



Healthy New Jersey 2010:

Assessing Progress by Race and Ethnicity

July 2008

CHS BRIEF

Healthy New Jersey 2010 (HNJ 2010) is a statewide disease prevention and health promotion initiative. One of its overarching goals is to eliminate racial and ethnic health disparities identified in New Jersey’s population. In keeping with this goal, the *Strategic Plan to Eliminate Health Disparities in New Jersey* was drafted in 2007¹, to map priority health areas for the state and to set up an action plan for diminishing disparate outcomes between groups. A subset of the priority areas from the *Disparities Plan* are discussed herein - *infant mortality, deaths due to diabetes, incidence of end-stage renal disease (ESRD) related to diabetes, and HIV disease deaths*. Another health indicator, *prenatal care* is not in the Disparities Plan, but is included here because it is essential to securing optimal birth outcomes.² Though disparities in these selected health areas are ranked among the greatest compared to other health problems statewide, some progress has been made. Since the start of the decade, HNJ 2010 HIV/AIDS death reduction goals have been met, infant mortality and ESRD incidence rates have been reduced, and there has also been a decrease in the rate of deaths due to diabetes in NJ. Analysis of changes in the magnitude of health disparity also shows improvement. The disparities recorded at the start of HNJ 2010 were reduced in varying degrees among all of the selected health areas, and within racial and ethnic groups. These findings are examined further below.

Selected HNJ 2010 Objectives

- **Decrease infant mortality rate**
- **Decrease live births receiving no prenatal care**
- **Decrease diabetes related mortality rate**
- **Decrease HIV deaths**

Center for Health Statistics

Office of the State Epidemiologist

Public Health Services Branch

New Jersey Department of Health and Senior Services

¹ The “Eliminating Health Disparities Initiative” (1996 NJ Assembly Bill 655) charged the Office of Minority and Multicultural Health within NJDHSS to develop a comprehensive, coordinated plan to reduce health disparities between white and racial and ethnic subgroups in the state for the treatment of certain conditions or diseases. The 12 priority areas were asthma, infant mortality, kidney disease, HIV/AIDS, hepatitis C, cancer, sexually transmitted disease, adult and child immunizations, cardiovascular disease, diabetes, unintentional injuries, and violence.

² In a study which graded 50 states on a variety of wellness measures, overall NJ performed only slightly above average. Though infant mortality rates were significantly lower as compared to other states, NJ ranked second to last in the percentage of women receiving prenatal care. Hospitalizations due to complications from diabetes were also too high in New Jersey. (United Health Foundation, 2008)

Methods

Tracking progress toward achieving the HNJ 2010 objectives makes it possible to determine the likelihood of achieving them within the decade. A comparison of data from the first year of HNJ 2010 (baseline year, 1998/1999) to the most current data year provides valuable information on the status of objectives, as well as their probability of achievement.

For each of the selected HNJ 2010 objectives listed above, the percentage of the target that has been achieved to date is calculated and used to make a prediction about whether the objectives will be met at the end of the decade.³ This predictive measure is known as the Percent Target Achieved. This computation also allows for the evaluation of whether rates remained the same, improved, or worsened during the decade.

Next, changes in disparity levels between racial and ethnic sub-groups and whites from the baseline year to the most current data year are analyzed. Disparities within the specified health objectives among blacks, Hispanics/Latinos and Asian/Pacific Islanders are compared using a relative ratio, called the disparity ratio.⁴ The comparison of changes in this ratio over time provides a method to assess whether disparity levels are declining.⁵

Infant Mortality

Percent Target achieved

Overall, infant mortality rates decreased for the state population from 1998 to 2004 and 35% of the HNJ 2010 target was achieved. Though progress was made toward decreasing the overall infant mortality rate, not all the racial/ethnic sub-populations experienced the same outcomes.

³ The formula used to measure New Jersey's progress toward achieving the HNJ 2010 objective targets was borrowed from the US Department of Health and Human Services Healthy People 2010 Midcourse Review's calculation of the percent of target achieved for each of the HP 2010 objectives: % of Target Achieved = (Most recent value-baseline value) X 100/ (Year 2010 target – baseline value) Objectives which reached 50% or more of the target by the midpoint year (2004 or 2005) are considered likely to be met.

