



Conference of Radiation Control Program Directors, Inc.

NEWSBRIEF

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A Partnership Dedicated to Radiation Protection

October 2008

Message from Chairperson John P. Winston



This is by far the fastest summer I have ever experienced. Meetings concentrating on issues with balancing our efforts toward increased controls and security... wrecking balls... disposition alternatives for unwanted and waste radioactive material... kicking off the new radon web portal... the development of suggested standards and guidance on emerging technologies... and alternative technology efforts, have sped up the clock.

The diversity of the industry we oversee is most evident. In our programs, the materials licensing section face continued new challenges with the National Source Tracking System, web-based licensing, and an expansion of increased controls on smaller quantities of activity. Opinions differ on the direness of finding a safer alternative to onsite storage of waste and unwanted

materials, but all agree complacency is not the answer. The radon programs are a year into an ambitious five-year effort to double the number of lives saved and now have a new state of the art mechanism to share innovative ideas and resolve issues. New uses for x-ray and radioactive material in and outside of medicine, plus alternative technology initiatives, are continually pressing those charged with keeping their state's regulations current. I tip my hat to those of you in the state programs facing staffing shortfalls, and forced to balance your priorities.

There are recurring messages throughout nearly all of the activities I've participated in over the last several months. Rising to the top is probably the public's perception of risk. Yes, there are differing views among those of us in the nation's radiation control programs as to how we set our priorities to achieve our mission, but I am steering clear of that one. (Hey, it's my article.) I want to think an improved awareness on the public side will allow us to maximize our limited resources on the areas in which we can truly make a difference in minimizing the health and environmental risks of radiation exposure and contamination.

Inside

Executive Director's Message.....	3
Working Group Activities	
Report on ABR Summit	4
New Task Force on E-Brachytherapy	6
H-7 Releases New Q.A. Collectible.....	7
Report on AAPM National Meeting.....	7
Report on Joint Commission Meeting	9
SR A, D, & J Committee Meets.....	10
Radionuclides in Food Workshop	11
Contact Information on Board Members	13
Insert: Q.A. Collectible.....	15

Chairperson's Message

[Continued]

Everything from the latest trend in dentistry to phase out the use of lead aprons during intraoral x-rays to being prepared for the demands of responding to an act of terrorism can be made easier with improved public knowledge. How to accomplish this is the question.

What have you and your program done to improve the public's awareness of the beneficial uses of radiation and the perception of risk?

Helen Burnett and others with EPA published an excellent emergency responders guide on Communicating Radiation Risks last year. To get a copy of the guide, email radiation.information@epa.gov or call 202-343-9290. Our radon programs have a long history of striving to convey risk to the population. And they recently took advantage of the peaked interest in the health impact from naturally occurring radioactivity in granite countertops by providing educational information on radon and encouraging people to simply test their homes for radon.

Now we have a powerful initiative through the Alliance for Radiation Safety in Pediatric Imaging we know as the "*Image Gently*[™]" campaign that we should take full advantage of. The medical industry in the United States heavily emphasizes diagnostics, many of which involve the use of radiation sources. The culture of needing to rule out or verify all negative impacts of an injury or condition has led to a tremendous increase in the use of CT and other modalities. The *Image Gently* campaign attempts to assure that referring physicians and parents are making an informed decision before requesting a CT for a child, and the CT operator is using only the dose necessary to provide the needed diagnostic information. The Alliance intends to expand their efforts to other diagnostic procedures in the future.

I encourage you to take advantage of the attention *Image Gently* is receiving and use it to improve the overall awareness of opportunities to lower radiation dose. We recently sent each state program a template of the letter New York widely delivered in their model effort to promote the mission of *Image Gently*. **Follow their lead!**

Life is a mirror and will reflect back to the thinker what he thinks into it. – Ernest Holmes



Greetings from Your Executive Director



Ruth E. McBurney, CHP

CRCPD and HPS Proclaim National Radiation Protection Professionals Week

For the third year in a row, the Conference of Radiation Control Program Directors (CRCPD) and the Health Physics Society (HPS) have proclaimed the first week in November to be **National Radiation Protection Professionals Week--this year it is November 2-7**. The CRCPD Board of Directors passed a resolution on September 26, 2008, recognizing the weeklong observance. The full resolution can be found at <http://www.crcpd.org/RadProfWk/2008NRPPWresolution.html>. A nationwide press release was also issued on that same date.

