

**Missouri Department of Health and Senior Services
Cancer Control Environmental Scan:
An Internal Assessment**

For

Missouri Comprehensive Cancer Control Program



June 2017



Report Information

Title: Missouri Department of Health and Senior Services (DHSS) Cancer Control Environmental Scan: An Internal Assessment

Description: This report summarizes the activities of different programs within DHSS that contribute to cancer prevention and control.

Audience: This report is intended for use by the general public as well as state and local policy makers, researchers, local public health agencies, health care providers, voluntary organizations and others interested in programs and activities that contribute to cancer prevention and control.

Grant Support: This summary of Missouri Department of Health and Senior Services (DHSS) programs and activities that contribute to cancer prevention and control was supported by a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and Missouri Department of Health and Senior Services (DHSS) (#6U58DP003924-04). Its contents are solely the responsibility of the authors and do not necessarily represent official views of the CDC.

Suggested Citation: Gwanfogbe PN, Homan SG, Hope M, and Yun S. Missouri Department of Health and Senior Services Cancer Control Environmental Scan: An Internal Assessment. Jefferson City, MO: Division of Community and Public Health, June 2017.

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

Services provided on a nondiscriminatory basis.

Tables of Contents

Introduction	4
Environmental Scan	4
Methods	4
Results	5
Survey	12
Gaps Determination	12
Discussion and Recommendations	14
Conclusion	15
References	16
Attachments	
1	17
2	19
3	20
4	22

Introduction

Cancer exacts a heavy toll on Missouri. In 2013, more than 30,000 Missourians were diagnosed with invasive cancer and hospital charges alone for cancer exceeded \$1.1 billion. With earlier diagnosis and advances in personalized treatments more people are surviving cancer.

Nevertheless, many of these cancers could be prevented or the impact greatly minimized through comprehensive cancer control activities. Additionally, these activities can also promote high quality health monitoring, continuity of care services, and improve quality of life for cancer survivors.

The purpose of this report is to summarize the results of an environmental scan of the Missouri Department of Health and Senior Services (DHSS) programs and activities that contribute to cancer prevention and control to determine opportunities, gaps and inform policy, systems, and environmental (PSE) change initiatives that strengthen community-health care linkages to ultimately reduce the burden of cancer in Missouri. The PSE interventions are emerging as powerful tools in comprehensive cancer control. These initiatives are intended to enhance primary, secondary, and tertiary prevention of cancer, effect systems changes, and sustain these changes overtime through policies (Attachment 1 – A PSE Primer).

Environmental Scan

Although the environmental scan has been adopted as an assessment tool in various health care contexts, it does not have a consistent definition or process in public health practice.¹ The purpose of an environmental scan is to understand the context of the environment; collect information; and identify resources, links, and gaps.¹ In an environmental scan, activities focus on understanding the internal and external environment of a particular topic and providing input into strategic thinking, decision making, and program planning.^{2,3} Environmental scanning integrates multiple strategies for information collection^{2,4,5} including focus groups, in-depth interviews, and surveys with the population of interest (program coordinators in this case); literature assessments; medical chart reviews; personal communications; review of internal documents; and/or policy analyses. An environmental scan has standards of utility, feasibility, propriety, and accuracy; it also has standards for engaging stakeholders, describing a program, focusing program design, gathering evidence, and sharing results.⁶

Methods

A template (Attachment 2) and a questionnaire (Attachment 3) were developed to collect information from the DHSS programs specifically on activities related to cancer control. A draft of the template was completed for each program by the Missouri Comprehensive Cancer Control Program (MCCCP) PSE staff from existing information. The survey and template were then sent to each program coordinator. After completing the survey and reviewing the template, the PSE staff met with each coordinator one-on-one to obtain input and feedback and answer any questions regarding the template and/or the survey questionnaire. The completed template and responses to the questionnaire were updated as necessary and the final completed templates and survey questionnaires were sent to the PSE personnel. The first surveys and templates were distributed to the program coordinators at the end of March 2016 and the PSE staff met with some of the program coordinators from April 1 to April 22, 2016. Contact with program coordinators continued from April to September because additional programs to include were suggested by the coordinators. Fourteen programs were added between April 6th and 14th, 2016.

An additional two programs were added in March 2017. The activities of the DHSS programs were categorized as policy, system and environmental areas and then classified according to cancer prevention category: primary, secondary, tertiary, or all prevention levels, if a program covered all three areas of prevention.

