

2016-2020 Utah State Cancer Plan

Prepared by: Utah Comprehensive Cancer Control Program, Utah Cancer Action Network

The members of UCAN created this State Cancer Plan with the shared vision that future generations will only know cancer as a historical plague. Utah, we dedicate this State Cancer Plan to you with a special dedication to each and every Utahn who has been touched by this disease.



STATE OF UTAH

GARY R. HERBERT
GOVERNOR

OFFICE OF THE GOVERNOR
SALT LAKE CITY, UTAH
84114-2220

SPENCER J. COX
LIEUTENANT GOVERNOR

January 1, 2016

Dear Friends,

Cancer has become the second leading cause of death in Utah. Indeed, it is common that our own lives or the lives of people we know and love have been touched by cancer.

The fight against cancer is, however, stronger than ever. We fight by supporting early detection. We fight by protecting ourselves and our children from harmful substances. We fight by supporting medical research and providing state-of-the-art treatment. Last, but certainly not least, we fight by providing cancer survivors and their loved ones with programs and services that address their physical, mental, and emotional needs, thereby increasing their quality of life.

The Utah Cancer Action Network (UCAN) joined this fight in 2001. UCAN members offer their time, talents, and other resources to address primary prevention, early detection, and cancer survivorship by focusing on the high burden priority areas for the state.

The 2016-2020 Utah Comprehensive Cancer Prevention and Control Plan developed by the UCAN will be used to continue this noble fight. This is the fourth comprehensive cancer plan for the state of Utah, and it will guide our efforts to make a positive impact on the lives of those affected by cancer.

By working together and using this plan, we can increase awareness of how to prevent cancer, detect cancer early, and improve the quality of life for the courageous cancer survivors in our state. Together we can help Utahns live happier, healthier lives.

Sincerely,

A handwritten signature in black ink, reading "Gary R. Herbert".

Gary R. Herbert
Governor

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Introduction to the Plan

The Utah Comprehensive Cancer Control Program (UCCCP), in coordination with the Utah Cancer Action Network (UCAN), developed this five year plan as a guide for all those fighting cancer in Utah. This plan provides direction for those involved in the planning, implementation, and evaluation of cancer control efforts. Healthcare providers, community-based organizations, worksites, schools, policy makers, and other Utahns will find it contains useful information on the burden of cancer in Utah and provides evidence-based strategies to reduce cancer risk, find cancers at an early stage, improve treatments, increase the number of people who survive cancer, and improve quality of life for cancer survivors.

Cancer is an evolving problem, and addressing it requires approaches unique to the specific needs of Utahns. To accomplish this, UCAN chose timely, evidence-based priority areas to address over the next five years. While these priority areas encompass the highest priority areas for the state, they do not necessarily represent all areas being addressed by partner organizations. For this reason, the state plan priorities have been divided into two sections: **UCAN Priorities** and **Collaboration Priorities**.

UCAN Priorities

These priority areas represent the highest burden areas for cancer control in the state, and reflect UCAN's desire to achieve meaningful and lasting impact during the next five years.

- Skin Cancer
- Physical Activity and Nutrition
- Cancer Screening
- Survivorship and Quality of Life

Each UCAN Priority includes a set of evidence-based *goals*, *strategies*, and *action steps*. *Goals* represent the coalition's overarching ambitions in that particular area. *Strategies* describe the chosen method of reaching the *goal*. *Action steps* contain specific efforts or projects that individuals and organizations can do to implement each strategy. In addition to goals, strategies, and action steps, each priority area includes *targets for change*. *Targets for change* represent the long-term outcomes expected upon successful implementation of the goals and strategies.

Collaboration Priorities

Collaboration Priorities have been deemed an important area for the coalition to be involved, though these priorities will be led by outside organizations which will partner with UCAN to expand reach and improve outcomes.

- Human papillomavirus (HPV)
- Radon
- Tobacco
- Genomics

Each Collaboration Priority includes a description of organizations who are involved with the work, a list of *strategies*, and how UCAN can collaborate.

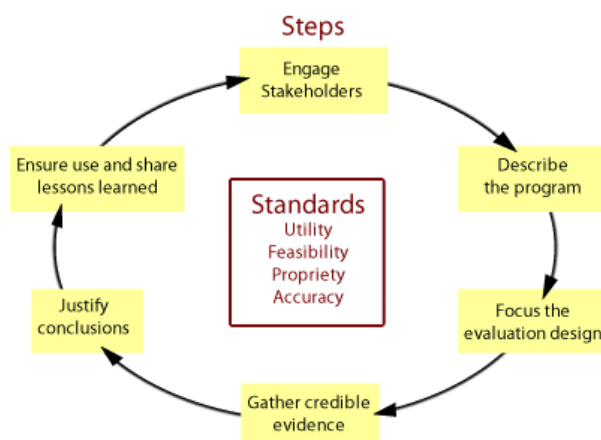
The Planning Process

The process of identifying priority areas began early in 2014. UCAN Executive Leadership reviewed previous state plan priorities, existing data, and available resources to determine which priority areas should be addressed in the future. An initial set of priorities was drafted and presented to UCAN leadership for a vote. These priorities were taken to the larger coalition body and several rounds of discussions and voting occurred before four primary priority areas were identified: skin cancer, physical activity and nutrition, cancer screenings, and cancer survivorship. Teams were established around each of these areas. These teams developed goals, strategies, and action steps to direct coalition efforts.

Implementation of the Plan

Implementation of this statewide cancer plan depends on effective evaluation. For this reason, UCAN will track progress of targets for change on an annual basis, and produce an annual report. UCAN commits to ongoing, complete evaluation measuring the outcomes and effectiveness of work being done. The UCCCP evaluation staff will direct evaluation efforts with aid from coalition members and subgroups. A separate evaluation plan with all elements of the six steps of the Centers for Disease Control and Prevention (CDC) *Framework for Program Evaluation* will be a critical counterpart this 2016-2020 Utah Cancer Control Plan, and direct its evaluation activities. Evaluation efforts and progress toward the targets for change will be highlighted on the UCAN website.

Framework for Program Evaluation



Centers for Disease Control and Prevention. Retrieved from <http://www.cdc.gov/eval/framework/>

Overview of the Utah Cancer Action Network (UCAN)

The Utah Cancer Action Network (UCAN) is Utah's comprehensive cancer control coalition, comprised of a diverse, professional group of stakeholders from across the state. Stakeholders represent a variety of groups and interest areas, including state and local governments, private and nonprofit organizations, academic institutions, researchers, physicians, cancer survivors, caregivers, patients, and advocates. UCAN is led by an executive committee that oversees coalition activities and determines coalition priorities.

The mission of UCAN is to reduce cancer incidence and mortality in Utah.

Since its inception in 2001, UCAN has worked collectively to ensure continued progress with comprehensive cancer issues across Utah. UCAN provides many opportunities for collaboration among coalition partners through activities designed to address the many facets of cancer prevention and control. UCAN links partners to available resources through regular e-mails and information posted on the UCAN website. UCAN members work to prevent and control cancer through increasing awareness of cancer issues, connecting eligible patients to screening services, increasing cancer screening among Utah's underserved populations, and providing professional and patient education.

The coalition meets once per quarter to report on events and activities and to provide updates on current cancer issues and sponsorship opportunities.