Originally initiated by the CRCPD, National Radiation Protection Professionals Week is intended to bring attention to the significant contributions radiation protection professionals make to the nation's health, energy, industry, and defense sectors. The first week of November has been chosen each year as National Radiation Protection Professionals Week in recognition of the discovery of x-rays by Wilhelm Conrad Roentgen on November 8, 1895. In 2005, the HPS joined the CRCPD in passing a resolution proclaiming the first week in November as a week to recognize radiation protection professionals.

The focus of the week is to get employers to recognize the week and to use the opportunity to recognize radiation protection professionals in their organization for their contributions to the organization's mission. From advances in medicine, environment, industry, and security, radiation protection professionals have made this country safer and healthier, while continuing to support new radiological technologies.

The week is also a time to inform the public and government leaders on the scope of skills and abilities needed by radiation protection professionals and the important role that they play. As Chairperson John Winston stated in the press release, "Radiation protection professionals provide leadership in protecting the public from the hazards of radiation. These dedicated individuals work diligently to ensure that radiation and radioactive materials are used safely and beneficially in thousands of different ways."

We encourage you to celebrate and recognize the accomplishments of the radiation safety professionals around you. Here are some suggested methods:

- Develop and display posters around your office and distribute information pamphlets on radiation safety and the profession of health

Chairperson's Message

[Continued]

CRCPD Working Group & Liaison Activities



- physics and other radiation safety professionals;
- Hold a staff appreciation lunch and distribute items of appreciation;
- Create a forum where people can discuss radiation protection and emerging technologies;
- Invite others from your agency and members of the public to tour or at least learn more about the radiation control program; and
- Show pride in what we do as radiation safety professionals.



Report on the American Board of Radiology Summit

By Jennifer Elee (LA), Healing Arts Council Chair

On August 9, 2008, I participated in the American Board of Radiology's (ABR) Summit on the Development of Practice Quality Improvement (PQI) projects as part of the upcoming Maintenance of Certification (MOC) for their boards. This summit included a half day of presentations on MOC and on use and misuse of radiation in medicine including computerized tomography (CT) scans, cardiovascular imaging, and radiation therapy. For the second half of the day, four breakout sessions were charged with developing PQI projects that could be implemented for CT, radionuclides, angiography/fluoroscopy, and radiation oncology. The presentations and PQI projects that were developed can be accessed at <http://summit:2008Summit@abritems.theabr.org>.

The keynote speaker was Kevin Weiss, an internist. Dr. Weiss is involved with the Maintenance of Certification plan as it will pertain to all medical specialty boards. He spoke of the need for professional accountability within each specialty and across specialty lines. He stressed the point that board certification should imply a higher standard than licensing and that with the rapidly changing world of medicine, MOC was necessary.

The MOC plan is to include not only continuing education and experience, but also a PQI project that would pertain to each individual's practice. The PQI could be one developed by the physician or one chosen from a list of approved PQI projects such as the projects being discussed at this summit. One of the main points of Dr. Weiss' talk and one that was repeated many times during the summit was the need to convey to other physicians outside of the radiology field the need to assess risk/benefit issues with the use of radiation for each individual patient.

The rest of the morning speakers spoke on each of the topics for the breakout sessions and outlined the issues we are facing

CRCPD Working Group & Liaison Activities

[Continued]

Healing Arts Council Chair's ABR Report [Continued]

concerning the use of each. Some of the speakers gave examples of measures they had undertaken in their own facilities to curb overuse of radiation.

One facility instituted a "Radiation Safety Alert" which will flag a patient's record for repeated exposure (ex: less than 40 years old and greater than 5 CT scans for a benign condition). Another facility had instituted alerts for interventional procedures that reach 300R, 600R, 900R, 1200R, and 1500R (a sentinel event for Joint Commission). Another speaker emphasized the importance of accurately including dose for therapy patients from IMRT, IGRT, and CT scanning as part of their planning and treatment as this can greatly increase the dose to unintended organs.

For the afternoon session, I participated in the CT breakout session. During that session, I was able to give a short presentation on CRCPD and what we do. This session worked on developing four PQI projects for various CT procedures. The outlines of all of the PQI projects were presented in a summary session and can be reviewed at the website listed above.

In summary, this was a very informative meeting. It is refreshing to see a group working on self improvement issues. There is a great deal of concern among the radiologists about the overuse of CT and the potential issues with the increase in dose to the population. The *Image Gently* campaign was applauded as a wonderful collaboration project to get the word out about pediatric doses. The *Image Gently* website has also begun listing potential PQI projects for physicians.

