Report to Congress

Radiation Exposure Screening and Education Grant Program
(FY 2005)

Department of Health and Human Services
Health Resources and Services Administration
TABLE OF CONTENTS

Background ............................................................................................................. 3
Purpose ..................................................................................................................... 3
Table 1 - FY 2005 Grantees ................................................................................. 4
FY 2005 Program Activities ................................................................................. 5-6
Table 2 - Program Users by Type of Service ....................................................... 7
Chart 1- Percent Program Users by Race and Ethnicity .................................. 8
Chart 2 - Percent Program Users by Age Group ................................................. 9
Chart 3 - Percent Program Users with Non-malignant Disease .............. 10
Chart 4 - Percent Program Users with Malignant Disease ...................... 11
Definitions, RECA Eligibility and Screening Requirements .............................. 12-14

2
Report to Congress

Radiation Exposure Screening and Education Program

Section 417C of the Public Health Service (PHS) Act, “Grants for Education, Prevention, and Early Detection of Radiogenic Cancers and Diseases,” includes a requirement that the Secretary submit an annual report summarizing the expenditures and programs funded under this section.

BACKGROUND

The Radiation Exposure Compensation Act (RECA) Amendments of 2000 (P. L. 106-245), amended the PHS Act to add section 417C, “Grants for Education, Prevention, and Early Detection of Radiogenic Cancers and Diseases.” Section 417C provides the authority for competitive grants to States, local governments, and appropriate health care organizations to initiate and support programs for: (1) individual cancer screening, (2) medical referrals, (3) public information dissemination, and (4) facilitation of RECA claim documentation. Administration for this authority designated as the Radiation Exposure Screening and Education Program (RESEP) was delegated by the Secretary of the Department of Health and Human Services to the Health Resources and Services Administration (HRSA).

PURPOSE

The purpose of the RESEP is to aid those individuals who may have been adversely affected by the mining, transporting and processing of uranium, and the testing of nuclear weapons for the Nation’s weapons arsenal. The people exposed included those who participated onsite in a test involving the atmospheric detonation of a nuclear device within the official boundaries of the Nevada or Trinity Test Sites; or those who were physically present in one of the affected areas downwind of the Nevada Test Site. In addition, uranium mine employees were exposed to large doses of radiation and other airborne hazards in the mine environment that together are presumed to have produced an increased incidence of lung cancer and respiratory diseases among these mine workers. This prevention grant program is designed according to its Congressional intent to help individuals and their families detect potential radiological illnesses earlier, allowing them to be treated more successfully and cost effectively.

In September 2005, HRSA awarded grants to seven organizations in five southwestern States (Arizona, Colorado, Nevada, New Mexico and Utah) with a 3-year project period. The University of Nevada in Reno was the newly awarded grantee in the 2005 competitive award cycle. Table 1 provides a description of the seven grantees, the proposed service area, and the amount awarded. For ease of review, Definitions, Eligibility, and Screening Requirements are defined on pages 12-14 of this report.
Table 1  
FY 2005 Radiation Exposure Screening and Education Program (RESEP) Grantees

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Proposed Service Area</th>
<th>Award Amount</th>
</tr>
</thead>
</table>
| Intermountain Health Services d.b.a. Dixie Regional Medical Center  
St. George, Utah                                      | Nye, Lincoln, NE Clarke, NV; Kane, Garfield, Washington, Iron, Beaver, UT; Northern Mohave and Coconino, AZ | $ 282,000    |
| Mountain Park Health Center  
Phoenix, Arizona                                      | Apache, Coconino, Gila, Mohave, Navajo, Maricopa, Yavapai, AZ                         | $ 180,000    |
| Northern Navajo Medical Center  
Shiprock, New Mexico                                   | Navajo Nation (NM, AZ, UT)                                                           | $ 336,000    |
| St. Mary's Hospital  
Grand Junction, Colorado                              | W. Colorado Grand and San Juan counties, UT                                           | $ 275,500    |
| Board of Regents  
University of Nevada  
Reno, Nevada                                            | Eureka, Lander, Lincoln, Nye, White Pine, Clark (portion), NV                         | $180,000     |
| University of New Mexico  
Albuquerque, New Mexico                                  | Grants, NM; Pueblos of Acoma, Canoncito and Laguna                                   | $184,745     |
| Utah Navajo Health System  
Montezuma Creek, Utah                                    | Utah State except Kane, Garfield, Washington, Iron, Beaver counties                  | $184,750     |

TOTAL: $1,622,995
The seven RESEP grantees have implemented programs consistent with legislative and program requirements. The remainder of this report is based on data and information provided by the grantees and reflects operations during the period September 1, 2005 through August 31, 2006.

