# Dose-Incidence Relationships on the Prenatal Effects of Gamma-Radiation

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The objective of this investigation was to evaluate of dose-incidence relationships on the prenatal effects of gamma-radiation. Pregnant ICR mice were exposed on day 11.5 after conception, coincident with the most sensitive stage for the induction of major congenital malformations, with 0.5-4.0 Gy of gamma-radiations. The animals were sacrificed on day 18 of gestation and the fetuses were examined for mortality, growth retardation, change in head size and any other morphological abnormalities. With increasing radiation dose, incidence of small head, growth retarded fetuses, cleft palate, dilatation of cerebral ventricle and abnormalities of the extremities in live fetuses rose. The threshold doses of radiation that induced cleft palate and dilatation of cerebral ventricle, and abnormal extremities were between 1.0 and 2.0 Gy, and between 0.5 and 1.0 Gy, respectively.