Hanford scientists decry shutdown of isotope facility

U.S. depends on foreigners for cancer cure

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DARRELL FISHER
Battelle physicist

BY AVIVA L. BRANDT
Associated Press

RICHLAND — Every day can be torturous for Ann Worcester, who suffers from multiple myeloma, a painful form of cancer in her bone marrow.

Her only hope, she believes, is a yet-to-be-discovered radioactive isotope that can kill her cancer cells without killing her. The drugs she takes attack her healthy cells as well as the cancerous ones.

"I'm waiting for a cure. I hope it's not too late for me," Worcester said. "But surely I hope it's not too late for those who don't have cancer yet."

Some scientists at the Hanford Nuclear Reservation think the cure for cancer could be right around the corner, but they say the shutdown earlier this year of an experimental reactor will mean new isotopes will go undiscovered. And it is causing a shortage of isotopes already in use to treat lymphomas, thyroid conditions and other medical problems.

Hanford for more than 40 years created plutonium for nuclear weapons. Now the site has the nation's greatest volume of nuclear waste, and is expected to cost more than $50 billion and take more than 30 years to clean up. Scientists like Robert Schenter and Darrell Fisher think some of the money could be better spent on medical research.

"We're interested in seeing some of the resources of the Department of Energy focused on talents and capabilities at the Hanford site that have been overlooked," said Fisher, a medical physicist at Battelle's Pacific Northwest Laboratory.

"We have identified concepts and radioactive isotopes that can be more helpful in fighting cancer than anything already being used," he said.

Even the nuclear waste at Hanford could be put to use and transformed into isotopes that could help save lives, he said.

The United States produces minimal amounts of isotopes, including only 5 percent of those used in medical procedures. Radioisotopes are used in about 13 million diagnostic procedures and 60,000 therapies each year.

Canada and Russia are the main suppliers for the U.S. market. But Russia's nuclear program is in disarray and Canada only uses one reactor to produce its isotopes.

Ron Kathren, professor of health physics at the Tri-Cities campus of Washington State University, believes the United States should be producing its own isotopes rather than importing them.

"There's something unseemly about having to depend on other countries for our health," Kathren said. "If the Canadians for whatever reason — a labor problem, a strike — have a shortage, we aren't going to be No. 1 on their priority list."

U.S. Department of Energy officials cited the $80 million a year in operating costs as one of the factors in the shutdown of the fast flux test facility (FFTF) reactor.

"It boggles my mind," Kathren said. "I find it hard to understand why we took our most modern reactor . . . and shut it down. Think of where you're putting your money. They're taking it away from health . . . and it's going to cost more to import isotopes than to keep FFTF running."

Another Hanford scientist, Dave Jones, noted that former President and Mrs. Bush both had to receive Canadian isotopes to treat their thyroid conditions.

"It's unbelievable that the president of the United States needed health care that had to be imported from Canada," Jones said.

Energy Secretary Hazel O'Leary has acknowledged the importance of the medical isotopes.

"We are committed at the Department of Energy to be producers of (medical) isotopes," O'Leary said June 16 while in Richland for the Hanford Summit II. "We have shortly to determine where that should be."

But the day before, Owen Lowe, head of the DOE's isotope production and distribution office, ruled out restarting Hanford facility in order to produce the isotopes, leaving Hanford out of the solution.

Robert Schenter, a Westinghouse Hanford Co. scientist who is one of the nation's leading experts in medical isotopes, said that some isotopes can only be produced at a facility like the FFTF.

'The fact that the FFTF is the only fast reactor limits us on our capabilities," Schenter said. "There's still a lot of unanswered questions and until we answer those questions, it's like an insurance policy (to keep the facility running). It's such an important issue, curing cancer, and we don't want to put away any options that could be very important in the future."