

well as in total percent avoidance. At 1 year of age, the CO-exposed rats showed impairment relative to air-exposed controls in both the original learning and retention of the two-way avoidance response.

3.3.4. Mice

Singh and Scott (1984) exposed groups of 17 pregnant CD-1 mice to CO concentrations of 0, 65, 125, 250, or 500 ppm for 24 h/d on gestational days 6 to 17. Mice were killed and examined on day 18. No signs of maternal toxicity were observed at any dose. The mean percent fetal mortality per litter was 4.52%, 5.89%, 12.50%, 15.50%, and 55.30%, respectively. Besides a dose-dependent increase in embryo lethality, fetus weights were significantly reduced at exposure levels of 125 ppm or higher. No fetal malformations were detected. COHb was not determined.

Singh (1986) exposed CD-1 mice to CO at 0, 65, or 125 ppm continuously during gestational days 7 to 18 (COHb not determined). No signs of maternal toxicity were observed. Exposure did not affect the number of live pups born per litter or their birth weight. Prenatal exposure to 125 ppm significantly increased the time required by pups for righting reflex on day 1 of birth and negative geotaxis on day 10. Prenatal exposure at both concentrations significantly decreased the mean aerial righting score of pups on day 14.

3.4. Genotoxicity

No information regarding the carcinogenicity of CO in animals was located in the available literature.

3.5. Carcinogenicity

No information regarding the carcinogenicity of CO in animals was located in the available literature.

3.6. Summary

Several CO-exposure studies reported LC₅₀ values in rats, mice, and guinea pigs. In the study of E.I. du Pont de Nemours and Co. (1981), the following LC₅₀ values were calculated by Probit analysis: 1,0151 ppm for 5 min, 5,664 ppm for 15 min, 4,710 ppm for 30 min, and 3,954 ppm for 60 min.

In a study in cynomolgus monkeys exposed to CO at 900 ppm, no signs of intoxication occurred during the first 20-25 min (corresponding to COHb of about 16-21%). At 25 min, the animals' performance in a behavioral test significantly decreased, and at the end of the exposure period (30 min), animals became less active and were lying down. After about 25 min of exposure at 1,000