UCAN activities are funded by the UCCCP through a federal grant from the Centers for Disease Control and Prevention (CDC).

Overarching Approaches

The Utah State Cancer Plan addresses five overarching approaches to cancer prevention and control. In order to meet the goals of this plan, these approaches have been incorporated into the strategies and action steps listed in the plan.

A colored '✓' near the strategy indicates the approach(s) that will be used to address the strategy and its corresponding action steps.

✓ Policy, Systems, and Environmental (PSE) Change

The environments in which people live, work, learn, and play have an impact on their health, including cancer prevention. Policies, systems, and environmental (PSE) changes have the ability to make long-term, sustainable improvements to the health by addressing the root causes of poor health. PSE changes are included in the strategies and action steps throughout the plan.

✓ Collaboration

Statewide cancer prevention and control efforts require strong collaborations between community organizations, healthcare organizations, state and local health departments, policy makers, schools, and businesses. This plan will serve as a roadmap for cancer-related collaboration efforts in the state of Utah for the next five years.

✓ Quality Improvement

Measuring quality and improving performance in health care systems is important for patients to receive quality cancer screening, treatment, and quality-of-life services. Quality improvement will lead to better patient outcomes and decreased costs.

✓ Strong Healthcare Workforce

The quality and quantity of the healthcare workforce for cancer prevention, screening, treatment and quality-of-life services is important for Utahns. Health workers must be adequately and appropriately trained to ensure that Utahns receive access to the quality services and care they need.

✓ Disparities

The 2016-2020 Utah State Cancer Plan addresses cancer-related health disparities and promotes health equity by improving access to quality and affordable health services for all Utahns regardless of geography, age, socioeconomic status, race, ethnicity, and culture.

How to Use This Plan

The 2016-2020 Utah State Cancer Plan represents the largest formal effort to address the burden of cancer in the state of Utah. This plan identifies timely and significant priority goal areas for the state. Success in addressing these areas is dependent on a diverse set of individuals and organizations working collaboratively, sharing resources, and utilizing unique skills. Below are examples of how different groups and individuals can help achieve the goals of the plan.

Healthcare Providers

Health professionals provide individuals and communities with the support necessary to prevent disease and promote health. Healthcare providers can work with patients to prevent and control cancer by routinely asking about healthy lifestyles factors including tobacco use, physical activity, diet, and in-home radon testing, recommending appropriate cancer prevention vaccines and screening tests, implementing office-based reminders that identify patients due for cancer prevention and screening services, learning about clinical cancer research studies available to patients, and providing cancer patients with a written summary of their care plan.

Local Health Departments

Local health departments are uniquely positioned to understand the needs of local communities and provide quality services to those they serve. Local health departments can address the burden of cancer in a variety of ways including providing cancer awareness education to Utahns; supporting community wellness campaigns; promoting prevention of chronic disease through healthy lifestyle behaviors; and providing access to low-cost cancer screenings, radon tests, and other health services.

Community-Based Organizations

Many Utah communities face significant challenges that affect the health and well-being of Utahns. Poor individual and community health is often associated with other problems including poverty, educational opportunities, crime, access to quality services, and an unhealthy environment. Community-based organizations play a key role in addressing these challenges, though many organizations can promote health as part of the work they do. Community-based organizations can collaborate to provide community disease prevention programs; create a local action plan to reduce barriers to cancer screenings; provide cancer awareness information to Utahns; and provide community-based educational forums to address the specific and unique needs of cancer survivors including physical, psychological, financial, social, and spiritual needs.

Worksites

Many Utahns spend a large proportion of their time at work. Worksites can impact the health of individual employees, but also play a larger role in ensuring all Utahns are healthy and free of disease. Employers and worksites can do this through encouraging employees to increase physical activity at home and during the work day; encouraging workplace participation in wellness programs; providing full financial coverage for recommended cancer screenings including time off for employees to get screened; providing healthy foods and beverages in vending machines and cafeterias; and providing protective clothing to employees applying fertilizers, pesticides, and insecticides as well as sun-protective gear to employees working outside.

Schools

Schools are important to the education of our students, but the school setting is also important to ensuring a healthy future for our children. Healthy students are more involved in the classroom, exhibit fewer disciplinary problems, and are better able to learn. School organizations should utilize this plan as an opportunity to promote health as an important aspect of school activity. Schools can prioritize health in the classroom by including chronic disease prevention messages in health classes, increase physical education opportunities, make school campuses tobacco-free, open facilities to the community during off hours to encourage community health, ensure ample shade is available for playgrounds and outdoor facilities, provide only healthy foods and beverages on campus and in cafeterias, and provide information to students and faculty about issues faced as cancer survivors return to school.

Policy Makers

Public policy plays a critical role in determining the prevalence of chronic diseases, including cancer. In Utah, access to necessary cancer services is not distributed equally across the state. Barriers to quality treatment include lack of access due to location, insurance status, culture, language, and lack of awareness. As a policy maker, there are important ways to address these issues. Using the information in this plan, a policy maker could influence cancer prevention and control by ensuring that all Utahns have access to affordable, high quality health care, raising awareness of cancer as an important health issue, and strengthening and establishing programs supporting cancer control.

Utahns

While many Utahns pride themselves on their healthy lifestyles, there are still many things that can be done to decrease the burden of cancer in our state. Utahns can choose to improve their own health and reduce their risk of cancer through quitting smoking or never starting to smoke, eating a primarily plant-based diet, increasing daily physical activity, maintaining a healthy weight, and protecting themselves from exposure to UV light. We can create a healthier environment for our families by testing and remediating our homes for radon, limiting our use of pesticides and fertilizers, ensuring our children receive appropriate cancer prevention vaccines, and support community efforts to develop and improve public spaces for physical activities. Even with these changes, it is important that Utahns discuss cancer screenings with health care providers and receive necessary screenings, support cancer control policies, consider enrolling in clinical trials if diagnosed, and show support and provide care for those living with cancer in their lives.

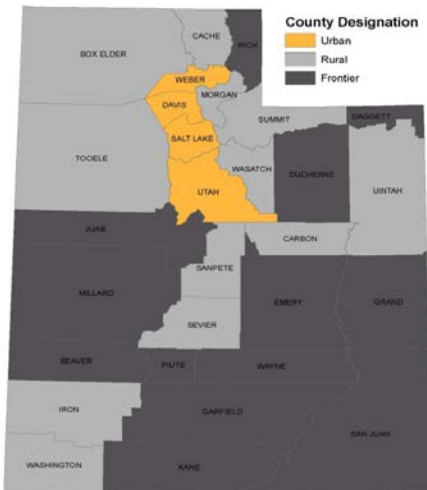
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Cancer Burden in Utah

Overview of Cancer Burden

Utah Demographics

In 2014, it was estimated that the population in Utah was 2,942,902. Utah's population continues to grow rapidly each year. The growth rate in Utah is almost double of the national growth rate.¹ Utah is the “youngest” state in the nation with the lowest median age of any state at 30.5, compared to the national median age of 37.7.²



Utah is the 13th largest state in geography. Much of the state is considered rural or frontier with very low population density. Approximately 80% of the state population lives along the Wasatch Front within the greater urban centers of Salt Lake City, Ogden, and Provo.

Utah has limited racial and ethnic diversity with non-Hispanic Whites comprising nearly 80% of the population.

