



## State of New Jersey

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*Lt. Governor*

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BOB MARTIN  
*Commissioner*

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Dear Medical Physicist:

On July 30, 2014, the Bureau of X-ray Compliance (Bureau) met with medical physicists to discuss issues encountered with the implementation of the alternate QA program and initial testing of dental Cone Beam Computed Tomography (CBCT) units. The majority of the discussions were focused on the lack of testing tools and manufacturers' guidance to perform the required tests listed in Tables 3A and 6, and the calculation of dose.

The Bureau was informed of the following issues:

- Facilities do not have the necessary testing tools (i.e. phantom) to perform the required daily and/or weekly tests. Either the manufacturer did not make the test tool(s) available to the facility or the manufacturer did not develop one that will satisfy the testing requirements.
- There was debate among the medical physicists whether the required tests, such as CT number for water, is appropriate for every manufacturer of CBCT. Some manufacturers have or are developing alternative tests to demonstrate proper calibration of the unit.
- Finally, there was much discussion regarding the proper parameter(s) to measure and report dose (e.g. CTDI vs. DAP). Reporting different dose parameters may be appropriate based on the machine type.

As a result of this meeting and the above discussion, the Bureau has decided that medical physicist may utilize their professional judgment in determining which tests in Tables 3A and 6 can be implemented at this time based on the tools and information available for the specific model CBCT utilized at the facility. This will allow time for both the manufacturer to provide and the facility to purchase the appropriate testing tools. However, the medical physicist must document in his/her initial report the acceptable methods for each test and the appropriate standard for each of the tests specified in the initial QA/QC program. Additionally, the medical physicist may develop the test and the standard for the facility's use (Table 3A). During the first annual physicist review, it is anticipated that all manufacturers will have developed procedures and test tools to fully meet the Department's QA/QC testing requirements. At such time, medical physicists will be expected to modify the program's QA program to fully comply with the Department's requirements.

Facilities have until September 30, 2014 to implement the alternate QA program. Facilities that fail to implement an initial QA program by this time will be subject to enforcement action pursuant to N.J.A.C. 7:28-22.1 et seq.

Finally, the Bureau is requiring that copies of the initial and annual MPQC dental CBCT survey be either faxed or emailed to the Bureau within 30 days of completion of the report. If you have any additional questions, please contact Michael McCary at 609-984-5370 or email [michael.mccary@dep.nj.gov](mailto:michael.mccary@dep.nj.gov).