Results

Of the 35 programs and activities included in the scan, 33 (94.3%) program coordinators completed the template, responded to the survey questionnaire, and met with the PSE staff person. Table 1 is a summary of prevention categories, programs and activities within DHSS that contribute to cancer prevention and control by the areas of PSE change and community health care linkages. When classified by prevention area, there were 21 programs included under primary prevention, three under secondary prevention, five under tertiary prevention, and six included all levels of prevention.

Only the activities of 14 programs (Behavioral Risk Factor Surveillance System, Comprehensive Tobacco Control, Missouri Child Assessment Program Survey, Missouri County Level Study, Missouri Pregnancy Risk Assessment Monitoring Systems, Youth Risk Behavioral Surveillance System, Youth Tobacco Survey, Women, Infants and Children (WIC), Center for Local Public Health Services, Missouri Comprehensive Cancer Control, Office of Epidemiology, Office of Minority Health, Office of Primary Care and Rural Health, and School Health Program) impacted the cancer control policy arena. With the exception of the Radon Program, the rest of the programs impacted systems, 16 program activities impacted the environment, and 18 program activities impacted community-health care linkages. Only six programs’ activities (Center for Local Public Health Services, Comprehensive Cancer Control, Office of Epidemiology, Office of Minority Health, Office of Primary Care and Rural Health, and the School Health Program) involved policy, systems, environment, as well as community health care linkages.

Table 1. Prevention categories of DHSS programs and activities and their impact on PSE change and community-health care linkages

Prevention Category Program / Activity	Policy	System	Environmental	Community-Health Care Linkages
<i>Primary</i>				
Behavioral Risk Factor Surveillance System (BRFSS) Collects data on the prevalence of risk factors, cancer screening, and cancer survivorship indicators among adults in Missouri.	X	X		
Bureau of Dental Health The Bureau of Dental Health is committed to improving the oral health of all Missourians through education, prevention and leadership. Healthy Missourians for life begins with access to, and availability of quality primary healthcare services for all Missourians.		X	X	X

<p>Child and Adult Care Food Program (CACFP) Prevent obesity in qualified Missourians and provides education on healthy lifestyles and sound nutrition for cancer prevention.</p>		X		
<p>Community Supplementary Food Program (CSFP) Prevent obesity in qualified Missourians and provides education on healthy lifestyles and sound nutrition for cancer prevention.</p>		X		
<p>Comprehensive Tobacco Control Program (CTCP) Impacts all aspects of tobacco control in Missouri via partnerships, the Missouri Tobacco Quit line, media and promotion of smoke-free air, and tobacco ordinances.</p>	X	X	X	
<p>Health and Risk Assessment Program (HRAP) The HRAP assesses risks from exposure to hazardous substances in the environment. The program performs human health risk assessments and risk reviews at the request of regulatory agencies; carries out health assessments, health consultations, and technical assists; private well sampling; annually updates the MO fish advisory; and is the contact point for methamphetamine surveillance.</p> <p>The program has a statewide mandate to evaluate and provide actionable recommendations with regard to potential or real exposures to chemical, radiology, and/or other environmental stressors that may pose risks to public health. Many of these stressors are carcinogenic.</p>		X	X	X
<p>Human Papilloma Virus (HPV) Program Promotes HPV vaccination which may prevent certain types of cancer.</p>		X		X
<p>Local Public Health Agencies (LPHAs) Collect information on risk factors, screening, nutrition, survivorship, clinical care, asbestos, environment, physical activity, sun exposure and work site wellness.</p>		X	X	X
<p>Missouri Actions to Prevent Chronic Disease and Control Risk Factors (MAP) Some risk factors of concern are poor nutrition, physical inactivity, smoking and other tobacco use, and overweight and obesity.</p>		X		

