CANCER AND CANCER CONTROL AMONG ASIAN AMERICANS

Tung T. Nguyen, MD
Associate Clinical Professor, UCSF
Co-Director, Vietnamese Community Health Promotion Project (Suc Khoe La Vang!)
Deputy Principal Investigator, Asian American Network for Cancer Awareness, Research, and Training
Chair, American Cancer Society-California Asian American Pacific Islander Team

August 1, 2008
Acknowledgements

• Funders
  – Asian American Network for Cancer Awareness, Research and Training (AANCART) (National Cancer Institute)
  – UCSF Comprehensive Cancer Center/San Francisco State University Collaborative Grant (U-56) (National Cancer Institute)
  – Vietnamese Reach for Health Initiative (Centers for Disease Control and Prevention)
Outline

• Asian American populations
• Cancer incidence and mortality rates
• Cancer prevention and care
• Examples of efforts to address cancer control
Race/Ethnicity in U.S. (2005)
Total = 296,410,404
Asians in the U.S. (2005)

• 12.7 million single race Asians (4.3%)

• 14.4 million any race Asians (4.9%)

• Projected growth rate 213% to 33 million (8%) by 2050
Growth in Population

Per Cent Growth

Census Year


Total Pop.  Asian
Race/Ethnicity in California (2005)

• 43.8% are non-Latino Whites
• 35.2% are Latinos
• **13.5% are Asians**
  – 4.9 million any race Asians
• 7.4% are African Americans
• 1.9% are American Indian/Alaskan Natives
• 0.7% are Native Hawaiians/other Pacific Islanders
Asian American Sub-groups

<table>
<thead>
<tr>
<th>Detailed group</th>
<th>Population</th>
<th>Percent of Asian alone population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian alone</td>
<td>12,097,281</td>
<td>100.0</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>2,245,239</td>
<td>18.6</td>
</tr>
<tr>
<td>Bangladeshi</td>
<td>50,473</td>
<td>0.4</td>
</tr>
<tr>
<td>Cambodian</td>
<td>195,208</td>
<td>1.6</td>
</tr>
<tr>
<td>Chinese, except Taiwanese</td>
<td>2,829,627</td>
<td>23.4</td>
</tr>
<tr>
<td>Filipino</td>
<td>2,148,227</td>
<td>17.8</td>
</tr>
<tr>
<td>Hmong</td>
<td>163,733</td>
<td>1.4</td>
</tr>
<tr>
<td>Indonesian</td>
<td>52,267</td>
<td>0.4</td>
</tr>
<tr>
<td>Japanese</td>
<td>832,039</td>
<td>6.9</td>
</tr>
<tr>
<td>Korean</td>
<td>1,251,092</td>
<td>10.3</td>
</tr>
<tr>
<td>Laotian</td>
<td>226,661</td>
<td>1.9</td>
</tr>
<tr>
<td>Malaysian</td>
<td>11,458</td>
<td>0.1</td>
</tr>
<tr>
<td>Pakistani</td>
<td>208,852</td>
<td>1.7</td>
</tr>
<tr>
<td>Sri Lankan</td>
<td>22,339</td>
<td>0.2</td>
</tr>
<tr>
<td>Taiwanese</td>
<td>70,771</td>
<td>0.6</td>
</tr>
<tr>
<td>Thai</td>
<td>130,548</td>
<td>1.1</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>1,267,510</td>
<td>10.5</td>
</tr>
<tr>
<td>Other Asian(^2)</td>
<td>250,666</td>
<td>2.1</td>
</tr>
<tr>
<td>Other Asian, not specified(^3)</td>
<td>140,571</td>
<td>1.2</td>
</tr>
</tbody>
</table>

American Community Survey: Asian Americans 2004
Asian American Demographics

- 66% born outside the U.S.
  - 33% of foreign-born Asians came after 1990

- 77% of Asians speak another language at home.

- Asian Americans have higher poverty rates than non-Hispanic Whites (8.8%)
  - All (11.7%)
  - Chinese (13.4%)
  - Koreans (14.9%)
  - Vietnamese (14.0%)
Outline

• Asian American populations
• Cancer incidence and mortality rates
• Cancer prevention and care
• Examples of efforts to address cancer control
Asian Americans and Cancer

• **Cancer is the leading cause of death.**
  • Leading cancers are preventable.
  • Acculturation may increase incidence of common cancers.
• Usually rare cancers are common.
• Sub-group differences are important.
• There is still a lack of data.
• Asian Americans underutilize cancer screening.
Leading causes of death for APIs

1. Cancer
2. Heart Disease
3. Stroke
4. Unintentional injuries
5. Chronic lower respiratory disease
6. Influenza and pneumonia
7. Diabetes
8. Suicide
9. Nephritis, nephrotic syndrome, and nephritis
10. Birth defects
# Cancer Incidence, All Sites 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>663.7</td>
<td>396.9</td>
</tr>
<tr>
<td>Non-Latino White</td>
<td>556.7</td>
<td>423.9</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>421.3</td>
<td>314.2</td>
</tr>
<tr>
<td><strong>Asian/Pacific Islander</strong></td>
<td><strong>359.9</strong></td>
<td><strong>285.8</strong></td>
</tr>
<tr>
<td>Amer Ind/Alaska Nat.</td>
<td>321.2</td>
<td>282.4</td>
</tr>
</tbody>
</table>