⁴ To evaluate changes in disparities, the selected HNJ 2010 objectives data were converted to ratios with whites used as the reference group for comparison to blacks, Hispanic/Latinos, and Asian/Pacific Islanders. The disparity ratio was computed as follows: Disparity ratio = Non-white population value/White value.

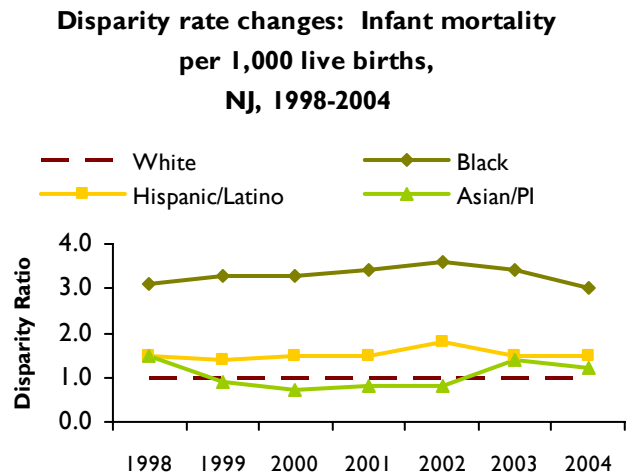
⁵ A disparity rate >1.0 means that the comparison group rate is worse than whites. Disparity rate=1.0 means the comparison group rate is the same as whites. Disparity rate <1.0 means the comparison group rate is better than whites.

Infant Mortality rates per 1,000 live births, NJ 1998-2004				
	(1998) Baseline	(2004) Current	2010 Target	% Target Achieved
White	4.1	3.6	3.8	100+
Black	12.7	10.8	7.5	36.2
Hispanic/Latino	6.0	5.4	4.4	37.9
Asian/PI	6.4	4.3	4.5	87.3
Total	6.4	5.7	4.4	35.4

White infant mortality rates met and surpassed target rates from 2002 to 2004. Blacks and Hispanics/Latinos achieved 36% and 38% of the target, respectively. Asians/Pacific Islander’s rates decreased by one-third their baseline rate and achieved 87% of the HNJ 2010 target. Even though reductions in infant mortality rates were made for blacks and Hispanics/Latinos, they were small; it is not likely that the general population target for infant mortality will be accomplished by 2010.

Changes in disparities

Between 1998 and 2002, the disparities in infant mortality rates increased steadily among blacks compared to whites. However, the trend reversed in 2003 and 2004, resulting in an overall 2% decrease from the disparity level measured at baseline by 2004. A similar trend is observed among Hispanics/Latinos, however, the disparity ratio increased 3% overall compared to whites. A smaller infant mortality disparity rate was measured for Asians/Pacific Islanders at baseline, with their rates being 53% higher than white rates. However, from 1999 to 2002 the group averaged 21% lower infant mortality rates than whites; and by 2004 Asian/Pacific Islander rates were only 19% higher than whites. Also in 2004, black infant mortality disparity ratios showed that infant mortality rates were three times higher than whites; and Hispanic/Latino rates were 50% higher.



Prenatal Care

Percent Target achieved

Percent of new mothers reporting that they had not received prenatal care, NJ 1998-2004				
	(1998) Baseline	(2004) Current	2010 Target	% Target Achieved
White	0.3	0.6	0.25	0
Black	3.9	3.7	2.8	15.6
Hispanic/Latino	0.8	1.2	0.75	0
Asian/PI	0.2	0.3	*	*
Total	1.0	1.2	0.75	0

**No target set.*

The overall percentage of mothers who did not receive any prenatal care during pregnancy increased slightly (1.0% to 1.2%) between 1998 and 2004. While white and Hispanic/Latino prenatal care usage worsened during this time period, blacks' usage improved and reached about 16% of the HNJ 2010 target by 2004. Since Asians/Pacific Islanders had better prenatal care access at baseline than all the racial/ethnic groups, no target was set for the group. Despite a slight decline in prenatal care use among this group from 1998 to 2004, it is still higher than for any other group. Regardless of gains in this health area for some groups, the HNJ 2010 objective to decrease the percentage of mothers reporting no prenatal care will most likely not be achieved within the decade.

