



Updated Information

On page 6, the report says, “The dominant radioisotope is an isotope of technetium, over 95 percent of which is produced through neutron irradiation in an HEU-fueled high-performance reactor.” That sentence is no longer reflective of the current practice. The reactors that provide irradiation services to make almost all (>95%) Mo-99, which subsequently produces Tc-99m through its decays, include BR2, HFR, LVR-15, MARIA, OPAL, and SAFARI-1. Among these, only BR2 is currently operating with HEU. In addition, just a few years ago, almost all (>95%) fission-based radioisotopes were made through irradiation of HEU targets, but at present, of major international producers, only IRE still uses HEU targets. Other facilities have stopped production or converted to LEU targets, resulting in dramatic reduction of HEU in radioisotope production.

Source: private communication Tom Hanlon, IAEA (2018). See also chapter 4 of *Opportunities and Approaches for Supplying Molybdenum-99 and Associated Medical Isotopes to Global Markets: Proceedings of a Symposium*, National Academies Press, 2018.