ational WIC Association

The Role of WIC in Reducing Infant Mortality

The WIC Program

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the nation's premier public health nutrition program, has improved the health of at-risk women, infants, and children for over 35 years. WIC serves over 9 million mothers and young children, over 1.5 million pregnant and breastfeeding mothers, more than half of America's infants, and one-quarter of its children 1 to 5 years of age. WIC has been shown to improve birth outcomes and reduce risk factors for infant mortality.

Infant Mortality

Infant mortality rate is considered a key indicator of a nation's health, measuring the number of infant deaths before age one. Although the U.S. has experienced a decline in infant mortality in recent decades, it remains a major public health issue. The U.S. currently ranks 30th in the world in infant mortality, with one of the highest rates among developed countries. Within the U.S., considerable racial, ethnic, and socioeconomic disparities exist in infant mortality rates. Women of lower socioeconomic status suffer substantially more infant mortality than higher socioeconomic women, and African American women experience 12.74 infant deaths per 1,000 live births, nearly twice the national average.1

Adequate maternal health and nutrition during pregnancy, along with early prenatal care, can help reduce some of the leading risk factors for infant mortality, specifically premature birth and low birth-weight.² Breastfeeding has also been shown to reduce the risk of infant death.³ The WIC program contributes to healthy birth outcomes by providing nutrition education, supplemental foods, breastfeeding support, and referrals to health and social services for at-risk low and moderate income women and children.

WIC's Role in Preventing Infant Mortality

WIC HELPS REDUCE RISK FACTORS FOR INFANT MORTALITY

- Prenatal WIC participation is associated with lower infant mortality rates.⁴
- WIC prenatal care benefits reduce the rate of low birth-weight babies by 25% and very low birth-weight babies by 44%.⁵
- Prenatal WIC participation is associated with an increase of 6.6oz for low birth-weight babies.⁶
- Women participating in WIC have been found to have longer pregnancies resulting in fewer premature births.⁷
- WIC participants are more likely to receive adequate prenatal care.⁸
- Participation in WIC during both the prenatal and postpartum periods has resulted in women having higher hemoglobin levels, less likelihood of obesity, and higher birth weight babies at a subsequent pregnancy than women who only participated prenatally.⁹
- ➡ WIC infants are in better health than eligible infants not participating in WIC.¹⁰
- Women who participate in WIC's breastfeeding support activities have longer durations of breastfeeding and are less likely to stop breastfeeding.¹¹
- Participation in WIC prenatal counseling programs is associated with an increased rate of breastfeeding initiation.¹²

As the nation's premier public health nutrition program, WIC is a cost-effective, sound investment insuring the health of our children.

NWA'S MISSION

NWA inspires and empowers the WIC community to advocate for and promote quality nutrition services for all eligible mothers and young children, and assure effective management of WIC.

WIC'S ROLE IN PRENATAL AND POSTNATAL CARE

- Nutrition education and supplemental food packages help ensure pregnant women receive necessary nutrients for a healthy pregnancy such as iron, protein, calcium, and Vitamins A and C.
- WIC prenatal screenings examine participant weight, hemoglobin level, medical history and dietary intake to determine nutrition and health risks early on.
- WIC provides referrals to services that improve prenatal and maternal health, specifically smoking cessation, substance abuse counseling, dental care, and other critical health services.
- WIC promotes breastfeeding as the optimal infant feeding choice, which has been shown to help reduce the risk of SIDS.¹³
- Children who participate in WIC are more likely to receive regular preventive health care and have increased diagnosis and treatments of childhood illnesses, such as otitis media, gastroenteritis, upper and lower respiratory infections, and asthma.¹⁴

