

## Monday Poster Session

### P1

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During recent years, attention has been drawn to an increased frequency of fetal alcohol spectrum disorders (FASD) among children adopted from Russia and other East European countries. A study of 71 children adopted to Sweden from orphanages in Eastern Europe [Landgren *et al* Pediatrics 2010] showed that 52% had FASD (30 % fetal alcohol syndrome (FAS), 14 % partial FAS (PFAS), 9% alcohol-related neurodevelopmental disorders (ARND)). 51% of the children had ADHD, a common finding in FASD and 23% had mental retardation. To learn more about the occurrence of FASD among adopted children in South America, a study of 94 children staying in an orphanage in Recife, Brazil has been initiated. The adoptees from this orphanage are studied regarding FASD and data are compared with those from the East European children. Up to now 28 (30 %) children have been adopted from the orphanage and some are waiting for permission to be adopted. Of these, 10 children had FASD; 2 FAS, 3 PFAS and 5 children had ARND. ADHD was found in 4 children and 13 were developmentally delayed. The children have been adopted inside Brazil, to USA, Italy and Norway. The preliminary data show that a considerable number of children suffering from FASD are given away for adoption not only from East Europe but also from Brazil. However, the two studies cannot be fully compared as the East European children come from several countries and orphanages, while the Brazilian data originate from only one orphanage and should therefore not be considered as a model for all orphanages in Brazil.

### P2

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In retrospective occupational exposure studies that use expert assessments, inter-rater reliability is often used as an indicator of validity when validity cannot be directly assessed. We evaluated inter-rater reliability of the exposure assessment of 7,7529 jobs reported in the National Birth Defects Prevention Study. Jobs were classified as exposed, unexposed, or exposure unknown by two independent industrial hygienists; exposed jobs were further evaluated for intensity, frequency, and routes of exposure. Exposure prevalence ranged from <1% to 10%. Inter-rater reliability for exposure (yes/no), assessed by Kappa coefficients, was fair to good for cadmium ( $\kappa = 0.46$ ), chlorinated solvents ( $\kappa = 0.59$ ), cobalt ( $\kappa = 0.54$ ), glycol ethers ( $\kappa = 0.50$ ), nickel compounds ( $\kappa = 0.65$ ), oil mists ( $\kappa = 0.63$ ), and Stoddard Solvent ( $\kappa = 0.55$ ). Polycyclic aromatic hydrocarbons ( $\kappa = 0.24$ ) and elemental nickel ( $\kappa = 0.37$ ) had poor agreement. After a consensus conference resolved disagreements, and additional 4,962 jobs were evaluated. Inter-rater reliability improved or stayed the same for cadmium ( $\kappa = 0.51$ ), chlorinated solvents ( $\kappa = 0.81$ ), oil mists ( $\kappa = 0.63$ ), polycyclic aromatic hydrocarbons ( $\kappa = 0.52$ ), and Stoddard Solvent ( $\kappa = 0.92$ ) in the second job set. Inter-rater reliability varied by exposure agent and prevalence, demonstrating the importance of measuring reliability as a quality control step.