As a result of CRCPD's participation in this meeting, we were able to establish a new liaison relationship with the ABR. I will serve as CRCPD's liaison to ABR and a very familiar face to many of us, Richard Morin, will serve as ABR's liaison to CRCPD. As Dr. Morin is familiar with our organization through his prior work with the American College of Radiology, I believe he will be an excellent liaison to work with and a champion for CRCPD with his organization.

CRCPD Working Group & Liaison Activities

[Continued]

New Task Force Formed for E-Brachytherapy

Cass Kaufman, LA County, Healing Arts Emerging Issues Chair
Jennifer Elee, LA, Healing Arts Council Chair

For many years physicians have performed e-brachytherapy treatments using radioactive sealed sources, usually cesium 137. These sources have on rare occasions been lost, and there are other handling and security issues associated with using a radioactive source.

A new device has been approved by FDA that uses an electronic source for brachytherapy (also known as e-brachytherapy) instead of a radioactive source. As always, there are pros and cons associated with the use of each source. The link below provides additional information, and is an informative report by the ASTRO Electronic Brachytherapy Working Group:

<http://astro.org/HealthPolicy/EmergingTechnology/EvaluationProjects/documents/ETCEBT.pdf>

The qualifications of operators who will use this device is an issue of concern for states. All regulations governing the use of radioactive materials have minimum training and experience requirements for physicians using radioactive brachytherapy sources. There is no similar national training and experience requirement for those using an electronic brachytherapy system.

Additionally, these systems can be quite portable, so there is a secondary issue of where these systems may be used. Currently, the CRCPD SR-X (Medical Therapy) and SR-Z (Medical Credentialing) working groups have been developing suggested state regulations to cover the use and qualifications/training for the users and operators of this new device.

The CRCPD Board, at the suggestion of the Healing Arts Emerging Issues committee, has created a new Task Force on E-Brachytherapy (H-36). This task force will be developing a white paper that will include guidance on an inspection protocol and will provide guidance on the suggested regulations from SR-X and SR-Z, which are both nearing completion. The chairperson of the E-Brachytherapy Task Force is Melanie Rasmusson (IA). Please contact her via email at mrasmuss@idph.state.ia.us if you have suggestions for their report.

CRCPD Working Group & Liaison Activities

[Continued]

H-7 Releases New Q.A. Collectible on Computed Radiography

By Jennifer Elee (LA), Chair of H-7 Committee on Quality Assurance in Diagnostic X-ray

The H-7 Committee has completed a new Collectible, "A Brief Overview of Computed Radiography." [The Collectible is inserted at the end of this Newsbrief](#) and is also available on the CRCPD website under Publications. This Collectible is meant to provide a brief description of how CR works. The Collectible indicates both advantages and disadvantages associated with this technology. Also included is a section of "inspector beware," which is intended to help those in the field who have very little experience with CR.

The H-7 Committee has also been conducting a thorough review of all of the Collectibles currently available. Several minor changes have been made to several of the Collectibles to bring them up to date. If you have not taken a look at the list of Collectibles recently, please visit the CRCPD website. Many of these Collectibles still contain very pertinent information that is useful to all of our members. If you have any comments about any of the Collectibles, please send me an email to Jennifer.elee@la.gov.

Report on the AAPM National Meeting

By Debbie Gilley (FL), H-15 Liaison to AAPM

John Winston, CRCPD Chairperson, Jennifer Elee, Healing Arts Council Chair, Ruth McBurney, CRCPD Executive Director and I attended the American Association of Physicists in Medicine (AAPM) national meeting July 28 through August 1, 2008 in Houston, Texas. CRCPD members participated in committee meetings, provided presentations, and supported CRCPD's exhibit booth to inform AAPM members about source collection activities.

John and I participated in the Government Relations Committee meeting. Many issues that concern the regulatory officials also concern AAPM members. One of the hot topics was the recently passed Medicare legislation that requires advanced imaging procedures to be provided by an accredited facility. The medical physicist community hopes to have board certified medical physicists included in the accrediting of facilities. This may be a good time for CRCPD to work with the American College of Radiology and the Intersocietal Commission for the Accreditation of Nuclear Medicine Laboratories to assure that suggested regulations would be considered in the accreditation process.

CRCPD Working Group & Liaison Activities

[Continued]

AAPM Report *[Continued]*

I attended the Emergency Response Committee meeting to report on Florida's efforts to mobilize a Radiation Response Volunteer Corps. The committee felt that they should promote this on a national level and are pursuing the development of the Corps. It is anticipated that this concept will move forward and AAPM is looking for a funding source to encourage participation. CRCPD may also like to promote the cause; maybe we can also look for additional funding.

