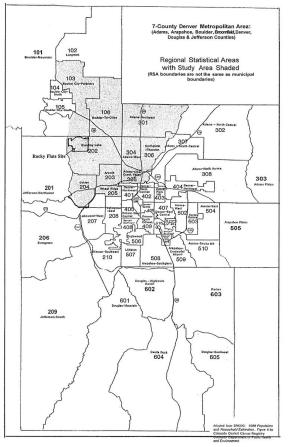
## Health Risk of Living Downwind of Rocky Flats By LeRoy Moore, PhD, January 2018

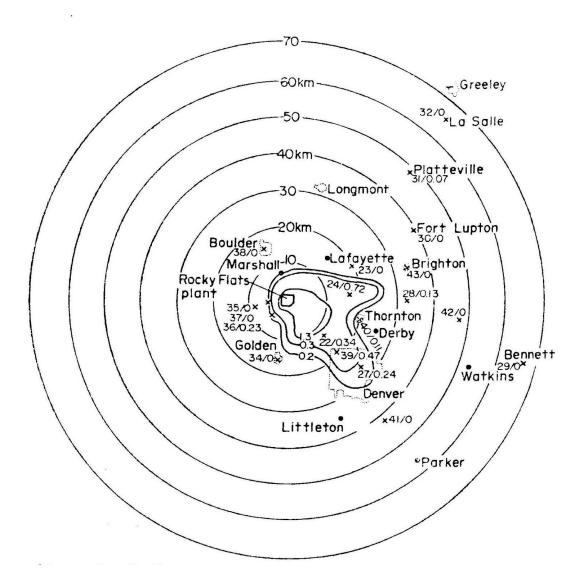
One of the most valuable of the groups working on issues related to the now-closed Rocky Flats Nuclear Weapons Plant is the Rocky Flats Downwinders. With the assistance of Prof. Carol Jensen of the Metro State University and Prof. Bonnie Kite of the U. of Denver, they are in the process of collecting data on people with health problems that may have been caused by toxins released from Rocky Flats into areas downwind of the site. They have found an abnormally high level of thyroid cancer and "rare cancers" (those normally only affecting less than 15 of 100,000 people).

In a November 21, 2016, letter, Co-Founder Nicholas Hansen on behalf of the Downwinders demanded that the Colorado Department of Public Health and Environment (CDPHE) undertake a comprehensive study of the Colorado Central Cancer Registry from 1980 to date "to determine whether a higher rate of thyroid cancer exists in residents living downwind of Rocky Flats versus the general population." They also demanded that the new study include an examination of "rare cancers."

A few days later CDPHE published a new study with the following map, with shading for the study area.



The CDPHE map greatly misrepresents the area of plutonium contamination and thus possible cancer. In 1970 P. W. Krey of the Atomic Energy Commission collected samples throughout the Denver Metro Area to see where plutonium released from Rocky Flats had been deposited. He produced this map, published in Krey, "Remote plutonium contamination and total inventories from Rocky Flats," *Health Physics*, 1976, Vol. 10, pp. 209-214



Note the contrast between where he found contamination and the CDPHE study area. The CDPHE study includes large areas that were not contaminated and excludes areas that were contaminated (such as most of Denver and suburbs NW of the city). The CDPHE study greatly diminishes Rocky Flats cancer incidence by what it includes – data from non-contaminated regions – and excludes – data from contaminated areas. For the full study, go on line to CDPHE Rocky Flats cancer study.

A study of cancer incidence in 1969-70 in areas contaminated with plutonium released from Rocky Flats done by Carl Johnson, MD, then Director of the Jefferson County Health Department, is far more convincing than the CDPHE study. Here is the map from Johnson, "Cancer Incidence in an Area Contaminated with Radionuclides Near a Nuclear Installation," *AMBIO*, vol. 10, no. 4, October 1981, p. 177.



Johnson collected samples in the area shown by Krey to be contaminated, then divided the whole contaminated region into three areas and showed cancer incidence for each area. Area I, nearest Rocky Flats, had 16% more cancer than the non-contaminated Area IV. Area II, extending into the heart of Denver, had 10% more cancer than Area IV. Area III, reaching across most of Denver, had 6% more cancer than Area IV.

Because of his findings about Rocky Flats, he was dismissed from his position of Director of the Jefferson County Health Department. The Colorado Department of Health dismissed and disregarded Johnson's work. His remarkable work is described in my "Democracy and Pubic Health at Rocky Flats," on line at http://media.wix.com/ugd/cff93e\_5d3b6b6a12204505a3bc0fd2e2f504eb.pdf