

# CLINICAL GUIDELINES

**FOR BREAST CANCER  
SCREENING IN ALASKA**

**2006**

Alaska Breast & Cervical  
Health Partnership

*Healthy Women, Healthy Alaska  
Through Early Detection*

# *Alaska Breast & Cervical* **HEALTH PARTNERSHIP**

HEALTHY WOMEN, HEALTHY ALASKA THROUGH EARLY DETECTION



Southcentral Foundation (SCF)  
Breast and Cervical Health

SouthEast Alaska Regional Health Consortium (SEARHC)  
Breast and Cervical Health Program

Yukon-Kuskokwim Health Corporation (YKHC)  
Women's Health Grant

Arctic Slope Native Association (ASNA)  
Screening for Life

State of Alaska - DHSS  
Breast and Cervical Health Check (BCHC)

**Contents**

**Routine Breast Screening Recommendations . . . . . 1**

- I. Routine Screening . . . . .1
- II. Medical History . . . . .1
- III. Clinical Evaluation . . . . .2
- IV. Breast Imaging . . . . .4
- V. Ultrasound . . . . .5
- VI. Magnetic Resonance Imaging (MRI). . . . .6
- VII. Correlation of Palpable Findings with Imaging Study . . . . .6

**Breast Sampling Techniques . . . . . 6**

- VIII. Triple Test . . . . .6
- IX. Fine Needle Aspiration . . . . .6
- X. Large Core Needle Biopsy And Vacuum Assisted Biopsy . . . . .7
- XI. Open Surgical Biopsy. . . . .7

**Evaluation and Management of Common Breast Problems . . . . . 8**

- XII. Palpable Mass . . . . .8
- XIII. Vague Nodularity . . . . .9
- XIV. Nonpalpable Abnormality Detected on Screening Mammogram. . . . .9
- XV. Breast Pain . . . . .10
- XVI. Nipple Discharge . . . . .11
- XVII. Skin/Nipple Changes. . . . .12
- XVIII. New Technologies and Procedures . . . . .12

**References . . . . . 13**



## Routine Breast Screening Recommendations

### I. Routine Screening

- A. Recommendations for methods and frequency of screening vary according to age and by the organization or institution
- B. Numerous risk factors have been identified, but only a few factors are significant enough to alter the frequency and type of screening needed
- C. Screening recommendations are described in Table 1 below

**Table 1: Breast Cancer Screening Frequencies**

Method	Age	Frequency
Breast self-examination	20 yrs and over	Per provider recommendation and woman's choice
Clinical breast examination	20-30 yrs old	Annually for women with identified risk factors; every 1-3 yrs if no risks found
	> 31 yrs old	Annually
Mammography	40-74 yrs old	Annually
	75 yrs and over	Every 1-3 yrs based on risk, co-morbidity

### II. Medical history

#### A. Risk Assessment

1. Up to 80% of women with newly diagnosed breast cancer have NO identifiable major risk factors other than advancing age.
2. A thorough and accurate medical history is essential to the risk assessment process.
3. Major risk factors
  - a. Age
  - b. Personal history of breast cancer
  - c. Personal history of ovarian cancer
  - d. Family history of premenopausal breast cancer in first degree relative (parent, sibling), or bilateral breast cancer in first degree relative.
  - e. Histologically diagnosed benign breast disease that increases risk, e.g., ductal or lobular atypia, LCIS.
  - f. Personal or family history of genetic mutation increasing breast cancer risk, e.g., BRCA1, BRCA2.
  - g. Prior radiation to chest wall, e.g. radiation therapy for Hodgkin's disease or substantial cumulative chest wall radiation.
4. Minor risk factors
  - a. Nulliparity or age over 35 at first live birth