<p>Missouri Asthma Prevention and Control Program (MAPCP) Focus is on childhood asthma - promotes the tobacco quitline and reducing environmental tobacco smoke exposure.</p>		X	X	X
<p>Missouri Cancer Registry and Research Center (MCR_ARC) Collects cancer incidence data for Missouri residents and contributes significantly to the knowledge of cancer for use in improving the health of all people.</p>		X		
<p>Missouri Child Assessment Program Survey (MoCHAPS) Collects information/data on maternal smoking, alcohol and drug use; nutrition and BMI status; physical activities; maternal depression and other life stressors including intimate partner violence and food insecurity for mothers for use to inform health policy development and cancer prevention.</p>		X		
<p>Missouri County Level Study (CLS) Provides county-specific prevalence on tobacco use – second hand smoke, tobacco cessation and tobacco use and other cancer risk factors, screenings, and preventive practices.</p>	X	X		
<p>Missouri Pregnancy Risk Assessment Monitoring Systems (PRAMS) Collect information that can be used to inform – maternal and infant health programs, health policies and maternal behaviors. Maternal and child health programs use data collected by PRAMS to develop interventions that reduce smoking, alcohol and drug use, increase breastfeeding and promote physical activity and weight loss. Surveillance of Maternal and Child Health (MCH) indicators provides a life course perspective to chronic disease and cancer prevention.</p>	X	X		
<p>Office of Women’s Health The Office of Women’s Health (OWH) is the statewide public health office focused on promoting a comprehensive view of women’s health, including a focus on social, emotional, economic, and educational factors affecting women’s health and well-being. OWH identifies issues affecting women’s and well-being and proposes strategies for addressing those issues. It promotes communication on women’s health needs and issues among a wide variety of constituent group, stakeholders and advocacy organizations; serves as a resource on women’s health for communities, the department, local</p>		X	X	X

health departments, other state agencies and the governor's office. OWH contracts with community organizations and universities to provide services for the prevention of sexual violence and contracts with local agencies to provide counseling and advocacy to assist victims in the recovery from the trauma of sexual violence and prevent secondary victimization.				
Radon Program Provides free radon monitors and promotes mitigation when needed. Provides radon classes to real estate associations across the state.			X	
Summer Food Service Program (SFSP) Helps prevent obesity in qualified Missourians and provides education on healthy lifestyles and sound nutrition for cancer prevention.		X		
Youth Risk Behavioral Surveillance System (YRBS) Monitors health risk behavior such as tobacco use, alcohol and other drug use, unhealthy dietary behaviors and inadequate physical activity among high school students.	X	X		
Youth Tobacco Survey (YTS) Collect data on lifetime and current use of cigarettes and other forms of tobacco, quit attempts and intent, access to tobacco products, tobacco education received at school and home, influences to use tobacco, exposure to secondhand smoke, and beliefs about risks associated with tobacco use and exposure to secondhand smoke among middle school students.	X	X		
Women, Infants and Children (WIC) Prevent obesity in qualified Missourians and provides education on healthy lifestyles and sound nutrition for cancer prevention. Provides access to farmer's markets and permits the use of food stamp cards for purchases at the markets.	X	X		
Worksite Wellness Encourage employees to adopt and maintain healthier lifestyles. Promotes community and health care linkages to state staff.		X		X

<i>Secondary</i>				
<p>Bureau of human immunodeficiency virus (HIV), sexually transmitted diseases (STD) and Hepatitis [BHSB] Provides prevention education, testing, partner notification/treatment verification and care services related to cancer causing conditions including human papilloma virus (HPV), hepatitis B virus (HBV) and hepatitis C virus (HCV).</p>		X		X
<p>Show Me Healthy Women (SMHW) Provide free Breast and Cervical Cancer Screening to women who meet age, income and insurance guidelines.</p>	X	X		X
<p>Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) Provide screening to detect high blood pressure, cholesterol and blood glucose and education to reduce risk factors for developing them. Develop and provide provider (SMHFW) with manuals on how to implement the program.</p>		X		X
<i>Tertiary</i>				
<p>Arthritis and Osteoporosis Program In an effort to address the impact of arthritis, the Missouri arthritis and osteoporosis program provides services to Missourians who have arthritis, osteoporosis and related diseases and other chronic health conditions in seven regional arthritis centers following the CDC recommendations including self-management education for chronic conditions such as cancer; being physically active; controlling weight/Healthy Eating; and consulting a physician. The program also offers information on smoking cessation and pain management.</p>		X	X	X
<p>Bureau of Health Care Analysis and Data Dissemination (BHCADD) Provides publicly accessible data on cancer incidence, emergency rooms, hospitalizations and charge data, and mortality through the MICA system.</p>		X		
<p>Bureau of Vital Records Provides health and medical information from birth and death records which is transformed into data to calculate population growth, identify health risk factors, measure health outcomes, plan and evaluate health programs and conduct research.</p>		X		

