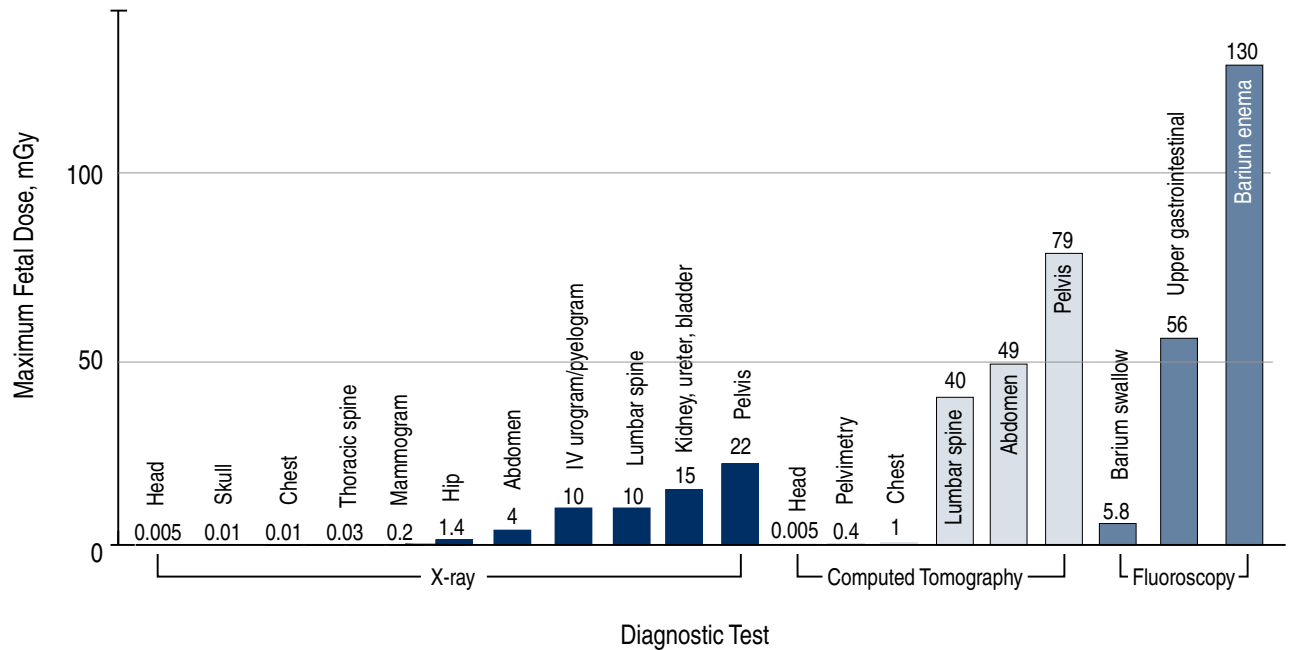




*A Provider's Reference Guide for
Radiation Exposure*

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 This pocket guide was excerpted from the following:
 Diagnostic ionizing radiation and pregnancy: is there a concern?
Pa Patient Saf Advis
 2008 Mar;5(1):3-15.

Approximate Maximum Fetal Dose/Diagnostic Test



Effects of Ionizing Radiation on Conception		
PREGNANCY PHASE	WEEKS POST CONCEPTION	RADIATION EXPOSURE
Pre-implantation	0 to 2 weeks	Diagnostic exposure (less than 100 mGy [10 rad])
		Embryo implantation failure; embryo death by cytogenetic damage
Pre-implantation		Greater than 100 mGy (10 rad)
		Lethality
Organogenesis	2 to 7/8 weeks	Greater than 100 mGy to 150 mGy (10 rad to 15 rad)
		Malformations due to cell killing; growth retardation; cataracts; skeletal anomalies; CNS abnormalities; microcephaly; mental retardation (risk of severe mental retardation is not increased over background levels)
Fetal Development	8/9 weeks to 15 weeks	Less than 50 mGy (5 rad)
		Cancer is the only detectable health risk
Fetal Development	8/9 weeks to 15 weeks	50 mGy to 500 mGy (5 rad to 50 rad)
		Dose dependent growth retardation; IQ reduction
Fetal Development	8/9 weeks to 15 weeks	Greater than 500 mGy (50 rad)
		Increased risk of growth retardation/spontaneous abortion; major malformation; IQ reduction; severe mental retardation
Mid	16 weeks to 25 weeks	Less than 50 mGy (5 rad)
		Cancer is the only detectable health risk
Mid	16 weeks to 25 weeks	50 mGy to 500 mGy (5 rad to 50 rad)
		Not likely to produce health risk except cancer
Mid	16 weeks to 25 weeks	Greater than 500 mGy (50 rad)
		Increase in major malformations and spontaneous abortions; dose dependent growth retardation; IQ reduction; severe mental retardation
Late	26 weeks to delivery	Less than 500 mGy (50 rad)
		Cancer is the only detectable health risk
Late	26 weeks to delivery	Greater than 500 mGy (50 rad)
		Dose dependent neonatal death and spontaneous abortion; major functional anomalies or malformations unlikely