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Infant Mortality in Allen County Indiana: Causes and Solutions

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Infant Mortality in Allen County Indiana: Causes and Solutions  
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Indiana has one of the highest infant mortality rates in the nation, and for black babies in Allen County the rate has been comparable to that of developing countries. The county’s overall infant mortality rate reached a staggering 9.5 deaths per 1,000 live births (Turner, 2010). Possible causes such as unsafe sleep practices, positioning of baby, prenatal care, and racial disparities have all been researched and proven to increase the risk of infant deaths. Infants being born preterm, which is defined as less than 37 weeks gestation, reached a devastating level of 12.9% of live births in Indiana in 2007. Another major concern for infants is being born with a low birth weight, which accounts for 8.5% of live births in Indiana (March of Dimes, 2010). Researching and understanding the factors that are contributing to infant mortality can greatly increase the education and awareness programs available for pregnant women. Our aim is to find out what is causing this high mortality rate and determine ways in which healthcare professionals can reach out to the community to improve infant health.

According to the Indiana State Health Department, between January 2005 and December 2007 (latest data available), there were 41 recorded infant deaths in Allen County and autopsies were only performed on 5 of those babies. Available data is incomplete with significant areas of missing data. Of the deaths recorded, the most frequent cause of death was Sudden Infant Syndrome, accounting for 10 deaths. Congenital Malformation and Premature rupture of the membranes surrounding the unborn baby accounted for 4 deaths each. Infants born pre-mature accounted for 3 deaths. Others causes were maternal hypertension, placenta separation and hemorrhage, compression of the umbilical cord, Chorioamnionitis and Anencephaly.

A review of the literature matched with our analysis of available data revealed possible interventions to decrease fetal loss in Allen County. According to previous research the most effective solution is educating expectant mothers about proper prenatal care and case management of expecting mothers (Livingood, Brady, Pierce, Atrash, Hou, & Bryant, 2009; Syed, Khadka, Khan, & Wall, 2008). Administering daily vitamins, especially folic acid, iron, and omega-3 fatty acids, before conception or early in the pregnancy was also found to be beneficial (Christian, West, Khatry, Leclerq, Pradhan, Katz, Shrestha, & Sommer, 2003; Hasan, Olshan, Herring, Savitz, Siega-Riz, & Hartmann, 2009; Olsen, & Sorensen, 1992, Titaley, Dibley, Roberts, Hall, & Agho, 2010). Another
important step in reducing infant mortality is smoking cessation for the mother of the baby (Heil, Higgins, Bernstein, Solomon, Rogers, Thomas, Badger, & Lynch, 2008; Jaddoe, Verburg, de Ridder, Hofman, Mackenbach, Moll, Steegers & Witteman, 2007).