AAPM supports a leadership breakfast for CRCPD and the host state at the annual meeting. This year, Richard Ratliff attended for the State of Texas. It was a delightful meeting with lots of good dialogue about issues and opportunities for partnerships to assure the safe and beneficial use of radiation in medical applications.



John Winston had the distinguished pleasure of participating in the Presidents plenary session. On behalf of the CRCPD membership, he presented a plaque recognizing AAPM for outstanding achievements over the past 50 years. Many of you are

aware that AAPM has supported training to CRCPD members for nearly 20 years and has given CRCPD members access to its web training. All of the recent training has been captured on tape so that you and your staff may view and listen at any time. AAPM members have also helped us in rule development and in preparation of issue papers.

There were many opportunities to visit with AAPM members. Jennifer Elee and Ruth McBurney coordinated the Source Collection and Threat Reduction (SCATR) exhibit booth for the meeting. John and I supported and gave them a break to attend some of the scientific sessions. Mike Pearson from Los Alamos National Laboratory came out to help. It is good to have the support of the Department of Energy and their Off-site Recovery Program and the Nuclear Nonproliferation Program that financially support the CRCPD SCATR program.

On Thursday, Ruth McBurney and I, along with former NRC attorney Chip Cameron participated in a session on medical physics licensure laws and other regulatory issues. The AAPM is

CRCPD Working Group & Liaison Activities

[Continued]

H-15 Liaison's AAPM Report *[Continued]*

looking to improve the quality of healthcare by assuring through certification and licensure that only qualified medical physicists will be allowed to practice. Only mammography facilities and therapeutic radioactive materials applications have consistent requirements for the qualifications of a medical physicist. Many states have no regulatory authority to assure qualified medical physicists provide this service.

I would like to thank the AAPM for their support of CRCPD's attendance. As we look to the next year, I hope to continue to collaborate on new initiatives that will assure the safe and beneficial use of radiation in the health care industry.

Joint Commission's Sixteenth Annual Liaison Meeting

By Ray Deilman (FL), H-16 Joint Commission Liaison

The Joint Commission held its Sixteenth Annual Liaison Network meeting June 23-24, 2008. This meeting provides the opportunity to reach commonality and/or raise the bar on many areas of patient radiation safety shared by both CRCPD and the Joint Commission (JC), and this was no exception.

We were able to interact with many decision makers and create or refine CRCPD opportunities.

- The Vice President and Chief Patient Safety Officer and I met to continue our discussion of the common goal of patient safety. In particular we believe this may be the time to focus on process or best practices and not on numbers; for example, implementation of the CRCPD recommendations on fluoroscopy safety in place of the current sentinel event – radiation overdose criteria. We agreed to continue an email dialogue.
- The Environment of Care Specialist and I discussed the discernible need to raise the issue of creating an Advisory Committee on Radiation Use in Medicine with CRCPD as a participant. Additionally, we discussed the JC linking of radiation and laser safety and JC emergency response criteria. This advisory committee subject will be raised as appropriate. I agreed to provide a recent copy of CRCPD's Medical Use Suggested State Regulations.
- The Education and Field Directors for Surveyor Development and Management will provide CRCPD with a sample of their

CRCPD Working Group & Liaison Activities

[Continued]

H-16 JC Report *[Continued]*

training modules for guidance. In turn, CRCPD will provide them with a CRCPD training module that would provide them methods to ascertain if a radiology department has a procedure in place to meet critical JC patient radiation safety standards, such as “what actions are taken if patient fluoroscopic time exceeds 30 minutes?”.

Other areas of discussion included CT use, dose and regulation; USP 797 requirements for sterile processes in radiopharmaceutical preparation (kits, etc); laser use and regulation; and finally the JC Medication Management Standard, which defines contrast and radiopharmaceuticals as drugs.

Additionally, consideration should be given to CRCPD being part of the National Quality Alliance Steering Committee. Also, JC and CRCPD members perform similar functions, which raises the question: Should CRCPD become the national accrediting agency of medical uses of radiation in healthcare? Various states and organizations perform similar “deemed” functions, i.e., the College of American Pathologists, the State of New York, Ohio, etc. Congress is seeking performance measurement organizations.

Further, I reiterate my annual recommendation that CRCPD request that the JC provide a senior officer to address a plenary session of the annual meeting.

