Cancer continues to take a major toll on the health and well-being of Georgians. In 2001 alone, an estimated 14,000 Georgians died of cancer and another 33,000 new cases were diagnosed. High rates of cancer cases and deaths translate into significant—and often immeasurable—social, psychological, and economic costs. The latest estimate of the annual cost of cancer is $171.6 billion for the nation as a whole, which includes more than $110 billion for lost productivity and over $60 billion for direct medical costs.

Effective community cancer prevention and control programs are well documented in the scientific literature. These interventions fall into three major categories.

Lifestyle interventions focus on the risk factors that underlie cancer—tobacco use, lack of physical activity, poor eating habits, and sun exposure—in an attempt to prevent cancer cases from occurring. They typically employ strategies to change individual behaviors and/or social policies.

Screening interventions strive to detect cancer in its earliest stages when treatment interventions can be more effective. They vary by cancer site but share a common goal of informing groups at highest risk of disease about screening opportunities, assuring that they receive quality screening, and following up with appropriate referrals.

Treatment facilitation interventions are geared toward individuals who have been diagnosed with cancer and are in need of quality diagnostic, medical care, and social support services. They aim to improve access to needed information, connect individuals with appropriate services and providers, and sustain support networks for patients and their families.

Given this vast array of interventions, communities can become overwhelmed by the desire to “do it all” while facing the stark realities of limited financial and human resources. They feel pressure to “start somewhere,” yet struggle to know which avenue is best. To assist communities with this challenge, the Georgia Health Policy Center (GHPC) has created a unique and user-friendly tool called the Framework for Community-Based Cancer Prevention and Control.

This Framework displays, in one simple table:

- The relative impact that various cancer risk factors have on Georgians (incidence and mortality in Georgia).
- The degree to which persons of a particular race, gender, socioeconomic status, or geographic area are disproportionately affected (disparities in Georgia).
- The relative value of one intervention to another (potential returns).
- Examples of interventions that have proven to be effective (community interventions).

The table converts a complex set of information, typically presented in fragmented “silos,” into a simple format that communities can use to select specific prevention and control initiatives tailored to their own circumstances. It depicts the synergy amongst the three types of cancer prevention and control interventions, and facilitates the design of a systematic community-based plan.

1 DHR Cancer Control Section. Available at www.ph.dhr.state.ga.us/programs/cancer
2 Estimates from the National Heart, Lung, and Blood Institute

This document outlines a framework for designing a community-based cancer prevention program, offers tips for how to best use it, and suggests additional information and resources for communities that wish to tailor it to their own unique needs and priorities.
## Framework for Community-Based Cancer Prevention and Control

<table>
<thead>
<tr>
<th>Cancer Factors</th>
<th>Incidence in Georgia</th>
<th>Mortality in Georgia</th>
<th>Disparities in Georgia</th>
<th>Potential Returns</th>
<th>Examples of Community Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lifestyle Changes</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
| Tobacco use   | HIGH     | HIGH                | MEDIUM Ethnic/racial Gender Socioeconomic | HIGH              | • Promote smoking cessation  
• Influence laws and culture surrounding teenage access to tobacco products  
• Change environmental smoke policies |
| Lack of physical activity and poor eating habits | HIGH | HIGH | HIGH Ethnic/racial Gender | HIGH | • Affect cultural norms surrounding diet and exercise  
• Inform community members of related health risks and promote healthy lifestyle changes  
• Facilitate and emphasize exercise through public wellness centers |
| Sun exposure  | HIGH     | LOW                 | MEDIUM Ethnic/racial   | MEDIUM           | • Educate population about risk of skin cancer and prevention measures |
| Lack of knowledge of healthy behaviors and cancer risk factors | HIGH | Insufficient evidence | HIGH Socioeconomic Ethnic/racial | Insufficient evidence | • Identify specific disparities  
• Create targeted communication  
• Change norms |
| **Screening for Early Detection** |            |                      |                        |                  |                                    |
| Breast        | HIGH     | MEDIUM              | MEDIUM Ethnic/racial Gender | MEDIUM           | • Inform women  
• Identify and address barriers to mammography |
| Cervical/uterine | LOW   | LOW                 | HIGH Ethnic/racial     | HIGH             | • Identify groups of women not receiving screening  
• Send targeted messages to encourage Pap test |
| Colorectal    | HIGH     | MEDIUM              | HIGH Ethnic/racial     | HIGH             | • Inform population of risk for colorectal cancer and the effectiveness of screening and early detection and address barriers |
| Prostate      | HIGH     | MEDIUM              | HIGH Ethnic/racial     | Insufficient evidence | • Educate men about advantages and disadvantages of screening and treatment options |
| Skin          | HIGH     | LOW                 | MEDIUM Ethnic/racial   | Insufficient evidence | • Promote skin cancer monitoring and early detection |
| **Treatment Facilitation** |            |                      |                        |                  |                                    |
| Lack of access to information | HIGH     | Insufficient evidence | MEDIUM Socioeconomic   | Insufficient evidence | • Provide access to information about treatment options |
| Insufficient linkage to “state of the art” cancer treatment | HIGH | Insufficient evidence | HIGH Urban/rural     | Insufficient evidence | • Assure physician referral  
• Provide affordable transportation |
| Lack of access to local providers who are clinically and interpersonally effective | MEDIUM | Insufficient evidence | HIGH Urban/rural     | HIGH             | • Facilitate continuing cancer education for healthcare workers  
• Improve collaboration and coordination among area providers |
| Inadequate individual and family support networks | MEDIUM | Insufficient evidence | MEDIUM Socioeconomic | MEDIUM           | • Create local or regional support services and outreach for cancer patients and their families |
Who should take part in a community-based initiative?

