

Organophosphate Exposure and Sperm Abnormalities

Source: C. Padungtod et al. "Sperm Aneuploidy Among Chinese Pesticide Factory Workers: Scoring by the FISH Method." American Journal of Industrial Medicine 36:2, August 1999, pp. 230-238.

A study conducted in China tested for effects of organophosphate (OP) exposure on rates of chromosomal abnormalities in sperm. The study included 32 workers who were exposed to pesticides while working at a pesticide factory and 43 non-occupationally exposed workers at a textile factory. The pesticide factory manufactures three organophosphate (OP) pesticides: methyl parathion, ethyl parathion and methamidophos. Of these participants, 13 exposed and 16 non-exposed workers were selected for a comparison of sperm aneuploidy, a chromosome abnormality. While the sample size was small, investigators concluded that OP exposure moderately increases rates of sperm aneuploidy.