Session Objectives: By the end of the session, the participant will be able to:

1. Identify at least three positive outcomes that have occurred in the last decade specifically for Indian women’s health.

2. Identify at least three common misconceptions about Indian Women’s health.
Indian Women’s Health and Jeopardy

There is no cure for death

Wanda Jones, RN, DrPH
Quoted during the 2008 Nebraska Women’s Health Symposium, Lincoln NE

Lots of Changes in Indian Women’s Lives Since 1988 ... Let’s Start with the Good News!

Politically in 1988 there were:

- About 3 Native women in leadership positions within the ~560 federally recognized tribal nations
- About 4 within the 34 urban Indian clinics
Lots of Changes Over Last 15-20 Years!

- Politically in 2008, more than one-third of the “seats” in Tribal Council are held by women.
- About half of all urban Indian health programs have Native women’s leadership.
- This is significant because ~64% of AIANs live in urban areas, yet few states, IHS, Tribal Programs support urbans.

Changes Since 1988

- Almost every Indian Health Service / Tribal / urban Indian clinical program currently has:
  - Women’s Infant Children (WIC) Programs
  - Alcohol and substance abuse programs
  - Children’s immunization programs
Changes Since 1998

Greater inclusion in research documenting differences between the genders

Inclusion of lesbians (Two-spirited) in research
Indian Women’s Health and Jeopardy

Changes Since 1998

- Research breakthroughs on women’s:
  - Heart conditions
  - Urinary tract disorders
  - Orthopedic anomalies

“If it was important, the doctor would have brought it up.”

Wanda Jones, RN, DrPH
Quoted during the 2008 Nebraska Women’s Health Symposium, Lincoln NE

Native American Cancer Research 303-325-3377
Indian Women’s Health and Jeopardy

Personal Changes – Aging Research

- Mental
- Memory
- Hormonal Therapies (good and bad outcomes)
- Differences in drug responses

Menopause – Aging Research

The Seven Dwarves of Menopause

- Itchy, Bitchy, Sweaty, Sleepy, Bloated, Forgetful & Psycho

Native American Cancer Research 303-325-3377
No Message or Material is appropriate to all urban or tribal communities.

All need some local modification (may be through verbal instruction while the product is being used).

Having a Colon Health Test isn’t painful

It is having one too late that hurt me and my family

Abigail Nashoolpuk
Inupiaq
Dx colon cancer 1991

Adapted from successful breast cancer poster, but uses local Native, ties into family messaging and for specific type of cancer.
The shield in these slides represents your protection (shield of health) against things that may make you more susceptible to cancer (cancer risks).

The larger the holes and the more number of holes in the shield, the less likely it is to protect you from cancer or other health problems.

NOTE: the web page version is animated for breast and CRC.

The woman’s “shield” of protection against cervix cancer may include daily physical activity, healthy, low fat, limit tobacco to ceremonial use only, and so on.

What does this shield tell you about this woman’s cancer risks?
### Example of Cervix Cancer risks that “damage” her shield of protection include:

1. Early age at first intercourse (16 years old or younger)
2. More than 5 different sexual partners in your whole life
3. Having sex with partners who have had many sexual partners
4. Sexually transmitted diseases (HPV - human papilloma virus) which may also cause genital warts
5. Herpes virus
6. HIV infection
7. Exposure to cigarette smoke (smoking and second hand smoke)
8. Giving birth to more than 4 children
9. Long term use of oral contraceptives
10. Diets low in carotene, Vitamins C and E

### Examples of Cultural Strengths

... despite the Challenges
Common Myths

- AIAN don’t pay taxes
- AIAN get free education
- AIAN don’t serve in the armed forces
- Most AIAN receive a monthly check from the government

**NOTE (Fact):** AIANs are the only group in the US who are required to carry a card to prove who we are.

Strengths: Resilience

- Ups and downs of life, more programs offered in AIAN settings to emphasize resilience and respect for traditional values
Strengths: AIAN Contribute to Society

- AIAN pay taxes, hold jobs that help society (e.g., teachers, Hot Shot Fire Fighters), and share healing and traditional knowledge with those who need it.

Strengths of AIAN Cultures

- Traditional Indian Medicine, spirituality, and healing
- Uses include herbal teas for pain relief for unmanaged cancer pain, etc.
Strengths of AIAN Cultures

- Family (as with most, if not all cultures) remains one of the core strengths within the diverse AIAN cultures.

- Respect our traditional practices that contributed to our survival.
Strengths of AIAN Cultures

“Community” includes protecting the family, clans, extended family, neighbors

Note: “Clans”, “Bands”

Being AIAN is more than simply checking a box on a survey; it implies a responsibility to give back to the community.