Rates per 100,000 age-adjusted to the US 2000 population

Jemal CA Cancer J Clin 2008
## Cancer Mortality Rates 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>321.8</td>
<td>189.3</td>
</tr>
<tr>
<td>Non-Latino White</td>
<td>234.7</td>
<td>161.4</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>162.2</td>
<td>106.7</td>
</tr>
<tr>
<td>Amer Ind/Alaska Nat</td>
<td>187.9</td>
<td>141.2</td>
</tr>
<tr>
<td><strong>Asian/Pacific Islander</strong></td>
<td><strong>141.7</strong></td>
<td><strong>96.7</strong></td>
</tr>
</tbody>
</table>

Rates per 100,000 age-adjusted to the US 2000 population

Jemal CA Cancer J Clin 2008
Asian Americans and Cancer

- Cancer is the leading cause of death.
- **Leading cancers are preventable.**
  - Acculturation may increase incidence of common cancers.
- Usually rare cancers are common.
- Sub-group differences are important.
- There is still a lack of data.
- Asian Americans underutilize cancer screening.
## Incidence Rates by Site for Men 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>W</th>
<th>Af Am</th>
<th>Latino</th>
<th>A/PI</th>
<th>AI/AN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>161.4</td>
<td>255.5</td>
<td>140.8</td>
<td>96.568.2</td>
<td>68.2</td>
</tr>
<tr>
<td>Lung</td>
<td>81.0</td>
<td>110.6</td>
<td>44.7</td>
<td>55.153.7</td>
<td>53.7</td>
</tr>
<tr>
<td>Colorectal</td>
<td>60.4</td>
<td>72.6</td>
<td>47.5</td>
<td>49.742.1</td>
<td>42.1</td>
</tr>
</tbody>
</table>

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

Jemal CA Cancer J Clin 2008
### Incidence Rates by Site for Women 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>W</th>
<th>Af-Am</th>
<th>Latino</th>
<th>A/PI</th>
<th>AI/AN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>132.5</td>
<td>118.3</td>
<td>89.3</td>
<td>89.0</td>
<td>69.8</td>
</tr>
<tr>
<td>Lung</td>
<td>54.6</td>
<td>53.7</td>
<td>25.2</td>
<td>27.7</td>
<td>36.7</td>
</tr>
<tr>
<td>Colorectal</td>
<td>44.0</td>
<td>55.0</td>
<td>32.9</td>
<td>35.3</td>
<td>39.6</td>
</tr>
</tbody>
</table>

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

Jemal CA Cancer J Clin 2008
Asian Americans and Cancer

- Cancer is the leading cause of death.
- Leading cancers are preventable.
  - **Acculturation may increase incidence of common cancers.**
- Usually rare cancers are common.
- Sub-group differences are important.
- There is still a lack of data.
- Asian Americans underutilize cancer screening.
# Incidence Rates by Site for Whites and Japanese Americans 2000-2004

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>White</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>170.0</td>
<td>115.0</td>
</tr>
<tr>
<td>Colorectal (men)</td>
<td>65.6</td>
<td>75.9</td>
</tr>
<tr>
<td>Breast</td>
<td>145.2</td>
<td>126.5</td>
</tr>
<tr>
<td>Colorectal (women)</td>
<td>47.6</td>
<td>51.9</td>
</tr>
</tbody>
</table>

Rates per 100,000 age-adjusted to U.S. 2000 population
Miller Cancer Causes Control 2008
Trends in Breast Cancer Incidence, California 1988-2004

Source: Cancer Surveillance Program of Los Angeles.
APC = Average Annual Percent Change. Percents in red are statistically significant (p < 0.05). All rates are age-adjusted to the 1970 US population.
Trends in Breast Cancer Mortality, California 1988-2004
Asian Americans and Cancer

- Cancer is the leading cause of death.
- Leading cancers are preventable.
  - Acculturation may increase incidence of common cancers.
- **Usually rare cancers are common.**
- **Sub-group differences are important.**
- There is still a lack of data.
- Asian Americans underutilize cancer screening.
Liver Cancer Incidence, Men
1998-2002

Miller 2008; California Cancer Registries 2008
Liver Cancer Incidence, Women 1998-2002

Rate per 100,000

White: 2.6
Al/PI: 7.9
Chinese: 8.2
Filipino: 5.1
Japanese: 7.9
Cambodian: 14.1
Korean: 23.1
Laotian: 14.4
Vietnamese: 16.8

Miller 2008; California Cancer Registries 2008
Comparison of Colorectal and Liver Cancer Mortality
U.S. Men 1998-2002

Miller 2008; California Cancer Registries 2008

Miller 2008; California Cancer Registries 2008
Cervical Cancer

- Laotian, (24.8), Samoan (18.1), Vietnamese (16.8), and Cambodian (15.3) women experience the highest rates of new cases of cervical cancer.

