



## Breast Cancer and Environment – Peer Education Tool Kit Zero Breast Cancer – Adolescent Education Project

### Breast Cancer Questions and Factors, Environmental Risk Issues, and Health Tips Zero Breast Cancer – Adolescent Education Project (Marin County, California)

#### Did You Know?

In California, the average woman has a one in eight chance of developing breast cancer over her lifetime. A girl's developing breasts may be more vulnerable to environmental exposures during her teen years. Only 5-10% of breast occurs because of an *inherited* flaw in specific genes involved in breast cancer. It is possible (but rare) for men to develop breast cancer. The majority of women who develop breast cancer have few known risk factors.

#### What is Breast Cancer?

Breast cancer begins when cells in the milk-producing structures in the breast divide and grow out of control. When cells multiply over time without any order, they can form a lump, or *tumor*. Some breast tumors are harmless or *benign*. Tumors that spread and invade surrounding tissue are called *invasive* breast cancers. No one knows exactly what causes breast cells to become cancerous. Several factors may work together.

#### What are some of the known risk factors for breast cancer?

Having one or more of the following risk factors does not necessarily mean that you will develop breast cancer. Specific healthy behaviors may reduce overall risk. Other factors are random or less controllable.

#### Factors that may Reduce Breast Cancer Risk

Regular exercise starting in the teen years  
Eliminating exposure to tobacco smoke  
Avoiding or limiting daily alcohol use  
Medical therapies for high-risk individuals  
Maintaining a normal adult weight  
Breastfeeding after childbirth

#### Factors that are known to Increase Breast Cancer Risk

Major: Family history of breast and ovarian cancer  
Having a personal history of breast cancer  
A biopsy that shows abnormal breast cell growth  
Hereditary mutation (mistake) in specific genes  
Other: Younger age when menstrual periods begin  
Older age when menstrual periods end  
Full term pregnancy (childbirth) after age 30

Dietary factors can *modulate* the effects of cancer causing agents by working to repair cell damage. A diet rich in plant-based foods (whole grains, fruits, and vegetables) helps to support a healthy immune system overall.

#### What should I know about environmental exposures that are suspected to play a role in breast cancer?

Specific environmental factors are being studied for their *possible* links to breast cancer earlier in life. Exposures to cancer causing substances that are thought to influence lifetime breast cancer risk include: second-hand tobacco smoke, moderate to excessive alcohol use, and chemicals that can mimic estrogen. Synthetic chemicals present in personal care products and manufactured goods surround us. For example, Butyl Benzyl Phthalates are a class of chemical compounds used to manufacture soft plastics and some cosmetics. Scientists suspect that BBP phthalates may promote breast cancer in the very early stages. Researchers are trying to learn more about environmental exposures and their effect on cancer related genes. Meanwhile, it makes sense to use a precautionary approach to exposures that are identified now as *suspected*.

\*

(\*Sources: 1. National Toxicology Program, <http://ntp-server.niehs.gov> 2. NIEHS Breast Cancer and Environment Research Centers; 3. Third National Report on Human Exposures to Environmental Chemicals-2005, U.S. Centers for Disease Control)



## **Breast Cancer and Environment – Peer Education Tool Kit**

### *Zero Breast Cancer – Adolescent Education Project*

#### **What are some things I can do about *suspected* environmental exposures and breast cancer risk?**

Be aware of your everyday exposures, read labels, and use caution with *suspected* exposures, for example:

- Avoid re-using clear plastic (polycarbonate) water bottles that have been sitting in the sun or absorbing heat
- Use opaque bottles made with the plastics PET, or polyethylene, and store sport bottles in a cool place.
- Be aware of ingredients in cosmetics and personal care products (check the list at [www.safecosmetics.org](http://www.safecosmetics.org))

#### **What do we know about cancer incidence in Marin County?**

Bay Area breast cancer rates are high in both Marin *and* San Francisco counties. Scientists, community agencies, and Zero Breast Cancer are actively researching this puzzle. Some of the risk factors associated with breast cancer (e.g. later age of first live birth) are common to a large segment of women who live in Marin County. There is no specific evidence to date that exposures in the Bay Area environment itself are causal. The Bay Area Breast Cancer and Environment Research Center, The Buck Center for Age Research, and the Marin County Department of Health Services are looking for clues to explain Marin’s higher incidence. There are approximately 240 estimated new cases of *invasive* breast cancer in Marin County each year. Most of the Marin women (and men) who have breast cancer are living longer because of newer medical advances.

