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**Northwest Tribal Cancer Control Project- Northwest Portland Area Indian Health Board, Spirit of EAGLES Community Network Program, and the National Cancer Institute's Cancer Information Service (CIS).**

# SUMMARY REPORT

## Evaluation of *Cancer 101: A Cancer Education & Training Program for American Indians and Alaska Natives*

March 2009

### From the Investigators

Dear Study Participants,

It is our pleasure to share with you a summary report of the evaluation study of the *Cancer 101* curriculum.

This report will give you a review of the study's purpose, what we hoped to learn, how we gathered information, and our results.

The results of the study indicate that *Cancer 101* is an evidence-based tool, that is, a tool that has been research tested and found to be effective. In summary, those who participated in the study achieved the following:

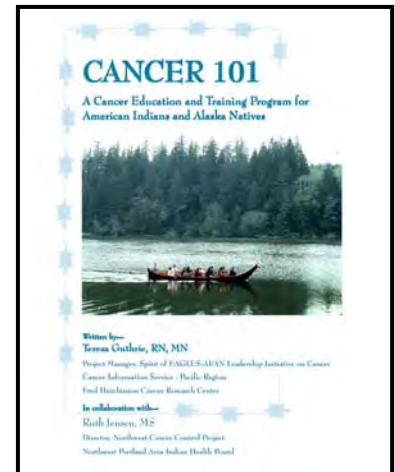
- Increased their knowledge about cancer and cancer control,
- Changed attitudes towards cancer risk and risk reduction,
- Changed the way they think about cancer issues and concerns in their communities, and
- Accessed resources to act on cancer control issues in their communities.

We wish to express our thanks for your participation in this study. Your commitment to the evaluation of the *Cancer 101* curriculum brings this collaborative effort, which began in 2001 with the development of the resource, full circle. Over the past eight years, tribal community members, community health representatives and staff of tribal health programs have assisted with the design, development, and use of *Cancer 101* throughout the Northwest and beyond. Your knowledge, wisdom, and hard work were an invaluable part of the effort to bring an evidence-based cancer education tool developed by, and for, tribal communities to reality.

We especially want to recognize the contributions of cancer survivors who have assisted us and those who have now walked on in their journey. Their strength and conviction will continue to carry us forward. It is our hope that this resource will continue to serve tribes in their efforts to improve cancer control and reduce the burden of this disease among their members.

To all our best,

Deborah Bowen, Principal Investigator  
Verné Boerner, Co-Principal Investigator  
Kathy Briant, Co-Principal Investigator  
Teresa Garrett Hill (formerly Guthrie), Co-Principal Investigator



## Study Background

American Indians and Alaska Natives bear an unequal burden for many diseases, especially cancer. Tribes participating in the Northwest Portland Area Indian Health Board's Northwest Tribal Cancer Control Project, the Spirit of EAGLES Community Networks Program (SoE) and the National Cancer Institute's Cancer Information Service (NCI's CIS) worked together to address this burden by developing *Cancer 101*, a seven-module cancer education resource. *Cancer 101* was designed to help trainees improve cancer knowledge, increase cancer control in tribal settings, and ultimately improve cancer survival in tribal communities.

The purpose of this study was to describe the impact of *Cancer 101* among urban and rural tribal community members that participated in trainings.

## Study Goals

- To provide a description of training participants.
- To assess knowledge gain and attitude change of participants pre/post trainings.
- To describe perceived benefits from attending trainings.
- To determine future activities of trainees.

## What we hoped trainees would gain from pre to post training

- Increase knowledge about cancer and cancer control.
- Have more positive attitudes about lowering cancer risk.
- Identify personal and community benefits from attending training.
- Identify at least one activity to participate in after the training that would improve cancer control outcomes in their communities.

## Study Design

There were five trainings in Idaho, Oregon and Washington between February 2006 and June



*Cancer 101 Training February 2006*

2007. Each training was two days long. A total of 99 people attended the trainings and of those, 70 agreed to take part in the study. Pre and post survey tools were used to look at knowledge and attitude changes, perceived benefits, and future activities at three points in time. All 70 participants completed a demographic questionnaire and a pre-self assessment on the first day of their training. At the end of the second day of training, 67 participants completed a post self-assessment and a post training evaluation. At 4-6 months post-training, 57 participants completed a follow-up interview.

