Minnesota Department of Health
Radiation Control
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Date: October 10, 2011

To: Medical, Dental, CT, Veterinary Registrants, and Service Providers

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Subject: Requirements Following X-Ray Tube Replacement

Information Notice 2011-02
October 2011
REQUIREMENTS FOLLOWING TUBE REPLACEMENT

PURPOSE

The Minnesota Department of Health (MDH) is issuing this Information Notice (IN) to medical, dental, computed tomography (CT), veterinary registrants, and service providers to underscore the requirements in 4732.1100 and 4732.0280 regarding the necessary installation calibration tests performed following x-ray tube replacements prior to any patient use. MDH expects recipients to review the information for applicability to their facilities and to consider appropriate actions, if necessary. However, the information in this notice is not a new requirement; therefore, no specific action or written response is required.

DISCUSSION

MDH has identified several instances where all required equipment performance tests following tube replacement had not been performed prior to patient use. At the time of installation, service providers are required under 4732.0280, subpart 3 to perform all calibrations indicated. On numerous occasions MDH has found registrants performing diagnostic studies following tube replacement where the service providers had not completed the entire required testing as specified in 4732.1100. Of particular concern are tests related to dose output in medical and CT scanning equipment.

In discussions with the regulated community, it appears some registrants and service providers believed they were allowed 14 days to complete tests based on the terms listed in 4732.0520, subpart 1(E). Requirements under 4732.0520, subpart 1(E) do not apply to new or replacement x-ray tubes, only to systems operating outside of given parameters.

Because there can be significant changes in the dose output upon replacement, it is crucial that all calibration tests are performed prior to patient use and the expected dose to the patient is not compromised. MDH encourages communication between registrants and service providers regarding the completeness of equipment testing following tube replacement to continue to ensure patient protection and an *ALARA* environment. MDH believes this communication will improve compliance with the regulations and minimize the likelihood of medical events. This Notice requires no specific action or written response.