A first step for communities will be to build a strong coalition of people who are committed to reducing the burden of cancer. Communities best know their strengths, needs, and potential. Representatives from all sectors of the community have unique perspectives to contribute to the process of developing a comprehensive cancer plan. While hospitals, physicians, and public health workers play a critical role in a community’s response to cancer, the effects of cancer extend beyond the clinical setting. Thus, a multi-sectoral group of local stakeholders, including the business community, political leaders, cancer survivors, and others, will provide the greatest insight for a cancer plan.

What types of cancer are having the worst impact on residents of your community?

Lung, breast, colorectal, prostate, and skin cancers have the highest incidence in Georgia, and lung, breast, prostate and colorectal have the highest mortality rates. While the framework depicts ratings based on state-level incidence, mortality, and disparity, counties can contact the Georgia Cancer Registry or refer to the 2000 Georgia Cancer Report to derive county-level incidence and mortality rates by cancer site. Thus, counties and regional coalitions can target the types of cancer that pose the greatest burden to their communities.

What disparities exist in cancer risk factors, incidence, treatment, and mortality?

Socioeconomic, racial, and urban/rural factors contribute to cancer disparities in many communities. For example, black Georgians are more likely to die from breast, colorectal, and prostate cancers than are white Georgians. Reasons for these disparities are not fully understood, but some literature has shown that when treatment is equal, racial disparities in mortality decline. Demographic information such as language spoken will help guide the creation of culturally appropriate interventions. Thus, community demographics will inform the development of a comprehensive cancer plan with an angle to target populations that have disproportionate cancer incidence and mortality.
What types of cancer prevention and control activities are available to residents in your community?

Developing a local comprehensive cancer plan begins with examining existing resources. These may range from the national Breast Test and More program to local support groups for families dealing with cancer. Building on existing resources is the best and most cost-effective route for most communities. Existing programs and activities such as health fairs in the schools, healthy worksite programs, or nutrition seminars in healthcare settings can be expanded to include cancer prevention information. Once communities have mapped their resources, they can also analyze the gaps in cancer prevention, treatment, and support. Comprehensive assets mapping and gap analysis will help communities focus on the interventions that are most appropriate for their situation.

What types of cancer prevention and control activities will yield the greatest return on investment?

Limited resources may compel communities to rank elements of their comprehensive cancer plan. The column for Potential Returns may assist communities in identifying and implementing appropriate interventions. The Potential Returns ratings are based on the literature, recommendations from the federal Task Force on Community Preventive Services, and consultation with national cancer scholars. The recommendations reflect statewide data and may change slightly by community. For example, if a community has cervical cancer incidence and mortality rates that are significantly higher than state rates, the potential returns for addressing cervical cancer may be higher for that community than for others with low rates. Communities may also reference economic analyses of cancer interventions through a Medline search on the Internet. Many published studies evaluate the impacts and cost-benefit of specific cancer interventions. Evaluation of the community’s program is also an integral component of the planning and implementation of a cancer initiative. Evaluation of the outcomes may inform the design of the program itself and will allow the community to measure the return on its investment.

How can communities implement the comprehensive cancer plan?

After the coalition has decided upon a comprehensive cancer plan, the community may implement all aspects concurrently, or may begin with those interventions that are most feasible and that offer the greatest promise for success. Though resource constraints may influence a community to implement the program incrementally, the ultimate goal is a program that will provide the community with the best services and support for cancer factors related to lifestyle, screening, and treatment.
EXAMPLE OF FRAMEWORK IN ACTION

1. **Build a broad coalition**
   Community stakeholders in one of Georgia’s rural counties met to discuss the focus of a $75,000 grant application for cancer prevention and control. Because of limited funds, the community wanted to determine the most valuable starting point to address cancer, with the ultimate goal of creating a comprehensive program to meet all aspects of community need.

2. **Assess the cancer burden**
   Following the incidence and mortality columns from the Framework, leaders examined recent statistics on the number of cancer cases and deaths in their county, and discovered high incidence of breast and skin cancers. Mortality was high for breast cancer but low for skin cancer.

3. **Assess disparities in cancer**
   Referring to the disparities column, the county leaders discovered that black women were significantly more likely to die of breast cancer than white women. They agreed that reducing this racial disparity through the comprehensive cancer program was a priority.