## Clinical Guidelines – Breast Cancer Screening in Alaska

- b. Early menarche (before age 12)
- c. Late menopause (age 55 or later)
- 5. Risk factors under investigation
  - a. Moderate daily alcohol consumption ( $\geq 3$  drinks per day)
  - b. Combined hormone replacement therapy of more than 5 years duration
  - c. Post-menopausal obesity
- B. Assessment of signs and symptoms
  - 1. Presentation of breast symptoms is common, but not always volunteered
  - 2. Providers must ALWAYS inquire about common symptoms
    - a. Breast mass or nodularity
    - b. Pain
    - c. Skin or nipple changes
    - d. Axillary or supraclavicular lymph nodes
    - e. Spontaneous, unilateral nipple discharge, especially serous or bloody
  - 3. Many common symptoms occur in conjunction with menses and will subside at other times of the cycle

### III. Clinical Evaluation

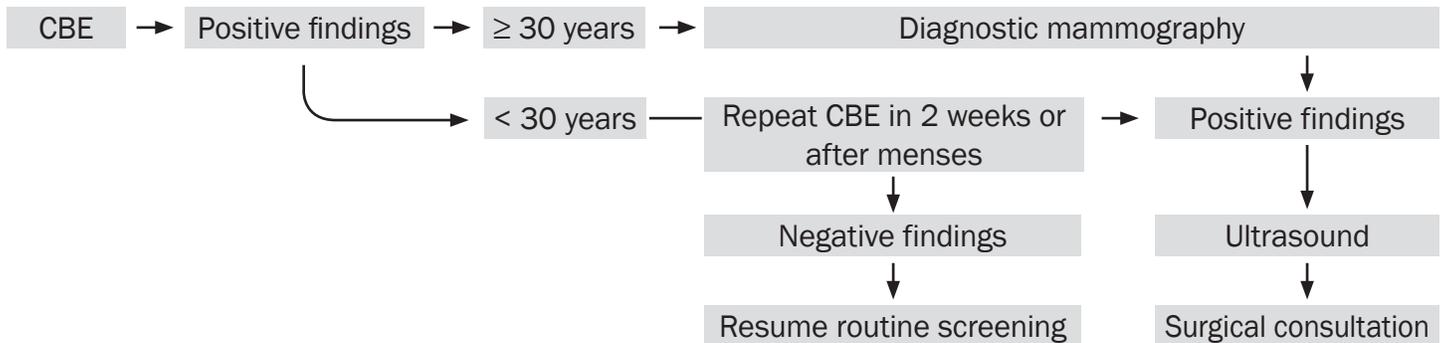
- C. Breast self-examination (BSE)
  - 1. On provider recommendation should then be professionally taught to all women over 20 years of age
  - 2. The preferred method is the vertical strip search pattern (Appendix A) or can use “radial o’clock pattern”
- D. Clinical Breast Examination (CBE)
  - 1. Recommended schedule
    - a. Every one to three years for women ages 20-30 years
    - b. Annually for women over age 30
  - 2. Always ask about symptoms and location of concern to the patient
  - 3. Thorough CBE consists of:
    - a. Visual inspection
      - 1). Symmetry
      - 2). Skin changes, dimpling, erythema
      - 3). Observe for changes during the following maneuvers
        - a). Lifts arms over her head, lifting breast
        - b). Leans forward slightly, letting breast fall forward
        - c). Presses fists together, tightening chest muscles

