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By MELISSA HEALY Los Angeles Times

WASHINGTON — They feared the threat of atomic war, of hostile superpowers firing nuclear missiles over the horizon, forever changing the lives of innocent civilians. But they never expected the radiation to come from their own government. For the Inupiat Eskimos of northyest Alaska, it came from the caribou, which got it from the lichen, which absorbed it from the radioac-The debris scattered across the tundra by scientists. For a group of cancer patients in Cincinnati — mostly poor, mostly black — it came in the form of "treatments" admin-Tstered by an eminent researcher in

radiation. For children at the Fernald School for the Mentally Retarded, it came along with breakfast their Gereal, served up researchers Бy from the Massachusetts Institute of Technollögy.

Alaska to Boston, one of the Cold War's most chilling legacies is finally com-

ing to light, dragged into the open by the agency that zealously safe-guarded the nation's nuclear secrets for decades. At the direction of Enorgy Secretary Hazel O'Leary, her department has vowed to "come dean" on the human radiation experiments sponsored by the federal government for nearly three decades

Beyond the crudeness of some of the experiments lies another injustice: The subjects were not just human guinea pigs in a series of po-tentially lethal experiments. Many were drawn from the ranks of society's dispossessed, either by virtue of their race, age, income or intelli-'s dispossessed, either by virtue gence.

In a sense, some were victims twice over: Already socially disadantaged, they were used by a gov-Ernment and medical establishment that appeared to value science and prestige and military supremacy more highly than the rights of indi-Uduals on the fringes of society.

The picture that is emerging is the that, as a government scientist familiar with the testing put it in 1950, "has a little of the Buchen-wald touch" — a reference to the

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Nazi concentration camp in which subjects chosen. grotesque experiments were conducted on prisoners.

From 1945 until the mid-1970s ears of concern about the Soviet Union's military intentions - the federal government underwrote a number of experiments that involved exposing humans to highly radioactive substances.

In several experiments, scientists injected toxic plutonium into gravely injured hospital patients. They exposed indigent cancer patients to whole-body radiation 10 times more powerful than that recommended as treatment for leukemia. They dangled prison inmates' testicles in irradiated water and served poor pregnant-women

cocktails con-taining radioactive iron filings. And all of the research was nanced with tax dollars.

As the government * and the scientific com-munity scour files for evi-dence of such experiments, they are con-

fronting ethical issues as old as the Hippocratic oath and as recent as 1947 Nuremberg convention, the which articulated international standards of informed consent.

So far, O'Leary has discussed de-tails of only one of the experiments. Others have come to light as a result of congressional hearings or in-dependent investigations. Altogeth-er, information involving more than 30 experiments has been disclosed.

Of those cases for which specific information is available, roughly a dozen involve subjects drawn from the ranks of the disadvantaged.

Ruth Faden, a medical ethicist at Baltimore's Johns Hopkins University who will head the review panel created by O'Leary, said "it would not be surprising" if the full body of experiments were to show a significant pattern of abuse of vulnerable and dispossessed people.

In fairness, most of the experi-ments were conducted at a time when far less was known about the long-term hazards of radiation exposure, and they are being judged by far more sophisticated standards than were available to scientists at the time. Even so, the revelations raise disturbing questions about the

Did the researchers understand that some of their experiments might be ethically questionable? Some of the principals have defended the studies as reasonable and necessary in light of the apparent threat of nuclear warfare. Today's critics say the choice of subjects suggests that scientists knew even then that their research might not stand up to public scrutiny.

Faden said the independent panel will focus on the standards used in choosing subjects and on the extent of informed consent by participants. In examining those issues, Faden said, members will consider whether Cold War anxiety — the sense of military urgency that clearly prompted support for many studie, is a valid excuse for any abuse