Strengths of AIAN Cultures

Respect for elders and traditional practices
Strengths of AIAN Cultures

Honor our Ancestors

Honor our histories. We stand on the shoulders of our ancestors.
Strengths of AIAN Cultures

- Respect our Veterans
- AIAN are over-represented in the armed forces
- AIAN hold unique roles in armed forces; Apache Tunnels in Vietnam; Code Talkers in WWII

Strengths of AIAN Cultures

- Respect for ties with the environment and the land ("the balance")
Strengths of AIAN Cultures

- Balance with our relatives, the animals

- We are Survivors!
Strengths of AIAN Cultures

- Palliative care and …
- End-of-life … most Natives die in their homes

Common Values Among Natives

- Sharing and generosity
- Allegiance to family, community, and tribe
- Respect for elders
- Non-Interference
- Orientation to present time
- Harmony with Nature
- Respect for status of the Woman and the Child

Carol Locust, Univ AZ, Tucson
Indian Women’s Health and Jeopardy

**Common beliefs related to Spirituality**

- A belief in an unseen power, Great Mystery or Creator
- All things in the universe are related
- Worship reinforces bonds between the individual, family, and community (our relatedness)
- Spirituality is intimately connected to our health

**Respective Core Values**

<table>
<thead>
<tr>
<th>Traditional Native</th>
<th>Main Stream US Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative</td>
<td>Competitive</td>
</tr>
<tr>
<td>Group/Tribal Emphasis</td>
<td>Freedom, Progress, Efficiency</td>
</tr>
<tr>
<td>Extended Family Important</td>
<td>Individualism</td>
</tr>
<tr>
<td>Modesty</td>
<td>Sexy</td>
</tr>
<tr>
<td>Patience/Passive (SW)</td>
<td>“Getting Ahead in Life”</td>
</tr>
<tr>
<td>Generous/Non-Materialistic</td>
<td>Material Comfort</td>
</tr>
<tr>
<td>Respect for Age</td>
<td>Youth</td>
</tr>
<tr>
<td>Spirituality</td>
<td>External Conformity</td>
</tr>
<tr>
<td>Indirect Criticism</td>
<td>Direct Criticism</td>
</tr>
<tr>
<td>Harmony with Nature</td>
<td>Conquest of Nature</td>
</tr>
</tbody>
</table>

Native American Cancer Research 303-325-3377
Examples of Native Specific Cancer Resources

Tribal Outreach -- Cancer Information Web Pages

Native Cancer Information Resource Center and Learning Exchange (Native C.I.R.C.L.E.)
http://NativeAmericanPrograms.org

The Native WEB (Women Enjoying the Benefit)
Tribal Outreach -- Cancer Information Web Pages


The BEST source of Native-specific cancer information!

Examples of free downloads:
- Free downloads of slides from the 5 “Get on the Path to Health” Curricula (breast, cervix, colon, lung, prostate) [each has 6-7 modules]
- “Clinical Trials Education for Native Americans”
- “Native American Palliative Care” Curriculum
- “Native American Cancer Education for Survivors” (NACES) (quality of life interactive education)
- FACT Sheets: Native Elder Cancer Survivors, Tobacco
Some Changes Not So Good
Indian Women’s Health and Jeopardy

The Indian Health Service is Chronically Under Funded

“Statistics are merely aggregations of numbers with the tears wiped away.”

Dr. Irving Selikoff

2000 U.S. Census: Numbers of AIAN

- American Indian and Alaska Native (AIAN) population is increasing at about 1.8% a year
- 2.2 million reported AIAN Race “alone” (4.1 million AIAN alone or in combination with other race(s))
- 28% increase in “AIAN alone” since 1990 Census
2000 U.S. Census: Where AIAN Live

Note the areas of elevated number of AIANs = Places unequal burden on states that have high numbers of AIANs

- 43% of AIAN lived in the West
- 31% lived in the South
- 17% lived in the Midwest
- 9% in the Northeast
- Approximately 64% live in urban areas

2000 U.S. Census: Age, Income, Poverty, Education

<table>
<thead>
<tr>
<th></th>
<th>AIANs</th>
<th>U.S. All Races</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median Age</strong></td>
<td>28 yrs.</td>
<td>35.3 yrs.</td>
</tr>
<tr>
<td><strong>Median Income</strong></td>
<td>$31,799</td>
<td>$42,148</td>
</tr>
<tr>
<td><strong>Poverty Rate</strong></td>
<td>25.9%</td>
<td>11.3%</td>
</tr>
<tr>
<td><strong>High School</strong></td>
<td>70.9%</td>
<td>80.4%</td>
</tr>
</tbody>
</table>

Thank you, Dean Seneca, MPH, Office of Tribal Affairs, ATSDR, CDC, for sharing this slide; modified by Linda B

American Indian / Alaska Native Demographics—Native American Cancer Research
IHS Health Risk Factor Data (BRFSS, 2000-2006)