IMPROVING BIRTH OUTCOMES REDUCES HEALTHCARE COSTS

- → Preterm births cost the U.S. over \$26 billion a year.¹⁵
- The average first year medical cost for a premature/low birth-weight baby is \$49,033 compared to \$4,551 for a baby without complications.¹⁶
- For very low birth-weight babies, a shift of one pound at birth saves approximately \$28,000 in first year medical costs.¹⁷
- Medicaid costs are reduced on average between \$12,000 and \$15,000 for every very low birth-weight incident prevented.¹⁸
- Every dollar spent on pregnant women in WIC produces \$1.92 to \$4.21 in Medicaid savings for newborns and their mothers.¹⁹

References

 Center for Disease Control and Prevention.
Deaths: Final data for 2008. Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr59/ nvsr59_10.pdf

2. Office of Minority Health and Health Disparities. (n.d.) *Eliminate Disparities in Infant Mortality.* Retrieved from http://www.cdc.gov/omhd/amh/ factsheets/infant.htm

3. Chen, A., Rogan, W. (2004). Breastfeeding and the risk of neonatal death in the United States. *Pediatrics*, *113*(5), e435-e439.

4. Khanani, I., Elam, J., Hearn, R., Jones, C., & Maseru, N. (2010). The impact of prenatal WIC participation on infant mortality and racial disparities. *American Journal of Public Health*, 100(S1), S402-S209.

 Avruch, S., & Cackley, A.P. (1995). Savings achieved by giving WIC benefits to women prenatally. *Public Health Report*, *110*, 27-34.
Kowaleski-Jones, L., & Duncan, G.J. (2002).
Effects of participation in the WIC Program on birthweight: Evidence from the National Longitudinal Survey of Youth. *American Journal of Public Health*, *92*(5), 799-804. 7,8. Kotelchuck, M., Schwartz, J., Anderka, M., & Finison, K. (1984). WIC Participation and Pregnancy Outcomes: Massachusetts Statewide Evaluation Project. *American Journal of Public Health*, *74*(10), 1086-1092.

9. Caan, B., Horgen, D.M., Margen, S., King, J.C., & Jewell, N.P. (1987). Benefits associated with WIC supplemental feeding during the interpregnancy interval. *American Journal of Clinical Nutrition*, *45*(1), 29-41.

 Black, M., Cutts, D., Frank, D.A, et al. (2004).
WIC impact on infant growth, health, and food security: Results of a multiyear surveillance study. *Pediatrics*, *114*(1), 169-176.

11. Office of Analysis and Evaluation, Food and Consumer Service, US Dept of Agriculture. (1997). WIC Infant Feeding Practices Study, (Contract 53-3198-3-003). Washington, DC.

 Yun, S., Liu, Q., Mertzlufft, K., Kruse, C., White, M., Fuller, P., & Zhu, B. (2010). Evaluation of the Missouri WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) breast-feeding peer counselling programme. *Public Health Nutrition*, *13*, 229-237.

 Vennemann, M.M., Bajanowski, T., Brinkmann, B., Jorch, G., Yücesan, K., Sauerland, C., Mitchell, E.A., & the GeSID Study Group. (2009). Does breastfeeding reduce the risk of sudden infant death syndrome? *Pediatrics*, *123*(3), 406-410.
Buescher, P.A., Horton, S.J., Devaney, B.L., Roholt, S.J., Lenihan, A.J., Whitmire, J.T., & Kotch, J.B. (2003). Child participation in WIC: Medicaid costs and use of health care services. *American Journal of Public Health*, *93*(1), 145-150.

 Institute of Medicine Report. (2006). Preterm Birth: Causes, consequences and prevention.
Thomson Reuters. The cost of Prematurity and complicated deliveries to U.S. employers. Report prepared for March of Dimes, October 29, 2008.
Rogowski, J. (1998). Cost-effectiveness of care for very low birth weight infants. *Pediatrics. 102*, 35-42.

 Devaney, B. (1992). Very Low Birthweight Among Medicaid Newborns in Five States: The Effects of Prenatal WIC Participation (Contract No. 53-3198-0-033). Alexandria, VA: USDA.
USDA Report: The savings in Medicaid costs for newborns and their mothers from prenatal participation in the WIC program. Addendum October 1991.