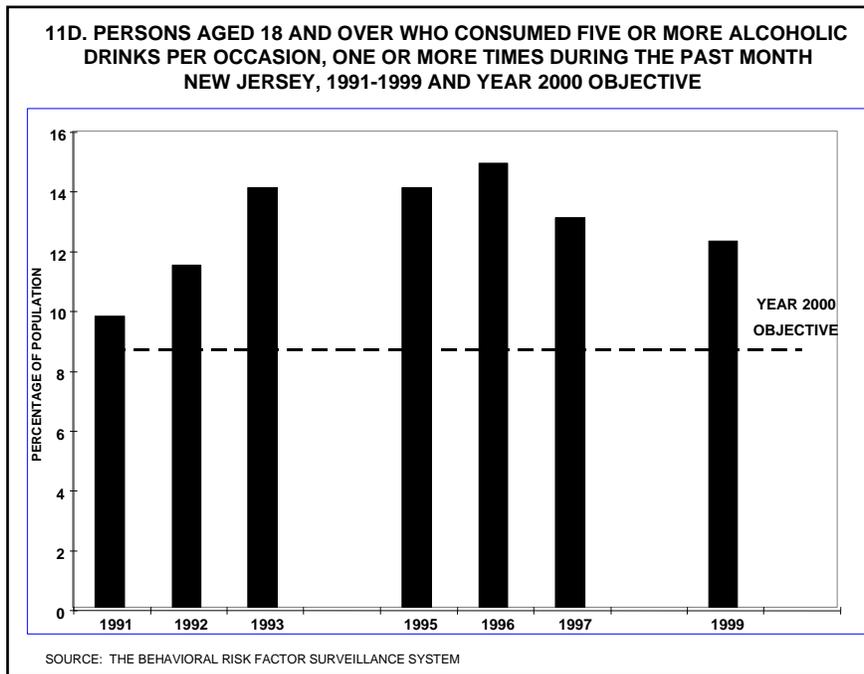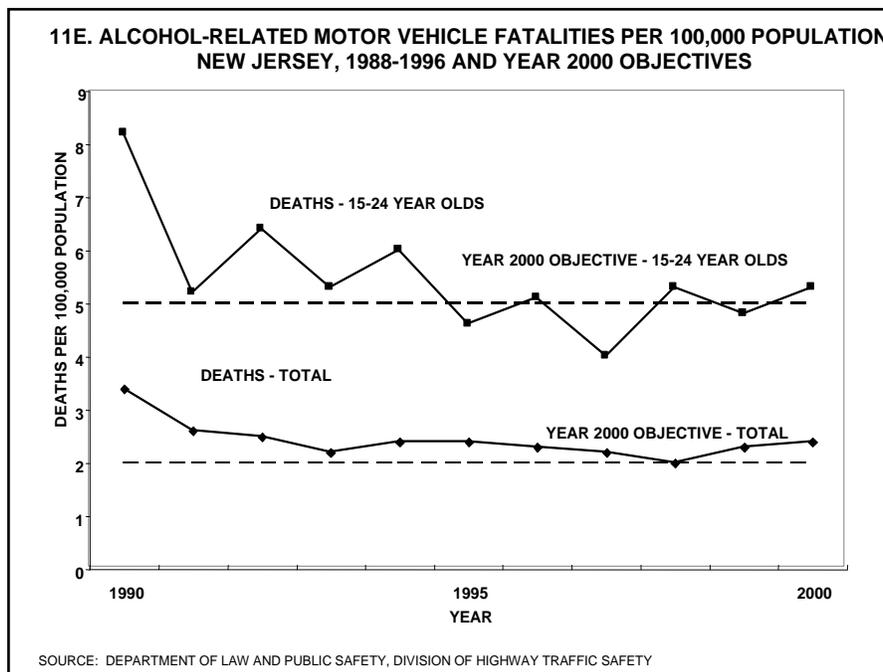
Objective 11F. Decrease the age-adjusted cirrhosis death rate per 100,000 population to:
**6.3 for the total population**
12.3 for minority males

11F. AGE-ADJUSTED DEATH RATES FROM CHRONIC LIVER DISEASE AND CIRRHOSIS TOTAL AND MINORITY MALES, NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVES

DEATH RATE - MINORITY MALES

YEAR 2000 OBJECTIVE - MINORITY MALES .

DEATH RATE - TOTAL

YEAR 2000 OBJECTIVE - TOTAL.