Utah has a significant refugee population with over 45,000 refugees being resettled in Utah since 1988.³ Approximately 8.2% of Utahns are foreign born.¹

Summary of Utah Race/Ethnicity Demographics 2014			
	Race/Ethnicity	Number in the Population	Percent of Population
Non-Hispanic	White	2,335,011	79.3%
	Black or African American	31,051	1.1%
	American Indian or Alaskan Native	28,583	1.0%
	Asian	66,837	2.3%
	Native Hawaiian or Other Pacific Islander	26,769	0.9%
	Two or more races	55,891	1.9%
	Hispanic/Latino of Any Race	398,760	13.5%
Total:		2,942,902	

Source: Population Estimates by Age, Sex, Race, and Hispanic Origin for Counties in Utah, U.S. Bureau of the Census, IBIS Version 2014

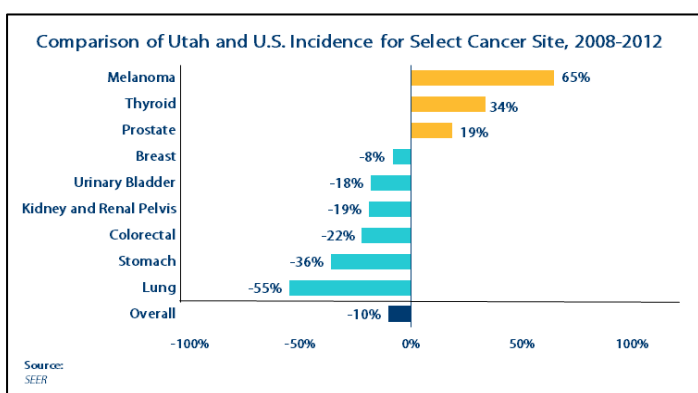
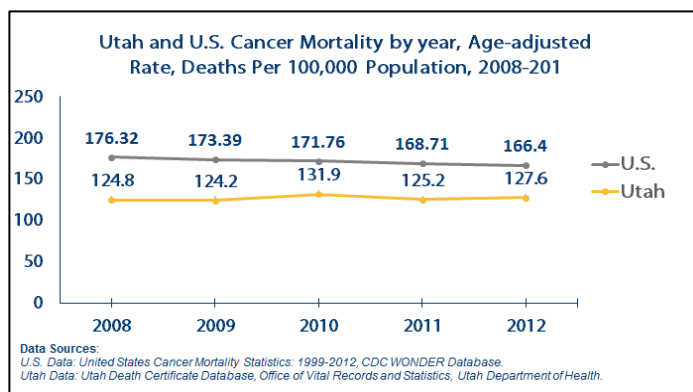
¹ U.S. Census Bureau. *Utah QuickFacts*. <http://quickfacts.census.gov/qfd/states/49000.html> Updated October 14, 2015. Accessed November 23, 2015

² U.S. Census Bureau. *U.S. QuickFacts*. <http://quickfacts.census.gov/qfd/states/00000.html> Updated September 30, 2015. Accessed November 23, 2015.

³ Utah Refugee Center. *FAQ - About Refugees*. <http://utahrefugee.org/faqs.html>. Updated November 17, 2015. Accessed November 23, 2015.

Incidence and Mortality

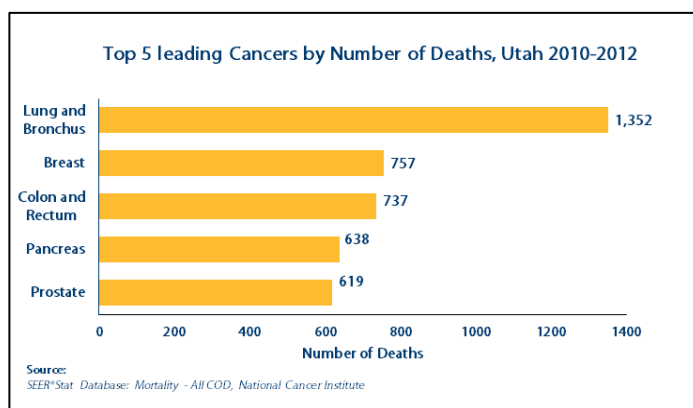
In 2014, 3,033 Utahns died from cancer. Cancer is the second leading cause of death in both Utah and the United States, exceeded only by heart disease.



Utah's cancer incidence rate is approximately 10% lower than the national rate, and the mortality rate is 26% lower.

Lung cancer is the leading cancer cause of death for Utah men.

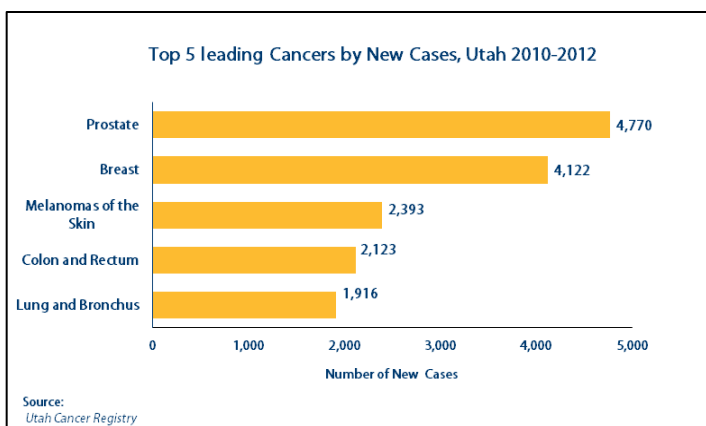
Breast cancer is the leading cancer cause of death for Utah women.



Prostate cancer is the most commonly diagnosed cancer in Utah men. Breast cancer is the most commonly diagnosed cancer in Utah women.

Utah has the highest rate of melanoma in the US, and has a much higher rate of thyroid and prostate cancers.

Utah has the lowest rate of lung cancer in the US, as well as the lowest smoking rates.



Health Disparities and Access to Care

Health Disparities

Health disparities are differences in the incidence, prevalence, mortality, burden of disease, and other adverse health conditions or outcomes that exist among specific population groups in the United States.⁴ Health disparities can affect population groups based on gender, age, ethnicity, socioeconomic status, geography, sexual orientation or gender identity, disability, or special health care needs. Disparities also affect groups that have persistently experienced historical trauma, social disadvantage or discrimination, and who systematically experience worse health or greater health risks than more advantaged social groups (National Association of Chronic Disease Directors). Socioeconomic status (SES), poverty, and poor access to health care have a large impact on health outcomes. These factors play an important role in the prevalence of behavioral risk factors for cancer, such as tobacco use, poor nutrition, and physical inactivity. Individuals with low SES are also less likely to receive recommended cancer screenings. Because of the significant and overarching role health disparities play in cancer control in Utah, a determination was made to integrate this issue into the priority areas of the 2016-2020 Plan.

Access to Care

Access to health services encompasses four components: coverage, services, timeliness, and workforce. The four components are defined below.

Coverage: Health insurance assists patients in accessing the health care system. Lack of adequate insurance makes it difficult for people to get the health care they need, and when they do get care, burdens them with large medical bills. Uninsured individuals are less likely to receive medical care, more likely to have poor health status, and more likely to die prematurely.