- These rates are 2-3 times higher than those of non-Hispanic White women (8.1 per 100,000).

Miller 2008; California Cancer Registry, 2008
Stomach Cancer Incidence, Men 1998-2002

Miller 2008; California Cancer Registries 2008
Stomach Cancer Incidence, Women
1998-2002

Rate per 100,000

White 4.3
A/PI 10.8
Chinese 14.1
Japanese 15.0
Korean 26.3
Samoa 53.0
Vietnamese 12.8

Miller 2008; California Cancer Registries 2008
Asian Americans and Cancer

• Cancer is the leading cause of death.
• Leading cancers are preventable.
  – Acculturation may increase incidence of common cancers.
• Usually rare cancers are common.
• Sub-group differences are important.
• **There is still a lack of data.**
• Asian Americans underutilize cancer screening.
An Example of Data Absence

*Incidence Trends, Liver Cancer*
That’s so Last Century!

• Many studies do not include sufficient numbers of Asian Americans
• Studies that include Asian Americans do not differentiate between different sub-groups
• Many studies do not include those who do not speak English
• Example
  – The HINT survey was conducted in 2003 and 2005 as the definitive survey on cancer communications
  – The survey oversampled Blacks and Hispanics and was conducted in English and Spanish
  – In press releases and reports about the results, Asian Americans were not mentioned!
Outline

• Asian American populations
• Cancer incidence and mortality rates
• Cancer prevention and care
• Examples of efforts to address cancer control
Primary Prevention

- Immunization
  - Hepatitis B, human papillomavirus
- Dietary behavior
  - fat, alcohol
- Lifestyle
  - tobacco use
  - physical activity
- Environment
  - toxins
  - radiation
Proportion of California Adults who Eat 5 or More Servings of Fruits and Vegetables, BRFS 2002

Source: California Behavioral Risk Factor Survey
Data are age-adjusted to the 1990 California population.
Percent of California Adults Who Get Moderate Exercise, BRFS 2001

Source: California Behavioral Risk Factor Survey
Data are age-adjusted to the 1990 California population.
Tobacco and Cancer

• 87% of lung cancer deaths
• 30% of all cancer deaths
• Cancers associated with tobacco
  – Lung
  – Larynx, Mouth, Esophagus
  – Liver, Pancreas, Stomach, Colorectal
  – Bladder, Kidney
  – Cervix

US DHHS 1989
Comparative Causes of Annual Deaths in the United States

- AIDS
- Alcohol
- Motor Vehicle
- Homicide
- Drug
- Suicide
- Smoking

Annual deaths (thousands)
Death by Smoking

- Nearly 500,000 deaths in the U.S. each year
- 4.9 million deaths worldwide in 2002
- 10 million deaths worldwide by 2030 (70% in developing countries)
Current Tobacco Use in Adults: 2006 National Health Interview Survey

<table>
<thead>
<tr>
<th></th>
<th>% Men</th>
<th>% Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>27.6</td>
<td>19.2</td>
</tr>
<tr>
<td>American Indian</td>
<td>35.6</td>
<td>20.0</td>
</tr>
<tr>
<td>Asian American</td>
<td>16.9</td>
<td>4.6</td>
</tr>
<tr>
<td>Latino</td>
<td>20.1</td>
<td>10.1</td>
</tr>
<tr>
<td>White</td>
<td>24.3</td>
<td>19.7</td>
</tr>
</tbody>
</table>

MMWR November 9, 2007 / 56(44)
Cigarette smoking rates among Asian American men, 1990s

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laotian</td>
<td>72</td>
</tr>
<tr>
<td>Cambodian</td>
<td>71</td>
</tr>
<tr>
<td>Vietnamese (OH)</td>
<td>43</td>
</tr>
<tr>
<td>Korean</td>
<td>39</td>
</tr>
<tr>
<td>Vietnamese (CA)</td>
<td>36</td>
</tr>
<tr>
<td>Chinese</td>
<td>28</td>
</tr>
<tr>
<td>US</td>
<td>26</td>
</tr>
</tbody>
</table>
Smoked Cigarettes within 30 Days
Adult Tobacco Survey*, 2002-05

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
</table>

*Survey conducted in English or Spanish

Caraballo, Public Health and Practice, 2008
**English fluency & Smoking among Asian Americans in California**

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>High:</td>
<td>17.3%</td>
<td>High:</td>
</tr>
<tr>
<td>Low:</td>
<td>24.9%</td>
<td>Low:</td>
</tr>
</tbody>
</table>
Physician-Patient Communication: Smoking Cessation Counseling

• Proportion of smokers counseled to quit by their physicians
  – 82% of Whites
  – 78% of African Americans
  – 58% of Latinos
    • 39% of Spanish-speaking Latinos
  – 68% of Asians

Commonwealth Fund 2001 Health Care Quality Survey
Asian Americans and Cancer

• Cancer is the leading cause of death.
• Leading cancers are preventable.
  – Acculturation may increase incidence of common cancers.
• Usually rare cancers are common.
• Sub-group differences are important.
• There is still a lack of data.
• **Asian Americans underutilize cancer screening.**
Secondary Prevention

