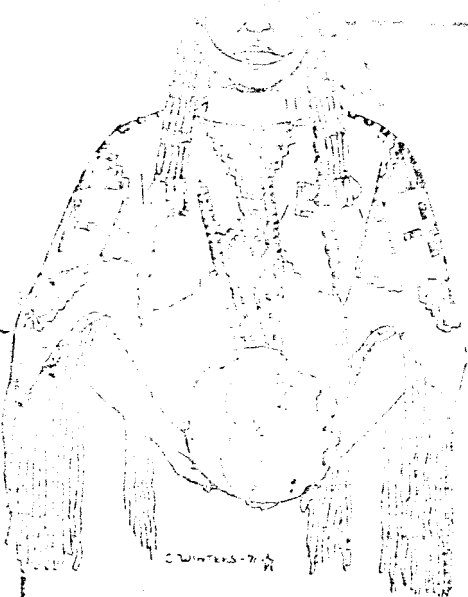


# Women of All Red Nations



REPORT

TO

MR. STANLEY LOOKING ELK, TRIBAL PRESIDENT,  
THE OGLALA SIOUX TRIBAL COUNCIL,

THE TRIBAL HEALTH BOARD,

AND THE

PEOPLE OF THE PINE RIDGE RESERVATION

FROM

WOMEN OF ALL RED NATIONS

PINE RIDGE HEALTH INVESTIGATION

May 1, 1980

... a nation is not conquered until the hearts of its women  
are on the ground ...

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## BACKGROUND

The WARN health investigation was not started at the request of the Tribe or any official agency, but grew out of the concerns of grassroots people of the Pine Ridge Reservation. During the past years, an increase in deaths by cancer has been noted, a strange development for a Tribe whose elders report no cancer in earlier generations. Also noted was a large number of birth defects and complications of pregnancy.

In December of 1979, the situation came to a head when 38% of the pregnant women (14 women) on the Reservation miscarried in one month. Medical personnel were concerned.

The Cheyenne River, which flows through the Reservation, runs from the Angostora Reservoir. On June 11, 1962, an accident at an uranium mill in Edgemont, S. D. spilled 200 tons of radioactive mill tailings into a creek and downstream to this reservoir. Reservation residents question what effect this has had on their water supply.

Also in question is the purity of the Arikaree and Ogalala aquifers which provide ground water for the Pine Ridge Reservation. These aquifers may be affected by exploratory drilling being done by energy corporations outside the reservation. This drilling may cause surface runoff, well dewatering or draining, and emission of radon, a major uranium by-product which dissolves easily in water but is tasteless, odorless and invisible. This could result in water contamination of several different kinds.

The Gunnery Range area of the reservation retained by the U.S. Air Force is rumored to be the site of nuclear and chemical waste disposal, another potential source of contamination.

Also at issue is the use of chemicals on the reservation and the impact that these substances will leave on reservation water. Control of grasshoppers and prairie dogs is an issue which must be resolved on the reservation but one where great differences of opinion exist as to what means of control should be used. The effect that chemicals presently used will have is not known.

WARN sought some answers to these questions. As a first step, the health study investigation group was created.

WORK COMPLETED BY THE HEALTH STUDY GROUP

1. As a first step, interviews of families on Pine Ridge and the Cheyenne River Reservation were completed to compile a comparative study of health problems on these reservations. Pine Ridge Hospital staff were interviewed about their concerns.
2. Water tests were taken at Pine Ridge and Cheyenne River and submitted to a Rapid City biochemist for analysis.
3. A press conference was held on March 4, 1980 at which WARN demanded a comprehensive health study and alternative water supply for the reservation.
4. WARN's attorney, Jacqueline Huber made Freedom of Information Act requests to the Bureau of Indian Affairs - Washington, Aberdeen, Pine Ridge offices, Environmental Protection Agency - Denver, Washington, Indian Health Service - Pine Ridge, Aberdeen, Rockville, Maryland, United States Geological Survey - Washington, Rapid City, and the United States Air Force.
5. Requests for information were also made to the South Dakota Department of Agriculture, Water and Natural Resources, and Health. Several divisions in each department replied including the Department of Health's Division of Air and Solid Waste, and Division of Communicable Diseases.
6. Follow-up visits were made to these offices:
  - BIA - Pine Ridge  
Aberdeen
  - IHS - Aberdeen  
Martin
  - USGS - Rapid City
  - State Department of Agriculture - Pierre

State Department of Health -  
Communicable Diseases - Pierre  
Air and Solid Waste - Pierre

State Department of Water and Natural Resources - Pierre

Department of Energy - Washington

Telephone interviews were held with:

Environmental Protection Agency - Denver  
U.S. Air Force - Alabama Research Center

7. Telegrams demanding a complete epidemiological health survey and alternative water supplies were sent 3/30/80 and 4/1/80 to:

EPA - Washington DC  
EPA - Denver  
US General Accounting Office  
BIA - Washington DC  
Mr. Cecil Andrus, Department of the Interior, Washington DC  
USGS - Reston Virginia

