



American Association of Physicists in Medicine

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Office of the President

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December 2, 2009

The Honorable Jeff Bingaman, Chair
The Honorable Lisa Murkowski, Ranking Member
Energy and Natural Resources Committee
304 Dirksen Senate Office Building
United States Senate
Washington, DC 20510

Dear Senators Bingaman and Murkowski:

The American Association of Physicists in Medicine (AAPM)¹ - an association whose mission is to advance the application of physics in medicine and biology for the benefit of all patients – urges the Senate Energy and Natural Resources Committee to give full support to and take timely action on H.R.3276, the *American Medical Isotope Production Act of 2009*.

AAPM remains concerned that the recent disruptions in the supply of Molybdenum-99 (Mo-99) have resulted in medical professionals across the country delaying or canceling imaging procedures. Although there may be alternatives to certain diagnostic procedures using Technetium-99m (Tc-99m) (including substitution of other isotopes for Tc-99m, and some computed tomography (CT) and invasive angiography procedures), clinicians routinely choose the most accurate, most useful and most dose-efficient imaging technique. These disruptions in access to the radioactive isotope have highlighted the urgent need to ensure a domestic supply for the United States. It is a disservice to patients to deny them access to the most appropriate study due solely to the non-availability of Tc-99m in the United States.

¹ The American Association of Physicists in Medicine's (AAPM) mission is to advance the practice of physics in medicine and biology by encouraging innovative research and development, disseminating scientific and technical information, fostering the education and professional development of medical physicists, and promoting the highest quality medical services for patients. Medical physicists contribute to the effectiveness of radiological imaging procedures by assuring radiation safety and helping to develop improved imaging techniques (e.g., mammography CT, MR, ultrasound). They contribute to development of therapeutic techniques (e.g., prostate implants, stereotactic radiosurgery), collaborate with radiation oncologists to design treatment plans, and monitor equipment and procedures to insure that cancer patients receive the prescribed dose of radiation to the correct location. Medical physicists are responsible for ensuring that imaging and treatment facilities meet the rules and regulations of the U.S. Nuclear Regulatory Commission (NRC) and various State regulatory agencies. AAPM represents over 7,000 medical physicists.

In order to ensure that patient needs are not compromised, a continuous reliable supply of medical radioisotopes is essential. Currently there are no facilities in the United States that are dedicated to manufacturing Mo-99 for Mo-99/Tc-99m generators. The United States must develop domestic capabilities to produce Mo-99, and not rely solely on foreign suppliers. In addition, forcing a change from HEU to LEU must be done within an adequate time period to allow for the research and development needed for the transition period. There also must be consideration of economic and environmental factors to, first and foremost, prevent putting patients at risk because of delays in production of much needed radionuclides, such as Tc-99m which is made from Mo-99.

A national effort to address these concerns requires (1) a commitment by the administration to have a coordinated inter-agency program with the specific responsibility to achieve reliable domestic independence in the production of Mo-99, (2) continued appropriations by Congress to provide the financial investment needed by the administration's program, and (3) support of the Congress through authorizing legislation that will serve as the basis for the continuation of the administration's program until its goals are achieved.

The Obama administration has made a commitment to achieve domestic independence in the production of Mo-99. The AAPM believes the initiative being led by the National Nuclear Security Administration through the Global Threat Reduction Initiative with oversight and interagency coordination by the Office of Science and Technology Policy has the capability to achieve the establishment of a reliable domestic production of Mo-99 within the next ten years. The Congress has appropriated sufficient support for fiscal year 2010. The remaining task is to obtain congressional support through authorizing legislation that will serve as the support and basis for the administration's program into the future.

AAPM believes that the *American Medical Isotope Production Act of 2009* will help patients who rely on medical imaging for the treatment and diagnosis of many common cancers by authorizing funding and providing a clear road map to create a domestic supply of Mo-99 while also allowing a responsible timeline and safeguards for the transfer of HEU to low enriched uranium (LEU); therefore, AAPM endorses *the American Medical Isotope Production Act of 2009*.

We thank you for your efforts and look forward to continuing to work with you on this important issue. Should you have any further questions, please contact Lynne Fairobent, Manager of Legislative and Regulatory Affairs, at lynne@aapm.org or 301-209-3364.

Sincerely,



Maryellen L. Giger, Ph.D., FAAPM, FAIMBE

cc: Members of the Senate Energy and Commerce Committee