4. **Rank the most cost-effective interventions**
   Modeled on the potential returns column, the community determined that addressing the high incidence, mortality, and disparities in breast cancer would yield a medium to high impact on reducing the cancer burden. County leaders were aware of other localities that had successfully targeted breast cancer on a small budget, which indicated that an investment in breast cancer would be cost-beneficial to the community.

5. **Map community assets and resources**
   Moving across the framework to the examples of community interventions column, leaders assessed existing programs and resources that could be extended to adopt a cancer focus. For example, they determined that funding continuing cancer education and training of community health nurses would increase their value and impact on cancer health in the area.

6. **Assess gaps in service, explore best practices, and implement desired program**
   Stakeholders matched local assets with needs for improved breast cancer prevention and control and identified several gaps. To see what other communities had done to fill these needs, they researched best practices in rural breast cancer education, screening, diagnosis, treatment, and support services. They decided to implement a lay health educator program in their community as part of an initial focus to reduce mortality from breast cancer in black women, and designed an evaluation to gauge the effectiveness and cost-efficiency of this initiative.
FOR FURTHER INFORMATION

General Cancer Resources
The following online resources are intended as a reference point for communities to find more cancer information. The Georgia Health Policy Center does not endorse or accept responsibility for their content.

- Georgia Cancer Coalition:
  Available at: www.gacancercoalition.com

- National Cancer Institute:
  Available at: www.cancer.gov

- American Cancer Society:
  Available at: www.cancer.org

- Centers for Disease Control and Prevention:
  Available at: http://www.cdc.gov/cancer/

- Guide to Community Preventive Services:
  Available at: http://www.thecommunityguide.org

- Cancer Control Planet:
  Available at: http://cancercontrolplanet.cancer.gov/

- Georgia Health Policy Center:
  Available at: http://www.gsu.edu/ghpc

Cancer Rates in Georgia
- Cancer data from the Department of Human Resources, Division of Public Health, Cancer Control Section
  Available at: http://www.ph.dhr.state.ga.us/programs/cancer/stats.shtml

- Georgia Cancer Data Report, 2000
  Available at: http://www.ph.dhr.state.ga.us/programs/cancer/pdfs/cancerreport2000.pdf

- Georgia Childhood Cancer Report, 2002
  Available at: http://www.ph.dhr.state.ga.us/pdfs/chronic/cancer/childcancer02.pdf

- Age-adjusted mortality rate 1996-2000 by all sites and for colorectal, lung, breast, and prostate cancers
  Available by county:
  http://www.ph.dhr.state.ga.us/pdfs/chronic/cancer/mortalitycounty.96-00.pdf
  Available by health district:
  http://www.ph.dhr.state.ga.us/pdfs/chronic/cancer/mortalitydistrict.96-00.pdf

- State Cancer Profiles, interactive charts and maps by state, county, and economic area
  Available at: http://statecancerprofiles.cancer.gov

- SEER Cancer Data for selected Georgia counties
  Available at: http://seer.cancer.gov/statistics
PROMISING PRACTICES IN COMMUNITY INTERVENTIONS

The following bibliographic references are intended as a starting point for communities to research promising practices. The list is a sampling of the literature and does not reflect a ranking of significance. The Georgia Health Policy Center does not assume responsibility for content of materials.

Tobacco Use


Wakefield, M., and Chaloupka, F. 2000. Effectiveness of comprehensive tobacco control programs in reducing teenage smoking in the USA. Tobacco Control, 9, 177-186.

Physical Activity and Nutrition


UV Exposure


Cancer Education


Breast Cancer Screening


Cervical/Uterine Screening


Colorectal Screening


Thompson, N.J., et al. 2000. A randomized controlled trial of a clinic-based support staff intervention to increase the rate of fecal occult blood test ordering. Preventive Medicine, 30,3, 244-251.

Prostate Screening


Skin Cancer Screening


The Philanthropic Collaborative for a Healthy Georgia serves as a forum for bringing foundations together to better understand and explore the health-related challenges facing Georgia. In 2002, the Collaborative convened an advisory committee of foundation executives and trustees, as well as representatives from the Georgia Cancer Coalition, the American Cancer Society, and the Georgia Division of Public Health. This advisory committee sponsored a series of meetings so that members could learn more about best practices for community-based approaches to cancer prevention and control. The Framework for Community-Based Cancer Prevention and Control was a result of this period of inquiry and discovery. The Philanthropic Collaborative supported the development of the Framework and state and national experts have endorsed it as a tool for communities to use in developing and implementing their own local cancer programs.

The Georgia Health Policy Center (GHPC) at the Andrew Young School of Policy Studies, Georgia State University, defined the Framework ratings through several sources. Cancer factors were identified through a review of the literature and consultation with national cancer experts. Cancer incidence and mortality data, derived from the Georgia Cancer Data Report 2000, were converted into thresholds for user-friendly descriptions of “low,” “medium,” and “high” rates. Cancer disparities were converted into thresholds from National Cancer Institute data and from the literature. Potential returns ratings reflect the literature on intervention efficacy and cost analysis in addition to expert consultation. More detailed information on the Framework is available from the Director of the Georgia Health Policy Center, Dr. Karen Minyard, at 404-651-3104.