AGE-ADJUSTED RATE PER 100,000 STANDARD POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

Objective 11G. Decrease the age-adjusted drug-related death rate per 100,000 population to: **6.0 for the total population**

11G. AGE-ADJUSTED DRUG-RELATED DEATH RATES NEW JERSEY, 1990-1998 AND YEAR 2000 OBJECTIVE

YEAR 2000 OBJECTIVE

AGE-ADJUSTED RATE PER 100,000 STANDARD POPULATION

YEAR

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, CENTER FOR HEALTH STATISTICS

134
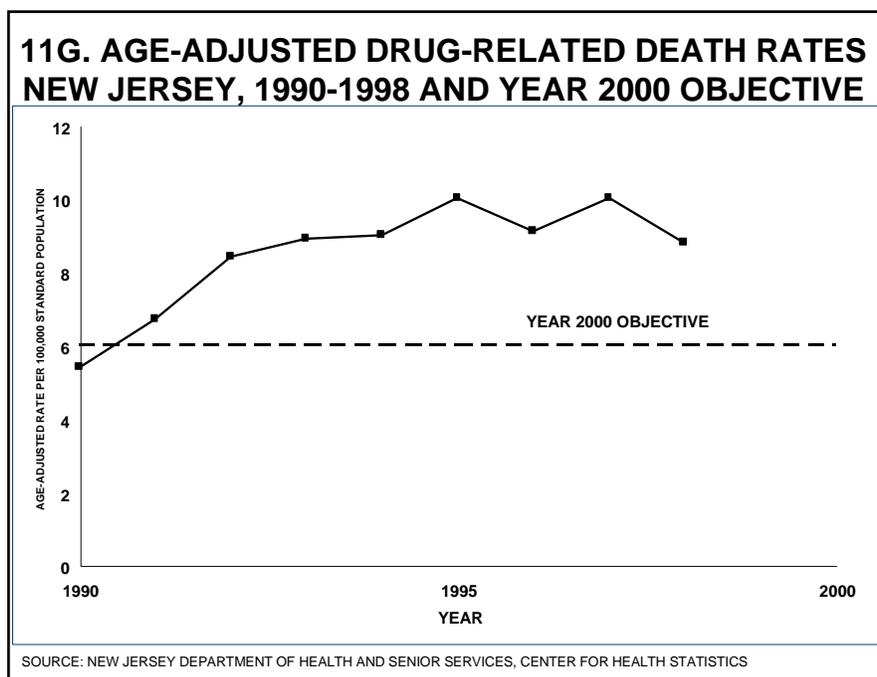
Objective 11H. For clients in treatment, decrease the average time between first use and treatment to: 13.8 years for alcohol

6.2 years for drugs other than alcohol

11H. FOR CLIENTS IN TREATMENT, AVERAGE TIME BETWEEN FIRST USE AND TREATMENT, IN YEARS NEW JERSEY, 1992-2000 AND YEAR 2000 OBJECTIVES

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF ADDICTION SERVICES
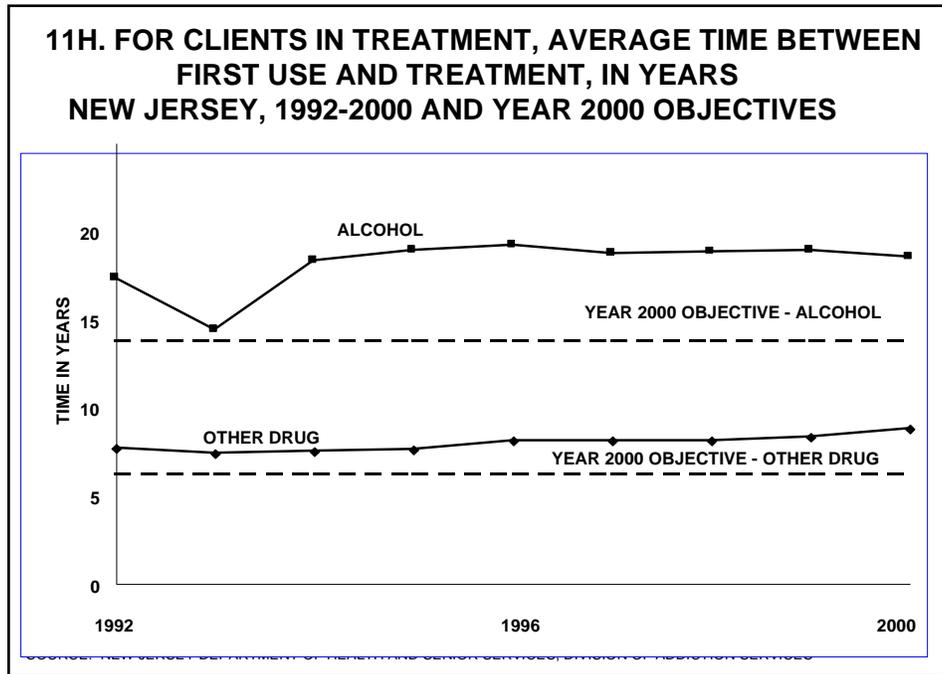
Objective 11I. Increase the number of persons addicted to alcohol and/or other drugs who are treated in residential or outpatient programs annually to: 41,449 for alcohol treatment

