



ADDITIONAL AREAS OF DISPARITY

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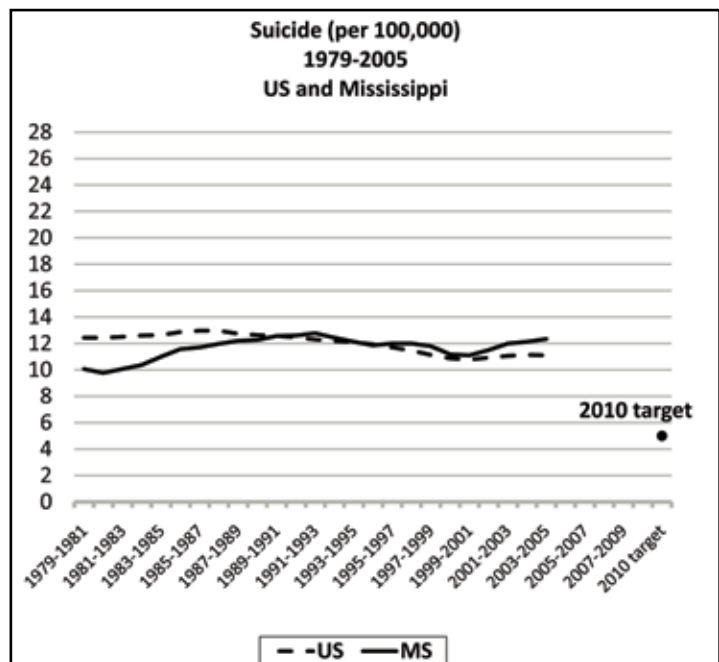
HOMICIDE

ADDITIONAL AREAS OF DISPARITY

SUICIDE

In 2006, suicide was the 11th leading cause of death in the United States (CDC, 2009). Men are 4 times more likely than women to die from suicide; however, 3 times more women than men report attempting suicide.

Suicide is most prevalent among young middle-aged and older adults. As additional risk factors include mental illness, physical illness, or abuse of drugs and alcohol. Suicide is best prevented by knowing the warning signs, which can include mood swings and changes in eating habits or sleeping patterns. Those contemplating suicide also may exhibit withdrawal, recklessness, and sudden loss of interest. "More people survive suicide attempts than actually die. They are often seriously injured and need medical care" (National Center for Injury Prevention and Control, 2009, para. 1).

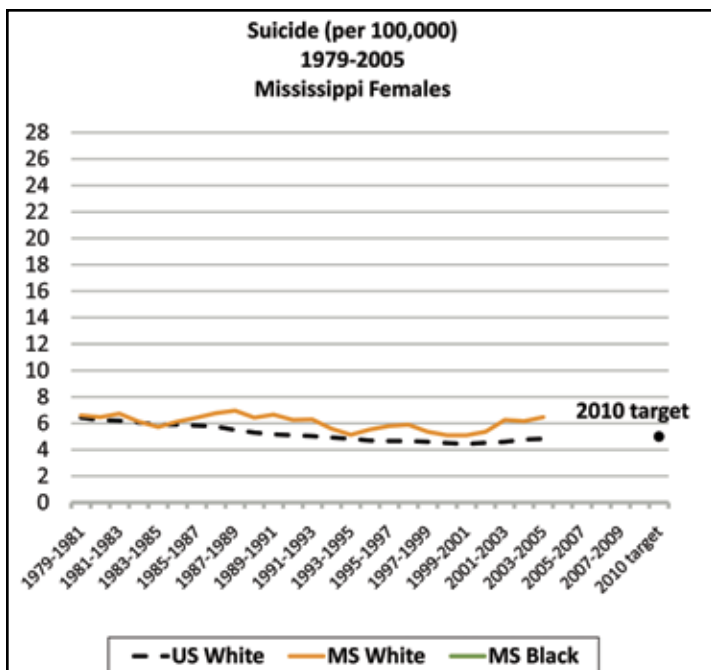


Source: CDC, Compressed Mortality Data, n.d.a; n.d.b

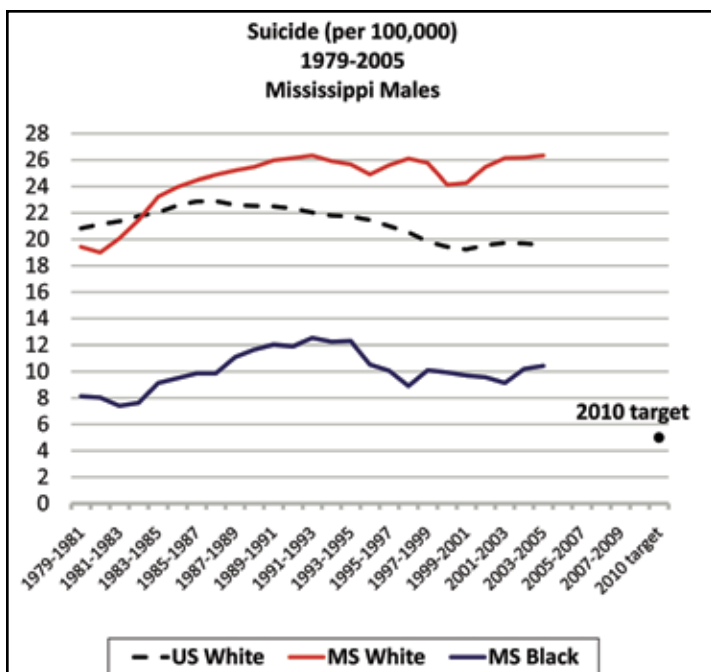
"The cost of self-inflicted injuries (suicide and attempted suicide) is \$33 billion annually (\$32 billion in productivity losses, \$1 billion in medical costs) (CDC, 2007, Costs of Violence section, para. 2). The average cost per case of suicide is \$1 million lost productivity and \$2,596 in medical costs. The average cost for a non-fatal self inflicted injury was \$9,726 in lost productivity and \$7,234 in medical costs"

(CDC, 2007, Result of Violence Section, para. 3 & 4).

NOTE: All rates and resulting measures are age adjusted.



*Note: Rates for MS black females were unreliable.
Source: CDC, Compressed Mortality Data, n.d.a; n.d.b



Source: CDC, Compressed Mortality Data, n.d.a; n.d.b

Mississippi, the Nation, and Healthy People 2010

Using the 1998 US rate of 11.3 suicides per 100,000 as a baseline, Healthy People 2010 calls for a reduction in suicides to 5 per 100,000 by 2010. As of 2005, the nation had not reached this goal, with a suicide rate of 11.1 per 100,000. If rates continue to follow current trends, it is unlikely that the US will achieve the Healthy People 2010 goal by 2010. Meanwhile, (with a 2005 rate of 12.8 per 100,000) Mississippi is actually moving away from the Healthy People goal.

Mississippians: How Have We Compared?

While the rates of suicide among white Mississippians have overtaken those among their national counterparts, rates for black Mississippians have remained well below national white averages. Since 1979, suicide rates among black females in Mississippi have been so low as to be unreliable. Rates among white females in Mississippi tracked closely with those of US females from 1979 (both 6.8 per 100,000) until the late 1980s when the rate for white females in Mississippi slightly overtook the national rate. By 2005, white females across the country (at 4.9 per 100,000) were 1.7 per 100,000 lower than among white females in Mississippi (at 6.6 per 100,000).

NOTE: In tables, red data represent a worsening in rate or percentage over the observed time period. Green data represent an improvement in rate or percentage.