<p>Cancer Inquiry Program (CIP) Explores the cancer concerns of communities or individuals, provides health education on risk factors for cancer, and conducts epidemiologic studies to assess cancer burden on communities.</p>		X	X	
<p>Children and Youth with Special Health Care Services The Children and Youth with Special Health Care Needs (CYSHCN) program provide assistance statewide for children and youth with special health care needs from birth to age 21. The program focuses on early identification and services coordination for children and youth who meet medical eligibility guidelines. As payer of last resort, the program provides limited funding for medically necessary diagnostic and treatment services for children whose families also meet financial eligibility guidelines. Children with special health care needs are those who have, or are at increased risk for a disease, defect or medical condition that may hinder their normal physical growth and development. These children require health and related services that go beyond those required by children in general.</p>		X	X	X
All Prevention Levels				
<p>Center for Local Public Health Services (CLPHS) Assess and promote health safety; identifies barriers, and facilitates access to primary and preventive health care; and enforces public health laws and regulations regarding tobacco cessation and others.</p>	X	X	X	X
<p>Missouri Comprehensive Cancer Control Program Looks at the whole spectrum of cancer from screening and early detection through treatment and survivorship. Comprehensive cancer control program (CCCP) is a process through which communities and partners organizations pool resources to reduce the burden of cancer. These combined efforts help to reduce cancer risk, find cancers earlier, improve treatments, increase the number of people who survive cancer and improve quality of life for cancer survivors. The office work to eliminate health disparities at all levels that could contribute to cancer prevention and control by providing access to and availability of quality health prevention services and cancer treatment to all.</p>	X	X	X	X

<p>Office of Epidemiology Initiates and maintain surveillance systems that collect data to determine the greatest cancer-related needs in Missouri and individual counties by identifying risk factors for cancers and emerging issues. It conducts analysis to identify cancer hot spots, cost-benefits analysis for policy analysis, disseminate information on cancer to Missourians and promote survivorship care. Take a lead in writing the Burden of Cancer in Missouri Report.</p> <ul style="list-style-type: none"> • Surveillance systems – risk factors and emerging issues • Hot spot cancer analysis • Cost-benefit analysis for policy analysis • Information dissemination • Promotion of survivorship care • Promotes public health-health care linkages (e.g., data for community needs assessments, planning, and evaluation) 	X	X	X	X
<p>Office of Minority Health The Mission of the Missouri Office of Minority Health is to eliminate health disparities through assertive leadership, advocacy support, and visible interaction with minority communities in Missouri. This can only be achieved through a heightened awareness of health strategic partnerships and community engagement at every level. Consequently, minority health is about everyone-health care providers, social service organization, industry, faith-based organizations, schools, policy makers and individuals getting involved. We urge the minority community to practice healthy behaviors, participate in health awareness activities and help someone else along the way to do the same.</p>	X	X	X	X
<p>Office of Primary Care and Rural Health Offer six programs through DHSS to address a shortage of primary health care providers which makes it difficult for low-income, uninsured and geographically isolated Missourians to receive health care. By working with health care providers and communities, access to care can be improved for the underserved.</p> <p>Supports rural communities to establish and sustain a health care system which is a challenge to rural communities. The components of such a system can vary but should include a hospital with an established referral pattern for services,</p>	X	X	X	X

<p>an adequate number of primary care providers, transportation for routine and emergency care, and public health services.</p> <p>Mainstays of the safety nets in rural areas are Federally Qualified Health Center (FQHC), Rural Health Care Clinics (RHCs) and rural hospitals. FQHCs are community-based organizations that provide comprehensive primary and preventive care, including medical, dental and behavioral health services to everyone without regard to ability to pay. Rural Health Care Clinics (RHCs) are vital for providing primary and preventative care. Rural hospitals provide essential health services to the community.</p>				
<p>School Health Program Promotes healthy lifestyle choices, information on smoking and nutrition, collects and disseminates data regarding health services and formulates school screening guidelines. Provides education and supports implementation of school health policies.</p>	X	X	X	X
<p>Total – 35 programs</p>	14	34	16	18