41,911 for other drug treatment

11I. NUMBER OF PERSONS ADDICTED TO ALCOHOL AND OTHER DRUGS TREATED IN RESIDENTIAL OR OUT-PATIENT PROGRAMS EACH YEAR NEW JERSEY, 1992-2000 AND YEAR 2000 OBJECTIVE

SOURCE: NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, DIVISION OF ADDICTION SERVICES

135
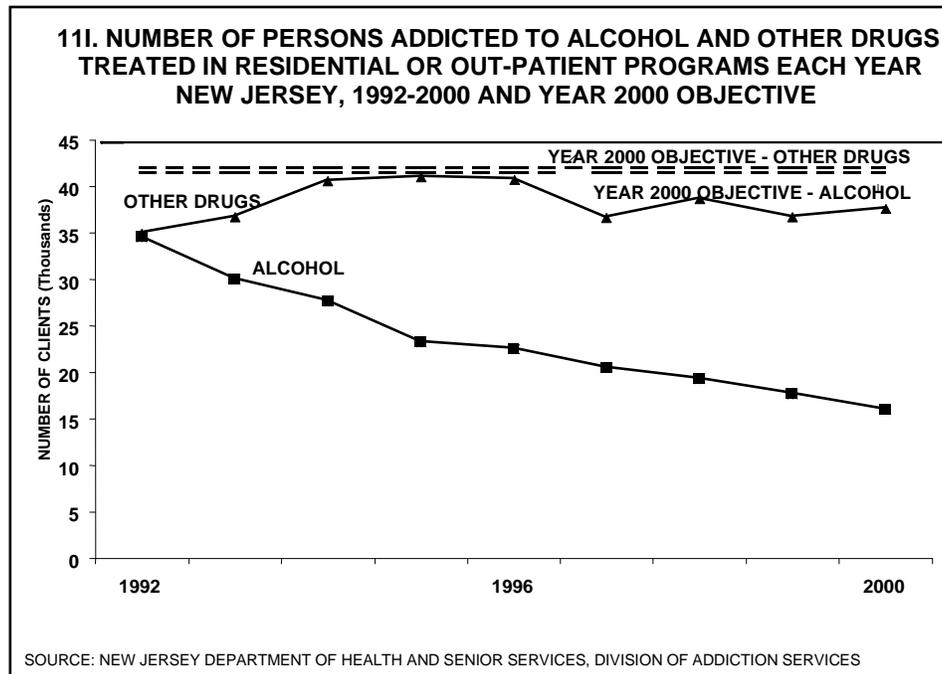
Appendix I

Objectives for Persons Aged 65 Years and Older

4A.   Reduce breast cancer deaths to 130.2 per 100,000 females aged 65 and over.

4G.   Reduce cervical cancer deaths to 3.2 per 100,000 females aged 65 and over.

4H.   Increase the percentage of women aged 65 and over (with uterine cervix) who had a Pap smear in the past two years to 70.0 percent.

5B.   Reduce cerebrovascular disease deaths to 283.8 per 100,000 population aged 65 and over.

9A.   Reduce motor vehicle fatalities to 20.0 per 100,000 population aged 70 and over.

9C.   Reduce deaths from falls per 100,000 population to:
            12.0 for the population aged 65 through 84 years
            105.0 for the population aged 85 and over

9E.   Reduce suicides to 16.2 per 100,000 white males aged 65 and over.