Black males in Mississippi have consistently bettered their white counterparts. In 1979, the white U.S. male rate (20.7 per 100,000) was nearly triple the rate for black males in Mississippi (7.6 per 100,000). However, the advantage held by black MS males has reduced over time, from 13.1 per 100,000 fewer suicides in 1979 to 8.1 per 100,000 fewer in 2005 (when white US males saw a rate of 19.6 per 100,000 and black MS males saw a rate of 11.5).

Rates for white males in Mississippi (19.7 per 100,000 in 1979) were initially also lower than white national rates. However, since the early 1980s, white males in Mississippi have seen higher rates of suicide. In 2005, the rate for white males in Mississippi (27.4 per 100,000) exceeded the national rate (19.6 per 100,000) by 7.8 deaths per 100,000. In contrast to US rates, **suicide rates are on the rise for all Mississippi males.**

Suicide (per 100,000)	1979	2005
US white male	20.7	19.6
MS white male	19.7	27.4
MS black male	7.6	11.5
US white female	6.8	4.9
MS white female	6.8	6.6

Black males in Mississippi have held a large and consistent advantage over their white national counterparts. However, as rates of suicide fall for white males across the nation but increase for both black and white Mississippians, this advantage is decreasing.

Meanwhile, **white males in Mississippi** are seeing greater and greater disparities compared to their national counterparts.

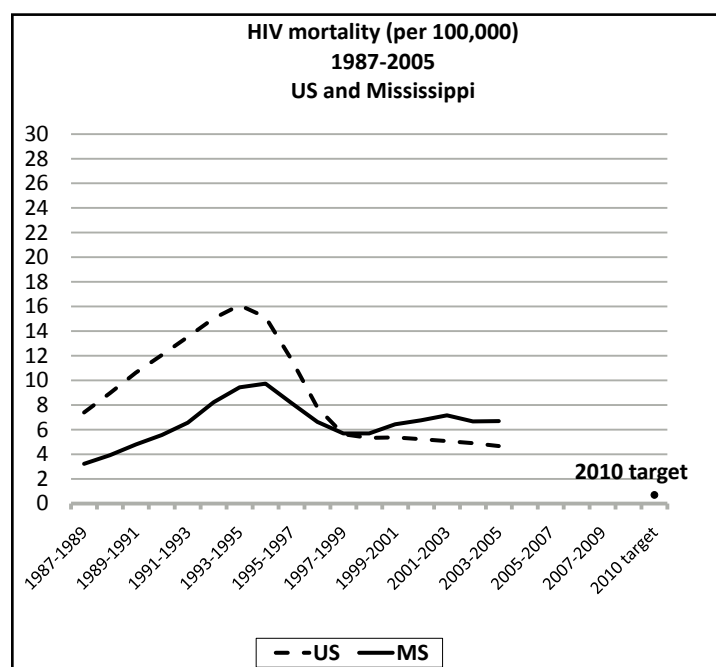
Because we were not equal...
15 more white females in Mississippi
69 more white males in Mississippi
...committed suicide in 2005.

NOTE: Measurements of equality employ national white data as the standard for comparison.

HIV

The Human Immunodeficiency Virus (HIV) infects the body and weakens the immune system directly. HIV is transmitted through blood and sexual fluids.

Once contracted, the first symptoms of HIV may be non-existent, but it is common to develop flu-like symptoms within a few weeks of becoming infected. After this, symptoms may completely disappear for years. Later, as the infection progresses, HIV can cause weight loss, fever, and shortness of breath. The final stage of HIV is Acquired Immune Deficiency Syndrome (AIDS). The first reported case of AIDS in the US was in 1981 (CDC, 2009b).



Source: CDC, Compressed Mortality Data, n.d.a; n.d.b

“Since the beginning of the epidemic through 2006, an estimated 1,014,797 people have developed AIDS in the United States and dependent areas” (CDC, 2009, Acquired deficiency syndrome section, para. 1). The disease destroys the body’s ability to fight off infection, and therefore, “people who have AIDS are very susceptible to many life-threatening diseases, called opportunistic infections, and to certain types of cancer”

(CDC, 2009, Acquired deficiency syndrome section, para.1).

Mississippi, the Nation, and Healthy People 2010

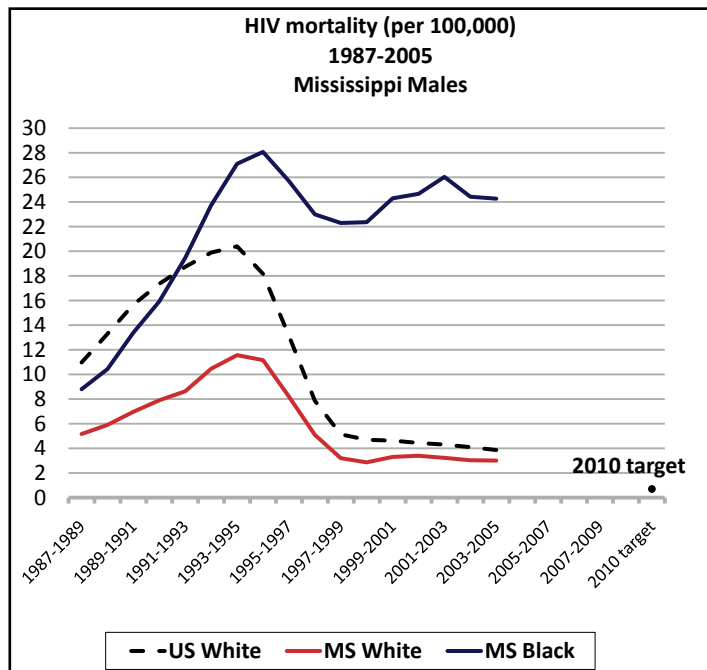
Using the 1998 US rate of 4.9 deaths per 100,000 as a baseline, Healthy People 2010 calls for a decrease in overall HIV mortality to 0.7 per 100,000 by 2010. As of 2005, the nation had not reached this goal, and the mortality rate had only declined to 4.4 per 100,000. **At the current rate of decline, it is unlikely the nation will achieve the Healthy People goal by 2010.**

Both the US and MS experienced a decline in HIV mortality in the mid-1990s. Until 1999, Mississippi rates were lower than national rates. However, Mississippi HIV mortality rates have overtaken national rates, and since then disparity between Mississippi and US HIV mortality rates has risen continuously. While the US is experiencing a gradual decline in HIV mortality, **Mississippi is actually moving away from the Healthy People 2010 goal and is unlikely to meet the 2010 target.**

Mississippians: How Have We Compared?

White males in Mississippi consistently better their national counterparts in HIV mortality. In 1987, 3.8 per 100,000 fewer white males in Mississippi (with a rate of 4.9 per 100,000) died of HIV infection compared to white US males (with a rate of 8.7 per 100,000). While this advantage has narrowed, white males in Mississippi in 2005 (at 2.6 per 100,000) still bettered their national counterparts (at 3.6 per 100,000).

Black males in Mississippi also initially bettered their white national counterparts. However, an incredibly steep rise in HIV mortality in the early '90s followed by a much smaller decline in mortality in the late '90s compared to white national male patterns left black males in Mississippi with wildly higher rates of HIV mortality compared to the nation (at 25.7 per 100,000 in 2005). In 2005, **black males in Mississippi died of HIV infection at more than 7 times the white national rate.** Unlike white males in Mississippi and across the US, HIV mortality for black males has shown no consistent decline in recent years.

