Birth Defects Surveillance among Military Births

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The broad geographic distribution of military personnel often prohibits state surveillance systems from completely capturing the data necessary to assess their reproductive health outcomes. Further hampering efforts by civilian public health agencies to monitor reproductive health and specifically birth defects among military families, is limited access to relevant data particularly when an infant is born at a military healthcare facility. Established in 1998 to address this surveillance gap, the Department of Defense (DoD) Birth and Infant Health Registry (Registry) conducts global monitoring for birth defects and other infant health outcomes among infants born to US military families.

This session will describe the data sources the Registry uses to capture the approximately 100,000 infants born to military families each year and how birth defects are identified among these infants. Infant outcomes are linked to sponsor demographic information and, for sub-analyses, are further enhanced with sponsor exposure information obtained from electronic or survey data, including deployment exposures, vaccination data, geographical location of gestation data, and data on other exposures of interest. The presentation will include a description of the overall population including parental demographics, the number and types of birth defects, and the geographic distribution of births and defects on infants contained in the Registry from 1998-2008.

Several state birth defects surveillance systems also include birth defects data among military infants, although the methods employed differ greatly. Using their state to exemplify one approach, the Texas registry will discuss their data collection experience, including special challenges in multiple Texas military facilities. Additionally, 2006 and 2007 birth cohort data from the Texas and DoD registries will be compared to demonstrate where overlaps and gaps exist between the two surveillance systems. Discussions on potential areas for future collaboration will follow.