An Introduction to the Problem of Alcohol-Related Birth Defects (ARBDs) (Slides 1-4)

When a mother drinks, her unborn child is exposed to alcohol. As opposed to a common misconception, the baby is not protected in the uterus from alcohol exposure. Excessive drinking by the mother at any time after fertilization of the egg may result in damage to the developing child.

The problem of alcohol related birth defects (ARBDs) is very large. In fact, maternal alcohol consumption is the leading known cause of mental retardation in the Western world. Although the range of intellectual deficits is wide, the average IQ of individuals with full blown Fetal Alcohol Syndrome (FAS) is approximately 70.

The prevalence of full blown FAS is typically quoted as 1 in 750 live births in the general population. However, the reported incidence varies, depending on the study population and design (NIAAA report; see web site -- http://www.med.unc.edu/alcohol/ed/fas/). According to the Centers for Disease Control, incidences of FAS per 10,000 births for different ethnic groups were as follows: Asians 0.3, Hispanics 0.8, whites 0.9, blacks 6.0, and Native Americans 29.9. Among Native Americans, the incidence of FAS varies among different cultures. In the case of blacks, the risk of FAS remains about sevenfold higher than for whites. The incidence of FAS currently exceeds that of Down Syndrome, spina bifida, as well as cerebral palsy. The incidence of other ARBDs (fetal alcohol effects including neurobehavioral abnormalities) is estimated to be at least twice as high as that of full blown FAS (approximately 1 in 300 live births in the general population)

In spite of the fact that FAS and other ARBDs can be prevented by women simply avoiding alcohol consumption throughout their pregnancies, the problem remains.