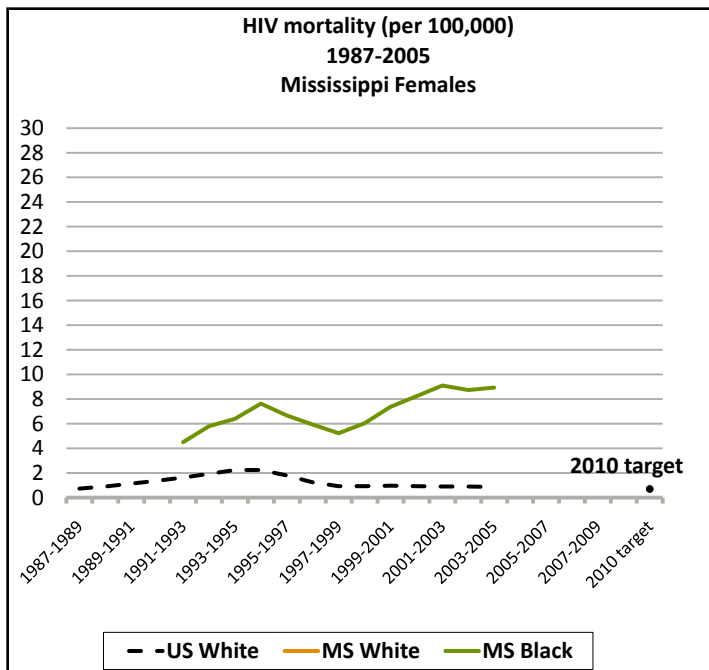


Source: CDC, Compressed Mortality Data, n.d.a; n.d.b

HIV Mortality (per 100,000)	1987	2005
US white male	8.7	3.6
MS white male	4.9	2.6
MS black male	---	25.7
US white female	0.6	0.8
MS black female	---	9.3

1 in 5 black males in Mississippi would have avoided HIV mortality in 2005, if we achieved like our white national counterparts. HIV mortality among black MS females was more than 11 times the white national rate.

The 2007 adult HIV/AIDS diagnoses suggest that certain groups are at more risk than others. 74% of the diagnoses were male, and 26% were female. By race, blacks accounted for 51% of all HIV/AIDS diagnoses made during 2007. Whites comprised 29%, while Hispanics made up 18%. "In 2007, persons aged 40-49 accounted for the largest proportion of newly diagnosed HIV/AIDS cases (27%). Persons aged 30-39 were the second largest proportion (26%), followed closely by persons aged 20-29 (25%)" (CDC, 2009b).



Source: CDC, Compressed Mortality Data, n.d.a; n.d.b

Females die of HIV infection at much lower rates than their male counterparts. Rates among white females in Mississippi are so low as to be unreliable for study. In contrast, rates of HIV mortality among black females in Mississippi are on the rise, more than doubling from 1993 to 2005 (from 4.5 per 100,000 to 9.3 per 100,000).

Unlike trends seen for white Mississippians and whites across the nation, trends of HIV mortality for black males and females are still on the rise.

Because we were not equal...
49 more black females in Mississippi
112 more black males in Mississippi
...died of HIV in 2005.



RISK FACTORS FOR HIV:

AN EXAMINATION OF SUBSTANCE USERS IN THE MISSISSIPPI DELTA

Substance users are more at risk to contract infectious diseases such as HIV because of their likelihood to participate in behaviors that place them at risk. These behaviors include: sharing needles and syringes, having multiple sexual partners, having sexual partners that are also substances users, and homelessness (Robertson, Herbert, & Leonard, 2008).

“In a study of 58 substance users at three regional community mental health centers in the Mississippi Delta, the majority reported cocaine use in the previous six months. Approximately 27% reported injection drug use. In addition several clients reported being homeless at some point in their life. Over one-fifth of the females and over 40% of males report a history of STD and approximately 4% of men and 6% of women assessed may be currently infected with an STD, based on symptoms reported. When we counted the number of HIV risk factors reported, we found that only 9 study participants or 15.5% reported zero risk factors. The average number of risk factors was three for males and 2.5 for females” (Robertson, Herbert, & Leonard, 2008, p. 1 & 2).

Substance users are also at greater risk to be infected with syphilis, tuberculosis, and hepatitis B and C than individuals who do not use alcohol or other drugs. Routine HIV testing is recommended to reduce transmission, however, in the Mississippi Delta, access to care is a serious obstacle (Robertson, Herbert, & Leonard, 2008).

SYPHILIS

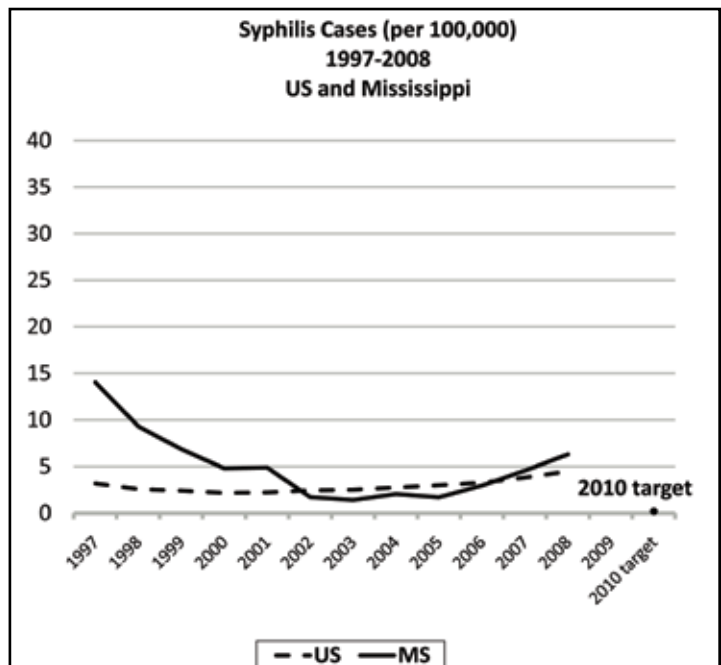
PRIMARY & SECONDARY SYPHILIS

Syphilis is a sexually transmitted disease and is characterized by its ability to imitate symptoms of other diseases. In 2007, there were 40,920 cases reported in the United States (CDC, 2009c). If left untreated, the disease will progress, resulting in damage to internal organs, paralysis, and dementia. In rare cases, syphilis can be fatal. “As of 2007, syphilis was most prevalent in the age group of 25 to 29 year olds” (CDC, 2009c).

Mississippi, the Nation, and Healthy People 2010

Using the 1997 US rate of 3.2 cases per 100,000, Healthy People 2010 calls for a decrease of syphilis incidence to 0.2 cases per 100,000 by 2010. Unfortunately, **US rates have actually risen slightly** (to 4.5 per 100,000 in 2008), and **the US is unlikely to meet the Healthy People goal**.

Mississippi rates (at 14 per 100,000) **were roughly four times the US rate in 1997 but dropped sharply in the first half of the decade**, actually falling below US rates. Unfortunately, in recent years, rates of syphilis among Mississippians have begun to rise (to 6.3 per 100,000 in 2008). As of 2008, rates of syphilis in Mississippi had risen above US rates once more, and **Mississippi is even less likely to meet the Healthy People goal**.



