



estimate the number of cancers induced.

CT scans of the head were the most common examinations, representing 25 percent of the first group and 30 percent of the second group. However, abdominal CT delivered the greatest proportion of radiation, accounting for approximately 40 percent of the total radiation exposure in each group. Imaging of the pelvis and chest represented the second and third largest sources of radiation.

From 1998 to 2001, 42 percent of patients underwent CT scans. From 2002 to 2005, 49 percent of patients underwent CT scans. The percentage of patients exposed to radiation doses in both the low and high ranges approximately doubled from the first group to the second group. The researchers found this to be consistent with the increasing use of high-speed CT in patient diagnosis and management.

Cancer incidences related to ionizing radiation from CT were estimated to be 0.02 percent and 0.04 percent of the two groups, respectively.

"Our findings indicate a significantly lower risk of developing cancer from CT than previous estimates of 1.5 percent to 2.0 percent of the population," said coauthor Scott Atlas, M.D., chief of neuroradiology at the Stanford University Medical Center. "Regardless, the increasing reliance on CT scans underscores the importance of monitoring CT utilization and its consequences."

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