• Early detection: screening test
  – Mammography
  – Pap test
  – Colon cancer screening tests
  – Prostate-specific antigen test?
The Importance of Early Detection
5-Year Survival and Stage at Diagnosis, California 1988-2004

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Local</th>
<th>Regional</th>
<th>Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>?</td>
<td>79%</td>
<td>20%</td>
</tr>
<tr>
<td>Prostate</td>
<td>?</td>
<td>93%</td>
<td>33%</td>
</tr>
<tr>
<td>Colorectal</td>
<td>?</td>
<td>66%</td>
<td>9%</td>
</tr>
<tr>
<td>Cervix</td>
<td>?</td>
<td>56%</td>
<td>17%</td>
</tr>
<tr>
<td>Lung</td>
<td>?</td>
<td>21%</td>
<td>3%</td>
</tr>
</tbody>
</table>
# The Importance of Early Detection

## 5-Year Survival and Stage at Diagnosis, California 1988-2004

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>All Stages</th>
<th>Local</th>
<th>Regional</th>
<th>Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>88%</td>
<td>97%</td>
<td>79%</td>
<td>20%</td>
</tr>
<tr>
<td>Prostate</td>
<td>95%</td>
<td>100%</td>
<td>93%</td>
<td>33%</td>
</tr>
<tr>
<td>Colorectal</td>
<td>63%</td>
<td>90%</td>
<td>66%</td>
<td>9%</td>
</tr>
<tr>
<td>Cervix</td>
<td>72%</td>
<td>92%</td>
<td>56%</td>
<td>17%</td>
</tr>
<tr>
<td>Lung</td>
<td>15%</td>
<td>50%</td>
<td>21%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Pap Test Receipt, California 2005

CHIS 2005, Women age 18-65
Mammography Receipt, California 2005

CHIS 2005, Women age 40-70
Colon Cancer Screening, California 2005

CHIS 2005, Age 50-80
Outline

• Asian American populations
• Cancer incidence and mortality rates
• Cancer prevention and care
• Examples of efforts to address cancer control
Health Insurance Coverage of People Age < 65 by Ethnicity, U.S. 2005
Cancer Screening by Health Insurance, 2005
Cancer Survival by Insurance Status
## Physician-Patient Relationship

<table>
<thead>
<tr>
<th>Issue</th>
<th>W</th>
<th>Af Am</th>
<th>Latino</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1 communication problem</td>
<td>16</td>
<td>23</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>Hard to understand instruction</td>
<td>41</td>
<td>45</td>
<td>55</td>
<td>56</td>
</tr>
<tr>
<td>Not involved enough in decisions</td>
<td>22</td>
<td>27</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>Felt disrespected</td>
<td>9</td>
<td>16</td>
<td>18</td>
<td>13</td>
</tr>
</tbody>
</table>

Commonwealth Fund Health Care Quality Survey, 2001
Outline

• Asian American populations
• Cancer incidence and mortality rates
• Cancer prevention and care
• Examples of efforts to address cancer control
Asian American Network for Cancer Awareness, Research, and Training

• Second 5-year grant
• Community-based participatory research
  – Community-academic partnership
  – Pilot research studies
  – Awareness activities
  – Pan Asian Council
  – Chinese Council

• www.aancart.org
Asian American Network for Cancer Awareness, Research & Training
Asian Pacific Islander Cancer Education Materials (APICEM)

• Joint AANCART and American Cancer Society effort
• Collection of culturally and linguistically appropriate cancer educational materials
• www.aancart.org/apicem
Vietnamese Community Health Promotion Project
(Suc Khoe La Vang!)

• UCSF community-academic research group
• Community research and education since 1986
  – Breast, cervical, and colorectal cancer prevention
  – Hepatitis B and liver cancer prevention
  – Nutrition
  – Tobacco
  – Clinical trial participation

• Website
  – www.healthisgold.org
  – www.suckhoelavang.org
VCHPP: Our Approach

- Partnership between community members and organizations with academic researchers
  - Coalition building with shared expertise and shared decision-making
  - Sustainable interventions built on existing community capacity, utilizing local cultural expertise and existing social networks
  - Building capacity of the community
  - Research capacity building
  - Dissemination
Balancing Community and Research

- Science
- Budget
- Academics
- Personnel

- Knowledge
- Economics
- Culture
- Health
- Other

Coalition
Pathways Model

Medical Care Pathway

Provider

System

Consumer

Community Pathway

Access

Screening or Treatment
Community Pathway

- Consumer knowledge, attitudes, beliefs, intentions
  - Culture, Acculturation, SES
  - Incentives, Behavior Modeling, Social reinforcement
  - Exposure to information and education
- Access: financial, cultural, geographic, convenience
- Interaction with health care system: cultural concordance or sensitivity, system capacity, patient education
Pathways Model

Medical Care Pathway

Provider

System

Screening or Treatment

Community Pathway

Consumer

Access
Medical Care Pathway

• Provider knowledge, beliefs, attitudes, intentions
  – Perception of patient and system barriers
  – Incentives
  – Stereotypes, bias, uncertainty