#### **How does breast cancer risk change over time? What if you inherit a known genetic risk factor?+**

When you are under age 25, or if you are male, your risk is less than 1%. By the time a woman is 85, she has a “one in seven” chance of developing breast cancer in this region. If you inherit a defect related the breast cancer genes (BRCA-1; BRCA -2) your risk is significantly higher. Genetic counselors are available to help.

#### **What steps can I take regarding breast cancer risk for myself now, and over the next ten years ?+**

- Eliminate known environmental exposures such as tobacco and second-hand smoke. Limit alcohol use.
- Eat healthy meals and snacks that include more fruits and vegetables and fewer saturated or trans- fats
- Know your family history of cancer and breast cancer – consult with your doctor or healthcare provider
- Exercise regularly – that means an average of 30 minutes of physical activity on most days of the week
- Girls - Learn about breast self exams and get annual breast exams from a doctor, beginning at age 20
- Avoid obesity in your adult years – aim to maintain a normal range of weight in relation to your height
- Be alert to *suspected* chemical exposures and look for safer alternatives in products you use everyday.

#### **What is my community doing about this issue now?**

Many hospitals, clinics and community programs provide information, treatment and support for persons affected by breast cancer. The Marin Cancer Institute (Marin General Hospital), Kaiser Permanente, and the American Cancer Society help with services for this disease. Zero Breast Cancer’s mission is to find the causes of breast cancer through community participation in the research process. The Marin Women’s Study (MCDHS) is collecting data. Cancer research institutions monitor statistics and evaluate scientific evidence. Several groups are working to change laws and regulations to protect the community’s environmental health.

#### **How can I make a difference for others?**

- Keep a copy of your Personal Action Plan. Change one health habit that can also reduce breast cancer risk.
- Stay informed on this topic. Visit one of the information resources listed below.
- Share and discuss the information from today’s presentation with a friends and or family members.
- Volunteer your time to local organizations that are dedicated to breast cancer research and prevention



## **Breast Cancer and Environment – Peer Education Tool Kit**

### *Zero Breast Cancer – Adolescent Education Project*

**Breast Cancer support programs for families:** The Marin Cancer Institute -Marin General Hospital  
Kaiser Permanente Medical Center  
UCSF Comprehensive Cancer Center, Cancer Risk Program

### **Where can I find more information about breast cancer, environmental factors and health tips?**

Zero Breast Cancer: [www.zerobreastcancer.org](http://www.zerobreastcancer.org)

Northern California Cancer Center: [www.nccc.org](http://www.nccc.org)

National Institute of Environmental Health Sciences: <http://www.niehs.nih.gov>

Bay Area Breast Cancer and Environment Research Center: [www.bcerc.org](http://www.bcerc.org)

Marin County Department of Health and Human Services: [www.co.marin.ca.us/depts/HH/main/index.cfm](http://www.co.marin.ca.us/depts/HH/main/index.cfm)

National Cancer Institute: [www.cancer.gov](http://www.cancer.gov)

Cornell University: <http://envirocancer.cornell.edu>

National Institutes of Health, National Library of Medicine: [www.nlm.nih.gov](http://www.nlm.nih.gov)

American Cancer Society: [www.cancer.org](http://www.cancer.org)

*+The information presented here is for educational purposes only and is not intended to take the place of medical advice.*

## Breast Cancer Factors that You Can Control (or Help Someone You Care About)

- **Limiting** daily alcohol use
- **Avoiding tobacco** and second hand smoke exposure
- Keeping your **weight** in a **healthy** range for your height and body type
- **Exercising** and being **physically active** most days of the week
- **Healthy nutrition** – eat more fruits, vegetables and whole grains – limit “junk food”



The mission of Zero Breast Cancer (formerly Marin Breast Cancer Watch) is to find the causes of breast cancer through community participation in the research process. The Adolescent Breast Cancer Prevention, Risk Reduction and Education Program was created with funding from individual donors and the Avon Foundation, To Celebrate Life Breast Cancer Foundation, and the Marin Community Foundation.

The Peer Education Breast Cancer Awareness project is a partnership with the Tamalpais Union High School District and Sir Francis Drake High School Peer Resource program.

### *For further information...*

*Zero Breast Cancer*  
**www.zerobreastcancer.org**

*National Cancer Institute:*  
**www.cancer.gov**

*National Institute of  
Environmental Health Science:*  
**www.niehs.nih.gov**

*Northern California Cancer Center:*  
**www.nccc.org**

*American Cancer Society*  
**www.cancer.org**

*Marin County Department  
of Health Services*  
**www.co.marin.ca.us**  
**414-507-2560**

*The Marin Cancer Institute*  
*Marin General Hospital*  
**415-935-7822**

*Marin Women's Clinic*  
**415-444-2173**

*Kaiser Permanente Medical Center*  
**415-444-2173**

*UCSF Cancer Risk Program*  
**415-885-7779**



**www.zerobreastcancer.org**

*Graphic Design: Keason Holehan*

What Should I know About  
Breast  
Cancer?