Services: Many patients, even those with health insurance, may forgo recommended or essential health services. While many factors influence this problem, ensuring that people have a primary care provider is a vital part of receiving appropriate services. People with a usual source of care have better health outcomes and fewer disparities and costs associated with their care.

Timeliness: Timeliness is the health care system's ability to provide health care quickly after a need is recognized as measured by the time spent between diagnosis and receipt of care and time spent waiting to receive care. Poor timeliness is associated with clinically significant delays in care, including increasing the number of patients not receiving services.

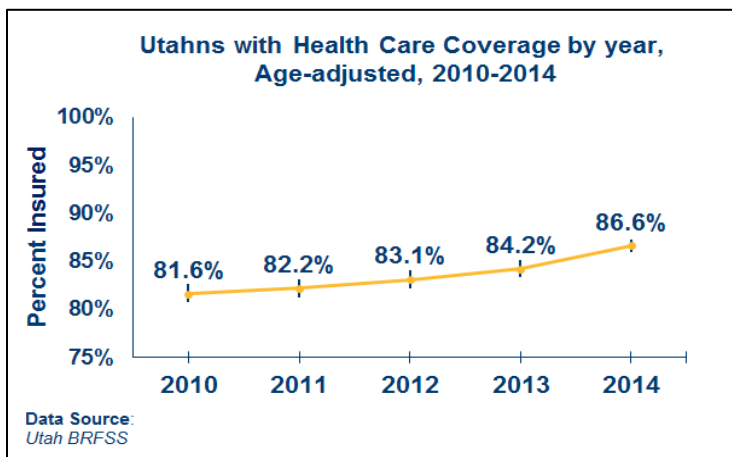
Workforce: Health specialists and primary care providers play an important role in promoting and ensuring the health of the communities they serve. This is especially true in cancer prevention and control where demand for oncologists is expected to exceed supply by as much as 30% by 2020.⁵ In order to ensure an adequate health care system, it is important to track and increase the number of health care providers available to patients.

⁴ National Cancer Institute. [Health Disparities Defined](#). Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute.

⁵ C-Change. *Sustaining a Strong National Cancer Workforce*. 2012. C-Change Web site. <http://c-changetogether.org/workforce>.

Health Insurance and Medicaid Expansion

Health insurance plays a critical role in both health disparities and access to health care. Access to affordable health care helps all people stay healthy, avoid or delay the onset of disease, keep diseases they already have from becoming worse or debilitating, lead productive lives, and reduce costs. Despite the benefits of preventive health services, too many Utahns go without needed medical and preventive care, often because of financial barriers. The Affordable Care Act (ACA) makes health care more affordable and accessible in generally two ways: first by requiring private health plans to cover certain recommended preventive services without charging a deductible, copayment, coinsurance, or other cost sharing; and second by expanding access to Medicaid for low income individuals. As a result of the ACA, Utah's uninsured rate dropped 15% between 2013 and 2014.⁶ Currently, Utah has not yet chosen to expand Medicaid resulting in more than 53,000 Utahns who are currently unable to access affordable health coverage of any kind. Medicaid expansion is critical to ensuring all Utahns have access to affordable health care.



Healthcare coverage rates have risen annually in the last five years. In 2014, 86.6% of Utahns indicated that they had health care coverage (including health insurance, prepaid plans such as HMOs, or government plans such as Medicare).⁷

⁶ Gallup. *Arkansas, Kentucky See Most Improvement in Uninsured Rates*. 2014. Gallup Web site.

<http://www.gallup.com/poll/181664/arkansaskentucky-improvement-uninsured-rates.aspx>

⁷ 2014 Survey Results, Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health

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UCAN Priorities

Skin Cancer

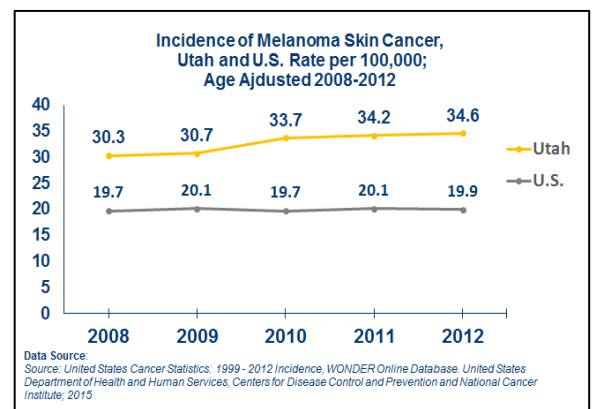
Skin cancer is the most commonly diagnosed cancer in the United States, and most cases are preventable. Melanoma is the most serious of three types of skin cancer (basal cell carcinoma, squamous cell carcinoma, and melanoma). It is estimated that 90 percent of non-melanoma skin cancers and 65 percent of melanoma skin cancers are associated with exposure to ultraviolet (UV) radiation from the sun. The risk for melanoma is greatly increased by tanning, both outside UV exposure and by using indoor sunlamps and tanning booths.

Geography plays a role in determining melanoma risk. Individuals who live in areas with a high elevation, warmer climate, and where sunlight can be reflected by sand, water, snow, and ice experience higher rates of melanoma. Utah is the third highest state in elevation with an average elevation of 6,100 feet and the occurrence of snow and ice in the winter months. Outdoor recreation is popular in Utah, further exposing residents to UV radiation.

The risk of skin cancer can be decreased through exercising proper sun safety measures including wearing protective clothing (e.g. long-sleeved shirts and long pants that utilize tightly woven fabric); hats and sunglasses; using sunscreen with an SPF of 15 or higher; seeking shade under an umbrella, tree, or shelter when possible; avoiding being outdoors during peak sunlight hours (9:00 am to 3:00 pm); and avoiding indoor tanning and sunbathing.⁸

Burden in Utah

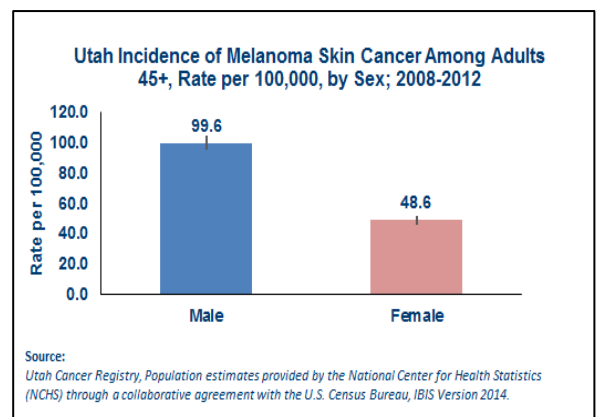
Utah's melanoma cancer incidence is higher than the national rate and continues to be on an upward trend. In 2012, the age-adjusted melanoma incidence rate in Utah was 34.6 per 100,000 compared to 19.9 per 100,000 nationally. The mortality rate of melanoma in Utah is also much higher than the national rate. In 2012, the age-adjusted melanoma mortality rate in Utah was 3.7 per 100,000 and 2.7 per 100,000 nationally.



Disparities

The risk of melanoma increases with age and affects men more than women. Utah males are significantly more likely than Utah females to be diagnosed with melanoma of the skin among those 45-64 years of age (58.3 per 100,000 males vs. 41.9 per 100,000 females) and among those 65 years of age and over (194.7 per 100,000 males vs. 63.5 per 100,000 females).

