Women's, Children's, & Family Health

March 2005 | Title V Needs Assessment: Special Series Fact Sheet | Vol. 2 No. 1

Breast and Cervical Cancer Screening in Alaska

Breast cancer is the most commonly diagnosed cancer among women in Alaska and the United States as a whole; and it is the second leading cause of cancer mortality among women. Many deaths from breast and cervical cancers could be avoided by increasing cancer screening rates among women at risk. Studies show that early detection of breast and cervical cancers saves lives. Timely mammography screening among women aged 40 years or older could reduce breast cancer mortality by approximately 16% compared with women who are not screened. Papanicolaou (Pap) tests can find cervical cancer at an early stage when it is most curable or even prevent the disease if precancerous lesions found during the test are treated.

Seriousness

Healthy People 2010 Targets and National Data

Indicator	Alaska 2002†	Nation 2002^	Healthy People 2010 Goals*
Proportion of women ages ≥ 40 receiving a mammogram in the previous two years	72.2%	75.9% (60.3%-85.4%)	70%
Proportion of women ages ≥ 40 receiving a mammogram in their lifetime	87.5%	88.9% (75.4%-94.1%)	---
Proportion of women ages ≥ 18 with an intact cervix receiving a Pap test in the previous three years	87.4%	86.8% (72.7%-92.0%)¥	90%
Proportion of women ages ≥ 18 with an intact cervix receiving a Pap test in their lifetime	97.4%	95.0% (81.9%-97.6%)	97%

The national estimates are the median percent of all states that collected this data on the 2002 BRFSS. The range represents estimates from other states participating in for that reporting period. See Data Sources and Notes for details.

¥2000 data. Note that 2002 data was unavailable for this indicator for the Nation.

- Alaska has achieved the Healthy People 2010 goal (HP2010) of increasing the proportion of women ages 40 and older that have received a mammogram in the previous two years. However, the Healthy Alaskan goal of 76%, which mirrors the Alaska Comprehensive Cancer Control Plan (CCCP), has not been achieved.

- Alaska has not achieved the HP2010 goal for increasing the proportion of women ages 18 and older that have received a Pap test in the previous three years. The Healthy Alaskan goal for this indicator is 95%.

- Alaska has achieved the HP2010 goal for increasing the proportion of women ages 18 and older that have ever received a Pap test. Alaska was one of three states to achieve this goal in 2002.

- Although just under the HP2010 goal in 2002, Alaska was one of four states in 2000 to achieve the HP2010 goal of increasing the proportion of women ages 18 and older having received a Pap test in the previous three years to at least 90%.

- Among all states participating in Behavioral Risk Factor Surveillance System (BRFSS), Alaska was similar to the median percent for each indicator.

Severity

Based on cancer statistics for the years 1999-2001, it is estimated that 1 in 7 women will develop breast cancer at some point during their lives.[1] According to the American Cancer Society, current trends in breast cancer incidence and mortality suggest that an estimated 211,240 new cases of invasive breast cancer will be diagnosed among women, and an estimated 40,410 women will die of this disease in 2005.[2]

Furthermore, while the incidence of invasive cervical cancer has decreased significantly over the last 40 years, based on current trends in cervical cancer incidence and mortality rates, an estimated 10,370 new cases will be diagnosed and an estimated 3,710 women will die of this disease in 2005.[2]

Urgency

Breast Cancer

- From 1998-2000, the average annual breast cancer incidence rate among Alaskan women was 141.3 per 100,000 – slightly higher than the Nation as a whole (128.9 per 100,000 in 2000).[3]

- From 1997-2001, the average annual mortality rate for breast cancer among Alaskan women was 23.9 per 100,000. Breast cancer mortality rates for Alaskan women over the last two decades have been fairly stable, slightly decreasing at 0.6% annually.[4]

- Approximately 1 in 4 Alaskan women ages 40 and older reported that they had not received a mammogram in the previous two years.†