Appendix II

Technical Notes

Major Data Sources

Data from birth and death certificates provide the measurement of achievement for a number of the objectives encompassed by *Healthy New Jersey 2000*. Birth certificates are usually completed by hospital personnel, while death certificates are prepared by hospital personnel, physicians, medical examiners, and funeral directors. New Jersey law requires that certificates of all births and deaths which occur in the state must be filed with the Local Registrar within a specified time period of occurrence. The certificates are then submitted to the office of the State Registrar, where they are recorded and filed permanently.

For public health planning and policy determination, the most useful population to study is usually the resident population of an area. For the objectives comprising *Healthy New Jersey 2000* which use birth and death data to measure progress, the data presented are for New Jersey residents. The National Center for Health Statistics sponsors a program of resident certificate exchange among the registration areas in the country, which fosters transfer of information on events occurring to out-of-state residents to the state of residence. This is particularly important to New Jersey, as a number of births to female residents of this state and deaths of New Jersey residents occur in New York and Pennsylvania.

Morbidity data (data on communicable diseases) contained in this report also relate to New Jersey residents. Reports of communicable diseases diagnosed in other states in New Jersey residents are transmitted to the New Jersey Department of Health and Senior Services and are included in the data contained in this report.

Data related to health behaviors in this report are from the survey results of the New Jersey Behavioral Risk Factor Surveillance System (BRFSS). The New Jersey BRFSS is part of the national Behavioral Risk Factor Surveillance System, a telephone survey of adults aged 18 and over. This survey is designed to monitor modifiable risk factors for chronic diseases and other leading causes of morbidity and death. This survey is a cooperative effort between the national Centers for Disease Control and Prevention (CDC) and all states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. The New Jersey Department of Health and Senior Services has been participating in the survey since 1991, collecting approximately 125 interviews per month through 1995 and nearly twice that number in 1996 through 1998.

Racial And Ethnic Classification

Racial designations used in this report are white, black, and minority, which includes all racial groups other than white (including black). The reporting of ethnicity is limited to Hispanic and non-Hispanic categories. These classifications are based on self-reports, or in the case of death records, on reports from respondents, usually a family member, or from persons responsible for preparing the death certificates. The race and ethnicity of an infant are not reported on the birth certificate and are classified for statistical purposes as the race and ethnicity of the mother.

A racial group (white, black, or a detailed list of twelve other races and an unknown race category) and an ethnicity (Hispanic or non-Hispanic) are reported for each individual for whom a vital record is filed. Thus persons who are identified as Hispanic also have been included in any analysis of data by race. For example, individuals may be designated as white Hispanic, black Hispanic, minority Hispanic, white non-Hispanic, black non-Hispanic, or minority non-Hispanic. Therefore, for objectives related to race (white, black, or minority), Hispanics and non-Hispanics may be included in each racial group. For objectives related to Hispanic ethnicity, persons identified as Hispanic include whites, blacks, and other races.

Development of Health Objectives for High Risk Groups

Where the relevant data were available, health objectives were developed for high-risk groups of the population, in addition to an objective for the total population. In general, these high-risk groups were defined by race, ethnicity, or age. In addition, there were a few gender-specific areas, such as breast and cervical cancer, for which sex-specific objectives were set.

In general, data are available for births, deaths, and survey results from the Behavioral Risk Surveillance System for each of the major demographic subgroups. However, at the time that *Healthy New Jersey 2000* was developed, population estimates provided by the U.S. Bureau of the Census only provided distribution by age, sex, and race (white and all races other than white). Estimates of the black population and of persons of Hispanic origin were not available. Thus, for objectives which required population estimates as denominators for rates, it was not possible to set objectives specifically for blacks or Hispanics. This was the case for objectives which used the death files for measurement. As a result, data for all races other than white were used as a □minority□ category and when this group had higher death rates (qualifying as a high-risk group), separate minority sub-objectives were set. Because there were no population estimates available for the Hispanic population, it was not possible to determine whether there was a need for separate sub-objectives related to targeted causes of death for this population.

Most of the objectives related to birth outcomes use the total number of births as the denominator, therefore where the black or Hispanic population was at high-risk, special sub-objectives were set for these population groups. Recent population estimates provided by the Census Bureau include distribution of race in four categories: white, black, American Indian and Asian/Pacific Islander. Additionally, estimates of the Hispanic population by age, race, and sex categories are now provided.