The risk is also much higher for non-Hispanic whites than for any other racial group, especially those with red or blond hair, blue or green eyes, or fair skin that freckles or burns easily. Utah's population of non-Hispanic whites



⁸ Guide to Community Preventive Services. Preventing skin cancer: education and policy approaches. www.thecommunityguide.org/cancer/skin/education-policy/index.html. Last updated: 05/22/2014.

comprises nearly 80% of the population.

Utah females 18 to 34 years of age are significantly more likely to practice one or more sun safety measures compared to males of a similar age (63.2 percent compared with 48.9 percent). However, females are more likely to report using an indoor tanning device compared to males (9.5 percent compared to 4.0 percent in the last 12 months). This same pattern is seen in adolescents (grades 9-12) who reported using an indoor tanning device with 6.1 percent of adolescent males reporting using an indoor tanning device compared to 12.8 percent of adolescent females.

Goal: Prevent skin cancer

Strategy A: Increase awareness through education on skin cancer prevalence and prevention. ✓✓

What will success look like? Schools, worksites, policy makers, and the general public will be aware of skin cancer prevalence in Utah and ways they can prevent it.

Action Steps

- Develop strategies for increasing awareness of skin cancer prevention for use in a school-based setting.
- Increase skin cancer prevention education in worksites and public entities.
- Provide education on skin cancer prevention and prevalence to policy makers.
- Identify and educate populations at high risk for skin cancer.
- Create and market an educational campaign in conjunction with National Skin Cancer Prevention and Detection Month in order to increase Utahns' awareness of skin cancer prevention and prevalence.

As part of increasing awareness through education on skin cancer prevention, UCAN will target disparate populations including males, who exhibit a higher rate of melanoma than females.

National Strategy Alignment: U.S. Department of Health and Human Services. (2014). *Surgeon General's Call to Action to Prevent Skin Cancer*. Washington, DC; Community Preventative Services Task Force. (2012). *Community-Based Skin Cancer Prevention that Works*.

Strategy B: Promote policy, system and environmental changes to decrease the risk for skin cancer. ✓✓

What will success look like? Schools, worksites, and public entities will implement policy, systems, and environmental changes that will decrease the risk of skin cancer.

Action Steps

- Advocate for increased availability of shade in schools, worksites, and public places through natural and built structures.
- Advocate for policy changes in worksites that increase sun protective measures, such as shade and sunscreen, for outdoor employees.
- Advocate for policy efforts and interventions addressing tanning behavior.
- Monitor the population's engagement in skin cancer preventive behaviors for use in the development of evidence-based interventions.
- Advance statewide policy efforts that increase the legal age of tanning to 18.

National Strategy Alignment: U.S. Department of Health and Human Services. (2014). *Surgeon General's Call to Action to Prevent Skin Cancer*. Washington, DC; Community Preventative Services Task Force. (2012). *Community-Based Skin Cancer Prevention that Works*.

Targets for Change

Reduce Melanoma Cancer Deaths.

Baseline: 3.42 deaths per 100,000 persons (age-adjusted 2013-2014)

Utah 2020 Target: 2.8 deaths per 100,000 persons (age-adjusted)

Data Source: Utah Death Certificate Database, Office of Vital Records and Statistics

Aligns with: Healthy People 2020, C-8

Reduce the percentage of adults who report sunburn in the last twelve months.

Baseline: TBD in 2016 BRFSS

Utah 2020 Target: 5 percent improvement

Data Source: BRFSS

Aligns with: Healthy People 2020, C-20.2

Reduce the proportion of adolescents in grades 9 through 12 who report sunburn.

Baseline: TBD in 2015 YRBS

Utah 2020 Target: 5 percent improvement

Data Source: YRBS

Aligns with: Healthy People 2020, C-20.1

Reduce the proportion of adolescents in grades 9 through 12 who report using artificial sources of ultraviolet light for tanning.

Baseline: 9.5% (2013 YRBS)

Utah 2020 Target: 7%

Data Source: YRBS

Aligns with: Healthy People 2020, C-20.3

Reduce the proportion of adults who report using artificial sources of ultraviolet light for tanning.

Baseline: 6.7% (2011- 2012 BRFSS age-adjusted, use within the last 12 months)

Utah 2020 Target: 5%

Data Source: BRFSS

Aligns with: Healthy People 2020, C-20.4

Policy, Systems, and Environmental (PSE) versus Traditional Approach

Setting	Individual Behavior Approach	PSE Approach
School	Teach students the importance of wearing sunscreen.	Incorporate sun protection as part of school policies, planning and development of school facilities.
Workplace	Encourage employees to avoid prolonged UV exposure.	Provide uniforms and apparel that protect against UV exposure to outdoor employees.
Community	Organize races or walks to raise awareness of skin cancer.	Incorporate shade planning in land use development, support organizational policies that discourage indoor tanning by adolescents and young adults, or advocate for additional policy restrictions. ⁹

⁹ U.S. Department of Health and Human Services. 2014. *Surgeon General's Call to Action to Prevent Skin Cancer*. U.S. Surgeon General Web site. <http://www.surgeongeneral.gov/library/calls/prevent-skin-cancer/>.

Skin Cancer Prevention Efforts

- UCAN has and continues to advocate for stricter teen tanning laws in Utah. In 2012, Utah Senate Bill 41 was passed requiring parental consent each time a minor visits an indoor tanning salon unless they have a doctor's note. In 2014, a study was conducted by The Utah Department of Health revealing that teen tanning rates decreased following the implementation of the tanning restriction.¹⁰
- UCAN partners are concerned with children who are at a higher risk for melanoma due to family history or genetics. Current efforts include the development of educational materials and research to determine what prevents high risk families who have children from engaging in preventive behaviors, such as sunscreen use. Some of the collaborators include dermatologists, genetic counselors, behavioral scientists, risk communication specialists, and science writer and graphic artists from the Genetic Science Learning Center at the University of Utah.

¹⁰ Rebecca G. Simmons, Kristi Smith, Meghan Balough, Michael Friedrichs. Journal of Skin Cancer. *Decrease in Self-Reported Tanning Frequency among Utah Teens following the Passage of Utah Senate Bill 41: An Analysis of the Effects of Youth-Access Restriction Laws on Tanning Behaviors*. Volume 2014 (2014), Article ID 839601, 6 pages. August 20, 2014.

Physical Activity and Nutrition

Diet, physical activity, and weight play an important role in determining an individual's cancer risk. Maintaining recommended levels of physical activity and eating a diet filled with a variety of plant foods such as vegetables, fruits, whole grains and beans helps lower the risk for many cancers. Weight management is also important. More than two-thirds of American adults are overweight or obese.¹¹ Being overweight or obese is a risk factor for several types of cancer, including breast, colorectal, kidney, and esophageal.

