

**West Virginia Birth Defects Surveillance System and Vital Statistics  
Patent Ductus Arteriosus and Premature Births 1996-2000**

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**Objective:** Patent ductus arteriosus (PDA) occurs when a blood vessel that is normal while a baby in the womb fails to close after the baby is born. The cause of the problem is not known and it affects one in 2000 babies that are born each year. It is much more common in premature infants. This study examines patent ductus arteriosus and premature birth data from West Virginia.

**Methods:** Using data from the WV Birth Defects Surveillance System and Vital Statistics we looked at the prevalence of patent ductus arteriosus and premature births from 1996 through 2000. Results are stratified by race, Caucasian and African American.

**Results:** Data from 1996 - 2000 indicate patent ductus arteriosus accounted for 91 Caucasian cases and 2 African American cases in 1996, 132 cases for Caucasian and 2 for African American in 1997, 84 for Caucasian and 2 for African American in 1998, 68 for Caucasian and 4 for African American in 1999 and 84 for Caucasian and 3 for African American in 2000. This reflects an overall rate for 1996-2000 of 46.7 per 10,000 for Caucasian and 37.3 per 10,000 for African American. Premature births were 11.1% for Caucasian and 17.3% for African American in 1996, 12.1% for Caucasian and 18.7% for African American in 1997, 12.2% for Caucasian and 15.6% for African American in 1998, 12.5% for Caucasian and 20.9% for African American in 1999 and 12.3% for Caucasian and 20.0% for African American in 2000.

**Conclusions and Implications:** The occurrence of patent ductus arteriosus and the prevalence of premature birth has not decreased in West Virginia in recent years. Premature birth can be reduced with prenatal counseling, education and care. Despite the proportion of pregnancies resulting in prematurity, expenditures for care of premature infants total an exorbitant amount compared to the cost incurred for all newborns. These data can be used to enhance understanding regarding premature infants and possible implications. These findings can be used to enhance existing and develop programs regarding prematurity. Reduction in premature births would result in an overall reduction in infant illness, disability and death.