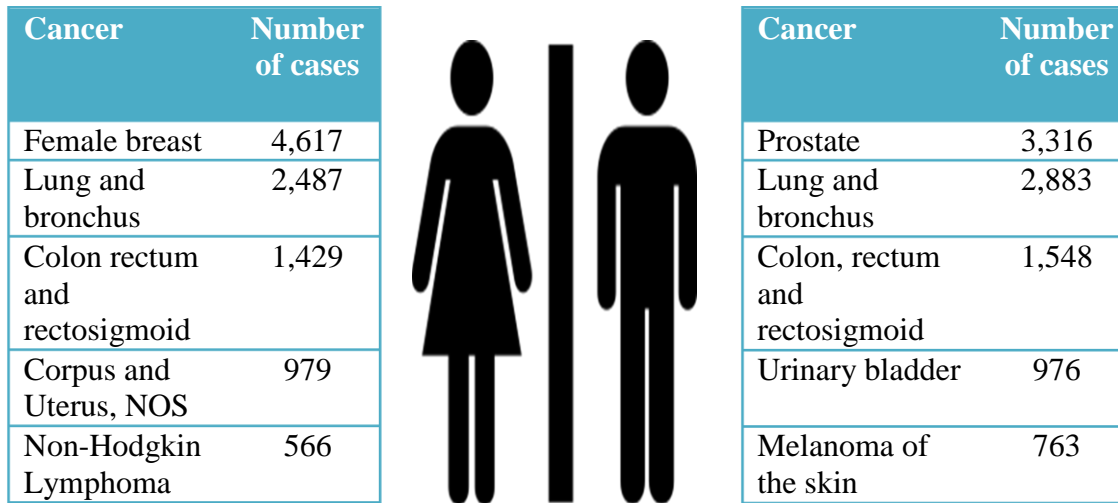
Survey

The project was undertaken to identify internal programs in the DHSS that contribute to cancer prevention and control and to determine gaps. Of the 33 program coordinators who met with the PSE staff, twenty seven (81.8%) agreed with the existing information about their program on the draft template. The remaining program coordinators amended the information about their programs. A total of 152 strategic partners were listed by the program coordinators, with the number of partners per program ranged from zero in two programs to 51 in one program (Attachment 4).

Gaps Determination

The five leading new invasive cancers among females and males in Missouri for 2012 are shown in Figure 1. Breast and prostate cancers are the leading invasive cancers for females and males, respectively (Figure 1). The second and third leading cancers- lung and bronchus; and colon, rectum, and rectosigmoid are the same for both males and females.

Figure 1. Five leading new invasive cancers in females and males, Missouri, 2012



Lung Cancer

Lung and bronchus cancer is the second leading newly diagnosed invasive cancer among women and men in Missouri and the U.S., and continues to be the leading cause of cancer death with a relative five-year survival rate of 18.1 percent.^{7, 8} Goal 1, Objectives 1 and 2 in the new state cancer plan 2016-2020 focus on decreasing the percentage of Missourians who smoke cigarettes and increasing the percentage of people living in communities with a comprehensive smokefree policy. Several of the programs contribute to tobacco cessation and control. For example, the Comprehensive Tobacco Control Program is actively reducing smoking as well as second hand smoke exposure, which is one of the many risk factors for lung and bronchus cancer as well as other cancers. The MAPCP promotes the tobacco quitline and avoidance of environmental tobacco smoke exposure for children with asthma and the WISEWOMAN Program provides lifestyle intervention education and counseling (e.g., tobacco cessation, nutrition, etc.) that also contributes to reducing the leading cancers. However, many other DHSS programs could promote the tobacco quitline to reduce the current smoking prevalence and incidence of the 13 cancers related to smoking.⁹ The current U.S. Preventive Services Task Force recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in people 55 to 80 years of age with a 30 or more pack per year history of smoking that are currently smoking or have quit within the past 15 years. Goal 2, Objective 5 focuses increasing screenings in the at-risk population; however, currently none of DHSS programs are actively promoting this screening.

Breast and Cervical Cancers

Breast cancer is the leading invasive cancer among women and more than one-half (54.9%) of the women diagnosed with invasive cervical cancer in 2013 were late-stage (i.e., regional or distant). Goal 2, Objectives 1 and 2 to increase the percentage of woman who receive regular breast and cervical cancer screenings based on nationally recognized guidelines are being addressed through the SMHW Program that promotes early detection of breast and cervical cancers by providing free screenings to eligible women. Related to Goal 1, Objective 4 to increase the percentage of children and adolescents receiving the HPV vaccine, the Bureau of Immunizations is also addressing the prevention of cervical and other cancers including anal,

vulva, vaginal and oropharynx by promoting HPV vaccines to the public.¹⁰ The BRFSS and CLS collect surveillance information related to the prevalence of screening but more efforts should be expended to inform women that many insurance providers fully cover mammography and Pap test screenings as part of a wellness examination.