It is estimated that one third of all cancers, or 345,000 cases in the US, are preventable through improved diet, physical activity, and weight management.¹² To reduce risk of chronic disease and promote overall health, including reducing the risk of cancer, it is important to eat a nutritious diet and be physically active. This includes:¹³

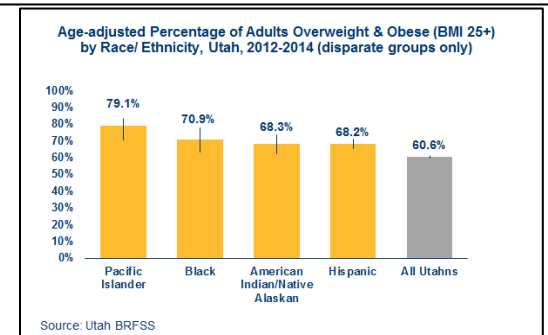
- Be as lean as possible without becoming underweight
- Be physically active for at least 30 minutes every day
- Avoid sugary drinks and limit consumption of energy-dense foods
- Eat more of a variety of vegetables, fruits, whole grains and legumes such as beans
- Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats
- If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day
- Limit consumption of salty foods and foods processed with salt (sodium)
- Don't use supplements to protect against cancer
- It is best for mothers to breastfeed exclusively for up to 6 months
- After treatment, cancer survivors should follow the recommendations for cancer prevention

Burden in Utah

Compared nationally in 2014, Utah ranks 45th lowest in adult (18+) self-reported obesity rates with 25.7% of Utahns reporting obese (BMI 30+) compared to the national rate of 29.5%. In 2008, Utah obesity-related adult health care expenditures were estimated at \$485 million.¹⁴

Historically Utah has higher fruit consumption and slightly higher vegetable consumption compared in national rates. Nutrition data in Utah shows little increase or decrease over time. Fruit and vegetable consumption generally are lower among those with lower education and income.

"Obesity is on its way to replacing tobacco as the number one preventable cause of cancer. We need to confront this growing problem and develop all the necessary tools to limit its impact." - Clifford Hudis, MD, 2013-2014 American Society of Clinical Oncology (ASCO) President



¹¹ <http://www.cancer.net/navigating-cancer-care/prevention-and-healthy-living/obesity-and-cancer>

¹² http://www.aicr.org/research/research_science_policy_report.html

¹³ Food, Nutrition, Physical Activity, and Cancer Prevention: A Global Perspective, AICR and World Cancer Research Fund, November 2007. <http://www.aicr.org/reduce-your-cancer-risk/recommendations-for-cancer-prevention/>

¹⁴ http://health.utah.gov/opha/publications/hsu/1205_EIObesity.pdf

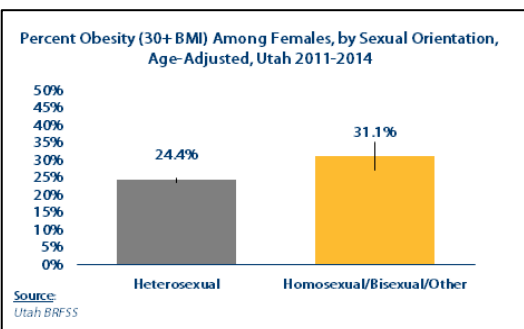
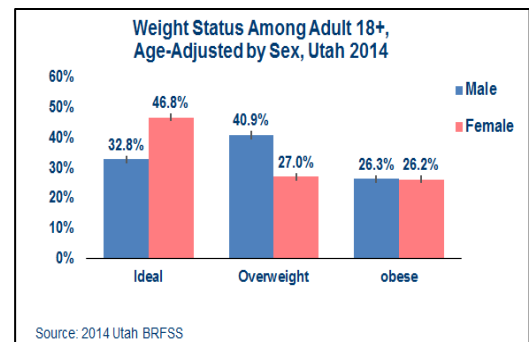
Disparities

Access to healthy foods and physical activity opportunities and resources can be a barrier to eating a balanced diet and being active; therefore the strategies and action steps in this plan focus on increasing access, especially in rural and underserved areas.

There is little measurable difference nutritional data among race and ethnic groups. American Indians in Utah have significantly lower fruit consumption but not significantly lower vegetable consumption compared to the state rate. Compared to the state rate, fruit consumption is lower in the rural and frontier populations and vegetable consumption is only lower among the Utah frontier populations.¹⁵

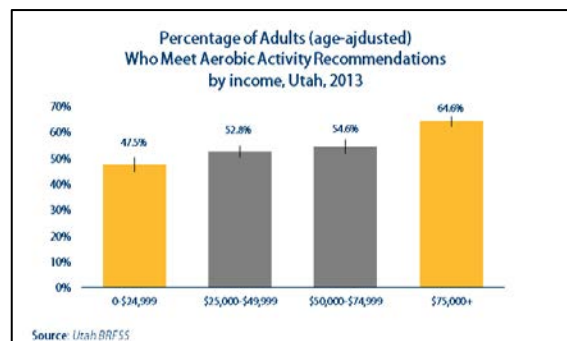
Pacific Islanders, Blacks, American Indians, and Hispanics all have significantly higher obesity or overweight rates than the state rate.

Utah males tend to have more weight problems than females. Adolescent obesity among Utah High Schoolers was reported as twice as high among Males (10.2%) compared to Females at (4.6%)¹⁶. Among Utah adults Women have reported significantly higher rates of having a healthy weight, while men show higher rates of being overweight, however there is no statistical difference of obesity rates among Utah adults.¹⁷



Compared to heterosexual women, women who identify as homosexual, bisexual, or other sexual orientation have significantly higher rates of obesity. There is no such significant difference among male obesity rates by sexual orientation.

Both higher education and higher income are associated with higher activity levels among Utah adults



¹⁵ 2011-2013 Survey Results, Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health

¹⁶ 2014 Survey Results, Utah Youth Risk Behavior Surveillance System, Utah State Office of Education

¹⁷ 2014 Survey Results, Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health

Goal 1: Increase the number of Utahns who meet current Dietary Guidelines¹⁸

Strategy A: Increase the access to healthy foods in schools, worksites, and communities through policy, systems, and environmental changes. ✓✓✓

What will success look like? Schools, worksites, and communities throughout the state will have access to healthy food options.

Action Steps

- Advocate for increased access to farmer's markets and community gardens for underserved populations.
- Develop interventions to increase access to healthy foods in areas with little or no access.
- Partner with worksites to implement healthy food policies that increase access to fruit and vegetables for employees.
- Increase access to culturally appropriate foods.
- Encourage the use of space for community gardens and farmer's markets in underserved areas.
- Partner with community supported agriculture (CSA) programs to increase access to locally grown foods.

National Strategy Alignment: Centers for Disease Control and Prevention. (2014). *Healthier Food Retail: An Action Guide for Public Health Practitioners*. Atlanta, GA; Centers for Disease Control and Prevention. (2011). *Strategies to Prevent Obesity and Other Chronic Disease: The CDC Guide to Strategies to Increase the Consumption of Fruits and Vegetables*. Atlanta, GA.

Goal 2: Increase the amount of Utahns who meet current Physical Activity Guidelines¹⁹

Strategy A: Increase physical activity in schools, worksites, and communities through policy, systems, and environmental change. ✓✓✓

What will success look like? Opportunities and resources for physical activity will exist in Utah communities.

Action Steps

- Advocate for more parks and open spaces in underserved communities.
- Promote and support state and local policies that create environments conducive to regular physical activity.
- Work with communities to develop active transportation plans and policies to encourage physical activity.
- Assist underserved communities to implement policies that encourage the development and utilization of physical activity resources including affordable recreation facilities, green spaces, and parks.
- Promote programs, such as the Safe Routes to School Program, that make it safe for students to walk to and from school.
- Collaborate with worksites and schools to implement policies that increase opportunities for employees and students to be physically active.
- Work with underserved communities to increase social support interventions in community settings.

