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FACTLINE HOOKER

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Public Relations
M.P.O. Box 728
Niagara Falls, NY 17302
(716) 278-7145 or
(716) 278-7007

HOOKER CHEMICAL

NO DEMONSTRATED HEALTH EFFECTS FROM LOVE CANAL CHEMICALS, SAYS MEDICAL REVIEW STUDY

Highlights of a special blue ribbon physician's panel review of the Love Canal medical studies are presented in this FACTLINE.

On June 4, 1980, New York Governor Hugh L. Carey appointed a special panel of distinguished physicians, chaired by Lewis Thomas, M.D., Chancellor of Memorial Sloan-Kettering Cancer Center, to "determine whether previous studies validly demonstrated acute chronic or long term health effects from exposure to chemical wastes buried at Love Canal." On October 10, 1980 the Panel issued its report and Dr. Thomas stated:

"As a result of this review, the Panel has concluded that there has been no demonstration of acute health effects linked to exposure to hazardous wastes at the Love Canal site. The Panel has also concluded that chronic effects of hazardous waste exposure at Love Canal have neither been established or ruled out yet, in a scientifically rigorous manner. The studies conducted in the past two years have been inconclusive in demonstrating long term health effects due to hazardous waste exposure."

The Panel report said:

"... the publication of studies on health effects and subsequent criticisms of these studies in the media have created more uncertainty than understanding on potential health problems for both the public and government officials... The inadequate coordination of study designs and procedures to insure meaningful findings concerning health effects has exacerbated the problems faced by decision makers in responding to this situation."

Following are highlights of the report:

"Love Canal—Public Health Time Bomb"

In September 1978, the New York Health Department issued a booklet entitled, "Love Canal—Public Health Time Bomb," which described the Love Canal situation as an "environmental nightmare" capable of causing "profound and devastating effects" constituting a condition of "great and imminent peril."

The Panel concluded that it:

"... recognizes that there was a reason for the State Health Department's initial announcement of 'Public Health Time Bomb,' but not a good enough reason. There ought to be a better mechanism for convincing the Federal government that a certifiable disaster area exists, in order to obtain Federal funds, than to arouse such fears of imminent peril as swept through the Love Canal area in this case."

The report continued:

"... The clear absence of acute damage to the Love Canal residents does not preclude a degree, perhaps, of damage over the very long term—but even here no working group can speak with that certainty which has characterized various pronouncements about this situation and has directly increased the intense anxiety of the Love Canal population."

The Panel went on to recommend that either the Center for Disease Control or the National Institute of Environmental Health and Sciences be assigned the responsibility for future federal involvement in health studies.

Governor Carey's Panel appointees represented varied backgrounds in the medical sciences.

New York Governor's Panel To Review Scientific Studies And The Development Of Public Policy On Problems Resulting From Hazardous Wastes:

Lewis Thomas, M.D., Chancellor Chairman
Memorial Sloan-Kettering Cancer Center

Saul J. Farber, M.D., Dean Secretary
School of Medicine
New York University Medical Center

Richard A. Doherty, M.D.
Associate Professor, Pediatrics,
Genetics, Obstetrics and Radiation
Biology/Biophysics
University of Rochester Medical Center

Attallah Kappas, M.D.
Physician-in-Chief
Rockefeller University Hospital

Arthur C. Upton, M.D., Chairman
Department of Environmental Medicine
New York University Medical Center

were primarily aimed at determining whether reproductive abnormalities existed at levels higher than what is considered normal. The Panel commented that:

"... The investigators... thought there might be some increase in miscarriages and infants with low birth weight, but the data cannot be taken as more than suggestive. No cases of chloracne were found, and there appeared to be no excess of cases of cancer, asthma, epilepsy, liver disease or hematologic abnormalities... blood specimens were obtained at 12 clinics held in the area, with essentially negative results... 5,000 soil samples from 700 houses were taken for chemical analysis, with results (still incomplete) similar to earlier soil studies in the area. A radioactivity survey was completed in September 1978 with essentially negative results."

Future Health Studies

The Panel warned that these future examinations, if undertaken outside a carefully designed research protocol, could contribute to the clinical and epidemiological questions which must be addressed. The Panel felt that the studies should continue, but all of it should have the benefit of external review by expert scientists in the field involved.

Recommendations

After its indepth review, the Panel concluded that the Love Canal situation:

"... has now become a genuine emergency for psychological and socioeconomic reasons, as well as for reasons of public health. The Panel believes that there is a great need at the present time for new administrative mechanisms to be set in place by the State for centralizing and coordinating the planning of all scientific activities relating to Love Canal... Much of the anxiety caused for the Love Canal residents might well have been averted if a *single* Federal-State group had evolved early in the history of this situation and if public pronouncements were made only by this group and limited to the exactitudes permitted by the current state of scientific knowledge... The scientific evidence, incomplete though it is, reveals no state of population damage justifying the terms 'imminent peril' and 'profound and devastating effects'."