Definitions

Active Case of Tuberculosis -- also referred to as a new verified case of tuberculosis. These cases are characterized by (1) any bacteriological confirmation of the presence of Mycobacterium tuberculosis or (2) in the absence of bacteriological confirmation, for a diagnosis of active pulmonary tuberculosis the patient must present a positive purified protein derivative (PPD), or must exhibit a positive chest x-ray, or in the case of children, must be epidemiologically linked to another active case of tuberculosis. In the case of extrapulmonary tuberculosis, the patient must show signs of clinical improvement while taking tuberculosis medication (K. Shilkret, personal communication, 1992).

Birth Weight -- the first weight of the fetus or newborn obtained after delivery. Birth weight is recorded in grams.

Cause of Death Classification -- a system of specification of the diseases and/or injuries which led to death and the sequential order of their occurrence. The version of the system currently in use is the *International Classification of Diseases, Ninth Revision* (1977), sponsored by the World Health Organization.

Infant Death -- death within the first year of life.

Life Expectancy -- the expected number of years to be lived, on average, by persons born in the year analyzed.

Live Birth -- the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Low Birth Weight -- birth weight of less than 2,500 grams or approximately 5 pounds, 8 ounces. Prior to 1989, New Jersey defined low birth weight as 2,500 grams or less.

Maternal Death -- a death in which the certifying physician has designated a maternal condition as the underlying cause of death. In the Ninth Revision of the *International Classification of Diseases*, (1977), the World Health Organization defined a maternal death as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes".

Minority -- all races other than white.

Motor Vehicle-Related Fatalities -- Motor vehicle-related fatalities is a broad term encompassing a number of different types of motorized vehicles and a variety of circumstances covering an encounter of an individual with a motorized vehicle. A motor vehicle is defined in *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Volume 1* as "any mechanically or electrically powered device, not operated on rails, upon which any person or property may be transported or drawn upon a highway. Any object such as a trailer, coaster, sled, or wagon being towed by a motor vehicle is considered a part of the motor vehicle." The Manual includes automobile, bus, construction, industrial or farm machinery, fire engine, motorcycle, moped, motorized scooter, trolley bus not operating on rails, truck, and van in its definition of motor vehicle. Persons killed or injured by a motor vehicle can be drivers, passengers, bicyclists, or pedestrians. Injuries and fatalities related to the use of motor vehicles are not currently labeled ☐accidents☐ by public health professionals, as these events are considered preventable.

Stages of Syphilis (Larsen and Kraus, 1990):
Primary Syphilis -- begins within approximately 30 hours after infection; a primary chancre usually forms within two through six weeks of infection. Both treponemal and nontreponemal antibodies appear one through four weeks after the lesion has formed. Even without treatment, the lesion usually resolves within two months.
Secondary Syphilis -- occurs within six weeks of healing of the primary lesion. Disseminated lesions appear that are attributable to systemic infection. Virtually every organ and tissue of the body is affected. Whether treated or untreated, the lesions of secondary syphilis usually resolve within 2 through 10 weeks.

Trimester of Pregnancy -- the first trimester includes the first 12 weeks of pregnancy, the second trimester encompasses the thirteenth through twenty-fourth weeks, and the third trimester is the period after the twenty-fourth week through delivery.

Underlying Cause of Death -- the disease or injury which initiated the train of events leading directly to death or the circumstances of the unintentional injury or violence which produced the fatal injury. All cause-of-death data in this report relate to the underlying cause of death coded from the death certificate, except falls and fall-related injuries which come from the multiple cause of death file.

Very Low Birth Weight -- birth weight of less than 1,500 grams or approximately 3 pounds, 5 ounces.

Rates and Ratios

The presentation of vital statistics in the form of rates and ratios facilitates comparisons between political subdivisions with populations of different sizes or between subgroups of a population. Crude rates are calculated by dividing the number of events of a type that occur to the residents of an area, e.g., births, deaths, by the resident population of an area or subgroup. The events are limited to those that occur within a specific time period, usually a year, and the population is, in general, the mid-year estimate of the resident population of the area, although census counts as of April 1 may be used in decennial census years. Crude rates are expressed in terms of occurrences within a standard, rounded population, usually 1,000 or 100,000.

While the denominators for rates consist of the population at risk of the events included in the numerator (e.g., births, deaths), ratios are designed to indicate the relationship between two counts in which the denominator population is not at risk of the events included in the numerator. An example of a ratio contained in this report is the maternal mortality ratio in which the number of deaths due to maternal causes forms the numerator and the number of live births provides the denominator.