Research has shown associations between physical activity and maintaining a normal weight lowers the risk of breast cancer. Physical activity has also shown to be linked with lower risk of recurrence of cancer and higher quality of life following treatment.²⁰

¹⁸ <http://health.gov/dietaryguidelines/>

¹⁹ <http://health.gov/paguidelines/>

²⁰ Department of Health and Human Services. Physical Activity - The Missing Link in Cancer Care. Retrieved from <http://odphp.tumblr.com/post/131766503025/physical-activity-the-missing-link-in-cancer>

National Strategy Alignment: U.S. Department of Health and Human Services. (2015). *Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities*. Washington, D.C.; U.S. Department of Health and Human Services. 2008. *Physical Activity Guidelines for Americans*. Washington, D.C; Community Preventative Services Task Force. (2014). *Behavioral and Social Approaches to Increase Physical Activity: Social Support Interventions in Community Settings*

Targets for Change

Reduce the proportion of adolescents in grades 9 through 12 who are considered obese (at or above the 95th percentile for body mass index, by age and sex).

Healthy People 2020

Baseline: 7.5% (2011 & 2013 YRBS)

Utah 2020 Target: 5.5%

Data Source: YRBS

Aligns with: Healthy People 2020, NWS-10

Reduce the proportion of adults who are obese (defined as a BMI of 30 or more).

Baseline: 26.3% (2014 BRFSS age-adjusted)

Utah 2020 Target: 24.5%

Data Source: BRFSS

Aligns with: Healthy People 2020, NWS-9

Increase the proportion of adults who are at a healthy weight (defined as a BMI less than 25).

Baseline: 39.5% (2014 BRFSS age-adjusted)

Utah 2020 Target: 41.5%

Data Source: BRFSS

Aligns with: Healthy People 2020, NWS-8

Increase the consumption of fruits to two or more servings per day.

Baseline: 34.2% adults (2013 BRFSS age-adjusted), 34.3% adolescents (2013 YRBS)

Utah 2020 Target: 36% (adults and adolescents)

Data Source: BRFSS, YRBS

Aligns with: Healthy People 2020, NWS-14; National Prevention Strategy

Increase the consumption of vegetables to three or more servings per day.

Baseline: 17.5% adults (2013 BRFSS age-adjusted), 14.2% adolescents (2013 YRBS)

Utah 2020 Target: 18.4% adults, 15% adolescents

Data Source: BRFSS, YRBS

Aligns with: Healthy People 2020, NWS-15.1; National Prevention Strategy

Increase the proportion of adolescents in grades 9 through 12 who are physically active for 60+ minutes daily

Baseline: 48.7% (2013 YRBS)

Utah 2020 Target: 51.1%

Data Source: YRBS

Aligns with: Healthy People 2020, PA-3.1; National Prevention Strategy

Increase the proportion of adults who are physically active as defined as "150+ min/week of at least moderate intensity, or 75+ min/week of vigorous intensity, or an equivalent combination of aerobic physical activity."

Baseline: 58.5% (2011- 2013 BRFSS)

Utah 2020 Target: 62%

Data Source: BRFSS

Aligns with: Healthy People 2020, PA-2.4; National Prevention Strategy

Policy, Systems, and Environmental (PSE) versus Individual Behavior Approach for Physical Activity

Setting	Individual Behavior Approach	PSE Approach
School	Teach the benefits of physical activity in a health course.	Develop a walking school bus program that makes it easy for students to walk and exercise before and after school.
Workplace	Host a one-time “get fit” challenge for employees.	Develop an incentive program that encourages walking and exercising during the workday. ²⁰
Community	Promote recreation center facilities and community classes for physical activity.	Advocate for local government to develop open spaces into public parks and recreation areas that allow for increased physical activity.

Physical Activity Efforts

- Utah Department of Health’s Comprehensive Cancer Control Program is in partnership with the Healthy Living through Environment, Policy, and Improved Clinical Care (EPICC) program and the Utah Department of Transportation (UDOT) for bike-pedestrian master planning processes to integrate physical activity into local community planning efforts in five rural areas in Utah. This project expands upon the previous year of funding three municipal active transportation efforts, which was highly successful.
- The National Tongan American Society (NTS) is currently working on increasing community-wide physical activity in two cities in Salt Lake County that have a large Pacific Islander population. Joint-Use-Agreements (JUA) will be used to increase free, safe, and available facilities that will be open to the public for physical activity.
- The Utah Department of Health WISEWOMAN Program provides eligible Utah women with the knowledge, skills, and opportunities to improve their diet, physical activity, and other life habits to prevent, delay, or control cardiovascular disease (CVD) and other chronic diseases.

²⁰ U.S. Department of Health and Human Services. 2015. *Step It Up! The Surgeon General’s Call to Action to Promote Walking and Walkable Communities*. U.S. Surgeon General Web site. <http://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/>.

Policy, Systems, and Environmental (PSE) versus Individual Behavior Approach for Nutrition

Setting	Individual Behavior Approach	PSE Approach
School	Discuss the importance of healthy eating with students during the school day.	Provide only healthy, appealing, and affordable food options in cafeterias and on school campuses that makes it easy for students to eat healthy before, during, and after school.
Workplace	Challenge employees to bring healthy lunches to work.	Dedicate workplace land for use as an employee garden, incentivize employees to tend the garden, and utilize the resulting produce in the onsite cafeteria.
Community	Promote a local farmer's market through flyers, signs, email, and newsletters.	Facilitate farm-to-plate agreements between local food producers and community organizations including schools and hospitals.

Nutrition Success Stories

- Salt Lake County has accomplished great strides in furthering farm to school programs not only within Salt Lake County, but around the state as a whole. Salt Lake County began their project by compiling the first list of all the local growers, farmers, and producers in the state which previously did not exist in Utah. Salt Lake County then began to offer farm field days to low income elementary schools to educate kids, teachers, and administrators about how local food can be incorporated into school curriculum. After creating contacts with both local farmers and school nutrition administrators, staff, and school principals, Salt Lake County set up met and greet sessions between the two groups that culminated in hosting the first farm-to-school conference in Utah being cosponsored by the State Office of Education and the Department of Agriculture. The conference was very successful resulting in partnerships between multiple growers and school districts around the Salt Lake metropolitan area. Salt Lake County also developed resources for both schools and farmers to use to develop working and lasting relationships as well a complete toolkit any school can use to procure more fresh local food. The farm-to-school program was so successful and grew so fast, that the State Office of Education has taken over management of the program to encourage schools around the state to buy local as often as possible.
- The International Rescue Committee (IRC) opened the Sunnyvale Farmer's Market in June 2015. The market operated for 18 weeks in Valley Center Park, located in the panhandle of Millcreek, in what the USDA designates as Salt Lake County's largest food desert. By offering a "match" program for customers using the Supplemental Nutrition Incentive Program (SNAP), the SFM was able to double, up to \$10, fresh fruit and vegetable purchases. After establishing itself as a source for local, nutritious food, the SFM drew in more than 100 people each week and became a source of economic generation for farmers and prepared food vendors throughout the Salt Lake Valley.