8. The following Tribal and community Health employees were interviewed:

Newton Cummings-Council Representative  
Elijah Whirlwind Horse-past president  
Geraldine Janis-CHR director  
OST Health Board  
OST Health Planning Program  
Senior Citizens  
Cornell Conroy- OST Natural Resources  
OST Land Office  
OST Contracts Office  
Stanley Looking Elk -OST president  
Donavan Shangreaux- OST Rangers  
Pete Cummings- OST Sanitation & Management  
Bernadine Blue Bird- OST Secretary

9. Statistics were compiled.

10. Reports were made to:

District Council Meeting- Martin- March 6, 1980  
Missouri River Basin Tribes- March 12, 1980  
Tribal Council- March 25, 1980  
Treaty Council- April 12, 1980

11. Fact sheets were prepared and distributed on the Reservation.

FINDINGS

POOR STATISTICS  
LACK OF INFORMATION

THERE IS AN ALARMING LACK OF INFORMATION AMONG THE PEOPLE, TRIBAL GOVERNMENT AND RESPONSIBLE GOVERNMENT AGENCIES CONCERNING HEALTH AND PHYSICAL ENVIRONMENT on Pine Ridge. Despite comprehensive interviews and research on the reservation and at government offices in South Dakota, no answers to the people's questions concerning these health problems are now available. Clearly, AN INTENSIVE STUDY IS NEEDED.

Government agencies show no incentive to protect the health and welfare of Pine Ridge residents except that required by federal statutes. State agencies correctly claim lack of jurisdiction and responsibility over Native matters on Pine Ridge. The Environmental Protection Agency, the federal agency with the responsibility of protecting air and water quality on the reservation, had done only a few water tests prior to the release of the WARN Health Study and had done nothing to research the impact of radioactive contamination and other issues of concern to residents so close to the Black Hills mining area. The Indian Health Service had compiled statistics of unusual rates of bone cancer and miscarriages but had not even notified the Tribe of its findings. The Bureau of Indian Affairs, aware of findings of radioactive water, has also failed to take action or even notify the Tribe.

MEDICAL STATISTICS AVAILABLE FROM THE BUREAU OF INDIAN AFFAIRS, COMMUNITY HEALTH REPRESENTATIVES AND THE INDIAN HEALTH SERVICE ARE CONFUSING AND CONTRADICTORY. The agencies themselves

seem unsure of how to read their own data. Data is limited; most statistics are incomplete as they are based only on inpatient rates at Indian Health Service clinics, failing to include families who do not seek medical care, are treated on an outpatient basis, or seek help elsewhere. Information that is available is misleading in that rates using high population figures are used with the result of lowering the rate of miscarriage and other disorders. Miscarriage statistics are mixed with voluntary abortion rates.<sup>1</sup> BETTER STATISTICS NEED TO BE COMPILED.

#### SERIOUS MEDICAL CONDITIONS

INFORMATION AVAILABLE CONFIRMS SERIOUS MEDICAL PROBLEMS, UNUSUALLY HIGH RATES OF BONE CANCER, MISCARRIAGES, AND INFANT MORTALITY ON THE RESERVATION. Despite the lack of cancer historically among the Lakota people, it is a reality today. Dr. E.S. Rabeau, Acting Director of the Aberdeen Area Indian Health Service, admits the high rate of bone cancer. Indian Health Service's own statistics confirm a rate of miscarriage on Pine Ridge close to 7 times the national average.<sup>2</sup> Rates of pregnancy complication on Pine Ridge are higher than those in the Aberdeen service area and have risen steadily since 1974.<sup>3</sup>

Although no statistics are available, interviews on the reservation show a high frequency of birth defects and leukemia. Statistics show cancer to be the number 3 killer. Birth defects rank 14th. Infant mortality is 6th. Unknown causes ranks 7th.<sup>4</sup>

Between 1971 and 1979, there were 314 babies reported to be born with birth defects on Pine Ridge.<sup>5</sup> This is a high number for a reservation with a population of 12,500 Indians. Infant mortality rates on Pine Ridge are more than twice the national average.<sup>6</sup>

expressed concern over the situation. Dr. Jeffery Olenick has reported unusual excessive bleeding after miscarriages of Pine Ridge women, and has called for a comprehensive health study.<sup>7</sup> Dr. Ronald Forgey requested radioactivity tests two months before the WARN Health Study was released. Ann Corral, Director of Field Health Nursery cited high cancer and diabetes rates among the elderly, high rates of cancer in reproductive organs and large numbers of babies with cleft palate.<sup>8</sup>

Long term major health radioactivity problems on Pine Ridge such as diabetes and heart disease have been shown to be disorders symptomatic of Low-level radiation in the environment. In the recent past several scientific studies have provided factual evidence that continued exposure to Low-level radiation results in tumors, anemia, depression, atherosclerosis, diabetes, and heart disease, in addition to weakening the body's ability to resist diseases, speeding up the natural aging process, and passing on the later generations such abnormalities as clubfoot, cleft palate, and respiratory problems.