- b. Palpation
  - 1). Palpation is best done with the patient in the supine position (except for examination of lymph nodes as noted below)
  - 2). The preferred search pattern is the vertical strip method or can use “radial o’clock” pattern
  - 3). Use pads of first three fingers
  - 4). Circular pattern in dime-sized circles
  - 5). Use three levels of pressure (light, medium, deep)
  - 6). Examine for supraclavicular lymph nodes with the patient in both the supine and upright positions
  - 7). Examine the axillary nodes with the patient in the upright position
- 4. Documentation of CBE findings
  - a. Negative
  - b. Non-significant findings may prompt re-examination at later appointment
    - 1). Vague thickening, especially matching bilateral areas
    - 2). Generalized nodularity
    - 3). Long-standing nipple retraction
    - 4). Expressed, bilateral discharge, greenish or milky in color
  - c. Significant findings requiring further evaluation
    - 1). Distinct palpable mass
    - 2). Lumpiness or thickened area of concern to clinician or patient, especially if unilateral or dominant compared to opposite
    - 3). Skin changes
      - a). Dimpling or puckering
      - b). Erythema and/or edema
    - 4). Nipple changes
      - a). Retraction
      - b). Nipple erosion or scaliness
      - c). Nipple inversion of recent onset in non-pregnant or non-lactating woman
      - d). Spontaneous, unilateral nipple discharge
        - (1). Localized to one duct
        - (2). Clear or blood tinged discharge requires evaluation
    - 5). Palpable lymph nodes (consistency, number, location, mobility)
    - 6). Presence of, type, and condition of breast implants (appropriate to note on patient history and on order – “imaging will require ‘push back’ views in addition to usual views”)
    - 7). Previous breast procedures (aspiration biopsy, mastectomy, lumpectomy) – while not necessary to be noted under “requiring further evaluation” the information should be noted on patient history and imaging order.

## Clinical Guidelines – Breast Cancer Screening in Alaska

5. General recommendations for further evaluation of findings
  - a. Diagnostic mammography for women over age 30
  - b. Discordant CBE and mammography require referral or additional imaging
  - c. Ultrasound and/or referral to specialist for women under age 30
  - d. All dominant masses which are solid by needle aspiration or ultrasound should be referred regardless of age, risk factors or mammographic findings

### Positive Clinical Breast Exam Algorithm



## IV. Breast Imaging

- A. Ideally, the CBE immediately precedes any imaging studies
  1. Screening mammography can detect nonpalpable microcalcifications and masses
  2. ALL clinically suspicious breast masses require additional evaluation
    - a. Ultrasound, especially in women  $< 30$  y.o.
    - b. Diagnostic mammography and ultrasound in women  $\geq 30$  y.o.
- B. Screening mammography
  1. Indicated for asymptomatic, age-appropriate women
  2. Most screening mammography abnormalities are resolved by further imaging
  3. Not used in women under age 30 (except in carefully selected cases) due to low incidence of breast cancer and high breast density
  4. False negative rates range between 12-25% depending on whether mammography is used alone or in combination with CBE
  5. Best performed 7 to 10 days post menses in childbearing women
  6. Not indicated while breastfeeding – wait until six months after weaning
- C. Diagnostic mammography
  1. Indicated when breast masses or other abnormalities are present or suspected on examination or screening mammography
  2. Includes additional views (cone down compression or magnification)
  3. Any clinically appreciated mass not explained by imaging studies must be biopsied
- D. Standard mammography reporting terminology
  1. Adopted by the American College of Radiology and Mammography Quality Standards Act (MQSA)
  2. Required by the programs in the Alaska Breast & Cervical Health Partnership

<b>American College of Radiology Breast Imaging Reporting and Data System (BIRADS)</b>	
<b>Category 0</b>	<b>Incomplete: Additional imaging evaluation needed</b> These patients will be called back for additional imaging, such as special mammographic views or ultrasound.
<b>Category 1</b>	<b>Negative finding</b>
<b>Category 2</b>	<b>Benign finding</b>
<b>Category 3</b>	<b>Probably benign finding;</b> short follow-up interval may be suggested
<b>Category 4</b>	<b>Suspicious abnormality;</b> biopsy should be considered (malignancy rates range between 10-27%)
<b>Category 5</b>	<b>Highly suggestive of malignancy;</b> appropriate action should be taken (malignancy rates range between 30-80%)
<b>Category 6</b>	<b>Biopsy-proven malignancy</b>

**V. Ultrasound**

A. Not currently indicated for routinely screening asymptomatic women of any age

1. Inconsistently detects microcalcifications
2. Clinical management of persistent suspicious masses is critical despite negative sonographic findings