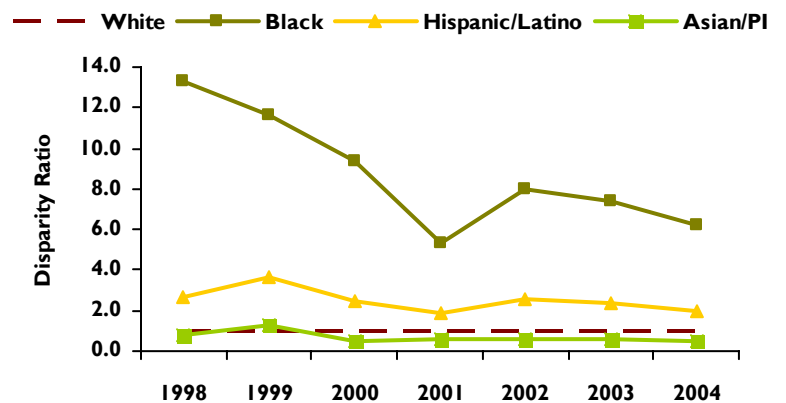
Changes in disparities

From 1998 to 2004, among blacks, there was a rapid decrease, averaging 2.7% per year, in the disparity level measured for prenatal care usage as compared to whites.

This contributed to an overall

54% decrease in the prenatal care use disparity in 2004. However, blacks are still 6 times more likely than whites to lack prenatal care at the time of the child's birth. Among

Disparity rate changes: Percent of new mothers who received no prenatal care, NJ 1998-2004



Hispanics/Latinos, changes in the disparity measured were more modest, decreasing by 26% from baseline, but this group is still twice as likely to lack prenatal care as whites. It is important to note that there was also a 50% increase among whites reporting a lack of prenatal care during this time (0.3% at baseline vs. 0.6%). Therefore, decreases in disparity levels overall may be partially due to the decrease in prenatal care use among whites.

Diabetes – Incidence of end-stage renal disease (ESRD)

Percent Target achieved

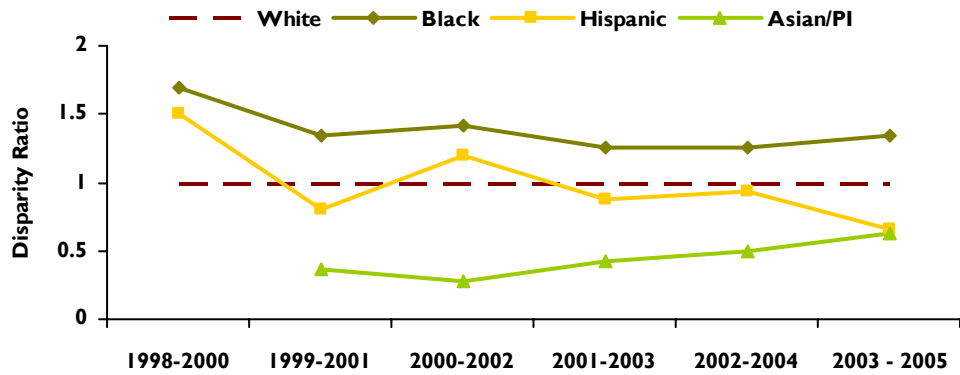
End-Stage Renal Disease (ESRD) incidence per 1,000 diabetic population, NJ, 1998-2005				
	(1998-2000) Baseline	(2003-2005) Current	2010 Target	% Target Achieved
White	2.7	2.5	2.4	66.7
Black	7.0	4.7	3.7	69.7
Hispanic/Latino	6.2	2.3	3.0	100+
Asian/PI	*	2.2	**	**
Total	6.4	5.7	2.7	90.0

**Figure does not meet standard of reliability or precision, N<20.; **No target set.*

The HNJ 2010 objective to reduce the incidence of end-stage renal disease (ESRD) will more than likely be achieved within the decade, as it had already been 90% accomplished overall in 2005. Whites and blacks met 67% and 70% of targets set, respectively; Hispanics/Latinos surpassed their target by an additional 28 percent. Asian/Pacific Islander ESRD incidence was so low at baseline that no rate could be calculated and no target was set. In subsequent years (1999 to 2005), incidence among Asians/Pacific Islanders averaged 1.7 cases per 1,000 diabetic population, lowest among all groups. However, the number of new ESRD cases per 1,000 NJ diabetics increased 23% among Asians/Pacific Islanders from 2001 to 2005 (Diabetes Prevention and Control Program).