" The risk of acceleration of the natural aging process, causing gradual breakdown of the body's ability to cope with infection and stress, is very large, about 100%...radiation exposure generally undermines health and can be manifested in benign tumors, anemia, immunodepression, atherosclerosis, diabetes, heart disease and other maladies. The general impression conveyed by public information is that the risk of death from cancer is low, with the implication that there is no other risk.<sup>9</sup> "

#### RADIOACTIVITY

TESTS DONE BY THE INDIAN HEALTH SERVICE AND THE ENVIRONMENTAL PROTECTION AGENCY CONFIRM W.A.R.N. FINDINGS OF HIGH RADIOACTIVITY LEVELS IN THE WATER ON PINE RIDGE. Test results done by Indian Health Service at Environmental Protection Agency's laboratories show levels of gross alpha radioactivity at Oglala and Manderson

of 25 and 19 pico curies per liter of water.<sup>10</sup> The maximum federal safety level, admitted to be too high by author Joe Wagoner of Public Health Service is 15. (The level at Evergreen is 15, and past tests show Red Shirt at a level of 19.)<sup>11</sup> The cause of these gross alpha rates is unknown. More recent tests show a high level of uranium in the water and traces of strontium 90 as possible causes.<sup>12</sup>

"...the most serious of all radiation exposures are not brief medical x-ray diagnostic isotope tests for the adult, but prolonged environmental exposures to fallout accumulating in the body from nuclear bomb-testing and releases from nuclear facilities acting slowly on the infant in utero, the young child and the oldest individuals in our society."<sup>13</sup>

" One of the most frightening effects on any population from radiation is genetic... Genetic damage has been shown to be particularly common for radiation at low-levels and, considering the high incidence of exposure among Native Americans, a rise can be expected in club foot, subluxated hips, mental retardation, diabetes, heart disease, rheumatic fever, and sterility, which might be manifested as late as ten generations from radiation exposure. When the relatively small size of the Native population and the other pressures on the Native Americans are added to these genetic defect, the overall result is slow genocide."<sup>14</sup>

#### POOR WELL MAINTENANCE

WELLS ON PINE RIDGE ARE POORLY MONITORED AND MAY BE ALLOWING CONTAMINATION OF GROUND DRINKING WATER SOURCES. The Indian Health Service Environmental Health Division claims no responsibility for well maintenance on Pine Ridge.<sup>15</sup> Although that Department installs the wells and provides their designs for community wells, they hold the Tribe responsible for maintenance. The Tribe has little money to monitor well quality and as a result, the people suffer.

Of particular concern are the hundreds of individual wells on the reservation which are not maintained, in many cases are poorly capped, and which, as a result, are allowing surface sewage and chemical to contaminate the ground water shared by all wells on the reservation.<sup>16</sup> This surface contamination may be the reason for several wells showing dangerous nitrate levels in recent tests.<sup>17</sup>

Investigations have also revealed problems with several community wells systems - systems which provide water for entire towns. The Red Shirt Table well, a shallow 40 to 50 foot well, utilizes a seepage system which may be allowing radioactive contamination from the Cheyenne River which lies only a few hundred yards away. Indian Health Service engineers have admitted to this as a real possibility.<sup>18</sup> The Cheyenne River and its sources were contaminated by radioactive mill tailings in 1962.<sup>19</sup>

Bacteria tests received from the State Department of Water and Natural Resources have revealed dangerous bacteria contamination in several public housing system wells.<sup>20</sup>

AS ALL WELLS ON PINE RIDGE SHARE THE SAME WATER SOURCE - THE ARIKAREE AND OGLALA AQUIFERS - CONTAMINATION OF ONE WELL MAY MEAN CONTAMINATION OF THE ENTIRE GROUND DRINKING WATER SOURCE FOR ALL OF PINE RIDGE.<sup>21</sup>

It also should be noted that the sewage systems used on Pine Ridge are admitted by Indian Health Service to be the cheapest available.<sup>21</sup> Review of those systems may be necessary. The sewage system in the town of Pine Ridge has backed up in the last several years, for example, pushing sewage into area water sources.

THE ACCUMULATION OF HERBICIDE, PESTICIDE, AND INSECTICIDE RESIDUES POSES A GREAT DANGER TO THE PEOPLE OF PINE RIDGE RESERVATION. These poisons cannot help but kill unintended wildlife. Some bird and animals will be killed directly by the chemicals. Others will die after eating poisoned insects and wildlife. Eating contaminated wild game could offset the health and life of human beings.

Furthermore, these chemicals wash into the ground water and streams, killing fish and polluting the water supply.<sup>25</sup>

Last summer the South Dakota Department of Agriculture was successful in lifting a ban on toxaphene, over-riding the testimony of the federal government's own experts. There have been rumors and denial of toxaphene use on Pine Ridge toxaphene can generate a violent death by brain hemorrhage.<sup>26</sup> Smaller amounts brings on cancer of the liver.<sup>27</sup> New research indicates that small doses of toxaphene can create genetic mutation.<sup>28</sup> Even though the rumors of toxaphene use on Pine Ridge may be confounded its use on adjacent lands and water poses a threat to the Lakota people.<sup>29</sup>

There has been much recent publicity regarding Agent Orange, a defoliant used in the Vietnam War: Agent Orange has now been proven responsible for a variety of ailments to military veterans. These include impotency, respiratory and nerve disorders, and cancer.<sup>30</sup>

Dioxin is the active ingredient of Agent Orange. Dioxin is present in 2.4.D and 2.4.5.T.<sup>31</sup> 2.4.D has recently been used

by crop-dusting planes based in nearby Martin, South Dakota.<sup>32</sup> It seems probable that it has been sprayed on reservation land.

