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Submitter Information

Name: Cheryl Schultz

General Comment

See attached file(s)

Attachments

BHS Comments on Proposed Changes to 10 CFR Part 20

Comments on Proposed Changes to 10 CFR Part 20

Q1-1: DOE implemented this change in 2007. It requires changing the terminology on procedures and forms. The cost for the change will be insignificant.

Q1-2: 18 months since re-accreditation of the dosimetry program may be needed.

Q1-3: No comment

Q1-4: Keep it the way it is currently

Q2-1: Yes

Q2-2: Compared to the other health effects associated with ionizing radiation exposure, the impact of a radiation induced cataract is a very low risk. Cataracts removal is a routine outpatient surgical procedure.

Q2-3: It is not so easy to reduce exposure to the lens of the eye for technologists who handle and inject PET radiopharmaceuticals.

Q2-4: The use of the primary dosimeter has been effective at reporting the dose to the lens of the eyes. If reduction techniques are implemented to comply with the lower dose limit to the lens of the eye, how will this be documented? Will we need to provide additional dosimeters that are worn in close proximity to the lens of the eyes of our occupationally exposed personnel?

Q2-5: If reduction techniques are used, then additional dosimetry may be required to demonstrate compliance with the lower dose limit.

Q2-6: Yes, the lowering of the dose limit will require significant changes to our program including operational changes, procedural, training, tracking and trending. Additional dosimetry is expensive and not readily available. Does the benefit outweigh the cost?

Q2-7: No comment

Q3-1: It is not unusual for declared pregnant nuclear medicine and noninvasive cardiology personnel to exceed 1 mSv (100 mrem) during their gestational period. Between 2013 and 2014 (YTD), 5 of 14 of the Beaumont Health System pregnant personnel in nuclear medicine and noninvasive cardiology exceeded 1 mSv (100 mrem), with the highest reported dose of 1.57 mSv (157 mrem). Potential implementation and operational costs are significant to the practice of nuclear medicine. Pregnant nuclear medicine technologists would not be able to perform many routine tasks that are part of their clinical practice, such as eluting generators, handling radioiodine therapy doses, radiopharmacy rotations, PET rotations, on-call preparation of radiopharmaceutical kits, and cardiac stress imaging. Limiting the clinical practice of pregnant nuclear medicine technologists may lead some of them to not declare their pregnancy, as a

means of preventing them from exceeding the lower limit of 1 mSv (100 mrem). ICRP publication 103 recommends the dose to the embryo/fetus provide the same level of protection as that offered for a member of the public, which is 1 mSv (100 mrem). Current NRC regulations allow members of the general public to receive up to 5 mSv (500 mrem) per year for infrequent exposure. This same rule could be applied to the developing embryo/fetus of an occupationally exposed pregnant nuclear medicine technologist.

Q3-2: No, since before declaration the RSO has no basis for control. The privacy of the potentially pregnant person should be respected.

Q3-3: No significant cost effect from the record keeping change.

Q3-4: No comment

Q3-5: Refer to the data provided in Q3-1.

Q4-1: This would require licensees to develop administrative limits, develop a way to evaluate and document administrative control level increases, and an access control system to input the various ACLs. This may cause licensees to mandate changes to clinical practice, such as rotation of personnel or place limits on their current clinical practices. This could intrude into the practice of medicine.

Of the occupationally radiation workers monitored at Beaumont Health System, about 10% work at more than one facility. For these individuals who work in multiple facilities, the licensee has no control over the ACLs used by the other facilities.

Q4-2: No comment

Q4-3: It will drive up the cost of health care, without a clearly defined benefit. Medical licensees already have established ALARA programs, which have been effective at minimizing unnecessary radiation exposure to their patients, visitors and staff. Furthermore, there should be no ACL or measurement control over lifetime exposure. If we control the yearly annual dose to our employees, then we have not issues except for unplanned doses.

Q4-4: As stated by the NRC, controlling occupational doses for PET technologists is not the same situation as controlling occupational doses in a nuclear cardiology setting. Medical licensees should be able to establish different ACLs for different groups of occupational workers.

Q4-5: The methodologies discussed are prescriptive, and overly burdensome, and will increase the cost of health care.

Q4-5: Cumulative lifetime exposures are currently covered by adherence to the annual dose limits. This is overly burdensome and will increase the cost of healthcare.

Q4-6: See Q4-5 above

Q4-7: At least one dosimetry vendor currently provides cumulative annual doses for occupational workers concurrent employment through the use of the individual's social security number. To require 10% of our medical work force to provide their occupational dose information to the licensee would set the licensee up for failure. This is overly burdensome, and will increase the cost of health care.

Q4-8: No comment.

Q5-1: Agree with this

Q5-2: Be consistent

Q5-3: Both units

Q6-1: The REIRS is not very usable from the licensee standpoint. It is very difficult to retrieve records and these come with disclaimers that they may not be accurate. Before requiring additional reporting of occupational doses by medical licensees, there should be a national database that allows all licensees and dosimetry providers to report in real time.

Q6-2: Additional paperwork would increase the cost of health care. The personnel monitoring data might have theoretical value but no practical value. The NRC failed to demonstrate a sufficient cost versus benefit ratio for another administrative requirement. Occupational exposures (in medical diagnosis and therapy) are already as low as is reasonably achievable (ALARA). The requirements for reporting overexposures are adequate. Only licensees with repeated overexposures should be required to submit annual reports. Separating exposures received from NRC-licensed material from exposures received from non-NRC-licensed materials is not possible.