**FY 2005 RESEP PROGRAM ACTIVITIES**

**Intermountain Health Services d.b.a. Dixie Regional Medical Center, St. George, Utah:**
- Service Area: Southwestern Utah and adjacent regions in Arizona and Nevada;
- Number of Service Delivery Sites: three;
- Users: Downwinders;
- Screening: 520 patients and made 1,036 medical referrals;
- Education: Disseminated cancer-related educational materials. Held 43 presentations on atmospheric nuclear testing and downwinder risks; and
- Outreach: Distributed over 4,372 pamphlets/brochures, orchestrated 3 radio spots reaching 240,000 individuals; organized 9 TV spots reaching 720,000 individuals, and composed 39 newspaper articles reaching 5,729,000 individuals.

**Mountain Park Health Center, Phoenix, Arizona:**
- Service Area: Counties of Apache, Coconino, Gila, Mohave, Navajo and Yavapai Counties;
- Number of Service Delivery Sites: four;
- Users: Downwinders;
- Screening: 22 patients and made 5 medical referrals;
- Education: Conducted one educational presentation, disseminated educational brochures; and
- Outreach: Provided for one radio announcements. Disseminated letters about the program.

**Northern Navajo Medical Center, Shiprock, New Mexico:**
- Service Area: Navajo Nation of NM, AZ; Apache County, AZ; Navajo County, AZ; Coconino County, AZ; McKinley County, NM; San Juan County, NM; and in UT, including San Juan County, UT;
- Number of Service Delivery Sites: five;
- Users: Miners, millers, ore transporters, downwinders;
- Screening: 478 individuals and made 31 medical referrals;
- Education: Educated providers and patients on the importance of screening. Held informational community meetings and conducted two presentations;
- Outreach: Participated in various activities including public service announcements and continuing medical education programs. Held 23 radio advertisements with an expected audience of 75,000; and wrote 1 newspaper article reaching 100,000 individuals.
St. Mary’s Hospital, Grand Junction, Colorado:
• Service Area: Western Slope of Colorado, Southeastern Utah, and Wyoming;
• Number of Service Delivery Sites: one;
• Users: Miners, millers, and ore transporters;
• Screening: 166 individuals for radiogenic disease and made 266 medical referrals;
• Education: Conducted four public meetings in target communities and four presentations to community organizations; and
• Outreach: Distributed 250 promotional pamphlets; wrote 8 newspaper articles reaching several thousand individuals.

Board of Regents, University of Nevada, Reno, Nevada:
• Service Area: Eureka, Lander, Lincoln, Nye, White Pine, and portion of Clark counties;
• Number of Service Delivery Sites: one;
• Users: Downwinders, and onsite participants;
• Screening: 66 individuals for radiogenic disease and made 259 medical referrals;
• Education: Disseminated 1,869 informational brochures on health risks associated with radiation exposure and 12 presentations; and
• Outreach: Conducted 219 radio announcements, 5 TV spots, 34 news articles and wrote 168 letters.

University of New Mexico, Albuquerque, New Mexico:
• Service Area: Residents of New Mexico who do not live on the Navajo Nation;
• Number of Service Delivery Sites: two;
• Users: Miners, millers and ore transporters;
• Screening: 162 individuals for radiogenic disease and made 48 medical referrals;
• Education: Disseminated informational brochures on health risks associated with radiation exposure and conducted 65 educational presentations; and
• Outreach: Distributed 934 brochures and wrote 6 newspaper articles.

Utah Navajo Health System, Montezuma Creek, Utah:
• Service Area: State-wide Utah except for Washington, Iron, and Kane counties;
• Number of Service Delivery Sites: three;
• Users: Miners, millers, ore transporters, and downwinders;
• Screening: 137 individuals for radiogenic disease and made 22 medical referrals;
• Education: Conducted 1 group session with 711 attendees; and
• Outreach: Held regular public meetings and 30 presentations at various community events and venues, disseminated 960 brochures and wrote one letter and 10 newspaper articles.

