



Radiation Control, X-ray Unit
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Facilities with Digital X-ray Equipment

Many facilities have decided to go digital with their x-ray equipment, and have questions as to how to follow proper Quality Control (QC) procedures in compliance with Ionizing-Radiation, Minnesota Rule 4732. Here are some suggestions:

1. Send MDH a letter or email that you have gone digital. QC films can then be discarded.
2. If you are installing new equipment in your digital conversion, you will need to complete an install performance evaluation.
3. If you are converting to digital using the existing x-ray equipment, you will need to find out from the service provider what the new bite-wing technique is. Digital techniques are generally lower. There is a maximum 120 mR dose at the end of the cone and your service provider will need to set it up for you. All technique charts will need to be updated. Know how to recognize an over/under exposure when an image appears.
4. Review your technical manuals very carefully. There is no universal QC standard as far as digital goes. All QC must be performed according to manufacturer's specifications. The information may be located in "care of the machine" or "QC." All policies regarding film will need to be replaced by the manufacturer's specifications for the digital unit.
5. Training will need to be done at the time of conversion and documented for all those who attend. Initial training for future employees will need to include digital, so it is a good idea to keep training notes.
6. Although dental offices are not required to perform an analysis on repeated x-rays, there is a big learning curve the first three months of operation in digital. A facility may want to track repeats as a training tool.

If you have any other questions, please feel free to contact the Radiation Control, X-ray Unit at (651) 201-4545 or health.xray@state.mn.us.