B. Indications for ultrasound

1. Evaluating dominant breast lumps in women under age 30
2. Differentiating solid from cystic masses
  - a. Diagnosis of a simple cyst
    - 1). Round or oval shape
    - 2). Sharply defined margins
    - 3). Lack of internal echoes
    - 4). Posterior acoustic enhancement
  - b. A mural nodule visualized in a cyst may be suggestive of rare intracystic carcinoma
3. Useful for both palpable and mammographically detected (nonpalpable) masses
4. Detecting masses where there are palpable findings but negative mammogram
5. Evaluating focal areas of breast pain
6. Mammographic findings of focal asymmetric densities, architectural distortion or solid masses

## Clinical Guidelines – Breast Cancer Screening in Alaska

7. Guiding interventional breast procedures
  - a. Simple cyst aspiration
  - b. Core needle biopsy
  - c. Needle localization for surgical excision

### VI. Magnetic Resonance Imaging (MRI)

- A. Not helpful as a routine screening modality.
- B. Most accurate diagnostic test for evaluation of silicone implant rupture
- C. May be selectively utilized to evaluate women with known malignancies.
- D. Conservatively utilized for evaluation of very high risk women such as those who are BRCA mutation carriers or women with pre-existing cancer.

### VII. Correlation of Palpable Findings with Imaging Study

- A. Diagnostic mammography and ultrasound MUST specifically address any clinical findings
- B. Documentation must be evidenced in the imager's report
- C. The breast imager bears responsibility for documenting correlation
  1. Usually done by placing a marker, e.g., BB, on the palpable lump
  2. Sometimes by pursuit of additional imaging efforts, e.g., ultrasound

## Breast Sampling Techniques

### VIII. Triple Test

- A. A combination of clinical and imaging findings, supervised by a surgeon or breast specialist if available, that minimizes the number of surgical biopsies needed to manage a palpable lump
- B. Requires correlation of the CBE, mammogram, and FNA results
  1. If all three are benign, mass can be followed without excision
  2. If all three are malignant, the client proceeds directly to treatment
  3. If the three are nonconcordant, the mass should be biopsied

### IX. Fine Needle Aspiration

- A. Provides safe and reliable diagnosis of benign cysts
- B. Simple cysts contain aspirate with benign appearance and completely resolve after aspiration
  1. Benign-appearing fluid, e.g., not grossly bloody or mucinous, may be discarded
  2. Fluid may be sent for cytologic evaluation at clinician discretion
- C. FNA of solid masses can be valuable
- D. False negative rates vary from 1.8% to 33%
- E. A third test should be performed to confirm or rule-out diagnosis

### X. Large Core Needle Biopsy And Vacuum Assisted Biopsy

- A. Palpable masses – A cost-effective and well-tolerated procedure
- B. Nonpalpable mass - Can be sampled with assistance of ultrasound or mammographic (stereotactic) guidance
- C. Useful as a highly accurate diagnostic sampling technique
- D. Histologic diagnosis **MUST** be consistent with the imaging findings; if not, rebiopsy is mandatory
- E. Histologically benign findings concurrent with imaging must be followed with imaging for 2 years to exclude 1-2% sampling error rate
- F. Follow-up interval is at 6, 12, and 24 months
- G. Fibroadenoma diagnosed by core biopsy does not always need imaging follow-up. Return to routine screening intervals
- H. Excision is mandatory with needle biopsy results of atypical hyperplasia, LCIS, radial scar/complex sclerosing lesion.

