

NCRP Joins The Alliance for Radiation Safety in Pediatric Imaging

Ionizing radiation doses to the U.S. population from medical imaging procedures have increased by more than six times since 1982, according to preliminary findings from a National Council on Radiation Protection and Measurements (NCRP) scientific committee. The largest elements in the increase are the widespread use of computed tomography (CT) and comparable increases in nuclear medicine procedures.

In 2002, NCRP organized a national conference on dose reduction in CT, with an emphasis on pediatric patients (AJR:181, August 2003). The 2007 NCRP annual meeting on "Advances in Radiation Protection in Medicine" included an emphasis dose reduction in pediatric CT. As part of NCRP's ongoing evaluation of doses and health protection issues related to the use of ionizing radiation in medicine we have joined the Alliance for Radiation Safety in Pediatric Imaging, a coalition of medical organizations and government bodies, in launching the "Image GentlySM" campaign (www.imagegently.org).

As part of this effort, NCRP and all Alliance member organizations urge that, when performing imaging exams on children, providers:

- significantly reduce, or "child-size," the amount of radiation used
- not over-scan:
 - scan only when necessary
 - scan only the indicated region
 - scan once; multiphase scanning (pre- and post-contrast, delayed exams) is rarely helpful
- be a team player:
 - involve medical physicists to monitor pediatric CT techniques
 - involve technologists to optimize scanning

The Image GentlySM campaign initially will focus on CT scans. There were four million pediatric CT scans performed in 2006. In fact, the number of pediatric CT scans performed in the United States has tripled in the last five years.

The Image GentlySM Alliance website (www.imagegently.org) contains the latest research and educational materials to aid radiologists, radiologic technologists, medical physicists, and other imaging stakeholders in determining the appropriate radiation techniques to be used in the imaging of children, and how the radiation received from these exams may affect patients over time. We ask that you share this important resource for all imaging professionals with your colleagues.

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