



Protecting, Maintaining and Improving  
the Health of All Minnesotans



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## ***MDH X-ray Unit magnets***

The MDH X-ray Unit created magnets for all registered facilities to help facilitate communication between our registrants and MDH. Please write your facility registration number on the magnet, as we refer to this number to answer your questions. If you do not receive your magnet by the end of this month, please give us a call.

## ***Registration payments for multiple facilities***

If you are paying registration fees for multiple facilities, it would be best to submit checks for each individual registration, rather than one big check. Because of the way our new central cashier system is configured, we cannot process checks if there is an underpayment. This means that if there is even one problem with one registration, we will have to return your check and all paperwork. To avoid the hassle and confusion, it would be in your best interest to submit an individual check for each registration. If your facility is not able to do this, be sure to verify that all the information is correct before sending one check for multiple registrations.



Chapter 4732 is available at the Minnesota Bookstore for \$13.95 plus shipping and tax . Call 651.297.3000 or 1.800.657.3757 or order online at [www.comm.media.state.mn.us/bookstore/bookstore.asp](http://www.comm.media.state.mn.us/bookstore/bookstore.asp)

## ***Visit our website***

Please visit our website for all your radiation control questions about Quality Control, Service Providers, X-ray Operators, registration forms and more at [www.health.state.mn.us/xray](http://www.health.state.mn.us/xray). New items include:

- X-ray recycling and disposal services
- Mammography classes added
- X-ray operator classes updated

## ***CT over-exposure***

The FDA has made several recommendations in response to recent reports of over-exposure of patients during brain perfusion studies. The FDA released new standard operating procedures for all imaging facilities, radiologists and operators.

1. Facilities assess whether patients who underwent CT perfusion scans received excess radiation.
2. Facilities review their radiation dosing protocols for all CT perfusion studies to ensure that the correct dosing is planned for each study.
3. Facilities implement QC procedures to ensure that dosing protocols are followed every time and the planned amount of radiation is administered.
4. Radiologic technologists check the CT scanner display panel before performing a study to make sure the amount of radiation to be delivered is at the appropriate level for the individual patient.
5. If more than one study is performed on a patient during one imaging session, practitioners should adjust the dose of radiation so it is appropriate for each study.

The FDA requires hospitals and other user facilities to report deaths and serious injuries associated with the use of medical devices. If an adverse event is identified, health care professionals should follow the reporting procedures at their facility. Report these directly to the device manufacturer or to MedWatch. This can be done online by filing a voluntary report, by phone at 1-800-FDA-1088, or by obtaining the [fillable form online](#), print it and fax to 1-800-FDA-0178 or mail to MedWatch, 5600 Fishers Lane, Rockville, MD 20852-9787.

## Airport Scanners

As a result of the Christmas Day attempted bombing of an airplane, more nations are using whole-body scanners to look underneath clothing for hidden objects. There are two types of scanners: millimeter wavelength (radio wave) and backscatter x-ray scanners. The radiation used in a backscatter scanner bounces off. The federal government regulates airport security x-ray units, not MDH.

Dose from typical exams:

- The dose from a backscatter scanner is approximately .1 microsieverts. (< 1mrem)
- The dose from a chest x-ray is normally 100 microsieverts (10 mrem)
- A CT scan of the chest is approx. 10,000 microsieverts (1000 mrem)
- Backscatter scanner is equivalent to 2 minutes of flying on an airplane.

To receive bulletins by email, please submit your request to [Kelly.Sabanjo@state.mn.us](mailto:Kelly.Sabanjo@state.mn.us). For past bulletins, visit our website at [www.health.state.mn.us/xray](http://www.health.state.mn.us/xray), click on Publications.



## LMXO annual exam results

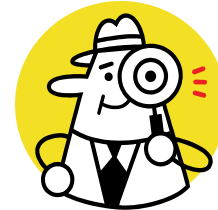
The ARRT has given out the annual results for the nation for the Limited Scope X-ray Operator exam. Below is the percentage of people that passed for each exam.

Test	MN	Nation
Core	65%	57%
Chest	55%	44%
Extremities	48%	45%
Skull	43%	39%
Spine	56%	48%
Podiatry	42%	50%

## Registration refunds

In 2007, the Legislature made billing for x-ray facilities an **annual** requirement. Some facilities continue to figure out their annual amount, and then double it as if they were still on the biennial schedule. Because there is a cost associated with issuing a refund, we will not be doing so anymore. If your payment is not correct, we will return your paperwork, delaying your registration.

## Inspector's Corner



### Digital Radiography

More facilities are using digital (DR) or computed radiography (CR) in their practice. As a result, there are some misconceptions that need to be cleared up. When an x-ray is taken it needs to result in an image. Typically, that image was an x-ray film. This film needed to be processed in a processor and the final image could not be altered.

In the 1980s, DR/CR began. The x-ray image is now displayed on a computer monitor and the image can be altered. There may be a slight reduction in some technique factors, but it is still very much an x-ray. It is disturbing to hear health care professionals reporting "we're digital", as if that exonerates them from any radiation safety program. It does not.

There is no universal standard for digital radiography the way that there is with film. Therefore, here's what facilities need to know:

- Refer to the equipments manufacturer's recommendations for quality control and use that as part of their radiation safety program.
- Employees need to be trained (document training) on the new modality.
- Equipment needs to be registered.
- Equipment performance evaluations need to be performed at intervals not to exceed 24 months.
- Radiation policies need to be updated to reflect digital radiography (i.e. fog test policy not needed).
- Technique charts also need to be updated.

MDH wants facilities to be successful with their digital radiography programs. Please give us a call if you have further questions.

### Badge Monitoring

MDH has been notified that badge companies may not be including control badges with the individual monitoring badges. To arrive at the occupational exposure, badge companies use national averages of background radiation applied to individual film badges. Facilities may request a control badge if they are uncomfortable with the badge companies method of establishing background radiation.