Colorectal Cancer

Colorectal cancer is the third leading invasive cancer for both men and women. Goal 2, Objectives 3 focuses on increasing the percentage of colorectal cancer screenings for adults aged 50 and older. Currently, none of programs provide screening services for CRC and only one program (Comprehensive Cancer Control) is actively promoting colorectal cancer screening.

Prostate Cancer

Prostate cancer is the leading diagnosed invasive cancer in men. Goal 2, Objective 4 focuses on increasing the percentage of men who have discussed with their health care provider the advantages and disadvantages of the prostate-specific antigen (PSA) test to screen for prostate cancer. Currently, none of the programs are actively promoting the U.S. Preventive Services Task Force recommendation on informed decision making regarding prostate cancer screening as recommended by the U.S. Preventive Service Task Force.¹¹

Skin Cancer

Melanoma skin cancer is the fifth leading invasive cancer among men in Missouri. Goal 1, Objective 5 focuses on decreasing the proportion of adolescents who report a sunburn or use of indoor tanning in an effort to prevent melanoma and other skin cancers. Although the YRBS and BRFSS have been used to collect information on skin cancer in the past, currently there are no programs actively promoting sun safety and skin cancer screening.

Uterine and Bladder Cancers

Although there are no recommended routine screening tests for uterine or bladder cancers, greater education on preventive factors and early symptoms of disease would promote early detection and prompt treatment of these cancers and improve prognosis.

Cancer Treatment and Survivorship

Gaps exist with Goals 3 and 4, Objectives 1-3 which are to increase access to evidence-based treatment services and improve quality of life for cancer survivors. None of the programs have activities to promote participation in clinical trials or survivorship care plans although the National Coalition for Cancer Survivorship believes that every person with cancer should receive written care plans and treatment summaries that follow them from the time they are diagnosed through all the years of survivorship.¹²

Discussion and Recommendations

This internal environmental assessment reveals that DHSS has many programs and partnerships that impact cancer control. However, considering that there are only three programs under secondary prevention level – there is a need to promote individual decision making, screening, and early detection of the cancers, particularly for lung and bronchus, prostate and colorectal cancers – three of the five top leading new invasive cancers. Activities supporting tertiary prevention for cancer survivors could be enhanced since there were a limited number of

programs with activities related to survivorship issues (Arthritis and Osteoporosis; Bureau of Health Care Analysis and Data Dissemination; Bureau of Vital Records, Cancer Inquiry Program; Child and Youth with Special Health Care Services; and the BRFSS that collects the prevalence of cancer and the cancer survivorship module. Out of the 32 programs, only fourteen of them impact policy. More programs should educate and inform policy areas to increase initiatives that impact cancer prevention and control.

Conclusion

The purpose of an environmental scan is to understand the context of the environment; collect information; and identify resources, links, opportunities, and gaps. Several programs contribute to reducing one or more risk factors for cancer. However, many DHSS programs could promote the tobacco quitline to reduce the current smoking prevalence and incidence of the 13 cancers related to smoking. There are gaps with regard to screening of lung and bronchus and colorectal cancers and promoting shared decision making regarding prostate cancer screening – three of the five top leading new invasive cancers. In summary, 33 programs within DHSS have activities in the area of cancer prevention. Greater coordination and linkage of these programs and initiation of activities to address the gaps may enhance cancer control efforts in Missouri and reduce the incidence and deaths from this disease.