• System capacity, service availability
  – Culturally and linguistically appropriate care
  – Quality control, reminders, follow-up protocols
Pathways Model

**Medical Care Pathway**
- **PROVIDER**
  - Knowledge
  - Beliefs
  - Attitudes
  - Intentions
  - Incentives
  - Stereotypes and Bias
  - Uncertainty
- **CONSUMER**
  - knowledge, attitudes, beliefs, intentions
  - Culture, Acculturation, SES
  - Incentives
  - Behavior Modeling
  - Social reinforcement
  - Exposure to information

**Community Pathway**

**SYSTEM**
- Capacity
- Service availability
- Culturally & linguistically appropriate care
- Quality control, Reminders, follow-up protocols

**ACCESS**
- Financial
- Cultural
- Geographic
- Convenience

**Screening or Treatment**

- Cultural concordance or sensitivity
- System capacity, patient education
Vietnamese Americans

• One of the fastest-growing ethnic groups in U.S.
  – 1990 U.S. Census: 614,547
  – 2000 U.S. Census: 1.1 million
  – 2030 projection: 3.9 million

• Nearly 1/2 live in California

• Over 100,000 live in Santa Clara County, CA.

• Over 90% were born outside of the U.S.
Cervical Cancer and Screening

• Compared to general U.S. population, Vietnamese American women:
  – Have a cervical cancer incidence rate 5 times higher
  – Are more likely never to have received a Pap test (32% vs. 9%)
  – Are more likely to be overdue for a Pap test (71% vs. 40%)
Cervical cancer: Age-adjusted incidence by race/ethnicity, SEER 1988-92

- Vietnamese: 42.4
- Non-Hispanic White: 6.4
- Black: 11.5
- Hispanic White: 16.9
- Chinese: 6.7
- Japanese: 6.9
- Filipina: 11.3
- Korean: 12.4
REACHing Vietnamese Women: A Community Model for Promoting Cervical Cancer Screening

• Goal: Reduce disparity in cervical cancer screening among Vietnamese adult women

• Study: Quasi-experimental controlled community-based intervention trial
  – Intervention: Santa Clara County, California (99,986 pop.)
  – Control: Harris County, Texas (55,489 pop.)

• Evaluation: pre- and post-intervention cross-sectional telephone surveys

• Study period
  – Phase I: 1999-2000
  – Phase 2: 2000-2004
Vietnamese REACH for Health Initiative (VRHI) Coalition

- VCHPP and community organizations spent one year (Phase 1) to build a coalition.
- Coalition identified vision and mission and developed a Community Action Plan.
- Each coalition member, including VCHPP as the research organization, has one vote.
- Coalition has grown from 10 members to 14 members and includes CBOs, health providers, insurers, and government agencies.
- Coalition meets every 2-3 months to evaluate interventions and plan for the future.
- Coalition obtained input from the community through annual community forums.
VRHI Coalition Members

- Asian American for Community Involvement
- American Cancer Society
- Blue Cross of California
- Catholic Charities Y.E.S.
- Catholic Charities – John XXIII
- Community Health Partnership
- Immigrant Resettlement & Cultural Center
- Kaiser Permanente
- Santa Clara County Public Health Department
- Santa Clara County Ambulatory & Community Health Services
- Southeast Asian Community Center
- Vietnamese Physicians Association of Northern California
- Vietnamese Voluntary Foundation, Inc.
- 2 Community Representatives
- UCSF/Vietnamese Community Health Promotion Project
Annual Coalition Retreat
Bimonthly Coalition Meeting
Community Action Plan

• Targeting Patients:
  1. Media Campaign
  2. Lay Health Worker (LHW) Outreach

• Targeting Health Care System:
  3. Restoration of the Breast and Cervical Cancer Control Program (BCCCP)
  4. Vietnamese Pap Test Clinic

• Targeting Physicians:
  5. Continuing Medical Education Seminars

• Cross-Cutting:
  6. Pap Test Reminder and Registry System
Interaction of REACH Components

Mass Media
Community Forum and Health Fairs

BCCCP Advocacy

Lay Health Worker Outreach

Vietnamese-language Low income Pap Clinics (Silver Creek)

Private Clinics SCV County Health Svs. Kaiser Permanente

Pap Registry

CME
1. Media Campaign

• Researchers created media strategy, events and media products
• Coalition reviewed strategies and products, gave feedback and final approval, participated in media products, and provided volunteer staff for the events
Project Logo and Slogan

CERVICAL CANCER PREVENTION PROGRAM
Santa Clara County, California

Health is Gold!
Get an Annual Pap Test
Community Assessed and Gave Feedback on Television Ads
Media Campaign

• Television ads: produced 15 TV spots and aired on two Vietnamese-language stations

• Radio ads: produced 17 radio spots and aired on three Vietnamese-language stations
Print Media

- Print ads: produced 17 newspaper ads and placed on 5 newspapers/magazines
- 1,000 small posters
- 25,000 cervical cancer info booklets
Community Forum