## Study Findings

### 1. Description of Study Participants

The majority of study participants identified themselves as American Indian or Alaska Native (79.4%) and their region of primary tribal affiliation was Pacific Coast (77.3%). (See Tables 1 and 2.) Only 3% of participants spoke their Native language. (See Table 3.) Ages of study participants ranged from 18 to 70 years or older. Most participants were between the ages of 40-59 (65.6%). (See

TABLE 1: Race/Ethnicity - Sample (n) = 70		
	Percent (%)	Sample (n)
American Indian & Alaska Native	79.4	54
Caucasian (Non-Hispanic White)	19.1	13
African American	1.5	1
Missing		2

TABLE 2: Region of primary tribal affiliation Sample (n) = 70		
	Percent (%)	Sample (n)
Alaska	1.5	1
Pacific Coast	77.3	51
South Central	3.0	2
Northern Plains	3.0	2
Canada	1.5	1
Non-Native	13.6	9
Missing		4

TABLE 3: Can speak Native language - Sample (n) = 70		
	Percent (%)	Sample (n)
No	81.8	54
Yes	3.0	2
Non-Native	15.2	10
Missing		4

TABLE 4: Age - Sample (n) = 70		
	Percent (%)	Sample (n)
18-29	9.0	6
30-39	11.9	8
40-49	32.8	22
50-59	32.8	22
60-69	10.4	4
70 or older	3.0	2
Missing		3

Table 4.) The majority of participants identified themselves as community health educators (32.4%) or healthcare providers or professionals (25%) (See Figure 1) and had an education level of high school graduate or higher (96.9%). (See Table 5.) Most lived on a reservation (50%), with others residing in a town or city (31.8%), or off-reservation in a rural setting (18.2%). (See Table 6.) The majority were female (88.6%).

FIGURE 1: How study participants described themselves

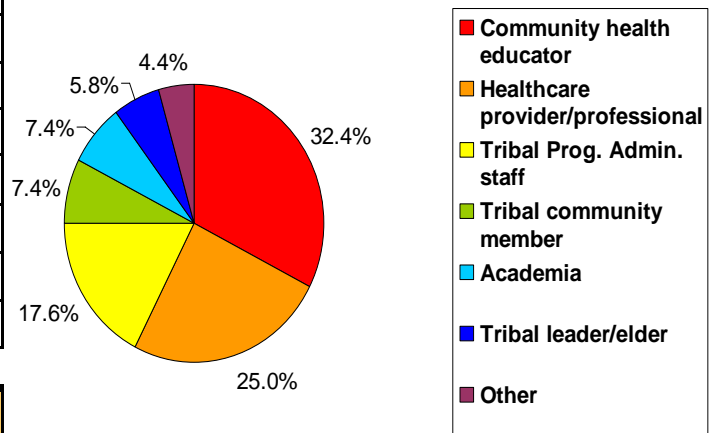


TABLE 5: Education - Sample (n) = 70		
	Percent (%)	Sample (n)
Some high school	3.1	2
High school graduate	35.4	23
Technical school/ apprentice training	10.8	7
Associate's degree	21.5	14
Bachelor's degree	20.0	13
Master's degree	9.2	6
Missing		5

**TABLE 6: Residence - Sample (n) = 70**

	Percent (%)	Sample (n)
Reservation	50.0	33
Off-reservation in a rural setting	18.2	12
Town or city	31.8	21
Missing		4

### 2. Reasons for Attending

The top five reasons given for attending the training included:

- 1) Develop knowledge and skills to educate others
- 2) Understand cancer issues and concerns
- 3) Learn basic information about cancer
- 4) Learn about cancer resources for patients and caregivers
- 5) Develop knowledge and skills to participate in cancer control activities



Cancer 101 Training May 2006

### 3. Effects of training on knowledge from pre to post-training

Knowledge changed significantly ( $p < 0.01$ ) from pre to post training for all modules except Module 3. This could be due to tribal involvement in the National Breast and Cervical Cancer Early Detection Program (funded by the Centers for Disease Control and Prevention), which may have had an effect on participants' pre-self assessment scores. (See Table 7.)