Changes in disparities

Disparity rate changes: ESRD incidence, NJ 1998-2005



Though disparities in ESRD incidence still exist with blacks having 35% higher rates as compared to whites, overall disparities measured among blacks compared to whites dropped 11% from baseline (1998-2000). Among Hispanics/Latinos disparity levels improved greatly; incidence was 50% worse than whites at baseline but in 2003-2005, Hispanic/Latino ESRD incidence was 34% lower than among whites. Asian/Pacific Islander ESRD incidence rates were lowest of all the racial/ethnic groups. The disparity measured among whites compared to this group at baseline improved, due to the increased ESRD incidence noted among Asian/Pacific Islanders.

Diabetes – age-adjusted death rates

Percent Target achieved

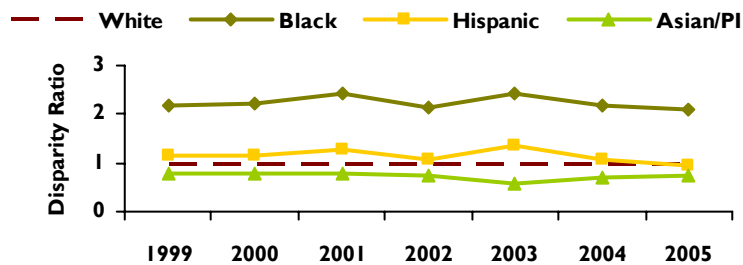
Age-adjusted diabetes deaths per 100,000 population, NJ 1999-2005				
	(1999) Baseline	(2005) Current	2010 Target	% Target Achieved
White	25.2	24.6	18.4	8.8
Black	55.1	51.3	24.5	12.4
Hispanic/Latino	28.7	23.5	18.4	50.5
Asian/PI	19.7	17.7	*	*
Total	28.0	27.1	18.4	9.4

*No target set.

Modest reductions in age-adjusted diabetes death rates were achieved for the total population and within each of the racial and ethnic sub-groups from 1999 to 2004. HNJ 2010 targets will not likely be met within the decade. A review of the most current data available shows that slightly more than 9% of the target has been achieved overall. Blacks achieved 12% of the target, and their diabetes death rates are more than 50% higher than white rates. Hispanics/Latinos have achieved 51% of the target, and in 2005 their diabetes death rates are 4% lower than whites. Asians/Pacific Islanders death rates were 21% lower at baseline than for the overall population, and no HNJ 2010 target was set. Current diabetes death rates for this group remain lower than even the targets set for every other group.⁶

Changes in Disparities

Disparity rate changes: Age-adjusted diabetes deaths, NJ 1999-2005



From 1999 to 2005, for blacks, essentially no change occurred in disparities measured from baseline, and the disparity rates remained more than 200% worse than among whites. At baseline, Hispanic/Latino disparities were evident in 14% higher death rates compared to whites. In 2005, no disparity was measured for this group. There was also no disparity measured among Asian/Pacific Islanders compared to whites from 1999 to 2005; this group averaged 27% better rates than whites during this time period.

⁶ The number of Hispanic/Latino and Asian/PI deaths from diabetes is known to be understated due to under reporting of deaths and migration patterns for these groups. Healthy New Jersey 2010 Update 2005, Available at: <http://www.state.nj.us/health/chs/hnj2010u05/index.shtml>

HIV Disease - age-adjusted deaths

Percent Target achieved

Age-adjusted HIV disease deaths per 100,000 population, NJ, 1999-2005				
	(1999) Baseline	(2005) Current	2010 Target	% Target Achieved
White	3.1	2.4	2.5	100+
Black	54.7	34.3	43.8	100+
Hispanic/Latino	13.2	5.5	10.6	100+
Asian/PI	*	*	**	**
Total	10.6	6.5	6.4	97.6

*Figure does not meet standard of reliability or precision, N<20.

**No target set.

HNJ 2010 targets for reducing HIV disease deaths were met and surpassed for whites, blacks and Hispanics/Latinos. There were too few HIV disease deaths among Asians/Pacific Islanders to compute a rate. Despite achieving the set targets, Hispanic/Latino HIV disease death rates are more than 2 times higher than whites, and black rates are more than 14 times higher than whites.

