

Disparities in **HYPERTENSION** Mortality Among Blacks in Arkansas

Health disparities are gaps in health outcomes or determinants between segments of the population. Many health disparities are related to social determinants of health (*Centers for Disease Control and Prevention, CDC*).

- **Hypertension** or high blood pressure, is caused by higher-than-normal blood pressure levels in the blood vessels. Long-term damage to the blood vessels and heart due to hypertension may lead to heart disease and stroke (*CDC*).
- In 2015, Arkansas ranked 11th in the nation for **hypertension** mortality (1st being the worst).¹
- In 2015, a total of 329 Arkansans died due to **hypertension**, of which 17.0% were Black.
- In 2014, total hospitalization costs for **hypertension** in Arkansas was over \$21.1 million. Thirty-five percent of those costs (\$7.3 million) were for Blacks.²

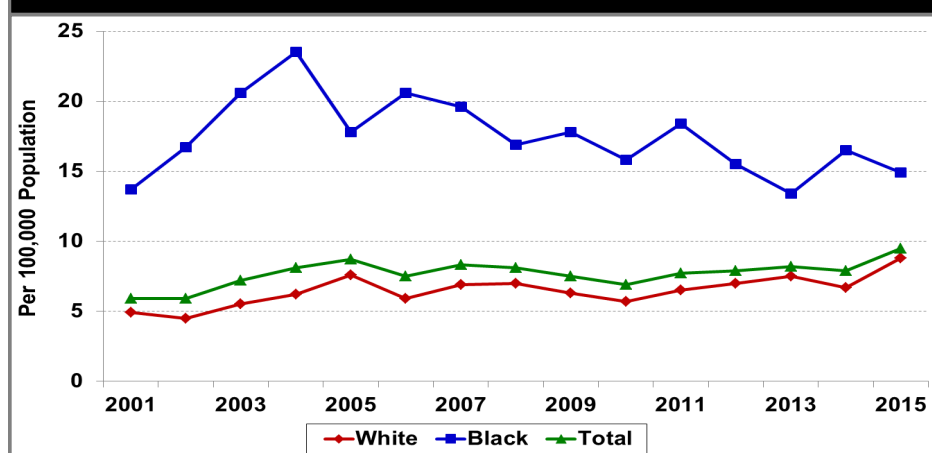
Table 1: Leading Causes of Death by Black/White Disparity Ratio, Arkansas 2011-2015

Cause of Death ³	White Rate ⁴	Black Rate ⁴	Disparity Ratio ⁵	Preventable Deaths among Blacks ⁶
1. HIV	1.2	7.0	5.8	27
2. Homicide	4.4	23.5	5.3	89
3. Diabetes	21.9	51.2	2.3	137
4. Perinatal Conditions	3.4	7.6	2.2	20
5. Hypertension	7.3	15.7	2.2	39
6. Kidney Disease	19.0	36.9	1.9	84
7. Septicemia	14.5	23.9	1.6	44
8. Stroke	46.4	61.9	1.3	73
9. Heart Disease	215.2	261.2	1.2	215
10. Cancer	187.9	212.4	1.1	115

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER Online

- The 15 Leading Causes of deaths among Blacks were sorted and ranked by disparity ratio. The ten causes with the highest disparity ratio are presented.⁵
- **Hypertension** ranked fifth among the diseases examined.
- The **hypertension** age-adjusted mortality rate for Blacks was 15.7 per 100,000 population compared to 7.3 for Whites, 2.2 times higher than for Whites.⁵
- Preventable Deaths among Blacks showed that 39 Black lives could be saved if the mortality rate for Blacks was equal to the rate for Whites.⁶

Figure 1: Age-Adjusted Hypertension Mortality Rates by Race Arkansas 2001-2015

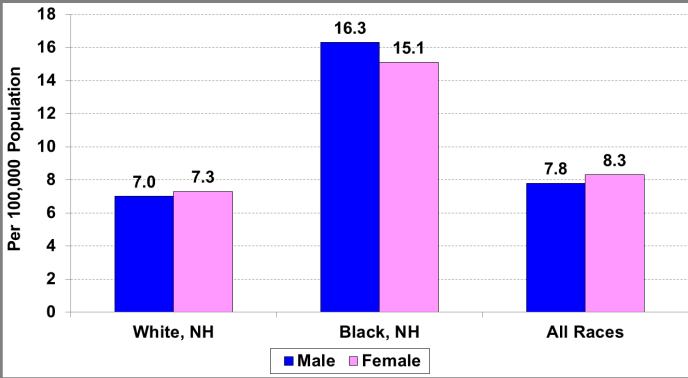


Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER Online

- During the 2001-2015 time period, **hypertension** mortality rates among Blacks remained higher than the mortality rates for Whites.
- **Hypertension** mortality rates among Blacks had a slight decrease over the years, while the rates among Whites had a slight increase.
- Rates for Whites mirrored the State's trend during the 2001-2015 time period.

