

Quick Pediatric CT Scan Facts

Radiation Exposure in X-rays

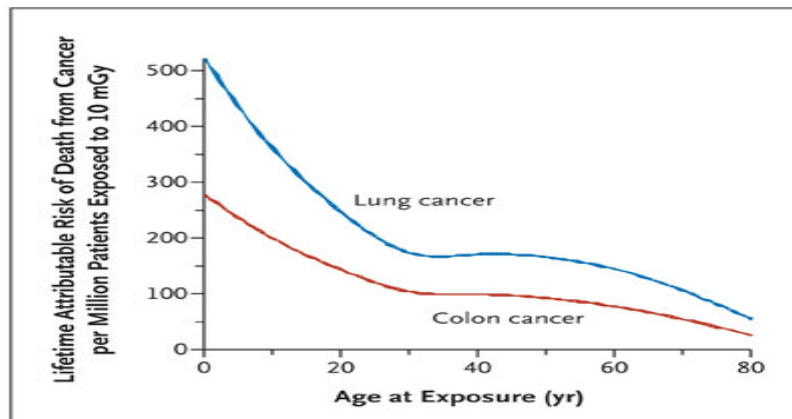
Study Ordered	Equivalent Dose
CT Head	20 CXR
CT C-Spine	60 CXR
CT Chest	70 CXR
CT Abdomen/Pelvis	100 CXR
C-Spine Series	16 CXR

Radiologyinfo.org



Pediatric Radiation Exposure

- Pediatrics represents a small fraction of tests, BUT the fraction is increasing
- Higher radiation doses and larger lifetime risk results in a higher lifetime cancer mortality risk
- Lifetime risk of cancer in a single dose of radiation is higher in children



NEJM:357:2277-2284, November 2007

Radiation Risks

- Lifetime cancer risk of a 1 year old from **ONE** CT scan of the abdomen and pelvis is **1 in 550**
- Lifetime cancer risk of a 1 year old from **ONE** CT scan of the head is **1 in 1500**
- If you take 600,000 as a average number of CT scans done in children under 15:
 - ❖ **500 children will die from the CT scan they received**

AJR:176, February 2001

Alternatives

- Evaluate and determine if there is a need for radiologic studies
- Get baseline studies **FIRST**
- Never delay transfer to definitive care to get scans
- If it is felt that a CT scan is needed, USE contrast to decrease the need for repeated CT scans at the definitive care facility.