Finally, this meeting has been the most productive to date.

SR A, D, & J Committee Meets

By Shawn Seeley (ME), Chair of SR-A, SR-D, and SR-J

Greensboro, North Carolina was the site of our latest venture to update Parts A (General Provisions), D (Standards for Protection Against Radiation) & J (Notices, Instructions, and Reports to Workers; Inspections) of the Suggested State Regulations for the Control of Radiation. The members, Shawn Seeley, Chairperson (ME), Mike Snee (OH), Robert Gregor (CA), and Ken Weaver (CO) met for two and a half days before the CRCPD annual meeting in Greensboro, North Carolina, May 2008. The group reviewed all their respective charges and found all to be accurate and one that needed to be removed.

The group incorporated many necessary changes that had occurred since their last meeting several years ago. The following

CRCPD Working Group & Liaison Activities

[Continued]

SR A, D & J Committee Report *[Continued]*

charges for each Part and found one that needed to be removed. For Group D, the charge relating to “Establishing an air emission standard for the PET radionuclides, specifically, N-13” can be removed from the list. This is pursuant to the rule change at the US NRC regarding the expanded definition of by-product material. This isotope, along with O-15, was added to the ALI/DAC table and therefore no longer needs consideration.

In addition to the above, during the meeting the group was also placed in charge of Part O (Decommissioning) when it was re-activated. The group is honored to accept the challenge of an additional Part and will be making the necessary changes within the upcoming year to remain compatible with the US NRC regulations. Hopefully with the issuance of Parts C & D, Part O can be successfully incorporated, thus eliminating some duplicity, and possibly confusion, among the SSRs.

If anyone has a particular topic or issue which the SR-A, D, J or O group should consider, please contact the chair, Shawn Seeley at 207-287-5696 or via email at shawn.seeley@maine.gov



Radionuclides in Food Workshop

By Marinea Mehrhoff (IA)
and Lynn West (WI)

The “Radionuclides in Food Workshop” took place in Gaithersburg, Maryland, at the National Institute of Standards and Technology campus August 26-29, 2008. The purpose of the workshop was to identify needed certified reference materials, inter-comparison materials, and performance evaluation materials for emergency preparedness in food matrices and a mechanism to produce these materials.

Another goal of the workshop was to make this an international effort. To that end, participants included representatives from Argentina, Belgium, Brazil, Canada, Germany, Great Britain, Philippines, the Food and Drug Administration (FDA), state radiation labs and many others. The workshop was unique in that it gave both laboratorians and material providers the opportunity for input and to help guide the direction of this new program prior to its implementation.

On the first day of the workshop, technical presentations were given that provided the background information necessary to prepare participants to create a work product in the breakout sessions. Marinea Mehrhoff gave a short presentation about CRCPD and the work groups for Homeland Security. Another

CRCPD Working Group & Liaison Activities

[Continued]

Radionuclides in Food Workshop [Continued]

presentation was given by Ms. Mehrhoff (Wisconsin State Hygiene Lab) and Lynn West (University of Iowa Hygienic Laboratory), both CRCPD members. This presentation was developed from a brainstorming session guided by Ms. Mehrhoff at the Food Emergency Response Network (FERN) National Meeting, held July 2008. Participating in the session were 23 radiological laboratories all in the FERN program.

Ms. Mehrhoff, aided by Ms. West, was charged with collecting and summarizing the data presented at the FERN national meeting and then presenting the information at the Radionuclides in Food Workshop so the state laboratories would have input about desired criteria in a Performance Evaluation program.

Other technical presentations included current efforts in Belgium, Great Britain, and the Philippines to make certified reference material (radiological and non-radiological) for use in a performance evaluation program that includes descriptions of the complexities and limitations in making these materials. Also presented were topics on the implications of detecting radionuclides in food, ISO 17025 laboratory accreditation rules, research data from the University of Texas using neutron activation for determination of U-238, K-40 and Cs-137, and current efforts on making food reference material for rice, seafood, and blueberries.

After the technical presentations, participants chose one of two breakout sessions to attend. One session focused on requirements of a proficiency evaluation program for food matrices, while the other focused on producing a list of reference materials that ideally should be available to support laboratories and proficiency evaluation providers in their activities.

In breakout session one, the recommendations were intensely debated. Consensus was reached by the end of the workshop, however, and a document was created that will be used by FDA to guide the development of its performance testing program.