- **Current Smoker**
  - **US**
    - 22.8% NHW
    - 31% AIAN
  - **Southern Plains Region**
    - 33.2%
  - **Northern Plains Region**
    - 40.1%


American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality

---

IHS Health Risk Factor Data (BRFSS, 2000-2006)

- **Ever told have diabetes**
  - **US**
    - 6.0% NHW
    - 12.4% AIAN
  - **Southern Plains**
    - 12.6%
  - **No. Plains**
    - 13.0%


American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality
Obese

US
- 20.8% NHW
- 29.0% AIAN

Southern Plains
- 30.9%

Northern Plains
- 31.0%

CDC definition of obesity using Body Mass Index
\[ \Rightarrow 30.0 \text{ kg/m}^2 \]

Health care coverage

US
- 88.3% NHW
- 75.6% AIAN

Southern Plains
- 71.8%

Northern Plains
- 77.2%

The BRFSS data overestimates insurance for AIANs because AIANS erroneously call IHS “insurance”, but it is not now and never has been. IHS always under-funded; never “insurance”.

Indian Women’s Health and Jeopardy

IHS Health Risk Factor Data (BRFSS, 2000-2006)

Pap Screening with past 3 years, All women 18+ (w/o hysterectomy):

US
- 84% NHW
- 78% AIAN

S. Plains 74%
N. Plains 80.4%

These numbers differ greatly from Pap tests practices prior to the change of screening guidelines.


American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality

Mammogram within past 2 years among women aged 40+:

US
- 76% NHW
- 69.4% AIAN

S. Plains 66.4%
N. Plains 67.9%


American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality

Collapsing the diverse smaller population groups into an “other” racial category ...

“Other” racial data

Lose all racially specific information and cultural relevance

“Are of no use when attempting to develop, assess, and monitor public health programs and services” LB

“Every time an elder dies ...

... a library burns”

Patricia Cochran, MS, Inupiaq, Executive Director Alaska Native Science Commission
Indian Women’s Health and Jeopardy

AIAN Cancer Incidence Data (finally) THANK YOU!

- CHSDA Counties = IHS Contract Health Service Deliver Areas
- NHW = Non-Hispanic White

American Indian Alaska Native Cancer Data and Surveillance and Regional Differences in Incidence and Mortality
What is the racial group that has the highest incidence of breast cancer?

How about for cervix cancer?

2007 Annual Report to the Nation

Cancer incidence among AI/AN’s, though generally lower than for the Non-Hispanic White (NHW) population, is rising rapidly.

In 3 of the twelve regions of the Indian Health Service, cancer incidence rates are equal to that of the dominant white population:
- Alaska
- Northern Plains (IL, IN, IA, MI, MN, MT, NE, ND, SD, WI, WY)
- Southern Plains (OK, TX, KS)
## Indian Women’s Health and Jeopardy

### Cervix Cancer Incidence Rates - Females, 1999-2004

<table>
<thead>
<tr>
<th>Region</th>
<th>NHW</th>
<th>Rate per 100,000 per year, adjusted to 2000 U.S. population</th>
</tr>
</thead>
<tbody>
<tr>
<td>US (CHSDA)</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>9.2</td>
<td></td>
</tr>
<tr>
<td>Northern Plains</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>Southern Plains</td>
<td>14.1</td>
<td></td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>7.9</td>
<td></td>
</tr>
</tbody>
</table>

### Colorectal Cancer Incidence Rates - Females, 1999-2004

<table>
<thead>
<tr>
<th>Region</th>
<th>NHW</th>
<th>Rate per 100,000 per year, adjusted to 2000 U.S. population</th>
</tr>
</thead>
<tbody>
<tr>
<td>US (CHSDA)</td>
<td>41.6</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>106.2</td>
<td></td>
</tr>
<tr>
<td>Northern Plains</td>
<td>60.4</td>
<td></td>
</tr>
<tr>
<td>Southern Plains</td>
<td>54.4</td>
<td></td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>34.8</td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>34.6</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>17.6</td>
<td></td>
</tr>
</tbody>
</table>
Indian Women’s Health and Jeopardy

Lung Cancer Incidence Rates - Females, 1999-2004

<table>
<thead>
<tr>
<th>Region</th>
<th>NHW (Cases per 100,000 per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US (CHSDA)</td>
<td>48.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>78.9</td>
</tr>
<tr>
<td>Northern Plains</td>
<td>97.4</td>
</tr>
<tr>
<td>Southern Plains</td>
<td>66.8</td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>62.9</td>
</tr>
<tr>
<td>East</td>
<td>60.9</td>
</tr>
<tr>
<td>Southwest</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Rates per 100,000 per year, adjusted to 2000 U.S. population

IHS Cancer Mortality

- Note cancers other than breast, cervix, colon, lung and prostate
- This is why AIAN comprehensive cancer plans cannot be limited to only those sites!