*Graphic Design: Keason Holehan*

## Did you know?

- Breast Cancer affects many women who have no known risk factors
- A young girl's breasts are changing rapidly - that's a reason to use precautions with known and suspect environmental exposures.
- The majority of women with breast cancer are surviving and coping with the disease.
- A small percentage of people who have breast cancer are men.
- Alcohol and tobacco use can increase your risk for breast cancer.
- Researchers and medical scientists are working to prevent and control breast cancer.
- The power of your choices can make a difference for your health.



Breast cancer begins when cells inside the mammary gland change and grow out of control. There are many risk factors for breast cancer that can increase the odds for the disease.

Breast Cancer is like a puzzle - look at some of the pieces above.

Environmental Factors can influence the course of breast cancer, other diseases, and our normal health. Scientists think that some synthetic chemicals may affect hormones and cells in growing breasts. Learn more about suspected exposures – avoid them!



### Breast Cancer and Breast Health Awareness:

Ask questions - talk about breast cancer to parents, teachers, friends and your doctor or nurse. Know your family history for cancer and breast cancer and get regular breast exams (start at age 20). There are places to go for help in Marin. Check out the breast cancer resource list and information sites. Check out the breast cancer resource list and information sites in this brochure.



### The Community is Working on the Breast Cancer Issue.

Researchers are working with Marin residents. The Bay Area Breast Cancer and Environment Research Center, the Marin County Department of Health, Zero Breast Cancer, Kaiser Permanente, the Marin Cancer Institute, the Buck Institute for Age Research and Bay Area universities are conducting studies to find clues and answers. Concerned citizens are working with government leaders to promote a healthy environment.



### You Hold Some of the Keys *Here are some suggestions:*

- Think about the information on your handouts from Peer Resource and Zero Breast Cancer.
- Check out a web-site from this brochure – learn how to reduce breast cancer risk - pass it on!
- Think about careers in science, technology, health, education, and research – you can help solve this puzzle.



## Breast Cancer Tips for Latina Teens, Young Women and Families

### What is Breast Cancer?

- Breast cancer begins when normal cells in the breast start to change and grow out of control
- Symptoms may include a lump or a change in the shape or feel of the breast
- Breast cancer can affect any adult woman, including Latinas

### Facts About Breasts

- The breast is composed of a mammary (milk producing) gland that grows rapidly in teen girls and young women
- Some girls and women's breasts may feel tender before their menstrual period begins
- Mothers who breastfeed their babies tend to have lower rates of breast cancer later in life

### Healthy Living Habits

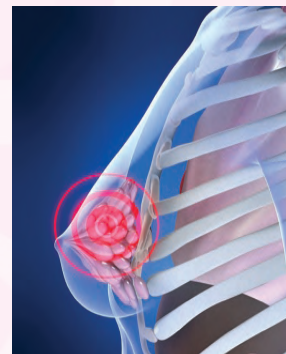
By practicing these Healthy Living Habits, adolescent girls and women can reduce some future risk for breast cancer:

- Be physically active and exercise for at least 30 minutes on most days
- Women should limit alcohol and not drink more than one alcoholic beverage a day
- Avoid tobacco smoke, including second-hand smoke
- Eat a balanced diet with 5-7 servings of fruits and vegetables each day
- Maintain a healthy body weight as a teen and as an adult woman



### Ways to Check for Breast Cancer

- Breast exams look for changes in the normal shape or feel of the breast
- If you are 20-25 years old, you can talk about having a breast exam with a health educator or doctor or nurse that you trust
- A woman over 40 years of age should have her first mammogram (breast x-ray) or MRI to look for small changes or possible cancer in the breasts



### Who Breast Cancer Affects

- A woman in California has about a 1 in 8 chance of developing breast cancer during her lifetime. For California Latina women, the chance is lower, about 1 in 11.
- It is rare for men to develop breast cancer
- It is possible for a younger woman to have breast cancer in her 30's, but most women develop breast cancer after age 50



### Breast Cancer Risk Factors- Some That We Can Change

- A risk factor is something that increases your chance for a disease
- A woman's risk is higher if she has a family history for breast cancer
- Practicing Healthy Living Habits helps to reduce the risk for breast cancer
- Teen girls who exercise for at least 30 minutes each day, and who continue to be physically active as adults, may reduce some of their future risk for breast cancer

