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MedStar Medical Group Radiology

Steven H. Brick, MD, FACR
Physician Executive Director

HB 934 – Radiation Therapy, Nuclear Medicine Technology, and Radiology
Assistance – Limited Radiologic Technologist
Position: *Support*

March 5, 2024

The Honorable Joseline A. Pena-Melnyk
Chair, House Health & Government Operations Committee
241 House Office Building
Annapolis MD 21401

Dear Chair Pena-Melnyk:

Good afternoon, Chair Beidle, and esteemed members of the Committee. My name is Steven Brick, and I am honored to be before you today as a radiologist at MedStar Health. I am here to offer my testimony in wholehearted support of HB 934.

As background, I was Board Certified in Diagnostic Radiology in 1987. For the past 10 years, I have overseen all aspects of Radiology at MedStar Health, including leadership of the professional Radiology practice.

With over three decades of experience, including ten years overseeing Radiology at MedStar Health, I bring a wealth of insight into the matters at hand. Today, I wish to direct your attention to two pivotal aspects of HB 934: the quality of work conducted by limited RTs and the paramount concern of radiation safety.

Quality is the cornerstone of our profession, and it is with great pride that I affirm the exceptional standard upheld by our limited RTs (LRTs). For the past three years, MedStar Health has entrusted LRTs with responsibilities at our Urgent Care sites in DC and VA. Throughout this period, not a single complaint has surfaced regarding the quality of their work. Our radiologists maintain a vigilant eye, swiftly offering feedback on every imaging case. This feedback loop, integral to our commitment to excellence, ensures both commendations for exemplary work and guidance for areas necessitating improvement. Importantly, this process extends to X-rays performed by LRTs, with no disparity observed in the feedback provided compared to that for fully certified RTs.

Turning to the critical matter of radiation safety, I must emphasize the gravity of the risks inherent in X-ray procedures. Patients are vulnerable to potential harm arising from incorrect exposure settings or the need for repeated images due to positioning errors. However, I reassure you that MedStar Health has implemented robust measures to mitigate these risks. Our LRTs undergo rigorous training, with a

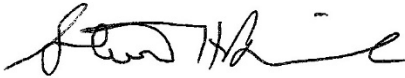
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particular emphasis on exposure settings, closely supervised by senior RTs during clinical training. Furthermore, our XR equipment is equipped with stringent controls to limit over-exposure, bolstering patient safety. Through meticulous monitoring and feedback mechanisms, we have found no discernible difference between the performance of LRTs and fully certified RTs in minimizing the need for repeat images.

In conclusion, I urge the Committee to lend their **support** to HB 934. With the assurance of quality upheld by our LRTs and our unwavering commitment to radiation safety, this bill represents a significant stride forward for patient care. Thank you for your attention and consideration.

Yours truly,

A handwritten signature in black ink, appearing to read "Steven H. Brick".

Steven H. Brick, MD, FACR
Physician Executive Director
MedStar Medical Group Radiology

cc: Members, House Health & Government Operations Committee
Erin Hopwood, Staff

RADIATION EFFECTS

Measurements in millisieverts (mSv). Exposure is cumulative.

■ **Potentially fatal radiation sickness. Much higher risk of cancer later in life.**

10,000 mSv: Fatal within days.

5,000 mSv: Would kill half of those exposed within one month.

2,000 mSv: Acute radiation sickness.

■ **No immediate symptoms. Increased risk of serious illness later in life.**

1,000 mSv: 5% higher chance of cancer.

400 mSv: Highest hourly radiation recorded at Fukushima. Four hour exposure would cause radiation sickness.

100 mSv: Level at which higher risk of cancer is first noticeable

■ **No symptoms. No detectable increased risk of cancer.**

20 mSv: Yearly limit for nuclear workers.

10 mSv: Average dose from a full body CT scan

9 mSv: Yearly dose for airline crews.

3 mSv: Single mammogram

2 mSv: Average yearly background radiation dose in UK

0.1 mSv: Single chest x-ray



EYES High doses can trigger cataracts months later.

THYROID Hormone glands vulnerable to cancer. Radioactive iodine builds up in thyroid. Children most at risk.

LUNGS Vulnerable to DNA damage when radioactive material is breathed in.

STOMACH Vulnerable if radioactive material is swallowed.

REPRODUCTIVE ORGANS High doses can cause sterility.

SKIN High doses cause redness and burning.

BONE MARROW Produces red and white blood cells. Radiation can lead to leukaemia and other immune system diseases.