Other chemicals also pose threats to Pine Ridge. The U.S. Fish and Wildlife Service Area Office has gone on record with the following statement:

"It is our opinion that using '1080' on the Pine Ridge Reservation might be a reasonable consideration in order to get initial control of the prairie dog problem there."<sup>33</sup>

'1080' is an effective poison- too effective. It was banned nearly a decade ago by former President Richard Nixon. The ban was re-iterated by President Carter and Secretary of the Interior Cecil Andrus as recently as November, 1979.<sup>34</sup> There is great potential for misuse in the handling of this poison: an antidote does not exist.<sup>35</sup> It accumulates in the body until a toxic level brings on-death.<sup>36</sup>

Zinc phosphide, the chemical currently used for prairie dog control, is toxic to wild game such as grouse and pheasants. It is also rumored to be inappropriately sprayed on area streams.<sup>37</sup>

24D, toxaphene, and '1080' are old chemicals that have been researched for years. Many new poisons are legal only because their side effects have not been documented sufficiently. Several of these have been suggested for use on Pine Ridge.<sup>38</sup> For example, a common grasshopper spray, malathion, has been linked to damage in kidneys and male reproductive organs of wild turkeys. It is also linked to blood disorders.<sup>39</sup> The effect on human beings can only be speculated upon. Parathion is a similar poison.

A popular grasshopper spray, Sevin, has been shown to affect animal life by lowering resistance to disease.<sup>41</sup> Faradon has

been heavily advertised this year. Its effect on waterfowl has varied according to species.<sup>42</sup>

All of these chemicals interfere with people's ability to lead a healthy life. There are non-chemical means of controlling grasshoppers, prairie dogs, and weeds. There are funds and jobs available for research and implementation of these alternatives.<sup>43</sup>

The retained Gunnery Range area is believed by many residents to be a site of nuclear waste disposal. Locals report helicopters carrying in large cannisters. Air Force documents refer to chemical wastes in the Area.<sup>44</sup>

#### POOR MEDIA COVERAGE

Since the release of the initial WARN study, press coverage has been negative and unsympathetic. Coverage is geared to government positions and disclaimers. A classic example was the Rapid City Journal's headline article reporting from McGovern's office that government water tests had found no radioactivity on Pine Ridge. IHS's statements to this effect were taken at face value while any statements made by WARN had been discredited. The government's tests had in fact shown gross alpha levels in two communities above federal safety levels. A small correction carrying the McGovern office statement that they believed they had been misled by IHS was carried on a back page of the Journal.

WARN has not even attempted to respond or compete with this negative press coverage. The media war has been a losing one for Indian people historically. We ask that the Oglala people listen to their own investigators, ask questions, and wait to make decisions on these issues until a thorough and independent study has been completed.

RECOMMENDATION

Women of All Red Nations urges the Tribal President - Mr. Stanley Looking Elk, the members of the Tribal Council, Tribal Health Board members, and Community Health representatives to dedicate themselves to these issues of survival and to act to protect the people of Pine Ridge from these environmental hazards as the primary thrust of their work.

We recommend the following plan of action by the Tribal government:

1. Support efforts to obtain funding for an independent health study of medical problems on Pine Ridge and potential causes.
2. Take necessary steps to provide pure, uncontaminated water for all communities on the reservation.
3. Establish an effective Tribal program to monitor and maintain reservation wells and sewage systems.
4. Abolish use of chemicals for grasshopper and prairie dog control on the Reservation.
5. Take all necessary steps to obtain Class I air status for the Pine Ridge Reservation.
6. Seek a moratorium on any further action on the Black Hills Claim by all federal agencies, i.e. the Claims Commission, Court of Claims, etc.
7. Enforce all treaty rights against further energy development in the Black Hills treaty area.
8. Take necessary steps to obtain the return of the Air Force retained area to the Oglala people.

REPORT SUBMITTED BY:

Lorelei Means

Lorelei Means  
Women of All Red Nations

Jacqueline Huber

Jacqueline Huber, Attorney-at-Law

## FOOTNOTES

1. Reference to "Ratio of Abortions to Deliveries for Indian Health Service and Contract General Hospitals, and U.S. Short-Stay Hospitals", Indian Health Service- March 7, 1980. Appendix Article A. See also Appendix Article B.
2. Supra.
3. "Number of Discharges and Rates for Selected Diagnosis in Indian Health Service and Contract General Hospitals, Aberdeen Area and Pine Ridge Service Unit, U.S. Short-Stay Hospitals", Indian Health Service, March 7, 1980. Appendix Article C.
4. "For Your Information", Statistics compiled by Bob Yellowbird, Oglala Sioux Tribal Water Quality Representative from IHS records. Appendix Article D.
5. Reference to Information submitted to Bob Yellowbird by Mr. Terry Pourier, Administrator, Pine Ridge Hospital.
6. "IHS Aberdeen Area Maternal and Child Health Report", May 22, 1979, Appendix Article E.
7. Letter from Dr. Jeffrey Olenick, February 28, 1980. Appendix Article F.
8. Reference to statements made to Jacqueline Huber on April 2, 1980
9. Quote from Dr. Rosalie Bertell, Researcher, Ministry of Concern for Public Health.
10. Letter from Perry Brackett, Director, Office of Environmental Health, April 17, 1980, with attached laboratory results. Appendix Article G.
11. Report of Analysis of Water Samples - J. Haworth Jonte, Biochemist. February 9, 1980. Appendix Article H.
12. Ibid. Brackett letter, April 17, 1980.
13. Congressional Environmental Study Conference, Environmental Policy Institute, and Atomic Industrial Forum, Radiation Standards and Public Health: Proceedings of a Second Congressional Seminar on Low-Level Ionizing Radiation, Congressional Environmental Study Conference, Environmental Policy Institute, and Atomic Industrial Forum: Washington, D.C. 1978, P. 178.
14. The Effects of Low-Level Ionizing Radiation on Native Americans, Liliias Jones, Researcher, Black Hills Alliance, Rapid City, South Dakota. 1979.
15. Position of Mr. Perry Brackett, Director, Office of Environmental Health, as stated to Jacqueline Huber. March 26, 1980.

16. Videotaped conversation with Peter Ireland, IHS engineer, Martin, South Dakota. March, 1980.
17. Summary of Nitrate Tests on Pine Ridge Reservation. Submitted by Geraldine Janis, Community Health Representative, Pine Ridge. March, 1980. Appendix Article I.
18. Ibid. Ireland conversation.
19. Shutdown: Nuclear Power on Trial, The Book Publishing Company, Summertown, Tennessee, 1979. Revised edition.
20. Bacteria tests results received from South Dakota State Department of Water and Natural Resources, April 2, 1980.
21. Conversation with Ireland- Ibid. Also, conversations with Mr. Harvey Case, U.S. Geological Survey, April 28, 1980.
22. Ibid. Ireland conversation.
24. Executive Office of the President. Office of Science and Technology, "Ecological Effects of Pesticides on Non-Target Species", June 1971.
25. Audubon Magazine, February 1980.
26. Walters and Barbour, "Dead Cows: California Toxaphene Caper" Acres, USA. Raytown, Missouri.
27. Morgan, H.K., Game and Fish Commissioner, "The Effects of Toxaphene Poisoned Grasshoppers upon Pheasant Chicks", North Dakota State Game and Fish Department, January 1951.
28. South Dakota State University's Department of Biology and Wildlife, South Dakota Natural Resources Newsletter, Sept. 1979.
29. Terriere Kllgemagi et al., "The Persistence of Toxaphene in Lake Water and its Uptake by Aquatic Plants and Animals".
30. Newsletters from Environmental and Veteran's groups; Research and Documentation Library, Black Hills Alliance, Rapid City.
31. Supra.
32. Conversation with Helen Anderson, farmer, Martin, S.D. 4/1/80.
33. U.S. Fish and Wildlife Service, Pierre Area Office Meeting Notes, January, 1980.
34. Andrus, Cecil, Secretary of the Interior, Washington, D.C. "Memorandum to Asst. Secretary of Fish and Wildlife and Parks", November 8, 1979.

35. Atzert, Stephen P. A Review of Sodium Monofluoroacetate (Compound 1080) Its Properties, Toxicology, and Use in Predator and Rodent Control, U.S. Department Of Interior Special Scientific Report - Wildlife # 146, Washington, D.C. 1971.
36. Hegdal, Gatz, et. al. , "Hazards to Wildlife associated with 1080 Baiting", U.S. Fish and Wildlife Service, Denver, 1979.
37. J. Orville Young and John L. Schmidt, "Ruling issued on Wildlife Damage Control Toxicants", Messenger, updated.
38. Conversation with Cornell Conroy, OST, 4/9/1980.
39. Eichelberger, Lichtenberg, "Persistence of Pesticides in River Water". Environmental, Science and Technology, June 5, 1971.
41. Zinkl, Henry, et. al. "Brain Cholinesterase Activities of Birds from Forests Sprayed with Trichlorfon (Dylox) and Carburyl (Sevin-4-Oil)", U.S. Fish and Wildlife Service.
42. Flickinger, King et. al., "Wildlife Hazards from Faradon 3G Application to Rice in Texas", U.S. Fish and Wildlife
43. Ibid., Andrus Memorandum, November 8. 1979.
44. Appendix Article J. Document submitted by U.S. Air Force to Jacqueline Huber, April, 1980.