### The Environment and Our Health - Use Precaution with Suspected Chemicals

- Scientists are concerned that certain chemicals in plastics and personal care products may cause health problems. One example of these chemicals is called phthalates (pronounced "thal-ates")
- When phthalates are absorbed in the body, they may affect the reproductive hormones
- Phthalates can be found in water bottles, children's toys, cosmetics, and other plastics. Products that contain phthalates have the number "3" or the letters "V" and "PVC" on their label
- It is better to choose products with no phthalates, or with the numbers 1, 2, 4 or 5 on their label



### Ask About Your Family History

- A woman's risk is higher if her mother or her sister has been diagnosed with breast cancer
- Ask your mother if your family has a history of breast cancer (both your mother's and father's family) and talk it over with someone that you trust including your doctor or nurse
- It is possible to develop breast cancer even if you do not have a family history of breast cancer

### Medical Treatment for Breast Cancer

- There are many medical treatments that help women to recover from breast cancer
- Treatments may include radiation, chemotherapy, medicines (pills) or a surgery to remove a tumor or cancer from the breast
- It is important to find (detect) breast cancer early and get medical treatment, even if you do not have health insurance
- Researchers are working on better treatments for people with breast cancer

## Resources in Our Community

**Marin County Clinics** that offer breast health services for all women, including low-income women:

**Women's Health Services**  
(HHS Clinics - San Rafael) 415-507-4019

**Planned Parenthood Golden Gate**  
(San Rafael, Novato Wellness Center) 1-800-967-7526

**Coastal Health Alliance** and Tina Caring Program  
(West Marin) 415-663-8666

**Marin Community Clinics**  
(Novato, Greenbrae and San Rafael) 415-448-1500

**Family Pact** program information: [www.familypact.org](http://www.familypact.org)

## Teen Clinics

**Planned Parenthood Golden Gate**; 1-800-967-7526;  
Teen Page: [www.espanol.ppgg.org](http://www.espanol.ppgg.org) PPGG (drop-in)  
Teen Clinics: Novato Wellness Center and central San Rafael

## Information and Support for Latinas

**American Cancer Society** information in English or Spanish; [www.cancer.org/docroot/ESP/ESPD.asp](http://www.cancer.org/docroot/ESP/ESPD.asp)

**Latinas Contra Cancer**: [www.latinascontracancer.org](http://www.latinascontracancer.org)

**Redes En Acción**: [www.redesenaccion.org](http://www.redesenaccion.org)

**Mujeres Activas!** support group at the Canal Welcome Center. Latinas can contact the **Marin Center for Independent Living** for this group or for assistance to qualify for treatment services: [www.marincil.org](http://www.marincil.org); or call 415-459-6245

**Women Caring for Women/Mujeres Cuidando Mujeres** assists Latinas over age 40 to enroll in the Every Woman Counts Cancer Detection program. Call 415-584-3449 (Spanish); 415-584-3444 (English); or visit: [www.latinabca.org](http://www.latinabca.org)

## Resources and Treatment for People Who Have Breast Cancer

**Medical Centers: Marin General & Novato Community Hospitals** (415-461-7770), **Kaiser Medical Center** (415-444-2496) and the **UCSF Cancer Risk Program** (415-885-7779)

The **State of California** helps low income women with breast cancer to obtain treatment. Call 1-800-511-2300 or visit: [www.dhs.ca.gov/cancerdetection/breastcancer/breastcancer/htm](http://www.dhs.ca.gov/cancerdetection/breastcancer/breastcancer/htm) for information in Spanish

Women under age 40 who have breast cancer can contact the **Young Survival Coalition** at: [www.youngsurvival.org/es/community](http://www.youngsurvival.org/es/community)

## Information on the Environment and Health

Information about suspected chemicals, environmental exposures and health on the **Zero Breast Cancer** web site: [www.zerobreastcancer.org/research/tensuggestions.pdf](http://www.zerobreastcancer.org/research/tensuggestions.pdf); and: [www.zerobreastcancer.org/research.html#1](http://www.zerobreastcancer.org/research.html#1)

Information for the family on the **National Institute of Environmental Health Sciences** web site: <http://kids.niehs.nih.gov/home.htm>

Video clips on chemicals in personal care products and plastics are available from **Cornell University**: [www.envirocancer.cornell.edu](http://www.envirocancer.cornell.edu)