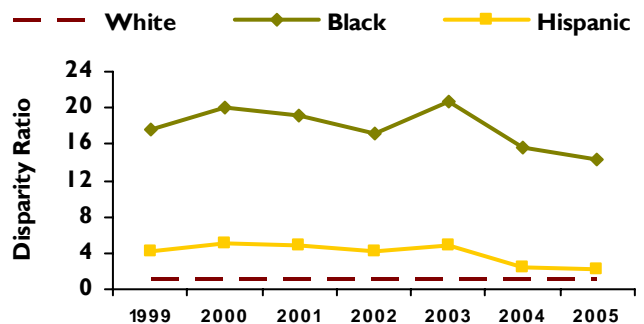
Changes in Disparities

The scale of disparity measured among blacks compared to whites for HIV disease deaths is far greater than as compared to the other selected health areas, with the disparity rates averaging 86% higher than

whites from 1999 to 2005. However, some improvement in the HIV disease death disparity measured at baseline did occur in this time period, decreasing overall 19%.

Hispanics/Latinos had a 46% decrease in disparities measured from baseline. However, because it is known that the number of HIV disease deaths for this group is understated, this statistic must be considered with caution⁷. Asian/Pacific Islander HIV death rates could not be computed due to the small number of deaths reported for this population.

Disparity rate changes: Age-adjusted HIV death rates, NJ 1999-2005



⁷ Hispanic deaths rates are somewhat understated due to a problem of miscoding on the death certificates. Hispanic origin on the death certificate is understated by a margin of 5 percent. http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf

HIV Disease Deaths, Ages 25 to 44 years-old

Percent Target achieved

HIV disease deaths among ages 25 to 44, per 100,000 population, NJ, 1999-2005				
	(1999) Baseline	(2005) Current	2010 Target	% Target Achieved
White	6.1	3.8	4.8	100+
Black	91.9	43.4	86.5	100+
Hispanic/Latino	20.8	5.5	16.6	100+
Asian/PI	*	*	**	**
Total	19.8	9.5	15.8	100+

**Figure does not meet standard of reliability or precision, N<20.*

***No target set.*

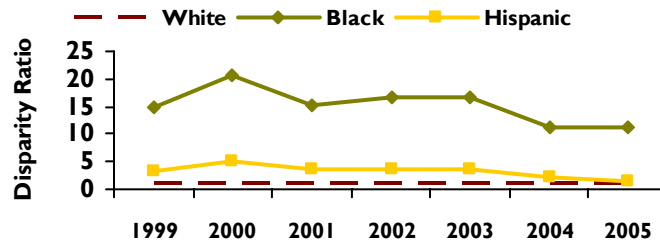
HNJ 2010 targets for reducing HIV disease deaths among 25 to 44 year olds were also met and surpassed for whites, blacks and Hispanics/Latinos, and for this age group overall.

Target rates for this objective were surpassed by 75% among whites, nearly 900% among blacks, and by more than 350% among Hispanics/Latinos. Though black HIV disease death rates for this age group were 11 times higher than for whites and 8 times higher than Hispanics/Latinos, they were cut by more than a third (37%) from baseline. There were too few deaths from this cause among Asians/Pacific Islanders to compute a reliable rate.

Changes in disparities

The disparity in HIV disease deaths among 25 to 44 year old blacks compared to whites increased intermittently from baseline through 2003. In 2004, the pattern reversed and there was the first true drop in the disparity rate observed, with 26% drop from baseline. In 2005, overall the change in the disparity rate was a 24% decrease from baseline for blacks in this age-group. A similar pattern was observed among Hispanics/Latinos, with disparities measured from baseline dropping 57% from baseline.

**Disparity Rate Changes: HIV death rates
among 25 to 44 year olds,
NJ, 1999-2005**



Discussion

A total of six HNJ 2010 objectives were evaluated and overall, some progress toward achieving set targets for these selected health objectives was made between 1998 and 2005. A number of the objectives evaluated herein were met, or improved to varying degrees, from baseline, and only one worsened for the total population. Progress toward achieving HNJ 2010 targets varied among racial and ethnic groups.