Donald Haverkamp, MPH*
David Espey, MD**
Roberta Paisano, MHSA***
Nathaniel Cobb, MD***

* Mr. Haverkamp is assigned to the IHS Division of Epidemiology and Disease Prevention from the U.S. Public Health Service Service, Office of Workforce and Capacity Development, Centers for Disease Control and Prevention, U.S.HHS.
** Dr. Espey is assigned to the IHS Division of Epidemiology and Disease Prevention from the Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, U.S.HHS.
*** Ms. Paisano and Dr. Cobb work for the IHS Division of Epidemiology and Disease Prevention.

American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality

Native American Cancer Research 303-325-3377
Indian Women’s Health and Jeopardy

Table 1: Definition of geographic regions, corresponding IHS service population, total AI/AN population of states included in regions, and service population percentage for the period 1999-2003.

<table>
<thead>
<tr>
<th>Geographic Region</th>
<th>IHS Service Population estimates</th>
<th>Total AI/AN population estimates</th>
<th>Serv. Pop. % of total AI/AN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>108,462</td>
<td>108,462</td>
<td>100%</td>
</tr>
<tr>
<td>East</td>
<td>103,149</td>
<td>682,523</td>
<td>15.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Regions</td>
<td>1,694,439</td>
<td>3,007,510</td>
<td>56.3%</td>
</tr>
</tbody>
</table>

* All population figures are derived from intercensal estimates and annualized for the period 1999-2003 (updated 7/06).

Note the % of AIANs summarized in report is extreme overestimate.

64+% live in urban areas and those data are not included in the reports.

Limited to AIANs WHO USE IHS CLINICAL FACILITIES WITH PREVIOUS 3 YEARS.

Note the horizontal scale fluctuates for each cancer site and can be misleading.


The IHS 56.3% service population an over-estimation because the data exclude urbans, AIANs who live in rural areas, or who are outside the IHS service area?

IHS Mortality Data (best of any federal database, but still has limitations)

Note the % of AIANs summarized in report is extreme overestimate.

64+% live in urban areas and those data are not included in the reports.

Limited to AIANs WHO USE IHS CLINICAL FACILITIES WITH PREVIOUS 3 YEARS.

Note the horizontal scale fluctuates for each cancer site and can be misleading.

American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality
Indian Women’s Health and Jeopardy

Omissions

- Note: both childhood and adult leukemia increasing among AIAN
- Childhood under-reported due to children not admitted to a Children’s Hospital and symptoms misdiagnosed as diabetes
- Brain cancer increasing among all races

American Indian Alaska Native Cancer Data Misclassification and Regional Differences in Incidence and Mortality

Breast Cancer Mortality Rates
Females, 1999-2003

<table>
<thead>
<tr>
<th>Region</th>
<th>Rate per 100,000 per year, adjusted to 2000 U.S. population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>21.2</td>
</tr>
<tr>
<td>Northern Plains</td>
<td>20.3*</td>
</tr>
<tr>
<td>Southern Plains</td>
<td>18.0*</td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>13.0*</td>
</tr>
<tr>
<td>East</td>
<td>16.5*</td>
</tr>
<tr>
<td>Southwest</td>
<td>13.2*</td>
</tr>
<tr>
<td>All IHS</td>
<td>(15.9)*</td>
</tr>
<tr>
<td>All US</td>
<td>(26.0)</td>
</tr>
</tbody>
</table>

**Denotes a significantly higher (*lower) rate than the U.S. rate.

Indian Women’s Health and Jeopardy

Cervical Cancer Mortality Rates
Females, 1999-2003

<table>
<thead>
<tr>
<th>Region</th>
<th>Rate per 100,000 per year</th>
<th>All US (2.7)</th>
<th>All IHS (3.7)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Plains</td>
<td>7.9**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Plains</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>1.3</td>
<td>All US  (2.7)</td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>3.1</td>
<td></td>
<td>All IHS (3.7)**</td>
</tr>
<tr>
<td>Southwest</td>
<td>4.1**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rates per 100,000 per year, adjusted to 2000 U.S. population

**Denotes a significantly higher (*lower) rate than the U.S. rate.


Ovarian Cancer Mortality Rates
Females, 1999-2003

<table>
<thead>
<tr>
<th>Region</th>
<th>Rate per 100,000 per year</th>
<th>All IHS (6.8)*</th>
<th>All US (8.9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>3.5*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Plains</td>
<td>8.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Plains</td>
<td>5.2*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Coast</td>
<td>6.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>4.0</td>
<td>All US  (8.9)</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>8.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rates per 100,000 per year, adjusted to 2000 U.S. population

**Denotes a significantly higher (*lower) rate than the U.S. rate.