RESULTS
Approximately 11,000 individuals were informed through the outreach and education activities including program brochures, presentations, and letters of the possible effects of exposure to radiation as well as the services available through the RESEP. The grantees have also successfully shared information with individuals through a variety of other types of media including TV ads, radio spots, public service announcements, and newspaper articles.
Table 2 illustrates the number of medical screening exams, medical referrals, and RECA eligibility assistance provided by each grantee. There were minor decreases in the total number of medical screening exams and medical referrals compared to fiscal year (FY) 2004. The number of medical users screened decreased by 308, and the medical referrals decreased by 457. However, the total number of individuals who received RECA eligibility assistance increased by 1,838.

Table 2. Number of Program Users by Type of Service

<table>
<thead>
<tr>
<th>Grantee Organization</th>
<th>Screening Exams</th>
<th>Medical Referrals</th>
<th>RECA Eligibility Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dixie Regional Medical Center</td>
<td>520</td>
<td>1036</td>
<td>6819</td>
</tr>
<tr>
<td>Mountain Park Health Center</td>
<td>22</td>
<td>5</td>
<td>59</td>
</tr>
<tr>
<td>Northern Navajo Medical Center</td>
<td>478</td>
<td>31</td>
<td>650</td>
</tr>
<tr>
<td>Utah Navajo Health System</td>
<td>137</td>
<td>22</td>
<td>149</td>
</tr>
<tr>
<td>Board of Regents University of Nevada</td>
<td>66</td>
<td>259</td>
<td>85</td>
</tr>
<tr>
<td>University of New Mexico</td>
<td>162</td>
<td>48</td>
<td>731</td>
</tr>
<tr>
<td>St. Mary’s Hospital</td>
<td>166</td>
<td>266</td>
<td>563</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1551</strong></td>
<td><strong>1667</strong></td>
<td><strong>9056</strong></td>
</tr>
</tbody>
</table>
Chart 1 below indicates that 52 percent of the users screened are white. The second largest numbers of users are American Indian/Alaskan Native at 44 percent, and the Hispanic population represents the smallest number of users at 4 percent of all users. There were no individuals in the African American, Asian or Native Hawaiian populations screened during the program year.

**Chart 1. Percent Distribution of Program Users by Race and Ethnicity**
Chart 2 below demonstrates the percent distribution of users by age. The largest age group screened was between 65-69 years at 22 percent, and the smallest age group screened was between 35-39 years representing less than 1 percent of all users.

**Chart 2. Percent Distribution of Program Users by Age Group**
Chart 3 provides the percent distribution of program users with non-malignant disease by exposure category. Downwinders represent the largest exposure category at 45 percent; while miners represent the second largest exposure category at 38 percent of all users. Both the onsite participants and ore transporters represent 1 percent. Eight percent of the users are exposed to multiple sources of radiation.

**Chart 3. Percent Distribution of Program Users with Non-Malignant Disease by Source of Exposure**
Chart 4 provides the percent distribution of program users with malignant disease by source of exposure. Eighty-six percent of the program users with malignant disease are Downwinders. Conversely, only 5 percent of program users are miners, 4 percent are millers, and 1 percent is ore transporters. Four percent of the users are exposed to multiple sources of radiation.
The following are Definitions, Eligibility, and Screening Requirements for Compensation under the Radiation Exposure Compensation Act amendments of 2000.

Uranium Miners

Definition: Individual must have been employed in an above-ground or underground uranium mine located in Colorado, New Mexico, Arizona, Wyoming, South Dakota, Washington, Utah, Idaho, North Dakota, Oregon, or Texas at any time during the period beginning on January 1, 1942, and ending on December 31, 1971.

Eligibility: Individual must have been exposed to 40 or more working level months of radiation while employed in a uranium mine during the time period referenced above.

Screening Requirements: Provided for the following diseases: primary lung cancer and certain non-malignant respiratory diseases including pulmonary fibrosis; cor pulmonale resulting from fibrosis, silicosis, and pneumoconiosis.

Uranium Millers

Definition: Individual must have been employed in a uranium mill located in Colorado, New Mexico, Arizona, Wyoming, South Dakota, Washington, Utah, Idaho, North Dakota, Oregon, or Texas at any time during the period beginning on January 1, 1942, and ending on December 31, 1971. The term 'uranium mill' includes milling operations involving the processing of uranium ore or vanadium-uranium ore, including both carbonate and acid leach plants.

Eligibility: Individual must have worked for at least 1 year during the time period referenced above.

Screening Requirements: Provided for the following diseases: primary lung cancer, certain non-malignant respiratory diseases (including pulmonary fibrosis, cor pulmonale resulting from fibrosis, silicosis, and pneumoconiosis), renal cancer, and other chronic renal diseases including nephritis and kidney tubal tissue injury.