## Breast Cancer Research in Marin County and the San Francisco Bay Area

Scientists and advocates are searching for the causes and prevention of breast cancer. For information (in Spanish) on the **Bay Area Breast Cancer and the Environment Research Center** visit <http://bayarea.bcerc.org>; or contact Zero Breast Cancer at 415.507.1949 or: [www.zerobreastcancer.org](http://www.zerobreastcancer.org)

Invite your mother to participate in the **Marin Women's Study**, a local breast cancer research study designed to learn more about breast cancer risk in our community. Visit [www.marinwomensstudy.org](http://www.marinwomensstudy.org); or call 415-507-4077

Students can learn about local breast cancer research at the **Buck Institute for Age Research**; [www.buckinstitute.org](http://www.buckinstitute.org); and **Dominican University of California**; [www.dominican.edu](http://www.dominican.edu)

*Please Share this Information with Your Family and Friends*

### ACKNOWLEDGEMENTS

The Latina Adolescent Outreach Project is funded by the Avon Foundation, the Andrea Fox Fund, the Marin County Board of Supervisors and Zero Breast Cancer supporters. The mission of Zero Breast Cancer (ZBC) is to find the causes of breast cancer through community participation in the research process. The project coordinator is Susan Schwartz (ZBC). Advisors include Dr. Julianna Deardorff and Claudia Guerra (UCSF), Janice Barlow (ZBC), Berta Campos and Melissa Fike (Novato Youth Wellness Collaborative) and Novato Latina student representatives. Spanish translation by Torta, Inc. Graphic design by Kimber Communications.

### RECONOCIMIENTOS

El Proyecto de Extensión Comunitaria para Adolescentes Latinas está financiado por la Fundación Avon, el Fondo Andrea Fox, la Junta de Supervisores del Condado de Marin y por quienes apoyan a Zero Breast Cancer. La misión de Zero Breast Cancer (ZBC) es encontrar las causas del cáncer de seno a través de la participación de la comunidad en el proceso de investigación. La coordinadora del proyecto es Susan Schwartz (ZBC). Entre los asesores destacan la Doctora Julianna Deardorff y Claudia Guerra (UCSF), Janice Barlow (ZBC), Berta Campos y Melissa Fike (Grupo de Colaboración para el Bienestar Juvenil de Novato) y representantes de las estudiantes latinas de Novato. Traducción al español por Torta, Inc. Diseño gráfico por Kimber Communications.



4340 Redwood Highway, Suite C400  
San Rafael, California 94903  
415.507.1949 • [www.zerobreastcancer.org](http://www.zerobreastcancer.org)



## Recomendaciones sobre el Cáncer de Seno para Adolescentes y Mujeres Jóvenes Latinas, y sus Familias

### ¿Qué es el cáncer de seno?

- El cáncer de seno comienza cuando las células normales del seno empiezan a cambiar y a crecer sin control
- Algunos síntomas pueden incluir la presencia de una bolita o algún cambio en la forma del seno
- El cáncer de seno puede afectar a cualquier mujer adulta, incluyendo a las latinas

### Información sobre los senos

- El seno está compuesto por una glándula mamaria (que produce leche), la cual crece con rapidez en las adolescentes y mujeres jóvenes
- Los senos de algunas niñas y mujeres pueden estar sensibles al tacto antes de que inicie su ciclo menstrual
- Las madres que amamantan a sus hijos tienden a tener tasas más bajas de cáncer de seno más adelante en sus vidas

### Hábitos para una vida saludable

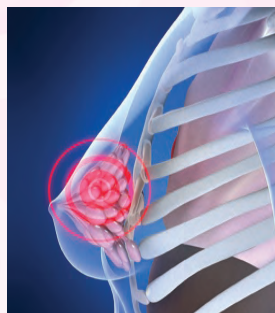
Al poner en práctica los siguientes hábitos para una vida saludable, las adolescentes y las mujeres pueden reducir algunos riesgos de padecer cáncer de seno en el futuro:

- Estar físicamente activas y hacer ejercicio al menos durante 30 minutos casi todos los días
- Las mujeres deben limitar el consumo de bebidas alcohólicas y no tomar más de una sola bebida alcohólica al día
- Evitar el humo del tabaco, incluyendo humo de segunda mano
- Comer una dieta balanceada con 5 a 7 porciones de frutas y verduras todos los días
- Conservar un peso corporal saludable durante la adolescencia y como mujer adulta



### Formas de detectar el cáncer de seno

- Los exámenes de los senos sirven para detectar cambios en la forma o en la sensación del seno
- Si tienes de 20 a 25 años de edad, puedes hablar con un educador de la salud, médico o enfermera a quien le tengas confianza respecto a hacerte un examen de los senos
- A fin de detectar pequeños cambios o la posible presencia



de cáncer de seno, las mujeres mayores de 40 años deben someterse a su primera mamografía (radiografía de los senos) o MRI.