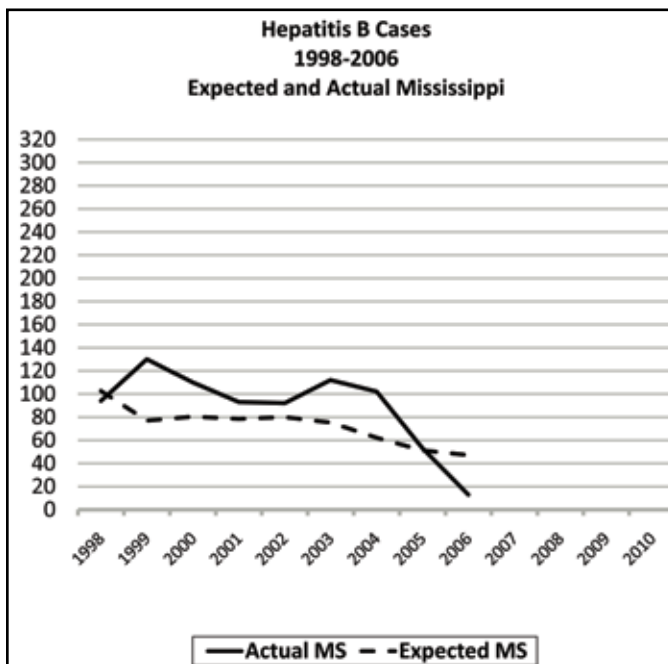
Source: CDC, n.d.c

Syphilis Cases (per 100,000)	1997	2008
US	3.2	4.5
MS	14.0	6.3

HEPATITIS

HEPATITIS B INCIDENCE

Hepatitis B is a serious liver disease caused by the Hepatitis B virus (HBV). Those who are infected with HBV experience not only acute illness but chronic infection, cirrhosis of the liver, liver failure, and possible death. The disease is transmitted through puncture wounds or contact with infectious blood or body fluids. The Hepatitis B vaccine is the most effective measure in preventing disease. It is recommended for all infants as well as others at risk for infection (National Prevention Information Network (NPIN), 2008).



Nationally, the total reported number of Hepatitis B cases declined significantly from 1998 to 2006, from 10,258 to 4,713 cases reported (CDC, n.d.e). Since Mississippians represents 1% of the nation's population, Mississippi should have seen a decline from 103 cases to 47 cases over this same period. Mississippi actually saw a drop from 94 cases to 13 cases between 1998 to 2006, creating a false impression that Mississippi is consistently seeing lower rates of Hepatitis B incidence than the nation. Unfortunately, while rates of Hepatitis B have decreased in Mississippi and were lower than national rates in 1998 and 2006, incidence was disproportionately large in comparison to national rates for all years from 1999 to 2005.

HEPATITIS B VACCINE

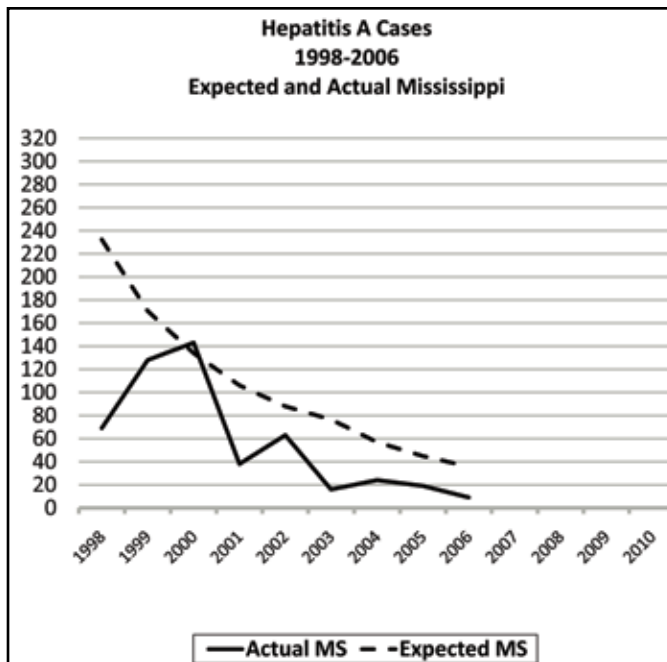
Hepatitis B vaccination rates are only available from BRFSS for 2006 and 2007. On average, from 2006 to 2007, US rates of Hepatitis B vaccination exceeded MS rates of vaccination by 4.8%.

Hepatitis B Vaccination	Average 2006-2007
US	30.9%
MS	26.1%

HEPATITIS A INCIDENCE

Hepatitis A is a liver disease caused by the Hepatitis A virus (HAV). It is a self-limited disease that does not cause chronic infection or chronic liver disease. It is transmitted primarily through the oral-fecal route. It is also transmitted through person-person contact, as well as contamination of food or water. The HAV vaccine is the most effective measure in preventing the disease. The vaccine is recommended for all children at age 1 and international travelers (NPIN, 2008).

The nation experienced 23,229 new cases of Hepatitis A in 1998. However, **US incidence of Hepatitis A declined rapidly**, reaching 3,579 in 2006. Since Mississippians represents 1% of the nation's population, Mississippi should have seen a decline from 232 to 36 cases over the same period. **With the exception of one year, Mississippi has lower rates of Hepatitis A incidence than the nation over the observed time period.** Cases of Hepatitis A in Mississippi have also declined overall, from 69 cases in 1998 to 9 cases in 2006.



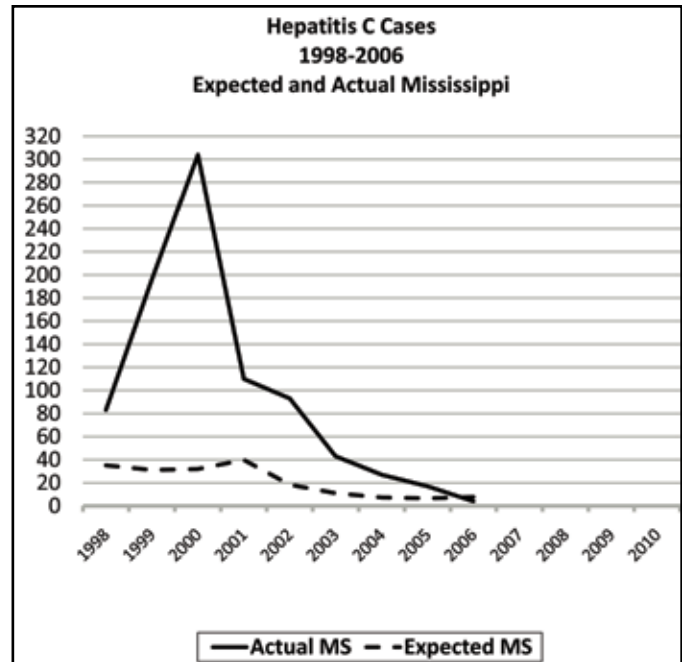
Source: CDC, n.d.c

HEPATITIS C INCIDENCE

Hepatitis C is a liver disease caused by the Hepatitis C virus (HCV). It may cause acute illness, but “most often becomes a silent, chronic infection that can lead to cirrhosis (scarring) of the liver, liver failure, liver cancer, and death” (NPIN, 2008). Most who have Hepatitis C never know they are infected until it is too late because they have no symptoms. The disease is spread by contact with infectious blood. To date there is no vaccine available for Hepatitis C.

From 1998 to 2006, **Hepatitis C incidence declined overall across the US**, from 3,518 cases to 766 new cases in 2006. Since Mississippians represents 1% of the nation’s population, Mississippi should have seen a decline from 35 to 8 cases over the same period.

At the beginning of the observed period, Mississippi saw much higher rates of Hepatitis C incidence than the nation, with 83 cases in 1998 and, at the peak, 304 cases in 2000. However, **Hepatitis C incidence in Mississippi has declined in recent years. In 2006, with 4 cases, incidence was disproportionately low compared to prevalence across the nation.**



Source: CDC, n.d.c

“Hepatitis C is responsible for about one-third of all liver transplants in the United States. Approximately 1,000 patients are transplanted each year for liver disease due to hepatitis C. With the cost per liver transplantation in the range of \$280,000 for one year, liver transplantation for hepatitis C alone reaches a cost of nearly \$300 million per year. Moreover, the average lifetime cost for hepatitis C, in the absence of liver transplant, has been estimated to be about \$100,000 for individual patients. Assuming that 80% of the 4.5 million Americans believed to be infected develop chronic liver disease, the total lifetime cost for this group (of 3.6 million) will be a staggering \$360 billion in today’s dollars. Assuming an estimated survival of 40 years, the annual health care costs for the affected US population with chronic hepatitis C may be as high as \$9 billion”

(The C. Everett Koop Institute, n.d., Associated Health Costs section, para. 2 & 3).