Health Fairs, Tet Festivals
Promotional Items

- 12,000 roses
- 15,000 calendars
2. Lay Health Worker Outreach (LHWO)

- Researchers outlined LHWO program, designed and conducted training, and evaluated results
  - Randomized comparative trial of LHWO in the context of a media campaign
- Community-based organizations recruited lay health workers, managed their work, and provided feedback to the Coalition
- Community women conducted health education through their own social networks
LHWO Logistics

- Coalition recruited 5 community-based agencies.
- Agencies utilized social networks to recruit 50 Vietnamese lay health workers (10 LHWs/agency).
- Researchers and agency trained LHWs to conduct education outreach.
- LHWs recruited 1,000 Vietnamese women from their social networks (20 women/LHW).
- LHW conducted small group (3-10 women) education outreach activities for intervention group with delayed (after evaluation) outreach for control group.
Program Design

- Lay Health Worker Agency
  - Lay Health Workers (n=10)
  - Women (n=200)

- RECRUIT
  - PROGRAM
    - Intervention Groups (n=100)
    - Control Groups (n=100)
  - NO PROGRAM

- DELAYED PROGRAM
LHWs Group Sessions
LHW Flip Chart

NỮNG ĐIỂM CẦN ĐỂ ĂN:

- Do các tổ chức bệnh viện, chính phủ thường gặp chấn thương ở người lớn, nên làm việc để khắc phục.
- Ta cần phải lưu ý về tổ chức và vận hành, vì phải là một tổ chức quốc gia, phải có sự hỗ trợ từ chính phủ để hoạt động ổn định.
- Việc này cũng là một phần của việc hướng dẫn người phụ nữ và phụ nữ trong các vấn đề liên quan đến sức khỏe, phải được truyền đạt rõ ràng.
- Vì vậy, việc tổ chức và vận hành là quan trọng.
3. Breast and Cervical Cancer Control Program (BCCCP) Restoration

- In 1999, there were no Breast and Cervical Cancer Control Program (BCCCP) providers in Santa Clara County and thus no way for women to obtain free Pap tests.
- The goal of this component was to engage state and local health providers in negotiations to restore BCCCP to Santa Clara County.
- Process required community leadership for advocacy work and utilized CBOs’ current advocacy capacity.
- Process required research organization to present needs assessment and to educate decision-makers.
BCCCP Restoration: Coalition Activities

Made legislative visits

Met with California Department of Health Services officials

Testified at Legislature meeting
2,748 community members signed petitions to restore BCCCP.

Petitions sent to state legislators and California Department of Health Services officials.
Results: BCCCP Re-established in Santa Clara County!

- In June 2003, the State of California re-established the BCCCP in Santa Clara County under a new program name, “Every Woman Counts!”

“Every Woman Counts!”

staff meet with VRHI Coalition
Results: “Every Woman Counts!”

Providers in Santa Clara County

- 15 new sites providing low-cost or free Pap testing
  - 7 physicians in private practice
  - 8 clinics

- Testing available not only for Vietnamese-American women, but for ALL low-income women in Santa Clara County
BCCCP Restoration: Capacity Building and Sustainability

• CBOs shared advocacy strategies with each other
• CBOs realized the power of working together to affect policy change
• Community members participated in the advocacy process and became empowered
• Research organization is exposed to the advocacy process
4. Vietnamese Pap Clinic

- As a temporizing measure prior to BCCCP Restoration, Coalition worked together with county health department to enroll Vietnamese women in Ability-to-Pay program to obtain Pap test at a clinic staffed by a Vietnamese woman physician.
- 1257 women called to ask about Pap tests
- 462 women received Pap tests at the Clinic
- 90 women received Pap tests at other sites
- 17 abnormal results followed to resolution
5. Continuing Medical Education Seminars

- Vietnamese-American women who see Vietnamese-American physicians (most of whom are male) are less likely to obtain Pap tests.
- Goal of annual CME seminars from 2001 to 2003 for Vietnamese-American physicians:
  - Update their knowledge
  - Encourage them to recommend and provide Pap tests
  - Promote culturally sensitive methods of educating and providing gynecological screening to these women
Results: CME

- Approximately 50 physicians attended each of 3 seminars
Results: CME

- There were significant changes in knowledge from pre- to post-CME in multiple areas:
  - 27% at pre- compared to 97% at post- knew the magnitude of cervical cancer among Vietnamese-Americans
  - 29% at pre- compared to 87% at post- knew that Stage 0 cervical cancer is curable
  - 31% at pre- compared to 57% at post- knew the new American Cancer Society guidelines for Pap testing
6. Vietnamese Pap Test Reminder and Registry System (PRRS)

- Goal was to establish an annual reminder system to increase regular receipt of Pap tests among Vietnamese-American women

- Individual detailing visits made to Vietnamese physicians to encourage them to enroll patients
Results: Reminder System

• 28 out of 29 eligible physicians enrolled 4,180 patients in a one-year recruitment period
• 52% of women who enrolled in the reminder system had obtained another Pap test within 18 months of enrollment
• Women liked the reminder system.
• Women who had not obtained a repeat Pap test faced barriers such as unemployment, lack of insurance, or childcare problems as reasons for not obtaining second Pap test
Community Action Plan