References

- ¹ Wilburn A., Vanderpool, RC. and Knight JR. Environmental Scanning as a Public Health Tool: Kentucky's Human Papillomavirus Vaccination Project. *Prev Chronic Dis* 2016;13:160165. DOI: <http://dx.doi.org/10.5888/pcd13.160165>.
- ² Rowel R, Moore ND, Nowrojee S, Memiah P, Bronner Y. The utility of the environmental scan for public health practice: lessons from an urban program to increase cancer screening. *J Natl Med Assoc* 2005;97(4):527–34. [[PMC free article](#)] [[PubMed](#)]
- ³ Thinking Futures. Holtham Hill (Australia): Doing an environmental scanning: an overview guide; 2012. Retrieved April 18, 2017, from http://www.sswm.info/sites/default/files/reference_attachments/CONWAY%202012%20Doing%20Environmental%20Scanning.pdf.
- ⁴ Graham P, Evitts T, and Thomas-MacLean R. Environmental Scans: how useful are they for primary care research? *Can Fam Physician* 2008;54(7):1022-3. [[PMC free article](#)] [[PubMed](#)]
- ⁵ National Association of County and City Health Officials. Developing a local health department strategic plan: a how-to guide. Retrieved April 19, 2017, from <http://www.naccho.org/uploads/downloadable-resources/Programs/Public-Health-Infrastructure/StrategicPlanningGuideFinal.pdf>.
- ⁶ Centers for Disease Control and Prevention. CDC evaluation framework. Atlanta (GA): Centers for Disease Control and Prevention; 2016. Retrieved April 19, 2017, from <http://www.cdc.gov/eval/framework/>.
- ⁷ Missouri Department of Health and Senior Services and Missouri Cancer Consortium. *The Burden of Cancer in Missouri: A Comprehensive Analysis and Plan, 2016-2020*. Jefferson City, MO. Division of Community and Public Health.
- ⁸ Surveillance, Epidemiology, and End Results Program. Cancer Stat Facts: Lung and Bronchus Cancer. Bethesda, MD: National Institutes of Health, National Cancer Institute. Retrieved June 18, 2017, from <https://seer.cancer.gov/statfacts/html/lungb.html>
- ⁹ U.S. Department of Health and Human Services (HHS), Office of the Surgeon General, *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington, D.C: HHS, November 2016
- ¹⁰ Center for Disease Control and Prevention. HPV Vaccine Information For Young Women. Retrieved April 27, 2017, from <https://www.cdc.gov/std/hpv/stdfact-hpv-vaccine-young-women.htm>
- ¹¹ U.S. Preventive Services Task Force. Prostate Cancer Screening. Retrieved June 13, 2017, from <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementDraft/prostate-cancer-screening1>
- ¹² National Coalition for Cancer Survivorship. Planning Your Care. Retrieved April 26, 2017, from <https://www.canceradvocacy.org/resources/planning-your-care/>

Attachment 1

Policy, Systems, and Environment: *A PSE Primer*

Defining PSE initiatives will help create a common language around these strategies and design initiatives that are highly impactful for cancer control. Evaluations of these initiatives will strengthen our knowledge and evidence base about such strategies.

What is PSE Change?

It involves changing or improving policies, systems and environments so as to provide practical readily available healthy options to community members.

What is Policy Change?

It is written statement(s) binding to all and applied broadly to affect certain behaviors to influence health. It can either be change in legislative and regulatory policies such as ordinances, state and federal laws and rules (soda tax, zoning laws, and health care final rules). Or change in organizational policies such as company policies, school and/or agency policy language (school discipline policies and organizational wellness policy). This can be done in two ways - Big P and Little p defined as:

- Big P = changes in laws, regulations affecting the legislative process, or legislation is involved
- Little p = changes within state, communities and localities related to cancer control outcomes; involve boards of education, schools, health care systems, insurance entities, organizations, addressing environmental issues and community concerns.

As related to cancer control, the types of policy change interventions include:

- a. Primary Prevention
 - Policy and environmental interventions aimed at promoting healthy behaviors, reducing exposure to cancer risk factors, and increasing resistance to diseases such as vaccines that prevent cancer.
- b. Secondary Prevention
 - Policy and environmental interventions that support access to screening and prompt treatment of pre-clinical diseases and conditions.
- c. Tertiary Prevention
 - Policy and environmental interventions that lessen the impact caused by the disease on the patient's function, longevity, and quality of life, reduce the risk of recurrence or new cancers among survivors, or where the condition is not reversible, tertiary prevention focuses on rehabilitation and assisting the patient to manage their condition.

System Change

It is a change in systems (health care or others) to make the healthy behaviors the default behavior. For example, implementation of patient and provider reminders into the electronic medical record to improve the uptake of care and treatment.