### XI. Open Surgical Biopsy

- A. Historically considered the gold standard for other diagnostic techniques; now equaled by newer technology, e.g., needle localized biopsy, large core needle biopsy
- B. Indications for surgical biopsy
  - 1. Patient preference
  - 2. Negative imaging studies
  - 3. Nonspecific imaging studies
  - 4. Nonpalpable mammographic lesion not amenable to image-guided core biopsy (as determined by radiologist)
  - 5. When core biopsy is not available
  - 6. Lesions previously biopsied by core needle that require surgical excision
  - 7. Histology shows atypical hyperplasia or radial scar/complex sclerosing lesion
  - 8. Imaging not concordant with histology
- C. Surgical removal of nonpalpable breast lesion
  - 1. Requires needle localization prior to biopsy
  - 2. Post biopsy imaging should confirm removal of entire lesion
- D. Histologic diagnosis
  - 1. Must correlate with clinical and imaging finding
  - 2. Noncorrelating results
    - a. Additional specimen sectioning indicated
    - b. Repeat mammography
    - c. Repeat biopsy may be needed

### Evaluation and Management of Common Breast Problems

#### XII. Palpable Mass

##### A. Essential tools for evaluation

1. Diagnostic mammography
  - a. Primary tool for women over 30 y.o.
  - b. There are limited indications for women under 30 y.o
2. Ultrasound
  - a. Primary tool for women under 30 y.o.
  - b. Often will yield additional information regarding extent of a visible mammographic lesion
  - c. Can detect masses not visible on mammography
  - d. Can distinguish cysts from solid masses
3. Report must state that mammography and ultrasound specifically target the palpable mass

##### B. Cysts

1. Common in pre and peri-menopausal age group
2. Simple cysts may recur
3. Simple cyst confirmed by ultrasound-no further workup necessary
4. Painful cyst may be aspirated
  - a. If cyst disappears with aspiration, no further workup needed
    - 1). Discard aspirate if it is clear
    - 2). Bloody or viscous aspirate needs cytologic evaluation
    - 3). Post aspiration, small area of soft edema may be appreciated
  - b. If residual soft tissue mass is persistent or discrete, surgical consultation is indicated
  - c. If no aspirate can be obtained, additional imaging is indicated
  - d. Diagnostic aspiration-needed if cyst does not meet criteria for simple cyst by ultrasound

##### C. Palpable solid mass evaluated by mammography or ultrasound must be managed by degree of clinical concern and ACR category

1. BIRADS 1 – negative
2. BIRADS 2 – imaging features are benign
3. BIRADS 3 – probably benign imaging features, but nonspecific
  - a. Risk of malignancy  $\leq 2\%$
  - b. Imaging follow-up indicated at 6 & 12 months
  - c. Refer woman who wants surgical consult or is high risk
4. BIRADS 4 – suspicious findings, biopsy indicated
5. BIRADS 5 – probably malignant, biopsy indicated

##### D. Mass not detected by imaging – refer for surgical consultation despite normal imaging

##### E. Women under 30 years of age

1. Fibroadenoma most common palpable mass
2. If imaging is performed, do ultrasound rather than mammography
3. Ultrasound guided biopsy for histological confirmation
4. Refer for surgical consultation

### XIII. Vague Nodularity

- A. Condition often brought to clinician's attention by patient who feels a "lump"
  1. Often represents premenstrual changes
  2. May or may not be bilateral
  3. Described as nodularity or lobular thickening
  4. Common locations
    - a. Areolar margin
    - b. Upper outer quadrant
    - c. Inframammary fold
- B. Management
  1. Return for re-check post menses
  2. Refer if persistent more than 3 months
  3. Diagnostic mammogram if over age 30
  4. Consider ultrasound if under age 30
  5. FNA indicated only after ultrasound

### XIV. Nonpalpable Abnormality Detected on Screening Mammogram

- A. Often resolved by additional imaging
  1. BIRADS 1 – resume routine screening
  2. BIRADS 2 – resume routine screening
  3. BIRADS 3
    - a. Re-examine for palpable mass
    - b. Carefully assess risk factors
    - c. Options
      - 1). Imaging follow-up at 6 & 12 months
      - 2). Ultrasound if not already performed
      - 3). Consider percutaneous image guided breast biopsy
      - 4). Surgical consultation
  4. BIRADS 4 or 5
    - a. Image-guided core biopsy
      - 1). Can sometimes be scheduled to be done at time of imaging workup
      - 2). Radiologist is responsible for correlating image with pathology