In order to compare natality and mortality experience among various ages and races or between the sexes, rates may be computed for subgroups of the population. These are referred to as age-, race-, or sex-specific rates and are calculated by dividing the relevant events within a subgroup by the population in the subgroup. Death rates from specific causes may also be calculated, with the numerator consisting of the deaths from the particular cause in an area and the denominator comprised of the population at risk of the disease or condition.

The definition of rates and ratios used in this report follows. It should be noted that alternative forms exist for some of these statistics. Some other states and the federal government may employ different formulae for the computation of selected rates.

Age-Adjusted Death Rate -- Direct Method-the elimination of the effect of age on the crude death rates for purposes of comparison with other rates by applying actual age-specific rates to a standard population. The resulting death rate in the standard population is age-adjusted and can be compared to other death rates age-adjusted to the same standard population.

Age-Specific Birth Rate -- the number of resident live births to females in a specific age group per 1,000 females in the age group.

Cause-Specific Death Rate -- the number of resident deaths from a specific cause per 100,000 population.

Crude Death Rate -- the number of resident deaths per 100,000 population.

General Fertility Rate -- the number of resident live births per 1,000 females aged 15 through 44 years.

Infant Death Rate -- the number of resident deaths under one year of age per 1,000 population.

Infant Mortality Rate -- the ratio of the number of deaths to children less than one year of age in a given year per 1,000 births in the same year.

Maternal Mortality Ratio -- the number of resident deaths from complications of pregnancy, childbirth, and the puerperium per 100,000 resident live births.

Total Fertility Rate -- age-specific birth rates of women in five-year age groups multiplied by five and summed to form a total for all ages. This rate yields the number of children a cohort of 1,000 women would bear if they experienced the existing age-specific birth rates throughout their childbearing years.

Caution should be exercised in the interpretation of rates and ratios based on small numbers.

Statistical Methodology

Age-Adjusted Rates --The numbers of births and deaths in an area are directly related to the demographic characteristics of the area's population. In comparing rates over time or among geographic areas, it is helpful to eliminate the effects of the differences in the populations' demographic characteristics on the comparison. This can be accomplished through adjustments of the rates for the particular characteristics of interest. Since age is the variable that has the greatest effect on the magnitude of rates (Shryock, Siegel and Associates, 1976), the most common type of adjustment of rates is for age.

There are at least two methods of calculating an age-adjusted death rate: the Direct Method and the Indirect Method. Several different standard populations are currently in use by various agencies and groups. In this report, the age-adjusted rates follow the standard set by the National Center for Health Statistics and *Healthy People 2000* in using the Direct Method and the 1940 standard population. Direct adjustment of vital statistics rates involves application of existing rates (age-, race-, or sex-specific) to a standard population to arrive at the theoretical number of events that would occur in the standard population, at the rates prevailing in the actual population. These events are then divided by the total number of persons in the standard population to arrive at an adjusted rate. Adjusted rates are index numbers and cannot be compared to crude or other actual rates. The use of adjusted rates is limited to comparison with other adjusted rates, based on the same standard population. The standard population used in this report is the United States 1940 standard million, derived from the counts of the 1940 decennial census.

Years of Potential Life Lost (YPLL) -- Crude and age-adjusted death rates have traditionally been used to examine the relative importance of the various causes of death acting upon a population. Since most deaths occur in the older age groups, these measures are heavily

weighted toward the mortality experience of the elderly. An important public health priority, in general, and one of the overarching goals of *Healthy New Jersey 2000* is the prevention of premature death, i.e., deaths that occur earlier than the average life expectancy or prior to some selected age, such as 65. A measure used to reflect the trends in premature mortality is years of potential life lost (YPLL). YPLL represents the summation of all of the years of life not lived to a defined upper limit. For this report, the YPLL age limit is set at 65. Deaths at younger ages receive a greater weight in computing YPLL than do deaths at older ages, e.g., one death at age 20 adds 45 years to YPLL, while a death at age 64 adds only one year to YPLL. Thus the death of one 20 year old is equivalent to the deaths of 45 persons aged 64 in the computation of years of potential life lost. The YPLL rate is the total YPLL in years, divided by the appropriate population under the age of 65.