TUBERCULOSIS

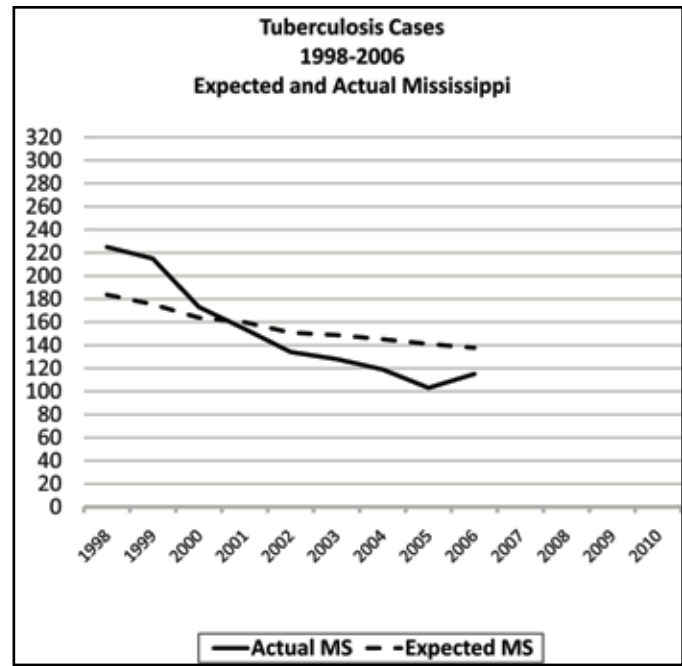
Tuberculosis is a potentially serious infectious disease that primarily affects the lungs. It is passed from person to person through tiny droplets released into the air. Most people who become infected with the bacteria that cause tuberculosis do not develop symptoms of the disease (Mayo Clinic Health Manager, 2009).

Since tuberculosis is a disease of the lungs, infected individuals also experience coughing that lasts three or more weeks, coughing up blood, chest pain, and pain with breathing or coughing. Any individual can contract tuberculosis; however, those with weakened immunity or close contact with individuals who have the disease are more susceptible

to tuberculosis. In the United States, the incidence of tuberculosis is eight times more likely to occur in foreign-born persons residing in the country rather than among US-born persons (NPIN, 2005).

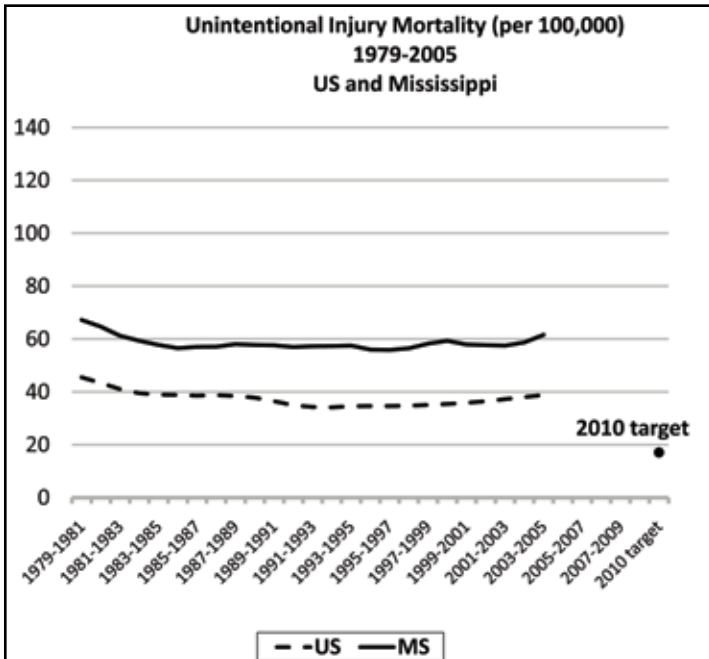
In 1998, the US had 18,361 cases of tuberculosis reported. However, **the US tuberculosis rate dropped steadily from 1998 through 2006**, when it reached 13,779. Since Mississippians represent 1% of the nation's population, Mississippi should have seen a decline from 184 to 138 cases over the same period.

At the beginning of the observed period, Mississippi saw higher rates of tuberculosis incidence than the nation, with 225 cases in 1998. However, **tuberculosis incidence in Mississippi dropped more rapidly than across the nation, and in 2006**, with 115 cases, **incidence was disproportionately low compared to incidence across the nation.**



Source: CDC, n.d.c

UNINTENTIONAL INJURY MORTALITY



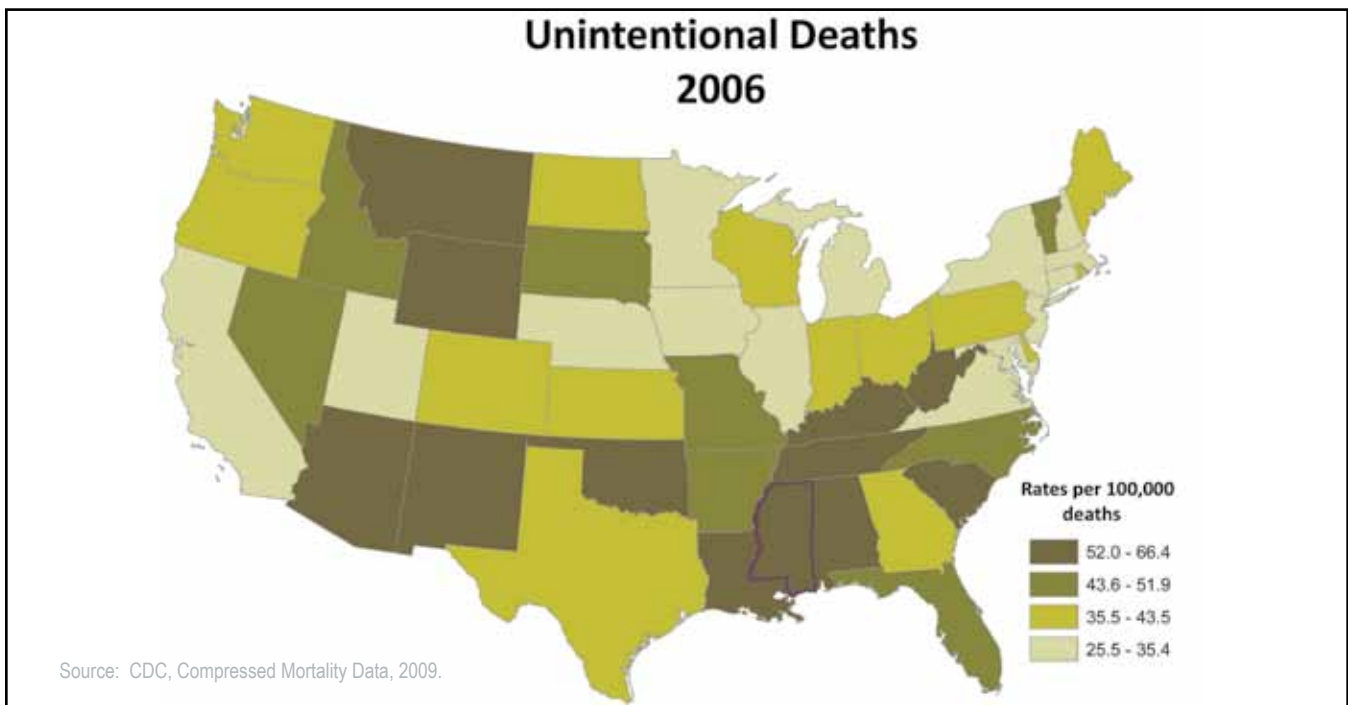
Source: CDC, n.d.a; n.d.b

More than **1 in 4** Mississippians would have survived unintentional injury in 2005, if we achieved like the nation.