- From 1990-2002, the proportion of Alaskan women ages 40 and older that reported receiving a mammogram in the previous two years has increased 24%; however, since 1998 the prevalence has remained relatively unchanged.[5]

Cervical Cancer

- From 1998-2000, the average annual cervical cancer incidence rate among Alaskan women was 8.7 per 100,000 – not significantly different than the Nation (9.2 per 100,000 in 2000).[3]

- From 1997-2001, the average annual cancer mortality rate among Alaskan women was 1.7 per 100,000 – significantly lower than the Nation for this time period (2.9 per 100,000). The trend in cervical cancer mortality among Alaskan women has significantly declined over the last two decades – with an annual average percent decline of 6.8%.[4]

- Nearly 1 in 8 Alaskan women ages 18 and over reported they did not have a Pap test in the previous three years.†

- From 1990-2002, the proportion of Alaskan women ages 18 and older that reported having a Pap test in the previous three years has remained relatively unchanged.[5]

Disparities

Deaths from these diseases occur disproportionately among women who are uninsured or underinsured. Mammography and Pap tests are underused by women who have no source or no regular source of healthcare, women without health insurance, and women who immigrated to the United States within the last 10 years.[6]

Breast Cancer

- Alaska Native women reported a higher prevalence of having a mammogram within the past two years compared to non-Natives. (Figure 1)

- The Gulf Coast region had the lowest percentage of women ages 40 and older that reported having a mammogram in the last two years (63%) – this was the only region to not achieve the HP2010 goal. All other regions were similar, ranging from 71% in Anchorage and vicinity to 78.1% in Southeast.[5]

Cervical Cancer

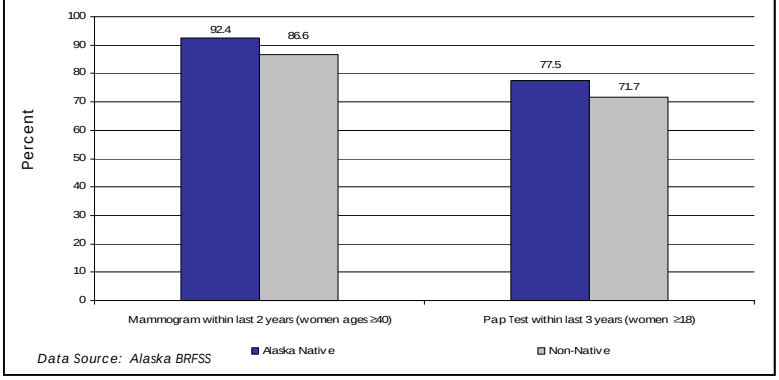
- As age increases, cervical cancer incidence rates increase. During 1997-2001, the cervical cancer incidence rate for Alaskan women ages 55-59 was 2.3 times as high as women ages 25-29, and 1.5 times as high as women ages 40-44.[7]

- Alaska Native women reported a higher prevalence of having a Pap test within the last three years compared to non-Natives. (Figure 1)

Economic Loss

Economic loss was not evaluated.

Figure 1 Breast and Cervical Cancer Screening by Alaska Native and Non-Native Alaska, 2002



Data Source: Alaska BRFSS

Interventions & Recommendations

Community oriented interventions recommended by the Task Force for Community Preventative Services (TFCPS) to promote breast cancer screening include: mass media; small media education; and one-on-one education. Furthermore, they recommended the following interventions for health care systems: client reminders to promote breast cancer screening and incentive programs for clients (in conjunction with reminders).[8]

The TFCPS recommends the same interventions to increase cervical cancer screening, with the exception of small media education and one-on-one education.[8]

In addition to recommending adoption of interventions documented by the TFCPS as being effective the CCCP made an Alaskan specific recommendation to promote the Alaska Breast and Cervical Health Partnership, a group of five CDC funded grantees who provide a safety net for women whose economic circumstances prevent them from obtaining breast cancer early detection.[9]

Intervention Effectiveness

Review of published studies by TFCPS found strong evidence that the interventions recommended above were effective in increasing breast and cervical cancer screening.[8]

Capacity

Propriety

Access to breast and cervical cancer screening, to ensure early detection is an issue that falls within the overall mission of the Women's, Children's, and Family Health Section. Increasing breast and cervical cancer screening, as well as reducing mortality due to these cancers, are a national initiatives (HP2010).