### Quiénes sufren los efectos del cáncer de seno

- En California las mujeres tienen aproximadamente una probabilidad de 1 en 8 de desarrollar cáncer de seno durante toda su vida. La probabilidad de las mujeres latinas de California es menor: alrededor de 1 en 11
- Es poco común que los hombres desarrollen cáncer del pecho
- Es posible que una mujer joven de entre 30 a 40 años de edad tenga cáncer de seno, pero la mayoría de las mujeres desarrollan cáncer de seno después de los 50 años de edad

### Factores de riesgo del cáncer de seno – Algunos de ellos se pueden modificar

- Los factores de riesgo son algo que aumenta la probabilidad de enfermarse
- El riesgo de una mujer es mayor si en su familia hay historial de cáncer de seno
- Practicar hábitos para una vida saludable ayuda a reducir el riesgo de desarrollar cáncer de seno
- Las adolescentes que hacen ejercicio al menos durante 30 minutos al día y que continúan haciendo ejercicio de adultas, podrían reducir parte del riesgo de desarrollar cáncer de seno en el futuro



### El medio ambiente y la salud – Ten precaución con las sustancias químicas que se sospecha son peligrosas para la salud

- A los científicos les inquieta el hecho de que algunas sustancias químicas presentes en el plástico y en los productos para el cuidado personal podrían ocasionar problemas de salud. Una de estas sustancias químicas recibe el nombre de ftalatos (pronunciada "talatos")
- Cuando los ftalatos son absorbidos por el organismo, podrían afectar las hormonas reproductivas
- Los ftalatos pueden encontrarse presentes en artículos como botellas de agua, juguetes infantiles, cosméticos y otros plásticos. Los productos que contienen ftalatos llevan el número "3" o las letras "V" y "PVC" en la etiqueta
- Es mejor elegir productos sin ftalatos, o los que tengan los números 1, 2, 4 ó 5 en la etiqueta



### Infórmate sobre tu historial familiar

- Las mujeres tienen un mayor riesgo si su madre o una hermana fueron diagnosticadas con cáncer de seno
- Pregúntale a tu mamá si en tu familia hay historial de cáncer de seno (tanto en la familia de tu madre como en la de tu padre) y discútelo con alguien en quien confíes, incluyendo a tu médico o enfermera
- Es posible desarrollar cáncer de seno incluso si no hay historial de cáncer de seno en tu familia

### Tratamiento médico del cáncer de seno

- Hay muchos tratamientos médicos que ayudan a las mujeres a recuperarse del cáncer de seno
- Algunos de estos tratamientos incluyen radiación, quimioterapia, medicinas (pastillas) o cirugía para eliminar un tumor o cáncer en el seno
- Es importante encontrar (detectar) el cáncer de seno oportunamente y recibir atención médica, incluso si no tienes seguro médico
- Los investigadores están trabajando en encontrar mejores tratamientos para personas con cáncer de seno

### Recursos en nuestra comunidad

**Clínicas del Condado de Marin** que ofrecen servicios relacionados con la salud de los senos para todas las mujeres, incluyendo las mujeres de bajos ingresos:

**Servicios de Salud Femenina** (Clínicas del Departamento de Servicios de Salud y Servicios Humanos en San Rafael) 415-507-4019

**Planned Parenthood Golden Gate** (en San Rafael, Novato Wellness Center) 1-800-967-7526

**Coastal Health Alliance** y Tina Caring Program (en el Oeste de Marin) 415-663-8666

**Clínicas Comunitarias de Marin** (en Novato, Greenbrae y San Rafael) 415-448-1500

**Family Pact.** Información: [www.familypact.org](http://www.familypact.org)

### Clínicas para adolescentes

**Planned Parenthood Golden Gate;** 1-800-967-7526; página para adolescentes (Teen): [www.espanol.ppgg.org](http://www.espanol.ppgg.org). Clínicas PPGG (a las que puedes acudir sin cita) para adolescentes: Novato Wellness Center y en el centro de San Rafael

### Información y apoyo para mujeres latinas

**Sociedad Americana del Cáncer** información en inglés o en español: [www.cancer.org/docroot/ESP/ESPD.asp](http://www.cancer.org/docroot/ESP/ESPD.asp)