In 2006, there were 27.7 million emergency department visits for unintentional injuries. Unintentional injury deaths include unintentional falls, motor vehicle traffic accidents, and unintentional poisoning (CDC, n.d.d).

Mississippi, the Nation, and Healthy People 2010

Using the 1998 rate of 35 deaths per 100,000 as a baseline, Healthy People 2010 calls for a drop in unintentional injury mortality to 17.5 per 100,000 by 2010. Based on current trends, neither the US nor MS is likely to meet the Healthy People 2010 goal; in fact, recent trends indicate both the US and MS are moving away from the Healthy People 2010 target.



Source: CDC, Compressed Mortality Data, 2009.

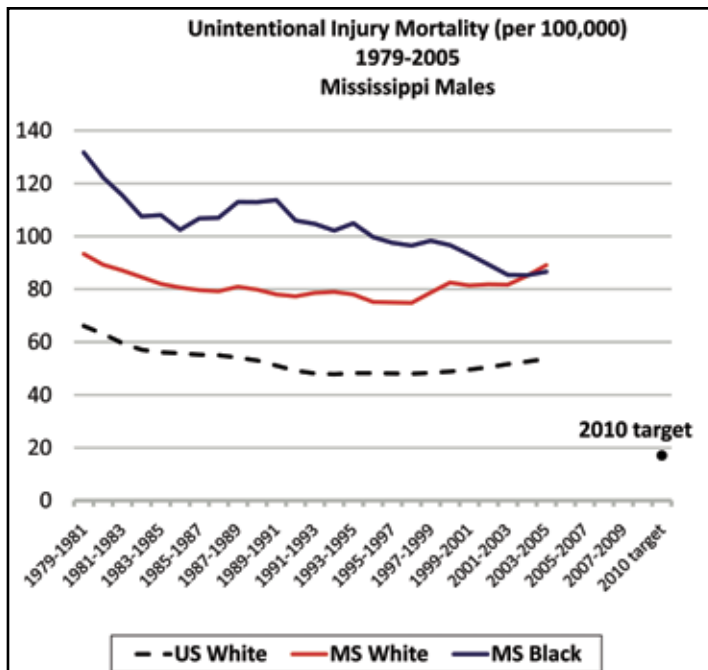
While rates of unintentional injury mortality across the nation fell initially (from 46.5 per 100,000 in 1979 to 33.4 per 100,000 in 1992), these rates have since begun a slow increase (to 39.9 per 100,000 by 2005). Similarly, rates for Mississippi fell (from 68.2 per 100,000 in 1979 to 53.7 per 100,000 in 1995) but rose again in recent years (to 66.6 per 100,000 by 2005). Moreover, **MS unintentional injury mortality rates are considerably higher than national rates.**

Mississippians: How Have We Compared?

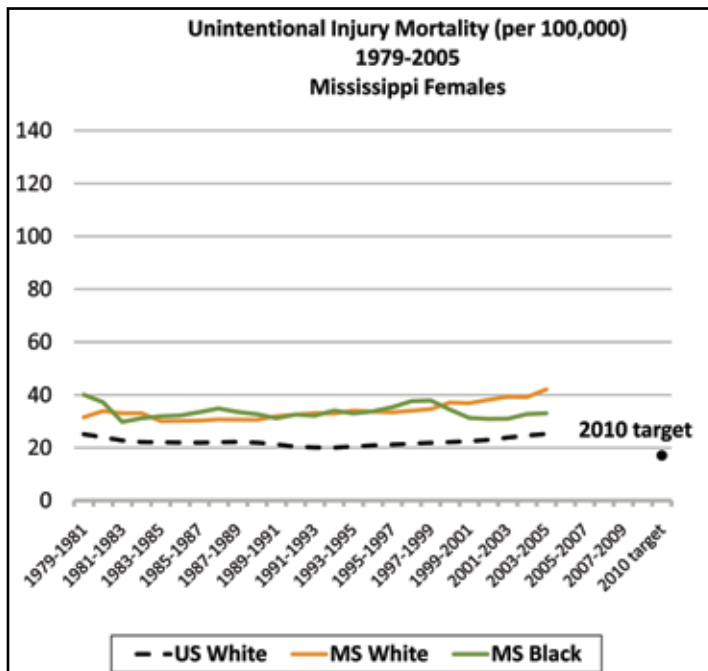
Since 1979, unintentional injury mortality rates for males in MS have been consistently higher than the rates of their white national counterparts. The white US male rate declined gradually (from 67.5 deaths per 100,000 in 1979 to a low of 47.1 deaths per 100,000 in 1992) before rising again in recent years (reaching 55.2 per 100,000 in 2005).

Rates for white MS males were much higher than national rates but followed a similar pattern, declining initially (from 100.4 per 100,000 in 1979) but rising again in the 1990s (reaching 96 deaths per 100,000 in 2005). **Initially, black males in MS were the most likely to die of unintentional injury** (at a rate of 133.5 per 100,000 in 1979). However, this rate has fallen drastically (reaching 91 deaths per 100,000 in 2005) without the increase in recent years seen by white males, and in 2005 the black MS male rate had fallen 5 per 100,000 below the rate for white MS males.

The unintentional injury mortality rates for females lie far below those for their male counterparts, but have experienced similar trends. The white US rate for females initially decreased slightly but rose again in recent years (creating a very slight overall rise from 25.6 deaths per 100,000 in 1979 to 25.8 per 100,000 in 2005).



Source: CDC, n.d.b; n.d.c



Source: CDC, n.d.a; n.d.b

UNINTENTIONAL INJURY MORTALITY

Unintentional Injury Mortality (per 100,000)	1979	2005
US white male	67.5	55.2
MS white male	100.4	96
MS black male	133.5	91
US white female	25.6	25.8
MS white female	30	46.1
MS black female	35.1	35.6

Because we were not equal...
56 more black females in Mississippi
182 more black males in Mississippi
185 more white females in Mississippi
360 more white males in Mississippi
...died of unintentional injury in 2005.

Meanwhile rates for white females in Mississippi rose fairly steadily (from 30 deaths per 100,000 in 1979 to 46.1 per 100,000). Black females in Mississippi saw levels of unintentional injury mortality similar to white MS females, but their rates were slightly more variable, fluctuating around white MS female rates over the observed period (at 35.1 per 100,000 in 1979 and 35.6 per 100,000 in 2005).

“...the total economic cost of motor vehicle crashes in 2000 was \$230.6 billion. This represents the present value of lifetime costs for 41,821 fatalities, 5.3 million non-fatal injuries, and 28 million damaged vehicles, in both police-reported and unreported crashes. Lost market productivity accounted for \$61 billion of this total, while property damage accounted for nearly as much - \$59 billion. Medical expenses totaled \$32.6 billion and travel delay accounted for \$25.6 billion. Each fatality resulted in an average discounted lifetime cost of \$977,000. Public revenues paid for roughly 9 percent of all motor vehicle crash costs, costing tax payers \$21 billion in 2000, the equivalent of over \$200 in added taxes for every household in the U.S.” (U.S. Department of Transportation, 2000, p. 8).