## Clinical Guidelines – Breast Cancer Screening in Alaska

- b. Needle localized surgical excisional biopsy
  - 1). Indications
    - a). Core biopsy result is atypical ductal hyperplasia or radial scar
    - b). Noncorrelating pathology and imaging
  - c. Definitive conservative surgery through excision of entire malignant lesion when patient desires breast preservation
- B. Nonpalpable cysts mammographically detected require ultrasound evaluation for characterization
  - 1. Simple cysts need no further workup
  - 2. If not confirmed as simple cyst, aspirate with image guidance
  - 3. Suspicious ultrasound
    - a. Image guided core biopsy, or
    - b. Needle-localized surgical excision biopsy
- C. Biopsy recommended
  - 1. Surgical consult required for all ACR category 4 or 5 lesions seen on mammography and/or ultrasound
  - 2. Radiologist will recommend core or excisional biopsy based on lesion characteristics
  - 3. Management of benign sampling result
    - a. If fibroadenoma, resume routine screening
    - b. If concordant with imaging, and core biopsy is benign, perform short term follow-up, followed by a return to routine screening
    - c. If atypia, LCIS, radial sclerosing lesion, malignancy, then surgical consult and excision appropriate

### XV. Breast Pain

- A. A common nonspecific problem
- B. Causes
  - 1. Most commonly, the physiologic action of estrogen and progesterone
  - 2. Painful masses most often cysts, glandular tissue
- C. Management
  - 1. Careful CBE and mammography if over age 40
    - a. Only a diagnostic mammogram if breast pain “focal” (one finger can pinpoint pain), otherwise a screening study
    - b. Reassurance & teaching if negative
  - 2. Trial of NSAIDS, acetaminophen, aspirin
  - 3. Good support brassiere
  - 4. Restricting caffeine, sodium of disputed value
  - 5. Refer
    - a. Painful mass
    - b. Persistent localized pain unresponsive to conservative measures

### XVI. Nipple Discharge

- A. A commonly reported symptom
- B. Causes
  - 1. Ductal ectasia
  - 2. Manual manipulation
  - 3. Suckling
  - 4. Pituitary adenoma
  - 5. Intraductal mass
- C. Nonsuspicious for cancer
  - 1. Characteristics of discharge
    - a. Not spontaneous, must be expressed
    - b. Arises from multiple ducts
    - c. Bilateral
    - d. Milky, green, or black in color
  - 2. Management
    - a. Diagnostic mammography of no benefit
    - b. Screening mammogram if age appropriate
    - c. Persistent milky discharge
      - 1). Workup for galactorrhea (prolactin level)
      - 2). Refer at clinician's discretion
- D. Discharge suspicious for cancer
  - 1. Characteristics
    - a. Spontaneous, noted on clothing without expression
    - b. Emanates from single duct
    - c. Copious
    - d. Bloody, serous or clear color is of most concern
  - 2. Management
    - a. Diagnostic mammogram, ductography
    - b. Refer for surgical consultation even with normal mammogram
    - c. Cytologic (Pap smear) evaluation
      - 1). Rarely useful – reported specificity as low as 15%
      - 2). Not cost-effective
    - d. Hemocult test or microscopy for fat globules may provide helpful clues re: need for referral

## Clinical Guidelines – Breast Cancer Screening in Alaska

### XVII. Skin/Nipple Changes

#### A. Refer for surgical consultation

1. Any skin breakdown on nipple-areolar complex
  - a. Paget disease (in situ or invasive breast cancer with involvement of the nipple)
    - 1). Symptoms unilateral, appearing first on nipple, progressing to areola
    - 2). Rarely involves surrounding skin of the breast
    - 3). Palpable masses found in 60% of presenting cases
    - 4). Diagnostic mammogram findings
      - a). Negative in 50% presenting cases
      - b). May include microcalcifications, subareolar densities, architectural distortions
  - b. Eczema often involves the areola; rarely involves the nipple
2. Any dimpling
3. Any retraction (not long-standing)
4. Any inflammatory signs – redness, warmth