• Targeting Patients:
  1. Media Campaign
  2. Lay Health Worker (LHW) Outreach

• Targeting Health Care System:
  3. Restoration of the Breast and Cervical Cancer Control Program (BCCCP)
  4. Vietnamese Pap Test Clinic

• Targeting Physicians:
  5. Continuing Medical Education Seminars

• Cross-Cutting:
  6. Pap Test Reminder and Registry System
LHWO Evaluation

- 1,010 participants enrolled in the LHW program, only 37 participants lost -- a retention rate of 96%
- 50 women trained as lay health workers
- Process measures collected
- Pap test knowledge and receipt measured before and after the intervention period (approximately 3 months)
- Both intervention and control group exposed to background media campaign
LHWO Results

- Media campaign was effective in reaching Vietnamese women
  - 90% had heard radio ads
  - 80% had seen TV ads
  - 77% had read print ads

- LHWO was effective in increasing Pap test receipt among those who had never had one before enrollment
  - 46% of the intervention had obtained a Pap test by the end of the intervention group compared to 27% in the control group
LHWO Results: Ever Had a Pap Test?

Pre- to Post-survey interval = 4 Months

<table>
<thead>
<tr>
<th></th>
<th>Pre-</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Only</td>
<td>70%</td>
<td>6%</td>
</tr>
<tr>
<td>LHW+Media</td>
<td>66%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Media Only p<0.001
LHW+Media p<0.001
REACHing Vietnamese Women: A Community Model for Promoting Cervical Cancer Screening

- Goal: Reduce disparity in cervical cancer screening among Vietnamese adult women
- Study: Quasi-experimental controlled community-based intervention trial
  - Intervention: Santa Clara County, California (99,986 pop.)
  - Control: Harris County, Texas (55,489 pop.)
- Evaluation: pre- and post-intervention cross-sectional telephone surveys
- Study period
  - Phase I: 1999-2000
  - Phase 2: 2000-2004
Cross-sectional Pre- and Post-Intervention Survey

- Random dialing telephone survey using 37 Vietnamese last names from directories in Harris County, Texas (control) and Santa Clara County, California (intervention) in 2000 and 2004

- Eligibility
  - women
  - ages >18
  - resident in either county
  - self-identified as Vietnamese, Vietnamese-American, or Vietnamese-Chinese
  - In households with more than one eligible respondent, randomly selected one woman.
## Sample Sizes and Response Rates

<table>
<thead>
<tr>
<th></th>
<th>Total Called</th>
<th>Total Eligible</th>
<th>Response Rate (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Intervention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris (C)</td>
<td>4699</td>
<td>1412</td>
<td>54% (768)</td>
</tr>
<tr>
<td>Santa Clara (I)</td>
<td>3985</td>
<td>1265</td>
<td>63% (798)</td>
</tr>
<tr>
<td><strong>Post-Intervention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris</td>
<td>4700</td>
<td>2014</td>
<td>40% (1005)</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>4100</td>
<td>1701</td>
<td>54% (1004)</td>
</tr>
</tbody>
</table>
### Sociodemographics

<table>
<thead>
<tr>
<th></th>
<th>SC Pre</th>
<th>SC Post</th>
<th>HC Pre</th>
<th>HC Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean)</td>
<td>45.2</td>
<td>46.9*</td>
<td>44.8a</td>
<td>47.0*</td>
</tr>
<tr>
<td>Yrs. In U.S.</td>
<td>11.8</td>
<td>13.8*</td>
<td>12.1a</td>
<td>14.7*b</td>
</tr>
<tr>
<td>% Poor English</td>
<td>38</td>
<td>46*</td>
<td>40a</td>
<td>48*</td>
</tr>
<tr>
<td>% Less than High school</td>
<td>42</td>
<td>38</td>
<td>42</td>
<td>40</td>
</tr>
<tr>
<td>% Unemployed</td>
<td>43</td>
<td>59*</td>
<td>40a</td>
<td>44b</td>
</tr>
<tr>
<td>% Never Married</td>
<td>9</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Below poverty</td>
<td>22</td>
<td>25</td>
<td>27</td>
<td>25</td>
</tr>
</tbody>
</table>

p<0.05 for *pre-post comparison, a SC vs. HC pre-; b SC vs. HC p
# Health and Access

<table>
<thead>
<tr>
<th></th>
<th>SC Pre</th>
<th>SC Post</th>
<th>HC Pre</th>
<th>HC Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>% good health</td>
<td>73</td>
<td>55*</td>
<td>71</td>
<td>54*</td>
</tr>
<tr>
<td>% with insurance</td>
<td>69</td>
<td>81*</td>
<td>59a</td>
<td>69*b</td>
</tr>
<tr>
<td>% usual place for care</td>
<td>93</td>
<td>88*</td>
<td>85a</td>
<td>77*b</td>
</tr>
<tr>
<td>% with regular MD</td>
<td>85</td>
<td>91*</td>
<td>76a</td>
<td>85*b</td>
</tr>
<tr>
<td>% with female MD</td>
<td>30</td>
<td>31</td>
<td>25</td>
<td>20*b</td>
</tr>
<tr>
<td>% with Viet MD</td>
<td>86</td>
<td>88</td>
<td>81a</td>
<td>81b</td>
</tr>
</tbody>
</table>

p<0.05 for *pre-post comparison,  a SC vs. HC pre-;  b SC vs. HC p
Results: Cross-sectional Pre- and Post-Intervention Survey