Ratio of Abortions to Deliveries for Indian Health Service and  
Contract General Hospitals, and U.S. Short-Stay Hospitals  
(per 1,000 deliveries)

	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1976</u>	<u>1975</u>	<u>5 yr.* Average</u>
<b>U.S.</b>						
Total	NA	130.7	132.9	141.2	149.8	138.4
Induced	NA	54.9	58.0	64.3	68.5	61.3
Spontaneous	NA	15.7	14.2	16.1	17.3	15.8
Other	NA	60.0	60.6	60.8	63.9	61.3
<b>IHS-All Areas</b>						
Total	125.3	119.3	120.5	130.7	135.9	126.1
Induced	43.9	39.6	43.8	45.6	50.1	44.5
Spontaneous	68.2	72.6	69.9	75.8	70.8	71.4
Other	13.2	7.1	6.8	9.4	15.0	10.2
<b>Aberdeen Area</b>						
Total	118.3	111.0	104.8	120.4	82.3	106.6
Induced	0.7	4.1	3.4	4.2	6.5	3.9
Spontaneous	102.5	102.1	77.6	105.1	47.4	85.7
Other	15.0	4.8	23.8	11.1	28.4	17.0
<b>Pine Ridge</b>						
Total	116.5	93.8	99.4	129.3	111.1	110.0
Induced	-	2.9	3.2	3.2	9.5	3.6
Spontaneous	116.5	90.9	92.9	119.9	79.4	100.4
Other	-	-	3.2	6.3	22.2	6.0

\* U.S. Short-Stay Hospitals: 4 yr. Average

APPENDIX ARTICLE C

NUMBER OF DISCHARGES AND RATES FOR SELECTED DIAGNOSIS IN INDIAN HEALTH SERVICE  
AND CONTRACT GENERAL HOSPITALS, ABERDEEN AREA AND PINE RIDGE SERVICE UNIT,  
U.S. SHORT-STAY HOSPITALS

Rate per 10,000 female population, 15-44

	All Areas		Aberdeen Area		Pine Ridge Service Unit		U.S. Short-Stay Hospitals		
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	
Complications of Pregnancy	1979	2,829	207.5	497	465.0	112	572.6	NA	
	1978	2,742	217.9	513	494.5	100	458.9	447	89.8
	1977	2,713	222.9	437	487.0	92	421.6	454	93.0
	1976	2,472	210.1	458	487.5	89	410.7	421	88.0
1975	2,216	205.1	425	458.9	48	238.3	424	91.4	
Urinary Infection & Toxemias of Pregnancy	1979	1,054	77.3	93	87.0	34	173.8	NA	
	1978	853	67.8	79	76.2	26	119.3	228	45.8
	1977	873	71.7	72	70.6	21	96.2	218	44.7
	1976	750	63.8	76	75.9	21	96.9	215	44.9
1975	723	66.9	78	84.2	26	129.1	188	40.5	

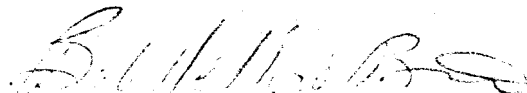
(thousands)

APPENDIX ARTICLE B

This is an example of the inaccuracies of information we have received from different agencies - Indian Health Service Aberdeen and Indian Health Service - Pine Ridge service unit for the same diagnosis in the same time period.

CANCER DIAGNOSED AT PINE RIDGE HOSPITAL FOR FISCAL YEARS  
1975 - 1979.

According to Pine Ridge Hospital, there were 233 cases.  
According to Aberdeen Area IHS, there were 287 cases at  
Pine Ridge Hospital in the same period.

  
Bob Yellowbird  
OST Water Investigator

NUMBER OF DISCHARGES AND RATES FOR SELECTED DIAGNOSIS IN INDIAN HEALTH SERVICE AND CONTRACT GENERAL HOSPITALS, ABERDEEN AREA AND PINE RIDGE SERVICE UNIT, U.S. SHORT-STAY HOSPITALS

Rate per 10,000 female population, 15-44

	All Areas		Aberdeen Area		Pine Ridge Service Unit		U.S. Short-Stay Hospitals		
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	
1979	2,829	207.5	497	465.0	112	572.6	NA	89.8	
1978	2,742	217.9	513	494.5	100	458.9	447	93.0	
1977	2,713	222.9	497	487.0	92	421.6	454	86.0	
1976	2,472	210.1	488	487.5	89	410.7	421	86.0	
1975	2,216	205.1	425	458.9	48	238.3	424	91.4	
Ordinary Infection & Toxemias of Pregnancy									
1979	1,054	77.3	93	87.0	34	173.8	NA	NA	
1978	853	67.8	79	76.2	26	119.3	228	45.8	
1977	873	71.7	72	70.6	21	96.2	218	44.7	
1976	750	63.8	76	75.9	21	96.9	215	44.9	
1975	723	66.9	73	84.2	26	129.1	198	40.5	

(thousands)

OPS/DRC/IHS  
March 7, 1980

APPENDIX ARTICLE D

FOR YOUR INFORMATION

AS OF MARCH 1980

STATISTICS TAKEN FROM IHS-Aberdeen Area Office and Pine Ridge Hosp.

11% of newborns died during FY 1964 to FY 1979

10% of the total deaths at Pine Ridge Hospital are newborns (FY 1964 to FY 1979)

21% of the total deaths at Pine Ridge Hospital were stillbirths (FY 64-79)

62% of the total fetal deaths in Aberdeen Area for FY 1971-FY 1979 were in Pine Ridge

26% of the total Cancer diagnosis in the Aberdeen Area come from Pine Ridge

IN-PATIENT DEATHS AT PINE RIDGE HOSPITAL for FY 1975 - FY 1979

	STILL BIRTHS	NEWBORN	CANCER	ALL OTHERS	TOTAL
FY 1975	6	2	1	19	28
FY 1976	4	1	4	16	25
FY 1977	6	2	3	19	30
FY 1978	5	2	4	21	32
FY 1979	7	3	8	12	30

FY 1975-FY 1979:  
 19.31% of deaths at Pine Ridge STILLBIRTHS  
 6.89% of deaths at Pine Ridge NEWBORNS  
 13.79% of deaths at Pine Ridge CANCER PATIENTS  
 60.00% of deaths at Pine Ridge OTHER CAUSES

2,236 TOTAL DEATHS in Pine Ridge Service Unit area from 1958-1976. Top 14 killers of Indians in this area.