Environmental Change

It is a physical or material change to the economic, social, or physical environment. Examples are:

- Books by school
- Increase easy access to healthy food and beverages
- Develop community gardens in school
- Farm to school by increasing easy access to fresh fruits and vegetables from farmers in a local community
- Change environment to increase or promote physical activity – safe routes to school program, walking tracks, etc.
- Facilitate identification of environmental hazards and referrals for remediation

Attachment 2

Missouri Department of Health and Senior Services
Comprehensive Cancer Control
Environmental Scan

Program / Activity Name, Brief description and how contributes to cancer prevention and control	Funding Fed, GR, or Other	Strategic Partners	Geographic Location Cities, Counties, or Statewide	Program Initiated	Program Coordinator / Contact #
Program / Activity Name:					
Brief description:					
Cancer Prevention and Control:					
DHSS Section, Bureau, Unit or Office:					

*Funding – Federal (Fed), general revenue (GR), other source of funding (Other)

Attachment 3

Missouri Comprehensive Cancer Control Program Cancer Control Environmental Scan of Missouri Department of Health and Senior Services Activities and Programs, 2015-2016

Introduction:

Good Morning/Afternoon,

The Missouri Comprehensive Cancer Control Program is conducting an environmental scan of the Missouri Department of Health and Senior Services activities and programs that contribute to cancer prevention and control. The findings from this scan may be shared with the Centers for Disease Control and Prevention (CDC) and other Consortium partners. We have drafted a scan for your program and would like to have your review and input. We would also like to ask you some questions to complete the scan.

Questions to program coordinators:

1. Is the information we have listed correct? Yes No

If No, please provide necessary changes

2. Are there other key strategic partners for your program that should be listed?

Yes No

If yes, please list:

3. What aspect of your program is related to cancer prevention and control?

The following are examples of how your program may be related to cancer prevention and control (circle all that apply):

Reducing or quitting smoking

Reducing alcohol consumption

Educating people on dangers of sun exposures or tanning booths

Increased risk due to family history of cancer

Preventing exposure to radiation, chemical and other substances or environmental exposures

Improving what people eat through nutrition education or providing nutritious meals

Increasing physical activity or exercise

Weight reduction or management

Motivating individuals to screen for cancers, providing screening or reducing the barriers to screening

Reducing exposure to certain viruses and bacteria or promoting immunizations

Other, specify _____

4. Are there other programs that we should include in the scan that are not in this list?
____No ____Yes If “Yes” please add to the list

- Comprehensive Cancer Control Program
- Show Me Healthy Women (SMHW)
- Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN)
- Comprehensive Tobacco Control Program
- School Health Program
- Behavioral Risk Factor Surveillance System (BRFSS)
- Youth Risk Behavior Surveillance System (YRBSS)
- Youth Tobacco Survey (YTS)
- Missouri Cancer Register and Research Center (MCR – ARC)
- Missouri County Level Study (CLS)
- Bureau of Health Care Analysis and Data Dissemination (BHCADD)
- Bureau of Vital Records
- Bureau of Environmental Epidemiology – Radon Program
- Center for Local Public Health Services
- Local Public Health Agencies
- Cancer Inquiry Program
- Missouri Actions to Prevent Chronic Disease and Control Risk Factors (MAP)
- Human Papilloma Virus (HPV) Program
- Child and Adult Care Food Program (CACFP)
- Community Supplemental Food Program (CSP)
- Summer Food Service Program (SFSP)
- Women, Infants and Children (WIC) Program
- Worksite Wellness
- Bureau of Human Immunodeficiency Virus (HIV), STD and Hepatitis

Thank you for participating in this cancer control environmental scan.

Attachment 4

Number of strategic partners by program

Programs	Number of strategic partners
Missouri Actions to Prevent Chronic Disease and Control Risk Factors	51
Show Me Healthy Women	22
Bureau of Children and Youth with special Health Care Needs	16
Bureau of Minority Health	14
Human Papilloma Virus	13
Summer Food Service Program	12
Commodity Supplementary Food Program	7
Comprehensive Cancer Control Program	7
Comprehensive Tobacco Control Program	6
Bureau of HIV, STD, and Hepatitis (HIV/STD)	6
Office of Women's Health	5
Bureau of Vital Statistics	5
Primary Care and rural	5
Well-Integrated Screening and Evaluation for Women Across the Nation	5
Child and Adult Food Program	4
Bureau of Dental Health	3
Cancer Inquiry Program	3
Bureau of Environmental Epidemiology – Radon	3
Missouri Asthma Prevention and Control Program	2
Local Public Health Agencies	1
Center for Local Public Health Services	1
Bureau of Health Care Analysis and Data Dissemination	1
Health and Risk Assessment Program	1
Worksite Wellness	0
WIC	0