Ore Transporters

Definition: Individual must have been employed in the transport of uranium ore or vanadium-uranium ore from mines or mills located in Colorado, New Mexico, Arizona, Wyoming, South Dakota, Washington, Utah, Idaho, North Dakota, Oregon, or Texas at any time during the period beginning on January 1, 1942, and ending on December 31, 1971.

Eligibility: Individual must have worked for at least 1 year during the time period referenced above.
Screening Requirements: Provided for the following diseases: primary lung cancer, certain non-malignant respiratory diseases, renal cancer, and other chronic renal diseases including nephritis and kidney tubal tissue injury.

Downwinders

Definition: Individual must have been physically present in one of the affected areas downwind of the Nevada Test Site during a period of atmospheric nuclear testing. The individual must have lived or worked downwind of atmospheric nuclear tests in certain counties in Utah, Nevada, or Arizona for a period of at least 2 years during the period beginning on January 21, 1951, and ending on October 31, 1958, or for the period beginning on June 30, 1962, and ending on July 31, 1962.

Eligibility: The designated affected areas for the Nevada Test Site are in the State of Utah, the counties of Beaver, Garfield, Iron, Kane, Millard, Piute, San Juan, Sevier, Washington, and Wayne; in the State of Nevada, the counties of Eureka, Lander, Lincoln, Nye, White Pine, and that portion of Clark County that consists of townships 13 through 16 at ranges 63 through 71; and in the State of Arizona, the counties of Apache, Coconino, Gila, Navajo, and Yavapai.

Screening Requirements: Provided for the following cancers: leukemia (other than chronic lymphocytic leukemia), lung cancer, multiple myeloma, lymphomas (other than Hodgkin’s disease), and primary cancer of the thyroid, male or female breast, esophagus, stomach, pharynx, small intestine, pancreas, bile ducts, gall bladder, salivary gland, urinary bladder, brain, colon, ovary, or liver (except if cirrhosis or hepatitis B is indicated).

Onsite Participants

Definition: The individual must have participated onsite in a test involving the atmospheric detonation of a nuclear device. The individual must have been present “onsite” above or within the official boundaries of the Nevada, Pacific, Trinity, or South Atlantic Test Sites at any time during a period of atmospheric nuclear testing and must have “participated” during that time in the atmospheric detonation of a nuclear device. (While onsite participants at the Pacific and South Atlantic test sites are eligible for RECA compensation, organizations located in these areas are not eligible to apply for RESEP grant funds.)

Eligibility: On-site means physical presence above or within the official boundaries of any of the following locations:

- The Nevada Test Site, Nevada – in the State of Utah, the counties of Beaver, Garfield, Iron, Kane, Millard, Piute, San Juan, Sevier, Washington, and Wayne; in the State of Nevada, the counties of Eureka, Lander, Lincoln, Nye, White Pine, and that portion of Clark County that consists of townships 13 through 16 at ranges 63 through 71; and in the State of Arizona, the counties of Apache, Coconino, Gila, a portion of Mohave County (located north of the Grand Canyon), Navajo, and Yavapai.
- The Pacific Test Sites - Bikini Atoll, Enewetak Atoll, Johnston Island, Christmas Island, the test site for the shot during Operation Wigwam, the test site for Shot Yucca during Operation Hardtack I, and the test sites for Shot Frigate Bird and Shot Swordfish during Operation Dominic I and the official zone around each site from which non-test affiliated ships were excluded for security and safety purposes.
- The Trinity Test Site, New Mexico.
- The South Atlantic Test site for Operation Argus and the official zone around the site from which non-test affiliated ships were excluded for security and safety purposes.
- Any designated location within a Naval Shipyard, Air Force Base, or other official government installation where ships, aircraft or other equipment used in an atmospheric nuclear detonation were decontaminated.
- Any designated location used for the purpose of monitoring fallout from an atmospheric nuclear test conducted at the Nevada Test Site.

Screening Requirements: Provided for the following cancers: leukemia (other than chronic lymphocytic leukemia), primary lung cancer, multiple myeloma, lymphomas (other than Hodgkin’s disease), and primary cancer of the thyroid, male or female breast, esophagus, stomach, pharynx, small intestine, pancreas, bile ducts, gall bladder, salivary gland, urinary bladder, brain, colon, ovary, or liver (except if cirrhosis or hepatitis B is indicated).