### XVIII. New Technologies and Procedures

#### A. Computer-aided detection (CAD)

1. Intended for use as an adjunct to radiologist's initial review of image, i.e., as an aid to detection, not a diagnostic tool
2. Electronic scan of film image generates a digital image then searches for and locates signs of potential abnormalities.
3. Prompts are then made for the reader's review of "suspicious" areas
4. Sensitivity and specificity depend on programmed detection algorithms
5. Advantages
  - a. Ensures all areas of image are thoroughly searched; emphasis can be added for subtle signs of abnormality
  - b. Potential for increase in true positive readings & earlier diagnoses by re-directing radiologist's review
  - c. Best at finding tiny calcifications
6. Disadvantages
  - a. Increased cost; may not be reimbursed by some payers
  - b. Worst at finding small tumors in dense breast tissue

#### B. Digital mammography

1. Images are recorded, stored, and displayed digitally (electronically)
2. Advantages
  - a. Image can be enhanced and brightened without increased radiation exposure to the patient; immediately visualized by technician as image is captured, i.e., there is no developing process required

- b. Improved portability and storage characteristics
- c. Combined imaging and reading capabilities, especially helpful for premenopausal women or women with dense breast tissue; builds on CAD strengths
- 3. Disadvantages
  - a. Increased cost; may not be reimbursed by some payers
  - b. Specific new technical equipment and skills required
- C. Ductal lavage/Nipple duct lavage (NDL)
  - 1. Permits sampling of breast ductal fluids for cytopathologic analysis
  - 2. Goals
    - a. Identify women at clinical risk of breast cancer to assist in decision-making re: risk-reduction interventions, e.g. tamoxifen regimen
    - b. Detect presence of atypical hyperplasia, which is associated with development of breast cancer
  - 3. Potential candidates
    - a. Member of a known or suspected hereditary breast cancer kindred
    - b. Personal history of hormone receptor-negative breast cancer or other breast cancer for which tamoxifen has not been prescribed
    - c. Lobular carcinoma in situ
    - d. 5-year Gail model breast cancer risk estimate of  $\geq 1.7\%$
    - e. Prolonged (8-10 yr) history of exogenous hormone replacement therapy
    - f. History of therapeutic chest wall radiation exposure during adolescence or early adulthood
  - 4. Technique requires specialized training and equipment for both clinical specialist and cytology laboratorian
  - 5. May not be covered by all payers.

## References

American College of Obstetricians & Gynecologists (ACOG). (2003, April). ACOG practice bulletin #43: Breast cancer screening. ACOG, Washington DC.

American College of Radiology. (2003). The ACR breast imaging reporting and data system (BI-RADS), (3<sup>rd</sup> Ed.). Accessed on 07/13/05 at: [http://www.acr.org/s\\_acr/bin.asp?CID=883&DID=14553&DOC=FILE.E.PDF](http://www.acr.org/s_acr/bin.asp?CID=883&DID=14553&DOC=FILE.E.PDF).

American College of Radiology. (2004). The ACR practice guideline for the performance of magnetic resonance imaging (MRI) of the breast. Accessed on 07/13/05 at: [http://www.acr.org/s\\_acr/bin.asp?CID=549&DID=17775&DOC=FILE.PDF](http://www.acr.org/s_acr/bin.asp?CID=549&DID=17775&DOC=FILE.PDF)

American College of Radiology. (2000). The ACR practice guideline for the performance of ultrasound-guided percutaneous breast interventional procedures. Accessed on 07/13/05 at: [http://www.acr.org/s\\_acr/bin.asp?CID=549&DID=17775&DOC=FILE.PDF](http://www.acr.org/s_acr/bin.asp?CID=549&DID=17775&DOC=FILE.PDF)