Progress toward achieving HNJ 2010 targets by race/ethnicity and selected health objectives, NJ, 2005						
Met = ↗ ; Better = ↑; Worse = ↓						
	INFANT MORTALITY	NO PRENATAL CARE	ESRD INCIDENCE	DIABETES DEATHS	HIV DISEASE DEATHS	HIV DISEASE DEATHS (25-44)
White	↗	↓	↑	↑	↗	↗
Black	↑	↑	↑	↑	↗	↗
Hispanic	↑	↓	↗	↑	↗	↗
Asian/PI	↑	↓	↓	↗	N/A	N/A
Total	↑	↓	↑	↑	↑	↗

Targets for reductions in infant mortality and prenatal will not likely be achieved within the decade for blacks and Hispanics/Latinos. Asian/Pacific Islanders infant mortality rate targets will likely be met. Among whites, infant mortality rate targets were met and surpassed.

There was great progress in meeting ESRD incidence targets; however, the same was not evident with age adjusted diabetes deaths. The best progress was achieved in meeting targets set for HIV age-adjusted and 25 to 44 year old deaths for every racial and ethnic group. Targets were met and surpassed by all groups for which a target was set. However, it is important to note that the target set for HIV disease deaths among blacks was still 20 times higher than the white target; and the Hispanic/Latino target was set up to 5 times higher than the white target for these objectives.

**Changes in Disparity level by Selected HNJ 2010 Objectives,
NJ 1998-2004**

	Black Disparity ratio			Hispanic/Latino Disparity ratio			Asian/PI * Disparity ratio		
	Baseline	Current	% Change	Baseline	Current	% Change	Baseline	Current	% Change
Infant mortality	3.06	3.00	-2%	1.45	1.50	3%	1.53	0.8	-22%
Prenatal care	13.3	6.17	-54%	2.70	2.00	-26%	0.79	0.5	-37%
ESRD incidence	1.69	1.35	-21%	1.50	0.66	-56%	0.37	0.63	59%
Diabetes deaths	2.19	2.09	-5%	1.14	0.96	-16%	0.78	0.72	-8%
HIV deaths	17.65	14.29	-19%	4.26	2.92	-31%	**	**	**
HIV deaths, 25 to 44	14.97	11.42	-24%	3.39	1.45	-57%	**	**	**

**With the exception of infant mortality, baseline rates for all measures were better than as compared to whites. For infant mortality, the current rates are better than as compared to current white rates.*

*** The number of cases were too small to calculate a reliable rate or ratio.*

Changes in disparities measured from baseline did occur, and almost all of those analyzed showed some improvement. The greatest change overall and within the racial/ethnic groups was noted in Hispanic/Latino HIV mortality rates among 25 to 44 year olds, decreasing the disparity ratio by 57% from baseline. The highest disparity reduction among blacks was seen with prenatal care usage ratios that decreased more than 50%. However, only 5% more blacks received prenatal care overall. The greatest improvements for Asians/Pacific Islanders disparity ratios occurred in prenatal care usage rates with 37% reduction in the

disparity ratio measured at baseline. Though Asian/Pacific Islander ESRD incidence remained lower than as compared to whites, the rates increased 59% from baseline. These figures should be interpreted with caution due to the relatively small size of the Asian/Pacific Islander population. There was essentially no change in the disparity ratio related to diabetes deaths for blacks as compared to whites. Only small improvements (less than 10%) were seen among Hispanic/Latinos and Asian/Pacific Islanders. HIV disease death disparities among blacks were the largest of all measured at baseline; with disparity ratios overall and among 25 to 44 year olds decreasing 19% and 24%, respectively, in 2005.

Black disparity ratios compared to whites decreased an average of 21% among the selected objectives. Hispanic/Latino decreases averaged 30%. Asian/Pacific Islander rates were often better than whites at baseline and improved further from baseline for all these causes except ESRD incidence related to diabetes.

Further targeting of health promotion and disease prevention efforts to sub-groups bearing the greatest burden from these diseases and health conditions is essential to achieving the goal of eliminating health disparities in New Jersey. Additional analyses are required to assess the progress of other HNJ 2010 objectives and to track changes in disparities measured, in order to inform future plans for improving the overall health and quality of life for New Jersey residents.

The Center for Health Statistics (CHS) analyzes and disseminates New Jersey health data and information. This report was prepared by Colette Lamothe-Galette. For more information contact CHS at: (609) 984-6703 or visit us on-line at www.state.nj.us/health/chs

Healthy New Jersey 2010 volumes I and II, and its update completed in 2005 are available on line at <http://www.state.nj.us/health/chs/hnj.htm>.

The Strategic Plan to End Health Disparities is available on line at <http://nj.gov/health/omh/documents/healthdisparityplan07.pdf>



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