



NRC NEWS

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NRC ISSUES NEW GUIDANCE ON RELEASE OF PATIENTS FOLLOWING IODINE TREATMENT FOR THYROID CONDITIONS

The Nuclear Regulatory Commission has advised medical licensees who conduct out-patient treatment of thyroid patients with iodine-131 (I-131) that recommending patients stay at hotels immediately after treatment is strongly discouraged.

In new guidance to licensees, NRC also reminded doctors of their responsibilities to consider a patient's intended destination and provide instructions on how to limit potential radiation exposures to the public following treatment.

The NRC is responding to continuing concerns that thyroid patients, who typically remain radioactive for a few days following administration of I-131, sometimes check into hotels or motels instead of going home, raising the potential that other people – especially hotel workers and guests – may unknowingly be exposed to radiation.

“The administration of radioactive iodine provides essential medical therapy to thousands of seriously ill patients, and outpatient procedures can increase access to this treatment without significant health or safety risk to the public,” said Robert J. Lewis, director of the NRC’s Division of Materials Safety and State Agreements. “However, it is the NRC’s goal to limit unnecessary radiation exposure to anyone to the greatest degree possible, and it is the doctor’s responsibility to carefully evaluate patient release to other locations and communicate to the patient additional radiation safety precautions that may be appropriate for such locations.”

NRC regulations allow I-131 patients to be released following treatment when the radiation dose to third parties is not likely to exceed 500 millirem. (An average person receives about 300 millirem each year from natural and background radiation.) The regulations assume the dose would apply principally to the patient’s family or other caregivers during the first few days the patient spends at home following treatment. Accordingly, doctors are required to consider the patient’s living conditions and provide instructions for avoiding unnecessary exposure to others.

NRC also reminded doctors to inquire about the patient's intended destination following treatment so that appropriate instructions may be given on how to manage exposure to others. If a patient is adamant on not being hospitalized or not going to a private residence, and plans to go to an alternative location such as a hotel, doctors must still provide adequate instructions on how the patient can keep radiation doses to others as low as possible.

The guidance is contained in Regulatory Issue Summary 2011-01, dated Jan. 25, and available on the NRC website at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2011/index.html>. In previous guidance issued in 2003 and supplemented in 2009 (both at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notice/2003/>), the agency discussed how patients might trigger homeland security radiation alarms. And in guidance issued May 12, 2008 (<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2008/index.html>), the NRC discussed precautions to protect young children who may come into contact with I-131 patients.

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