**Latinas Contra Cáncer:** [www.latinascontracancer.org](http://www.latinascontracancer.org)

**Redes En Acción:** [www.redesenaccion.org](http://www.redesenaccion.org)

**Mujeres Activas!** grupo de apoyo en el Canal Welcome Center. Las mujeres latinas pueden ponerse en contacto con el **Marin Center for Independent Living** con objeto de asistir a este grupo o solicitar ayuda para reunir los requisitos de los servicios de tratamiento: [www.marincil.org](http://www.marincil.org); o llama al 415-459-6245

**Women Caring for Women/Mujeres Cuidando Mujeres** ayuda a las latinas mayores de 40 años a inscribirse al programa de detección de cáncer Every Woman Counts. Llama al 415-584-3449 (español); 415-584-3444 (inglés); o visita [www.latinabca.org](http://www.latinabca.org)

### Recursos y tratamiento para personas con cáncer de seno

**Centros Médicos:** hospitales **Marin General y Novato Community Hospital** (415-461-7770), **Kaiser Medical Center** (415-444-2496) y el **UCSF Cancer Risk Program** (415-885-7779)

El **Estado de California** ayuda a las mujeres de bajos recursos que tienen cáncer de seno a obtener tratamiento. Llama al 800-511-2300 o visita [www.dhs.ca.gov/cancerdetection/breastcancer/breastcancer/htm](http://www.dhs.ca.gov/cancerdetection/breastcancer/breastcancer/htm) para información en español

Las mujeres menores de 40 años que tengan cáncer de seno pueden ponerse en contacto con la **Young Survival Coalition** visitando: [www.youngsurvival.org/es/community](http://www.youngsurvival.org/es/community)

### Información sobre el medio ambiente y la salud

Información sobre sustancias químicas que se sospecha son peligrosas para la salud, exposiciones ambientales y la salud en el sitio Web de **Zero Breast Cancer:** [www.zerobreastcancer.org/research/tensuggestions.pdf](http://www.zerobreastcancer.org/research/tensuggestions.pdf); y también: [www.zerobreastcancer.org/research.html#1](http://www.zerobreastcancer.org/research.html#1)

En el sitio Web del **Instituto Nacional de las Ciencias de Salud Ambiental** se incluye información para toda la familia: <http://ninos.niehs.nih.gov/home.htm>

Puedes obtener video clips sobre las sustancias químicas presentes en los artículos para el cuidado personal y en el plástico a través de la **Cornell University:** [www.envirocancer.cornell.edu](http://www.envirocancer.cornell.edu)

### Actividades de investigación sobre el cáncer de seno en el Condado de Marin y en el Área de la Bahía de San Francisco

Científicos y promotores de la salud buscan las causas del cáncer de seno así como las medidas para prevenirlo. Para mayor información (en español) sobre el **Centro de Investigación del Cáncer de Seno y el Medio Ambiente del Área de la Bahía (Bay Area Breast Cancer and the Environment Research Center o BABCERC)** visita <http://bayarea.bccrc.org>; o comunícate con Zero Breast Cancer al 415-507-1949 o: [www.zerobreastcancer.org](http://www.zerobreastcancer.org)

Invita a tu mamá a participar en el **Marin Women's Study**, el cual es un estudio local de investigación sobre el cáncer de seno diseñado para obtener mayor información sobre el riesgo del cáncer de seno en nuestra comunidad. Visita [www.marinwomensstudy.org](http://www.marinwomensstudy.org); o llama al 415-507-4077

Los estudiantes pueden obtener información acerca de las investigaciones locales sobre el cáncer de seno a través del sitio Web del **Instituto Buck de Investigación sobre el Envejecimiento (Buck Institute for Age Research)** en [www.buckinstitute.org](http://www.buckinstitute.org); y del sitio Web de la **Dominican University of California** en [www.dominican.edu](http://www.dominican.edu)

Por favor, comparte esta información con tus familiares y amigos

## BACKGROUND

- Accurate, developmentally appropriate information for adolescent girls specific to breast cancer risk and preventive health is needed
- Latino adolescents and young adults encounter unique cultural and linguistic barriers to health information and cancer prevention services
- Latinos represent the fastest growing ethnic demographic group in Marin County, California and the United States
- The prevalence of breast cancer among young Latinas appears to be increasing; therefore it is important to consider early breast cancer interventions that are culturally relevant within this population
- Zero Breast Cancer (ZBC) and bi-cultural advisors from the University of California, San Francisco (UCSF) have engaged Latina adolescents in adapting the *Breast Cancer and Environment – Peer Education Tool Kit*



## OBJECTIVES

- To culturally adapt and translate into Spanish three components of the *Breast Cancer and Environment – Peer Education Tool Kit (2006)* for Marin County Latina adolescents: Top Twelve Messages, Teen Brochure, and Personal Action Plan
- To disseminate the adapted, translated materials to high school health educators and community organizations

