Tuesday, February 24, 1:30PM-3:00PM Concurrent Breakout Session C

Long-Term Outcome of Children with Birth Defects

Moderator: Mark Canfield, Texas Department of State Health Services, Austin, TX

The presentations below describe results from studies that examined outcomes during and beyond infancy for children with selected birth defects (cardiovascular and abdominal wall defects, Down syndrome, and spina bifida), using population-based data systems from three different states (Texas, Tennessee, and Georgia)

The Role of Gestational Length and Size at Birth on Childhood Survival for Infants Born with Selected Birth Defects

Wendy N. Nembhard/Jason L. Salemi, University of South Florida, Tampa, FL Mary Ethen/Mark A. Canfield, BDES Branch, Texas DSHS, Austin, TX

Birth defects and preterm birth are leading causes of infant morbidity and mortality in the United States. Infants with birth defects are more likely to be born preterm, yet the role of race-ethnicity and fetal growth on risk of mortality is unclear. The purpose of this study was to describe the interplay between preterm birth and fetal growth in impacting survival and whether race-ethnicity is a modifier of this relationship. We will present findings comparing the effects of preterm birth, fetal growth, and race-ethnicity on long-term survival in infants diagnosed with several categories of birth defects in Texas, such as congenital heart defects, neural tube defects, and abdominal wall defects.

Hospitalization Characteristics and Survival of Children with Down Syndrome through Age 3 Richard C. Urbano/Robert M. Hodapp, Vanderbilt University, Nashville, TN

Although most children with Down syndrome survive their earliest years, these infants continue to be at increased risk for medically-related problems during the infancy period. Utilizing Tennessee's Birth, Death, and Hospital Discharge datasets (both separately and linked together by individual), we have been examining early health issues in over 1,300 infants born from 1990-2005. In this presentation, we report on the prevalence and correlates of adverse birth outcomes in Down syndrome, as well as the amount, timing, and causes-correlates of early hospitalizations (birth to age 3) and mortality during the first year of life. Public health implications of these findings are also discussed.

Long-term Survival and Prevalence of Children with Spina Bifida

Adolfo Correa, Mikyong Shin, James E. Kucik, Chengxing Lu, Csaba Siffel, CDC, Atlanta, GA Congenital Anomaly Multistate Prevalence and Survival (CAMPS) Collaborative

There is a paucity of population-based data on the survival and prevalence beyond the infancy period for children with spina bifida. Using birth defect surveillance data pooled from ten regions of the United States, we estimated the survival of children born with spina bifida, through adolescence. We will present findings on the impact of birth period, birth weight, and presence of heart defects on long-term survival for spina bifida, as well as some findings on estimates of prevalence of spina bifida among children and adolescents.