The members of breakout session two created a document that describes all the reference materials that should be available for food testing, including how these materials should be prepared. It was a relatively easy process to arrive at these recommendations. The difficulty will be in actually convincing suppliers to produce these materials, given the cost and complexity of preparation and the possibility of low demand.



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The Newsbrief is published in February, April, June, August, October, and December by the Office of Executive Director, Conference of Radiation Control Program Directors, Inc., 205 Capital Avenue, Frankfort, KY 40601. Telephone: 502/227-4543; fax: 502/227-7862; website: <www.crcpd.org>. The subscription to the Newsbrief is included in CRCPD membership dues. The subscription price for nonmembers is \$35 per year, prepaid.

The Newsbrief is written to address the needs of all radiation control program personnel. Readers are encouraged to contribute newsworthy or informative items for the Newsbrief, with neither charges nor stipends for the items that are selected. News of State radiation control programs is especially sought.

Articles should be sent to CRCPD, Attn: Curt Hopkins, 205 Capital Avenue, Frankfort, KY 40601 (fax: 502/227-4928; email: <chopkins@crcpd.org>. The deadline for contributions is the 15th of the month before an issue is to be published.

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This publication is supported in part by a Cooperative Agreement (No. FD-000005) administered by the Food and Drug Administration.

Q.A. Collectible

*Sponsored by CRCPD's Committee on Quality Assurance
in Diagnostic X-ray (H-7)*

A BRIEF OVERVIEW OF COMPUTED RADIOGRAPHY

Computed radiography (CR) uses a cassette similar to a film cassette. Instead of film, the cassette holds an imaging plate (IP), which is similar to an intensifying screen. Instead of emitting light when x-rays interact with it, the IP stores the x-ray energy in proportion to the intensity it receives. The stored energy is released as visible light when a laser in the CR Reader scans the IP. The Reader creates a digital image file after processing the raw image. This image file may be displayed on a video monitor (softcopy) or printed on a laser printer (hardcopy).

CR captures a latent analog image, which is subsequently digitized in the Reader. The translation process can introduce artifacts in the image that could result in an image that is not clinically acceptable. The CR process also decreases the efficient use of x-ray energy. In most clinical settings, radiographic technique factors are increased when using CR to reduce noise in the image. Changing from a 400-speed film/screen system to CR, which predominantly seems to be equivalent to a 200 speed film/screen system, usually will result in an increased radiation dose.

Most manufactures employ an exposure index/indicator value for CR imaging to indicate the average incident exposure delivered to the IP after x-ray transmission through the object. The exposure index/indicator is important to verify proper radiographic technique. Each IP manufacturer will supply their own exposure indicator/index value. Some examples of this manufacturer's exposure index/indicators are the Fuji sensitivity "S" value, the Kodak exposure index "EI" value, the AGFA log of the median exposure "LgM" value, and the Konica relative exposure "REX" value.

The advantages of CR are numerous. Since CR cassettes replace film cassettes, the same x-ray generator and x-ray tube equipment can be used, which saves considerable costs. Digital images may be viewed in multiple locations at the same time. Images may be rapidly transferred to other locations. Storage of digital images takes less space than film storage. Image retrieval is less labor intensive and faster. Since software enhances the image, CR reduces retakes. Repeats will be primarily due to positioning errors and motion blurring. Darkroom problems, such as odor, chemical hazard and darkroom integrity maintenance QA, are eliminated.

There are disadvantages of CR imaging. There is no significant time saving over the use of film. The images still require processing to retrieve the image, and CR plates must be erased in the Reader prior to reuse. Artifacts unique to CR can be introduced in the digital image acquisition

and /or retrieval process. Finally, patient dose (on average) does increase in most cases as compared to the 400 speed screen-film detector system that CR usually replaces.

Inspector Beware!

- * Do not make multiple exposures on the same imaging plate during equipment testing. Overloading can cause ghost patterns that are visible on subsequent radiographs. Work with the radiologic technologist (RT) to ensure the CR cassette, if used, is completely erased and have the RT run a test exposure to ensure there are no ghost patterns. Hang lead, such as an apron, over the CR cassette to prevent saturation of the plate, or use manual techniques without a cassette in the field of view.
- * CR cassettes are more expensive than conventional screen/film cassettes. Dropping may damage or break them.
- * Ask staff at the facility for assistance when using their CR system. Beware using the “Troubleshooting” setups as suggested by the manufacturer. CR system defaults can be easily changed without realizing it. Many computer defaults could be involved. Do not make adjustments to a facility’s CR reader. If you feel adjustments are needed, consult the facility, the manufacturer, or service personnel.

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