## METHODS

- ZBC and UCSF engaged the Novato Youth Wellness Collaborative in the project's planning and development
- Two focus groups were conducted with Latina adolescents aided by a bi-lingual health educator
- The goal of the first focus group was to determine cultural, social and familial factors to the intervention adaptation process. The goal of the second focus group was to validate the adapted, translated materials

- ▶ Participant recruitment and parental consent were obtained using bilingual forms
- ▶ Focus groups probed Latina students' needs and preferences related to *Tool Kit* adaptation
- ▶ A standard qualitative approach was utilized to review focus group data
- ▶ *Tool Kit* components were adapted to produce an education brochure for Latina adolescents
- ▶ The Breast Cancer Coordinating Council of Marin (MCDHHS) was consulted for Latina resources

### Focus Group Results - Themes for Adaptation

- ▶ Mothers, health providers and teachers were considered trusted sources of health information
- ▶ Adolescent girls were not concerned with risk to self (without positive family history)
- ▶ "It's important to learn about it (breast cancer) and to be able to handle the situation"
- ▶ Limited awareness of potential health effects of environmental exposures
- ▶ Adolescents suggested emphasizing benefits of physical activity and a healthy lifestyle
- ▶ Family respect and support is important - include images of mothers and daughters
- ▶ Brochure should include Spanish language health services and web site resources for Latinas

## WORK PERFORMED

The *Tool Kit* was adapted by project staff and advisors into a bi-lingual brochure with nine message categories. Each category presents bulleted statements for ease of reading in English and Spanish. The brochure includes a Community Resource section with Marin County/Bay Area clinics serving Latinas, and web sites including the National Institute of Environmental Health Sciences and the Breast Cancer and the Environment Research Centers. The new brochure is titled "*Breast Cancer Tips for Latina Teens, Young Women and Families.*"

### Adapted Message Objectives\*

- Promote awareness of breast development and modifiable breast cancer risk factors
- Emphasize relationship between healthy living habits and breast cancer risk reduction
- Introduce concept of environmental factors and precautionary approach
- Communicate preventive role of early detection breast exams and screening
- Encourage discussion of family history of breast cancer with parents and health providers
- Promote access to Latina oriented resources, health information and clinical services
- Anticipate that Latina adolescents will share information with peers and family members

\*Academic Content: California Health Education Standards and National Health Education Standards

### Spanish Language Translation

- ▶ Translation was approached with the diversity of the Bay Area Hispanic population in mind
- ▶ Translation involved the use of a respectful word for "breast" ("seno") and the use of familiar terms for "environment and health" ("información sobre el medio ambiente y salud")
- ▶ The translation was reviewed using an iterative process with Latina adolescents prior to final production

### Brochure Graphics

- ▶ A professional designer composed the brochure with a dual-sided English/Spanish format
- ▶ Illustrations feature Latina mothers and daughters, a physically active Latina adolescent, a breast anatomy view, and an environmental exposure example

### Personal Action Plan

- ▶ The *Tool Kit* Personal Action Plan was adapted and translated into a dual-sided English/Spanish format
- ▶ The intent of the Personal Action Plan is for Latina adolescents to commit to behavioral change
- ▶ The Personal Action Plan may be used for classroom instruction and qualitative program evaluation



## RESULTS & DISCUSSION

- ▶ The new brochure, *Breast Cancer Tips for Latina Teens, Young Women and Families*, integrates culturally grounded terminology and graphics to convey breast cancer educational messages and information for Latina adolescents
- ▶ The brochure encourages Latina adolescents and families to discuss breast cancer risk and protective factors and preventive health information
- ▶ The brochure is intended for dissemination to high schools and community programs serving Latina adolescents and women
- ▶ Many successful university-community collaborations have been initiated based on the premise of working together to demonstrate the utility and effectiveness of targeted intervention programs with underrepresented ethnic minority groups
- ▶ The work of Zero Breast Cancer and their advisors at the University of California San Francisco, along with the Novato Youth Wellness Collaborative, represents a community outreach program that will lead to effective health messages and prevention strategies with Latina adolescents



Julianna Deardorff, Claudia Guerra, Angelica Quirarte, Susan Schwartz: National Latino Cancer Summit, 2008

## Acknowledgements

Funding: Avon Foundation, Andrea Fox Fund, Marin County Board of Supervisors  
Community Partners: Novato Youth Wellness Collaborative, Berta Campos, Melissa Fike, Angelica Quirarte  
Translation: Torta Communications, Inc. Graphic Design: Kimber Communications