Lack of Coordinated Effort

After a lengthy review of how the Love Canal situation was handled by the various governmental agencies, the Panel members concluded that:

"... The record indicates just as clearly that an articulated and coordinated Federal and State approach was not achieved and has not been achieved to date... There did not emerge at any point in the past two years anything like a master plan for assembling the kinds of information required for analyzing and comprehending the problem... because of this ambiguity, the people most directly affected by the conditions at Love Canal have been subjected to more than two years of the most intense anxiety and fear. In the absence of clear-cut, authoritative answers, many of the residents have come to believe that their health is in fact irreversibly damaged, that they are at future risk of cancer, congenital malformations in their offspring, and an increased incidence of miscarriages and abortions."

No Demonstrated Health Effects

The Panel reviewed the several health studies and concluded that they did not establish any health hazard from exposure from the chemicals in the Love Canal.

"It is clear enough from the available data that no acute cases of intoxication by chemical pollutants have been observed within any part of the Love Canal community, 'wet' or 'dry.' That is, no clusters of cases of acute liver disease, or kidney disease, or pulmonary manifestations, or hemolytic anemia or agranulocytosis, and certainly no peripheral or central nervous system syndromes. Whatever else may be going on, there has not been a sufficient concentration of toxic material to produce overt illness attributable to poisoning.

"This was clear enough from the outset."

EPA Chromosome Study

On May 17, 1980, the Environmental Protection Agency (EPA) held a press conference to release the results of a preliminary genetic study showing alleged chromosomal damage in 11 of 36 Love Canal residents tested.

The Governor's special Panel in commenting on this study stated that:

“...The design, implementation and release of the EPA chromosome study has not only damaged the credibility of science but exacerbated any future attempts to determine whether and to what degree, the health of Love Canal area residents has been affected . . .” and “. . . In retrospect, this study represents a paradigm of administrative ineptitude, with all the defects to be expected when one governmental agency undertakes work in a highly sensitive area without knowledge, consultation or prior review by another agency with heavy responsibilities for the same problem.”

The Panel also pointed out that:

“... a certain number of abnormalities are seen as background in populations of entirely normal people. The test may be a useful method for surveying populations, but it is of questionable significance when applied to individuals or small groups. It is without value unless the subjects being tested are matched by a control group of similar people. (Note: There was no control group used in the EPA study.)

“...The Biogenetics report was made public soon after being submitted to EPA, and received the widest possible coverage in the press and on television. The public was given the strong impression that the Love Canal pollution was endangering the survival of all contacts and their offspring.”

The Panel agreed with those who had criticized the EPA study on technical grounds and went on to say that:

“... such a poorly designed investigation as this one should not have been launched in the first place. With so much at stake for the residents involved, to have set up experiments that lead to public conclusions of such magnitude, without prior review of the protocol by qualified uninvolved peer scientists, and without any after-the-fact, independent review by competent scientists before release of the results, was a disservice to the citizens most intimately concerned and, as well, to the public at large. The damage done by this EPA effort is perhaps beyond mending; many of the Love Canal residents have by now become so distrustful of governmental agencies and their scientific reliability that they are unwilling to believe anything except the worst of news about themselves.”

The Panel also said:

“...The Environmental Protection Agency has not demonstrated the capacity to design and implement health effects studies in a scientifically rigorous manner.”

Nerve-Conduction Study

A study of a small number of Love Canal residents was undertaken in the spring of 1980 by Dr. Steven Barron, a neurologist at the State University in Buffalo. The Panel, after reviewing Dr. Barron's report, concluded:

“...The results of this study were essentially negative. No statistically significant difference was detected between the conduction velocity in 35 Love Canal residents and a matched control group of 20 residents of other areas . . . the conduction study would need to be repeated in a much larger group of residents and under highly controlled circumstances before any serious conclusions can be reached.”

Dr. Paigen's Epidemiological Study

Beverly Paigen, Ph.D., has been a consultant for the Love Canal Homeowners Association since early 1978 and presented an extensive report on the alleged health problems of Love Canal residents in testimony before the House Subcommittee on Oversight and Investigations. The Panel, after reviewing her report, stated that the report:

“... falls far short of the mark as an exercise in epidemiology. She (Dr. Paigen) believes fervently that her observations prove the existence of multiple disease states directly attributable to chemical pollution, but her data cannot be taken as scientific evidence for her conclusions. The study is based largely on anecdotal information provided by questionnaires submitted to a narrowly selected group of residents. There are no adequate control groups, the illnesses cited as caused by chemical pollution were not medically validated . . . The Panel finds the Paigen report literally impossible to interpret. It cannot be taken seriously as a piece of sound epidemiologic research, but it does have the impact of polemic.”

New York State Health Department Studies

Epidemiological investigations of the residents of the Love Canal area were begun in June 1978 and