HOMICIDES

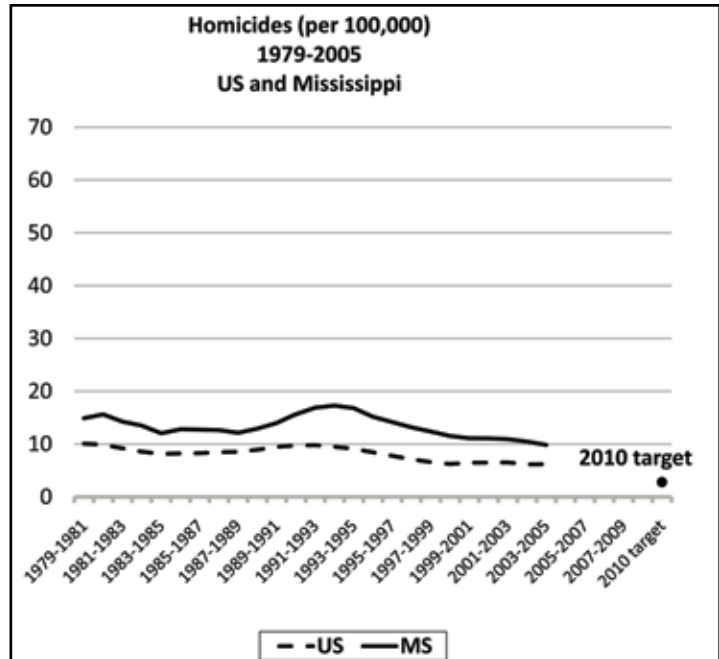
Mississippi, the Nation, and Healthy People 2010

Using the 1998 US rate of 6.5 homicides per 100,000 as a baseline, Healthy People 2010 calls for a drop in homicides to 3.0 per 100,000 by 2010. The US homicide rate rose in the late 1980s, but has steadily declined since the mid 1990s (reaching a rate of 6.3 per 100,000 in 2005). **If the current trend continues, the US could reach the Healthy People 2010 target by 2010.** MS homicide rates follow US patterns but are consistently higher (at 8.9 per 100,000 in 2005); **Mississippi rates of homicide will near the healthy people target by 2010 if current trends continue.**

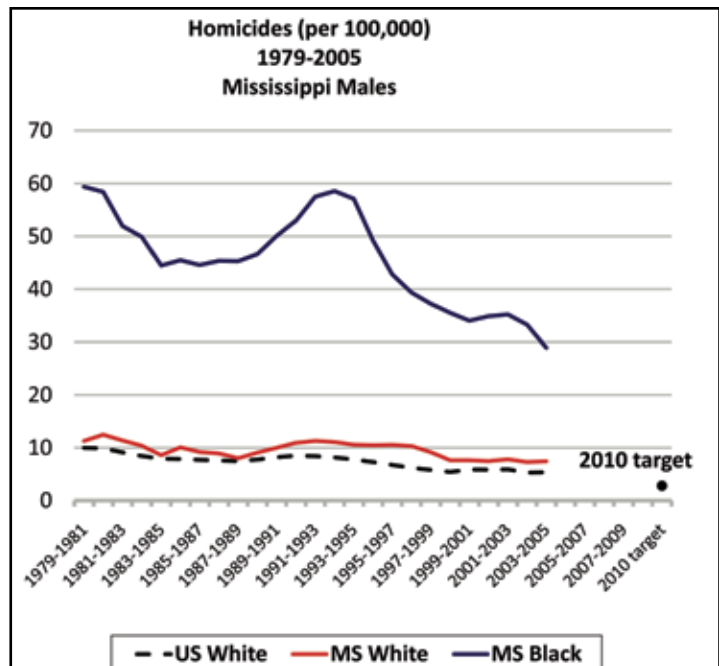
Mississippians: How Have We Compared?

Homicide rates for white males in MS tracked closely with those of their national counterparts from 1979 to 2005, both rates declining gradually (from 9.5 per 100,000 to 5.4 per 100,000 for white US males, and from 11.1 per 100,000 to 7.1 per 100,000 for white MS males). **Rates for black MS males were much greater.**

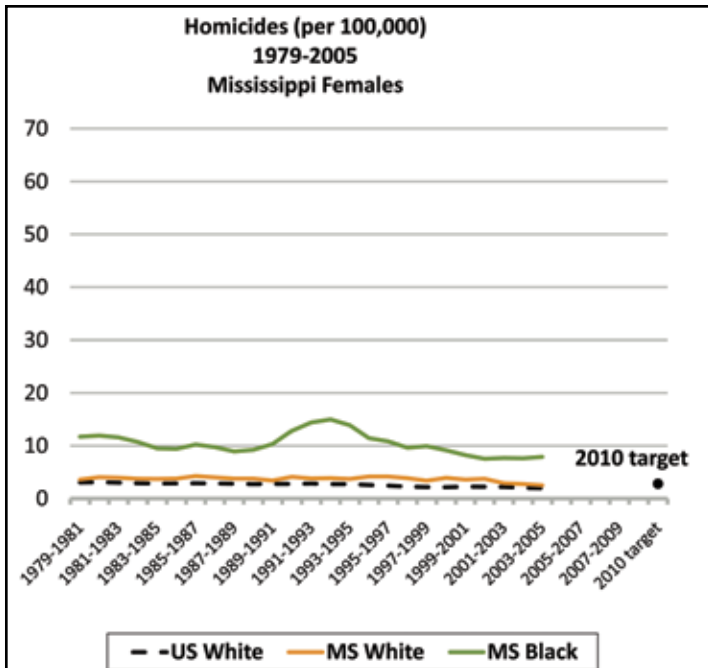
In 1979, the rate of homicide among black males in Mississippi (at 60.8 per 100,000) was more than six times greater than the white US rate and more than 5