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Change</td>
<td>Pre-Post Change</td>
</tr>
<tr>
<td>Heard of Pap</td>
<td>76%</td>
<td>94%</td>
<td>18%*</td>
<td>-5%a</td>
</tr>
<tr>
<td>Ever had Pap</td>
<td>77%</td>
<td>84%</td>
<td>6%*</td>
<td>-3%a</td>
</tr>
<tr>
<td>Had Pap within 1 year</td>
<td>65%</td>
<td>70%</td>
<td>5%*</td>
<td>-5%a</td>
</tr>
<tr>
<td>Plan to get Pap if never had one</td>
<td>40%</td>
<td>51%</td>
<td>11%*</td>
<td>-16%a</td>
</tr>
</tbody>
</table>

*p < 0.05 for intervention pre-post

ap<0.05 for intervention vs. control change
## Significant Factors Positively Associated with “Ever had a Pap”

<table>
<thead>
<tr>
<th>Factor</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention Effect</td>
<td>2.0</td>
</tr>
<tr>
<td>Every 5 years in U.S.</td>
<td>1.2</td>
</tr>
<tr>
<td>Have health insurance</td>
<td>1.4</td>
</tr>
<tr>
<td>Have usual place of care</td>
<td>2.0</td>
</tr>
<tr>
<td>Have female Viet MD (vs. none)</td>
<td>2.0</td>
</tr>
<tr>
<td>Have female non-Viet MD (vs. none)</td>
<td>3.8</td>
</tr>
<tr>
<td>Have male non-Viet MD (vs. none)</td>
<td>1.9</td>
</tr>
<tr>
<td>MD treats with respect</td>
<td>1.9</td>
</tr>
<tr>
<td>Heard of Viet radio ads last 6 mos.</td>
<td>1.5</td>
</tr>
<tr>
<td>Seen Viet newspaper article last 6 mos.</td>
<td>1.8</td>
</tr>
</tbody>
</table>
Significant Factors Negatively Associated with “Ever had a Pap”

<table>
<thead>
<tr>
<th>Factor</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 65+ (vs. 40-64)</td>
<td>0.5</td>
</tr>
<tr>
<td>Never married</td>
<td>0.1</td>
</tr>
<tr>
<td>Less than high school ed.</td>
<td>0.6</td>
</tr>
<tr>
<td>Income below poverty</td>
<td>0.8</td>
</tr>
</tbody>
</table>
Community Capacity Building

• Support of local community media agencies
• Identification and promotion of local community experts and spokespersons through placement in media products
• Coalition applied for grants to address other health issues in the Vietnamese community
• Community empowered through advocacy work
Community Capacity Building

• CBOs acquired capacity to conduct lay health worker outreach and can apply for funding to conduct systematic interventions
• LHWs acquired awareness, confidence, and skills
• LHWs are now identified as a trusted source of health information in the community and provide a ready resource for further health education
Research Capacity Building

- Research organization learned to work closely with coalition and shared decision-making
- Research organization exposed to the need for qualitative measurements
- Research organization learned about the advocacy process and how to educate policy-makers
Systems Change

- “Every Woman Counts” re-established
- County Health Department understands how to deliver culturally and linguistically appropriate care to Vietnamese women
- Community exposed to ability-to-pay program ran by the County Health Department
- Vietnamese Physician Association aware of the disparity in cervical cancer and its screening
- VRHI Coalition is a trusted source for health information, health education, collaboration, and advocacy
Sustainability

• Media products available for use
• Media agencies pledge to match paid advertisements with free advertisements
• “Every Woman Counts” program continue to provide free screening
• Community continues to participate in advocacy work
• New grants submitted or underway to carry out health education efforts using methods found effective in this project and focusing on topics identified as important by the VRHI Coalition
  – Smoking cessation
  – Hepatitis B screening
  – Breast cancer screening
  – Colorectal cancer screening
Lessons Learned and Challenges

• Building a coalition takes time and (a little) money
  – CBOs competed against each other in the past
  – However, after 4 years, coalition is ready to forge ahead even with minimal financial assistance
• Community is ready
• Traditional beliefs and cultures are NOT barriers but need to be incorporated into solutions
• System support such as transportation, patient navigation, and access to affordable health care are very important
• Community involvement is necessary to achieve significant change
• Conducting research in a minority community is hard
Conclusion: How Do We Address Health Disparities?

“One lone tree does not amount to much, but three trees together is the start of a mountain.”

“Một cây làm chẳng nên non, ba cây chừng lại nên hơn núi cao.”