CAUSE OF DEATH	% OF TOTAL DEATHS
1. Heart	21.10%
2. MV Accidents	10.73%
3. Cancer	8.67 %
4. Flu/Pneu.	8.58%
5. Other Accidents	8.40%
6. Infant Mort.	6.26%
7. Unknown causes	5.36%
8. Intestinal	4.96%
9. TB	3.17%
10. Infectious dis.	2.81%
11. Homicide	2.41%
12. Diabetes	2.14%
13. Suicide	1.83%
14. Birth defects	1.11%

DATE: May 22, 1979

REPLY TO: Chief, Maternal and Child Health  
ATTN OF:

SUBJECT: Aberdeen Area MCH Report

TO:

1. Infant Mortality Statistics

Attached is a table of Aberdeen Area Infant Deaths by Service Unit and Major Disease Class - CY 1974-1976. In the three year period there were 177 deaths among 5718 live births for an infant mortality rate of 31 per 1000. The rate by Service Unit ranged from a low of 17.9 at Rapid City Service Unit, South Dakota to a high of 56.6 at the Sac and Fox Service Unit, Tama, Iowa. However, as the latter Service Unit has a small population (699) with three deaths among 53 live births, the rate is not statistically significant. Only one less death would have given a rate of 37.7, which would have been less than the rate of the next highest Service Unit, Rosebud (40.1); Fort Yates (39.8); and Pine Ridge (38.9). The infant mortality rate of 31 for the Aberdeen Area, during the three year period, was about double the U.S., all races rate, during these years ('74 - 16.7; '75 - 16.1; '76 - 15.2). Some of the factors which may relate to the lower rate of infant mortality in Rapid City, as compared to other Service Units are as follows:

- A. Urban Indian population with better access to medical care and higher incomes.
- B. Prenatal care largely by Rapid City obstetricians with delivery in the community hospital.
- C. Pediatric inpatient and outpatient care at the Service Unit by one of the four pediatricians in the Aberdeen Area who is also on the staff of the Community Hospital. For calendar year 1977 a total of 59 infant death certificates has been received, which suggests that the rate when calculated, will not have decreased any. A summary of these cases is also attached with causes of death for the 37 neonatal deaths and 22 postneonatal deaths.

2. Pediatric Services

Outpatient pediatric care is provided at each of the 12 Service Unit Hospitals or Health Centers and Inpatient Pediatric Care in each of the nine hospitals. At present there are four pediatricians and one pediatric nurse practitioner. To a great extent the pediatricians also function as general medical officers.



Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

28 Feb, 1980

Attached is a copy of a computation made by our medical records department detailing the number of spontaneous abortions (miscarriages) for the period Jan 1976 to Jan 1980, as compared with the number of live births recorded during that same period.

The table is to be read as follows:

1) Number of spontaneous abortions are indicated in typed numerals

2) Number of live births are indicated in hand written numerals in parenthesis

For example: For June 1977:

	1976	1977	1978	1979
January	---	-	-	-
⋮				
JUNE	---	1 (23)	-	-
		↑ # sp. abortions	↑ # of babies born alive	

Figures for each year are totalled at the bottom of each column, with percentage of miscarriages (or compared with total births, living + dead) at the very bottom.

It should be noted that these figures are very incomplete, and as such are inaccurate + misleading unless it is understood that these figures represent only those women who were seen at our hospital, who were then admitted, and who later miscarried or gave birth. If, for one reason or another a woman had to be transported to another hospital (a common occurrence), this would not be indicated. Furthermore, as this study was undertaken retrospectively ~~it is~~ totally uncontrolled + comparison with any other statistic, from any other area would be highly unfair + misleading.

In view of these problems, and in view of the potential seriousness of public health problems of this kind, further, more statistically meaningful + more in-depth studies should be undertaken.

Jeffrey Dennis MD  
US Public Health Service Hospital  
Pine Ridge, SD.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

April 17, 1980

ABERDEEN AREA  
INDIAN HEALTH SERVICE  
FEDERAL BUILDING  
ABERDEEN, SOUTH DAKOTA 57401

Our Reference:  
Office of Environmental Health

Ms. Jacqueline Huber  
Attorney at Law  
Oglala Sioux Tribal Legal Services  
Pine Ridge, South Dakota 57770

Dear Ms. Huber:

Per Dr. Emery A. Johnson's letter to you of April 2, 1980, attached is a copy of the laboratory results of the water analyses for radio-nuclide contaminants. This transmittal includes Ra226, Ra228, Uranium, and Strontium 90. Also included are the results of three surface samples taken from the Cheyenne River.