## Clinical Guidelines – Breast Cancer Screening in Alaska

- Baxter, N., & Canadian Task Force on Preventive Health Care. (2001). Preventive health care, 2001 update: Should women be routinely taught breast self-examination to screen for breast cancer? *Canadian Medical Association Journal*, 164(13):1837-1846.
- Cady, B., Steele, Jr., G.D., Morrow, M., Gardiner, B., Smith, B. L., Lee, N.C., Lawson, H. L., Winchester, D. P. (1998). Evaluation of common breast problems: Guidance for primary care providers. *CA – A Cancer Journal for Clinicians*, 48(1):49-64.
- California Department of Health Services, Cancer Detection Section. (2000, May). Breast diagnostic algorithms for primary care clinicians. Recommendations of the breast protocols workgroup (2<sup>nd</sup> Ed.). University of California – Davis.
- Dey, P., Dhar, K. K. (1994). Cytologic evaluation of nipple discharge in relation to mammary neoplasia. *Journal of the Association of Physicians of India*, 42(5):369-370.
- CancerNet, a service of the National Cancer Institute. (2001). Screening for breast cancer: Screening/detection for health professionals. Available at: <http://cancernet.nci.gov/>
- Harris, J.R., Lippman, M.E., Morrow, M., & Hellman, S. (Eds.). (1996). *Diseases of the breast*. Philadelphia:Lippincott-Raven.
- Hou, M-F., Huang, C-J., Huang, Y-S., Huang, T-J., Chan, H-M., Wang, J-Y., Liu, G-C., Wu, D-K. (1998). Evaluation of gallactography for nipple discharge. *Clinical Imaging*, 22(2):89-94.
- McDonald, S., Saslow, D, Alciati, M. (2004). Performance and reporting of clinical breast examination: A review of the literature. *CA Cancer J Clin*; 54:345-361.
- National Cancer Institute. (February, 2005)Breast cancer screening, health professional version. Accessed on 5/17/05 at: <http://www.nci.gov/cancertopics/pdq/screening/breast/healthprofessional>
- Nekhlyudov, L. & Fletcher, S. (2001). Commentary: Is it time to stop teaching breast self-examination? *Canadian Medical Association Journal*, 164(13):1851-1852.
- Oregon State Health Division. (2003, July). Breast cancer diagnosis and follow-up protocols. Recommendations of the Oregon Breast & Cervical Cancer Program. Oregon Health Division.
- Saslow, D., et al. (2004). Clinical breast examination: Practical recommendations for optimizing performance and reporting. *CA Cancer J Clin*; 54:327-344.
- U.S. Preventive Services Taskforce. (1998). *Clinician's handbook of preventive services*. (2<sup>nd</sup> Ed.). pp. 201-205. U.S. Government Printing Office, Washington DC.
- Washington State Department of Health Breast & Cervical Health Program. (2004). Breast care algorithm for re-screening or initial visit. Available from Staff, Wash. DOH. <http://www.doh.wa.gov/wbchp/>
- Wohlfahrt, J., Melbye, M. (2001). Age at any birth is associated with breast cancer risk. *Epidemiology*, 12(1):68-73.





State of Alaska  
Department of Health and Social Services  
Division of Public Health  
Breast & Cervical Health Check (BCHC) Program

4701 Business Park Blvd.  
Building J, Suite 20  
Anchorage, AK 99503-7123  
1-800-410-6266  
[www.health.state.ak.us/dph/wcfh/BCHC](http://www.health.state.ak.us/dph/wcfh/BCHC)  
[health\\_check@alaska.gov](mailto:health_check@alaska.gov)

This publication was supported by Cooperative Agreement Number U55/CCU021987-04 from the Centers for Disease Control and Prevention and the Alaska Department of Health and Social Services. Its contents are solely the responsibility of the Alaska Breast & Cervical Cancer Partnership.