Abbreviations and Acronyms

3TC -- an AIDS drug

ACS -- Ambulatory Care Sensitive (Condition)

ADDP -- AIDS Drug Distribution Program

AIDS -- Acquired Immune Deficiency Syndrome

ASSIST -- American Stop Smoking Intervention Study

ATSDR -- Agency for Toxic Substances and Disease Registry

CABG -- Coronary Artery Bypass Graft

CVD -- Cardiovascular Disease

ddI -- an AIDS drug

DOT -- Directly Observed Therapy (for tuberculosis)

DUI -- Driving Under the Influence

ESRD -- End-Stage Renal Disease

FACE -- Fatality Assessment and Control Evaluation (Project)

Hib -- *Haemophilus Influenzae* type b

HIV -- Human Immunodeficiency Virus

HMO -- Health Maintenance Organization

MDRTB -- Multiple Drug Resistant Tuberculosis

N/A -- Not Available

NICU -- Neonatal Intensive Care Unit

NJDHSS -- New Jersey Department of Health and Senior Services

NPL -- National Priorities List

PAMR -- Pregnancy-Associated Mortality Review

PRO -- Peer Review Organization

PSA -- Prostate-Specific Antigen (Test)

SIC -- Standard Industrial Classifications

STD -- Sexually Transmitted Disease

TANF -- Temporary Aid to Needy Families

TASE -- Tobacco Age of Sale Enforcement (Program)

TB -- Tuberculosis

TBI/SCI -- Traumatic Brain Injury/Spinal Cord Injury

UMDNJ -- University of Medicine and Dentistry of New Jersey

WIC -- Women, Infants, and Children (Program)

YPLL -- Years of Potential Life Lost

ZDV/AZT -- Zidovudine, formerly Azidothymidine (an AIDS drug)

ICD-9 Codes for Mortality Objectives

HIV infection   042-044

Colorectal cancer   153.0-154.3, 154.8, 159.0

Lung cancer   162.2-162.9

Breast cancer   174

Cervical cancer   180

Coronary heart disease   402, 410-414, 429.2

Cerebrovascular disease   430-438

Cirrhosis   571

Motor vehicle injury	E810-E825
Falls and fall-related injuries	E880-E888
Suicide	E950-E959
Homicide	E960-E969
Drug-related deaths	292,304,305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5

Appendix III

Leading Causes of Death by Age Group (Excluding Infants)
New Jersey, 1996

RANK	1-14	15-24	25-44	45-64	65+	TOTAL**
			AGE GROUP			
1	Unintentional Injuries 70	Unintentional Injuries 247	HIV Infection 1,246	Malignant Neoplasms 4,172	Diseases Of The Heart 20,432	Diseases Of The Heart 23,658
2	Malignant Neoplasms 62	Homicide & Legal Intervention 134	Unintentional Injuries 798	Diseases Of The Heart 2,774	Malignant Neoplasms 13,184	Malignant Neoplasms 18,124
3	HIV Infection 27	Suicide 69	Malignant Neoplasms 487	Diabetes Mellitus 657	Cerebrovascular Diseases 3,726	Cerebrovascular Diseases 4,309
4	Congenital Anomalies 26	Malignant Neoplasms 43	Diseases Of The Heart 392	Cerebrovascular Diseases 464	Chronic Obstructive Pulmonary Disease 2,424	Chronic Obstructive Pulmonary Disease 2,759
5	Homicide & Legal Intervention 15	Diseases Of The Heart 34	Suicide 245	HIV Infection 461	Pneumonia/ Influenza 2,214	Pneumonia/ Influenza 2,500
6	Diseases Of The Heart 12	Congenital Anomalies 13	Homicide & Legal Intervention 161	Unintentional Injuries 405	Diabetes Mellitus 1,854	Diabetes Mellitus 2,411
7		HIV Infection 10	Chronic Liver Disease & Cirrhosis 127	Chronic Liver Disease & Cirrhosis 321	Septicemia 1,026	Unintentional Injuries 2,113
8			Cerebrovascular Diseases 108	Chronic Obstructive Pulmonary Disease 282	Nephritis/ Nephrosis 853	HIV Infection 1,786
9			Pneumonia/ Influenza 67	Pneumonia/ Influenza 184	Artery, Arterioles, & Capillary Diseases 713	Septicemia 1,237
10			Diabetes Mellitus 63	Suicide 161	Unintentional Injuries 575	Nephritis/ Nephrosis 1,020
Residual*	129	113	917	1,741	8.046	13,195
TOTAL	341	663	4,781	11,458	55,047	73,112

* includes deaths from all other causes in the specific age group.
** includes deaths of persons under one year of age and persons of unknown age.