### 4. Effects of training on attitude change from pre to post training

**TABLE 7: Effects of training on knowledge from pre to post training (SD = Standard Deviation)**

Module	Pretest Mean (SD)	Post test Mean (SD)	Change (SD)
1. Cancer and AIs and ANs	3.76 (1.01)	4.40 (0.74)	0.64 (1.06)
2. What is cancer?	4.00 (1.16)	4.67 (0.61)	0.67 (1.15)
3. Screening & early detection	4.43 (0.71)	4.60 (0.65)	0.15 (0.84)
4. Diagnosis & staging	3.70 (1.13)	4.43 (0.56)	0.73 (1.19)
5. Risk & risk reduction	3.90 (0.84)	4.43 (0.63)	0.51 (0.77)
6. Treatment	3.33 (1.00)	4.31 (0.74)	0.99 (1.05)
7. Patient & caregiver support	4.57 (0.67)	4.82 (0.42)	0.22 (0.65)
<b>OVERALL</b>	<b>27.7 (4.17)</b>	<b>31.67 (2.52)</b>	<b>3.91 (3.35)</b>

Attitudes of participants also showed a significant positive change from pre to post training ( $p < 0.05$ ). At post-training, participants indicated they either "agreed" or "strongly agreed" with the following seven items:

- Cancer is one of the most important health issues facing American Indian and Alaska Native people today
- Cancer is one of the most important health issues in my community
- American Indians and Alaska Natives can do a lot to prevent cancer in their communities
- My community can get help in fighting cancer
- I am worried about the impact of cancer on my community
- By changing some of my lifestyle behaviors, I can reduce my risk for developing cancer

- There are organizations that exist that can offer information, resources, and referrals to people with cancer.

**5. Participants' Cancer Control Activities**

On post-training assessment, 83.3% of respondents said they were “very” or “extremely” likely to plan a cancer activity in their community. (See Table 8.)

**TABLE 8: Likelihood to plan cancer activity in community post-training - Sample (n) = 66**

	Percent (%)	Sample (n)
Never	0	0
Not very likely	3.0	2
Somewhat likely	13.6	9
Very likely	42.4	28
Extremely likely	40.9	27
Missing		4

At 4-6 month follow-up, 42.1% reported they planned and conducted an activity, and 24.6% indicated they were in the process of planning an activity. Of those participants who had already planned an activity, 95.9% felt that the activity was beneficial to their community. (See Table 9.)

Participants' cancer control activities addressed three broad categories of need: 1) awareness and education, 2) prevention and screening, and 3) survivor support. The activities listed below and continued in the next column were estimated to have reached between 8 and 1500 community members.

*1) Education and awareness*

- Cancer screening events
- In-kind financial incentives for those who complete physical exams
- Development of educational materials for community members

*2) Prevention and screening*

- Cancer Fair and/or Walk
- Cancer education events targeting health professionals
- Cancer information sessions at work
- Distributing cancer education materials in the community
- Sharing cancer information informally via word of mouth
- Write grants to support cancer education efforts

*3) Survivor support*

- Start a support group
- Fund raise for cancer patients
- Sharing cancer information informally via word of mouth
- Partner with existing support groups (present cancer information, host luncheons and provide transportation)

**TABLE 9: Summary of participants' cancer control activities at 4-6 month follow-up - Sample (n) = 57**

“Have planned / conducted cancer control activity since training”	Percent (%)	Sample (n)
No	33.3	19
Yes	42.1	24
In the process of planning	24.6	14
Among “Yes” respondents (n=24)... “These activities have benefited my community”	Percent (%)	Sample (n)
Strongly disagree	0.4	1
Disagree	0	0
Undecided	0	0
Agree	41.7	10
Strongly Agree	54.2	13

## Future Activities - Where do we go from here?

Over the last eight years, we have benefited greatly from the wisdom, expertise, and vision of those who have partnered with us in the development, implementation, and evaluation of *Cancer 101*. We are dedicated to continuing to work together with tribes in their efforts to reduce the burden of cancer. These activities include supporting those who wish to use *Cancer 101* as an evidence-based education resource in seeking funding for community education. We will also share these results through publications and presentations with other tribal communities, scientists, and educators. These activities will move us closer to realizing our shared mission and vision of cancer-free tribal communities for generations to come.



*Participants planning a future community activity at a Cancer 101 training*

## Contact Information

If you have any questions or comments about the *Cancer 101* study, this report, or future activities, please contact us at:

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