Source: CDC, Compressed Mortality Data, n.d.a; n.d.b



Source: CDC, Compressed Mortality Data, n.d.a; n.d.b



Source: CDC, Compressed Mortality Data, n.d.a; n.d.b

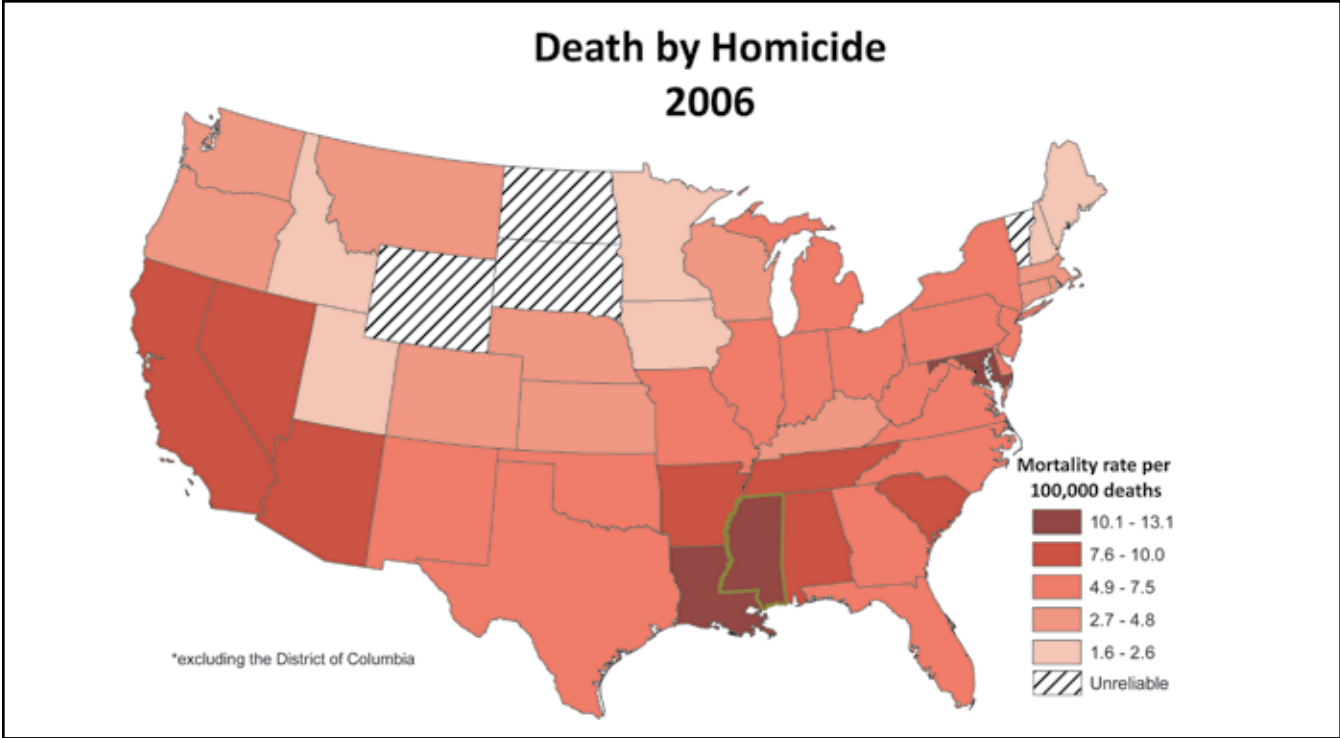
Homicide (per 100,000)	1979	2005
US white male	9.5	5.4
MS white male	11.1	7.1
MS black male	60.8	23.8
US white female	2.9	1.9
MS white female	---	2.7
MS black female	12.6	8.0

Because we were not equal...
7 more white females in Mississippi
15 more white males in Mississippi
35 more black females in Mississippi
93 more black males in Mississippi
...were victims of homicide 2005.

times greater than the white MS rates. After declining in the 1980s, the black MS male homicide rate rose again in the mid 1990s. Since that time, however, rates have dropped rapidly. While the 2005 rate of homicide for black males in Mississippi (23.8 per 100,000) remains significantly higher than white rates, **homicide rates for black MS males are dropping much more rapidly than rates for white males.** Between 1979 and 2005, excess deaths among black MS males compared to white US males dropped from 51.3 per 100,000 to 18.4 per 100,000.

Homicide rates among white females in MS has also tracked very closely to that of their national counterparts. Rates for both groups changed very little from 1979 until 2005 (rates for white US females dropping from 2.9 per 100,000 to 1.9 per 100,000, and rates for white MS females - unreliable in 1979 - dropping from 4 per 100,000 in 1980 to 2.7 per 100,000 in 2005).

Homicide rates for black females in the state were higher than white rates (at 12.6 per 100,000 in 1979 and 8 per 100,000 in 2005). Moreover, **disparity between black MS females and white US females is not decreasing quite as rapidly as among their male counterparts**, only dropping from 9.7 per 100,000 to 6.1 per 100,000 over the observed period.



Source: CDC, Compressed Mortality Data, 2009.

“Americans suffer 16,800 homicides and 2.2 million medically treated injuries due to interpersonal violence annually, at a cost of \$37 billion (\$33 billion in productivity losses, \$4 billion in medical treatment). The average cost per homicide was \$1.3 million in lost productivity and \$4,906 in medical costs. The average cost per case for a non-fatal assault resulting in hospitalization was \$57,209 in lost productivity and \$24,353 in medical costs” (CDC, 2007, Costs of Violence section, para. 1).

REFERENCES

- Centers for Disease Control and Prevention (CDC). (2007). *The cost of violence in the United States*. Retrieved October 2009 from <http://www.cdc.gov/ncipc/factsheets/CostOfViolence.htm>
- Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control. (2009). *Understanding suicide*. Retrieved October 2009 from <http://www.cdc.gov/ViolencePrevention/pdf/Suicide-FactSheet-a.pdf>
- Centers for Disease Control and Prevention (CDC). (2009b, August, updated). *HIV/AIDS in the United States*. Retrieved 2009 from <http://www.cdc.gov/hiv/resources/factsheets/PDF/us.pdf>
- Centers for Disease Control and Prevention (CDC). (2009c, January 13, reviewed). *Syphilis homepage*. Retrieved October 2009 from <http://www.cdc.gov/std/stats07/syphilis.htm>
- Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Compressed Mortality File 1979-1998. (n.d.a). [Data file]. *CDC WONDER on-line database, compiled from compressed mortality file CMF 1968-1988, series 20, No. 2A, 2000 and CMF 1989-1998, series 20, No. 2E, 2003*. Accessed at <http://wonder.cdc.gov/cmfcid9.html>
- Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Compressed Mortality File 1999-2006. (n.d.b). [Data file]. *CDC WONDER on-line database, compiled from compressed mortality file 1999-2006 series 20 no. 2L, 2009*. Accessed from <http://wonder.cdc.gov/cmfcid10.html>
- Centers for Disease Control and Prevention (CDC), National Center for HIV, STD and TB Prevention, Division of STD/HIV Prevention. (n.d.c). *CDC WONDER on-line database 1996-2008*. Accessed from <http://wonder.cdc.gov/std.html>
- Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. (n.d.d). *Accidents or unintentional injuries*. *CDC WONDER on-line database*. Retrieved October 2009 from <http://www.cdc.gov/nchs/fastats/acc-inj.htm>
- Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. (n.d.e). *Reported cases of notifiable diseases*. Retrieved from http://www.cdc.gov/mmwr/mmwr_nd/
- Mayo Clinic Health Manager. (2009). *Tuberculosis*. Mayo Foundation for Medical Education and Research (MFMER). Retrieved October 2009 from <http://mayoclinic.com/health/tuberculosis/DS00372>
- National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (CDC). (2009). *Understanding suicide*. Retrieved from <http://www.cdc.gov/violenceprevention>

National Prevention Information Network (NPIN). (2005). *Tuberculosis today*. A service of the Centers for Disease Control and Prevention. Retrieved October 2009 from <http://www.cdcnpin.org/scripts/tb/tb.asp>

National Prevention Information Network (NPIN). (2008). *STDS today*. A service of the Centers for Disease Control and Prevention (CDC). Retrieved October 2009 from <http://www.cdcnpin.org/scripts/std/std.asp>

Robertson, A., Herbert, A., & Leonard, S. (2008, July). *Risk factors for HIV: An examination of alcohol and other drug users in the Mississippi Delta*. Mississippi Health Policy Research Center, Social Science Research Center, Mississippi State University. Retrieved December 1, 2009, from http://www.healthpolicy.msstate.edu/publications/pubsvviewer.html#http://www.healthpolicy.msstate.edu/publications/HIV_Factors_Delta.pdf

The C. Everett Koop Institute, Dartmouth Medical School, Dartmouth-Hitchcock Medical Center. (n.d.). *Associated health costs-United States*. Retrieved October 2009 from <http://www.epidemic.org/theFacts/theEpidemic/USHealthCareCosts/>

U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA). (2000, May). *The economic impact of motor vehicle crashes 2000*. Retrieved October 2009 from <http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/Communication%20&%20Consumer%20Information/Articles/Associated%20Files/EconomicImpact2000.pdf>