¹CDC Wonder. ²HCUP State Inpatient Databases 2014. Hospitalization cost includes hospital discharges with principal diagnosis of hypertension. ³Based on the 15 leading causes of death among Blacks. ⁴Age-adjusted mortality rates for Non-Hispanic Whites and Non-Hispanic Blacks. ⁵Disparity ratio calculated by dividing the mortality rate for Blacks by the mortality rate for Whites. ⁶Number of deaths that could have been prevented among Blacks in the absence of Black-to-White disparity.

Figure 2: Age-Adjusted Hypertension Mortality Rates by Gender and Race, Arkansas 2011-2015



- **Hypertension** mortality rates among Black males and females are twice as high as the rates among their White counterparts.
- This also holds true when Black male and female mortality rates are compared with the State's male and female mortality rates.

NH=Non-Hispanic
Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER Online

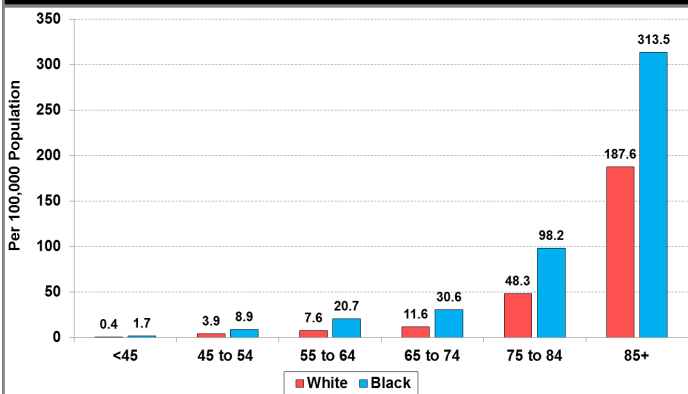
Table 2: Hypertension Mortality Rates and Disparity Ratios by Race and County, Arkansas 2011-2015

County	White Rate ⁷	Black Rate ⁷	Disparity Ratio ⁸
1. Conway	4.6	25.3	5.5
2. St. Francis	8.2	32.8	4.0
3. Drew	4.4	16.7	3.8
4. Clark	9.1	30.8	3.4
5. Faulkner	5.2	15.9	3.0
6. Sebastian	4.5	13.0	2.9
7. Garland	8.7	24.9	2.9
8. Jefferson	7.7	19.5	2.5
9. Miller	10.5	20.9	2.0
10. Crittenden	16.8	32.3	1.9

- **Hypertension** mortality rates were sorted and ranked by disparity ratio. Only those counties with at least five total deaths and at least four total Black deaths were used in the analysis. Ten counties with the highest disparity ratio among Blacks were highlighted.
- Conway County had the highest disparity ratio of 5.5 in **hypertension** mortality for the 2011-2015 time period.
- Between 2011-2015, 38 counties had less than 10 deaths due to **hypertension** and one county had no deaths related to **hypertension**.

Source: Arkansas Health Statistics Branch Query System

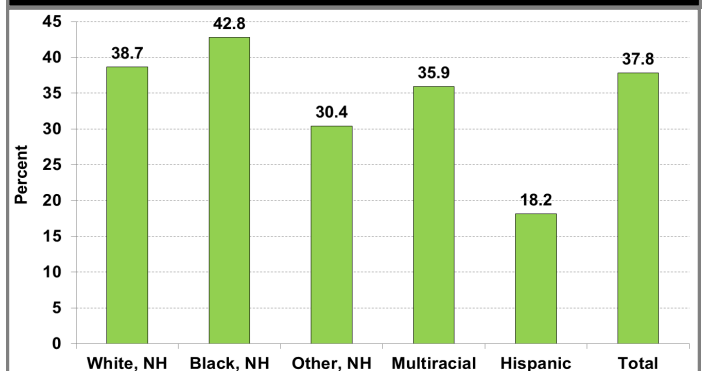
Figure 3: Hypertension Mortality Rates by Age and Race, Arkansas 2011-2015



- **Hypertension** mortality rates among Blacks, across all age categories were two to four times higher than their White counterparts.
- Rate for younger Blacks, <45 years of age, was over four times higher than that of Whites within the same age category.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER Online

Figure 4: Estimated Hypertension Prevalence⁹ by Race/Ethnicity, Arkansas 2011-2015



- **Hypertension** prevalence rate among Blacks was somewhat higher than that of Whites. The prevalence rates for Blacks were higher than all other racial and ethnic groups.
- Regardless of race/ethnicity, **hypertension** remains a major area of public health concern.

NH=Non-Hispanic
Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER Online

⁷Age-adjusted mortality rates for Non-Hispanic Whites and Non-Hispanic Blacks. ⁸Disparity ratio calculated by dividing the mortality rate for Blacks by the mortality rate for Whites. ⁹Hypertension prevalence refers to the percentage of adults reporting a healthcare professional has told them they have high blood pressure.