We will continue to provide the Tribe subsequent sample results as they become available.

Sincerely yours,

Perry G. Brackett, P.E.  
Director,  
Office of Environmental Health

Attachments

RESERVATION	SOURCE SAMPLED	Gross Alpha pCi/liter	Counting Error	Ra2225*	Ra228	Uranium Pc/liter	SR90 8 dCi
Pine Ridge	13A Red Shirt Village	3.4	± 3.4	0.1 ± .1	--	--	--
	15A Kyle	6.8	± 4.0	0.1 ± .1	<0.1 ± 0.5	--	--
	17A Manderson	19	± 5.0	<0.1 ± 0.1	<0.1 ± 0.5	5 ± 5	<0.5 ± 0.5
	18A Pine Ridge (well)	13	± 5.0	0.1 ± 0.1	1.0 ± 0.5		<0.5 ± 0.5
	19A Pine Ridge (hospital)	9.5	± 4.7	0.3 ± 0.1	0.4 ± 0.5		
Cheyenne River	21A Oglala (Tribal pumphouse)	25	± 6.0	<0.1 ± 0.1	0.5 ± 0.5	8 ± 8	
	22A Evergreen	15	± 5.0	0.1 ± 0.1	<0.1 ± 0.5	8 ± 8	<0.5 ± 0.5
	4A Blackfoot	4.1	± 2.0				
Standing Rock	7A Cherry Creek	3.8	± 2.0				
	12A Fort Yates	1.1	± 0.5				
	10A Cannonball	0.1	± 0.3				
Pierre District	23A Lower Brule	0.4	± 0.4				
	24A Fort Thompson	7.0	± 4.0	>0.1 ± 0.1	<0.1 ± 0.5		
	1A Blackpipe	10'	± 3.0	0.1 ± 0.1	0.5 ± 0.5		
Rosebud	6A White River (Swift Bear)	6.4	± 2.6	0.1 ± 0.1	0.4 ± 0.4		
	5A Rosebud	0.4	± 0.4				
	24 Winnebago	4.1	± 2.0				
Sioux City District	3A Macy	4.7	± 2.2				

1/ Orlando Laboratory - Less than 5 pCi/l does not require additional testing.  
 \* MCL = 3 pCi/liter  
 \*\*Sum of 226 and 228 Less than 5

CONSULTING GEOCHEMIST

2126 CEDAR DRIVE  
605-343-5304

RAPID CITY, SD 57701  
605-394-2421

DATE: Feb. 9, 1980

REPORT OF ANALYSIS

SAMPLE DESCRIPTION

BLACK HILLS ALLIANCE

WATER SAMPLES

GROSS ALPHA DETERMINATION

	<u>pCi/l as uranium</u>
A - 1 (10/12/79)	19
A - 2 (10/12/79)	9.7
Red Shirt Pump House	15
Cherry Creek I.	1.9

*J. Haworth Jr.*

SUMMARY OF NITRATE TESTS ON PINE RIDGE RESERVATION

146 wells were tested by the South Dakota Department of Water and Natural Resources in 18 areas of the Pine Ridge Reservation. Eight, or 5.5%, of the wells tested registered 2.8 or above. An additional 14, or 9.5%, of the wells tested registered from 2.0 to 2.7.

Nitrate levels of 2.8 or above were found in the areas listed below:

<u>Location</u>	<u>Level</u>	<u>Date Tested</u>
PINE RIDGE VILLAGE		
Don Hudson (trailer court)	2.8	1-17-80
WAKPAMNI LAKE DISTRICT		
Wakpamni Head Start	4.4	1-24-80
OGLALA		
Bill Walks (pump)	14.8	1-24-80
Edna High White Man	5.5	1-25-80
MANDERSON		
Cecelia Fast Horse	2.8	1-17-80
ROCKYFORD		
Mary Ann Steele	4.1	1-28-80
PORCUPINE		
Brings Plenty	2.8	1-17-80
Curtis Pourier	4.0	2-14-80

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FM HQ AFEG UPAPN ON/RRUM

TO 2701 0005 HILL AFH HI/CC

BT

~~UNCLAS~~

SUBJ: RANGE CLEARANCE REPORT.

1. REQUEST THE LOCATIONS OF KNOWN ORDNANCE IMPACT/TARGET AREAS AND EXPLOSTIVE/CHEMICAL BURIAL SITES BE IDENTIFIED ON MAPS FOR MATACOPDA AND BADLANDS ATP FORCE RANGE'S CLEARANCE REPORTS. LEGAL LAND DESCRIPTIONS WILL BE USED TO IDENTIFY THESE AREAS. THE CERTIFICATE OF CLEARANCE WILL IDENTIFY THESE AREAS AS RESTRICTED FOR ANY FUTURE USE. DUE TO THE POSSIBILITY THAT THESE AREAS ARE CONTAMINATED WITH ORDNANCE AND EXPLOSTIVES AND THE FACT THAT COMPLETE DECONTAMINATION CANNOT BE ASSURED.

2. REQUEST TWO ADDITIONAL COPIES OF EACH RANGE CLEARANCE REPORT BE FURNISHED THIS HQ.

BT

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ROUTINE