Economic Feasibility

Economic consequences of detection in a late stage of disease as opposed to an earlier, more treatable stage include greatly elevated costs of treatment, lower quality of life and increased mortality,

Acceptability

Increasing numbers of women seeking breast and cervical cancer screening through the Alaska Breast & Cervical Health Partnership indicate the target population is accepting of efforts to address morbidity and mortality rates of breast and cervical cancer in Alaska. A request by the Governor for state funds to provide additional cancer screening services indicates support for these efforts from the highest level of state government as well.

Resources

Resources are available to address this issue, primarily through grant funds from the Centers for Disease Control and Prevention to the Alaska Breast and Cervical Health Partnership members. Additional resources include the American Cancer Society; Section 330 Community Health Centers; private non-profit women's health facilities such as Planned Parenthood; state funded Health Centers and the Section of Public Health Nursing; tribal health facilities; and private clinicians.

Legality

Current law allows the issue of cancer screening to be addressed. There are no statutory requirements associated with cancer screening.

References

1 Ries LAG, Eisner MP, Kosary CL, et al. (eds). SEER Cancer Statistics Review 1975-2001. National Cancer Institute. Bethesda, MD. 2004. Available at: http://seer.cancer.gov/csr/1975_2001.
2 American Cancer Society. Cancer Facts and Figures 2005. Atlanta: American Cancer Society. 2005.
3 Alaska State Cancer Registry and the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), CDC. January 2003 data submission.
4 National Vital Statistics System (NVSS) 1977-2001 Data in: National Cancer Institute (NCI) using Surveillance, Epidemiology, and End Results (SEER) Program. Available at http://www.statecancerprofiles.cancer.gov.
5 Alaska Behavioral Risk Factor Surveillance System (BRFSS) Data: State of Alaska, DHSS, DPH.
6 Centers for Disease Control and Prevention. The National Breast and Cervical Cancer Early Detection Program: Saving Lives through Screening. Fact Sheet. 2004-2005.
7 Alaska Cancer Registry, 1997-2001 Data: State of Alaska, DHSS, DPH.
8 Zaza S, Briss PA, Harris KW. The Guide to Community Preventive Services: What Works to Promote Health? Task Force on Community Preventive Services. 2005.
9 The State of Alaska's Comprehensive Cancer Control Plan (CCCP). Department of Health and Social Services, Section of Epidemiology, Division of Public Health. 2004 (in prep).

Data Sources

† Alaska Behavioral Risk Factor Surveillance System (BRFSS), 2002 Data in: Balluz L, Ahluwalia IB, Wilmon Murphy W, et al. Surveillance for Certain Health Behaviors Among Selected Local Areas — United States, Behavioral Risk Factor Surveillance System, 2002. MMWR: 53(SS-05). July 2004.

‡ Behavioral Risk Factor Surveillance System (BRFSS), 2002 Data in: Balluz L, Ahluwalia IB, Wilmon Murphy W, et al. Surveillance for Certain Health Behaviors Among Selected Local Areas — United States, Behavioral Risk Factor Surveillance System, 2002. MMWR: 53(SS-05). July 2004.

* Healthy People 2010. U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. With understanding and improving health and objectives for improving health. 2 Vols. Washington, DC: U.S. Government Printing Office. 2000.

Notes

National estimates for mammogram and Pap test prevalence are the median percent and the range of estimates for all states participating in BRFSS during 2002 that collected data on these topics.

Incidence rates are age-adjusted to the 2000 US standard population by 5-year age groups. Rates are for invasive cancer only.

Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by the National Cancer Institute. See http://seer.cancer.gov/popdata/ for more information.