Cancer Screening

Introduction

Finding cancer early is one of the most important ways to increase a person's chance of survival. There is strong evidence that screening for breast, cervical, colorectal, and lung cancers is effective and can detect cancer at an early stage. Routine cancer screenings are the best way to identify and detect cancers early. In addition to detecting cancer early, screening for colorectal and cervical cancers can prevent these cancers by identifying precancerous lesions that can be removed.²¹

According to the American Cancer Society, early detection of cancer through screening has been determined to reduce mortality from breast, cervical, colorectal, and lung cancers.²²

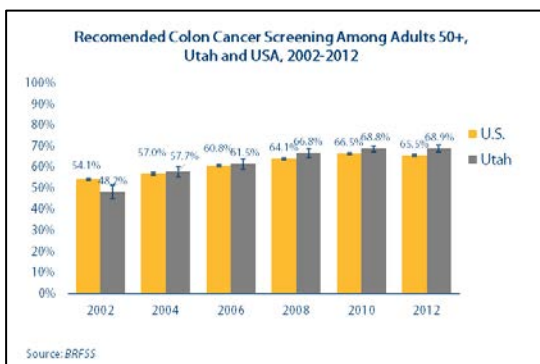
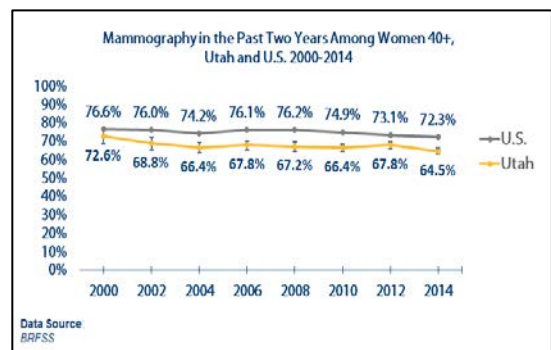
Three key priorities have been selected to aid in finding cancer in its earliest stages:

1. Educate and encourage the public to follow screening recommendations.
2. Increase access to quality recommended cancer screenings.
3. Implement healthcare systems-based strategies to increase cancer screening rates.

Cancer Screening in Utah

The rates of mammography and Pap tests historically and currently are lower in Utah compared national rates.

Additionally, over the past 15 years both mammography and Pap tests in Utah have been decreasing.



For the last decade or more, colon cancer screening rates in Utah have closely mirrored national screening rates.

²¹ Smith RA, Manassaram-Baptiste D, Brooks D, et al. Cancer screening in the United States, 2015: a review of current American Cancer Society guidelines and current issues in cancer screening. *CA Cancer J Clin.* 2015 Jan;65(1):30-54.

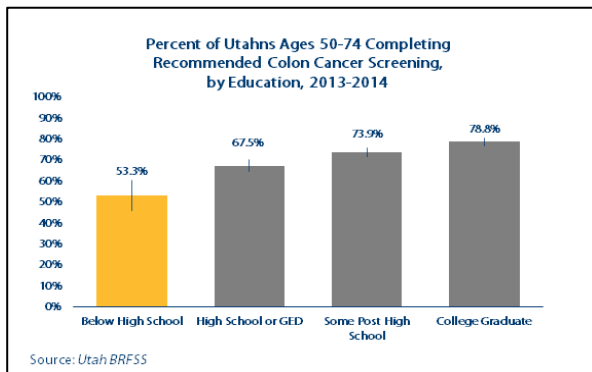
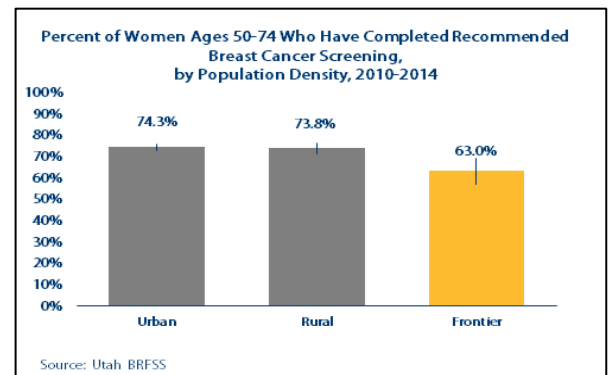
²² Cancer Prevention and Early Detection Facts and Figures 2015-2016

American Cancer Society

<http://www.cancer.org/acs/groups/content/@research/documents/webcontent/acspc-045101.pdf>

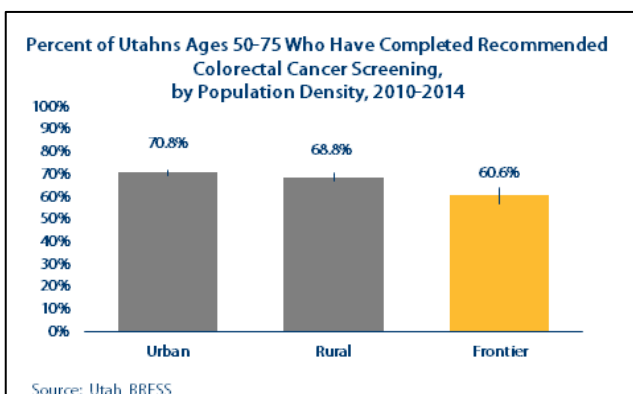
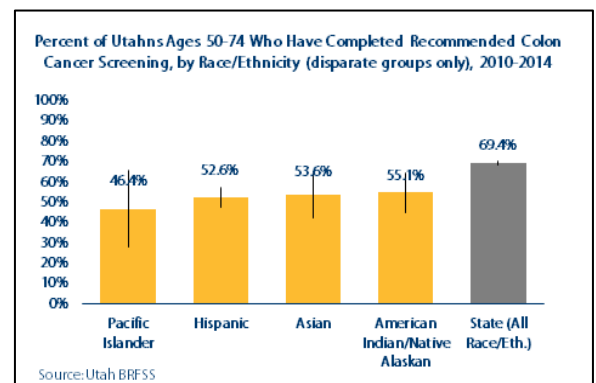
Disparities

Utah women with lower income, lower education, and living in frontier communities have significantly lower rates of breast cancer screening. The only racial/ethnic group of woman to have significantly lower rates of breast cancer screening are American Indians. From 2010 to 2014, an estimated 54.4% of Utahn American Indian/Alaskan native woman 50-74 years of age had received a mammogram in the past 2 years²³.



Colorectal Cancer Screening rates are significantly lower with more income and education levels.

Pacific islanders, Hispanics, Asians, American Indian/Alaskan Natives in Utah have lower rates of colon cancer screening compared to the Utah state rate.



Utahns living in frontier setting have lower rates of colorectal cancer screening. There is no difference between colorectal cancer screening rates among men and women.

²³ Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health

Goal: Increase the number of Utahns who receive recommended cancer screenings

Strategy A: Encourage the public to receive recommended cancer screenings by providing education using evidence-based communication methods. ✓✓✓

What will success look like? The public will have received education that positively influences their decision to receive recommended cancer screenings.

Action Steps

- Increase public knowledge about cancer screening facts and guidelines through multiple avenues, including small media and provider recommendation.
- Provide culturally competent and cancer-specific educational materials, including small media, in multiple languages to targeted communities.
- Coordinate with state and local health partners to promote cancer screening opportunities throughout the state.
- Advocate for a statewide accreditation for community health workers.

National Strategy Alignment: Centers for Disease Control and Prevention. (2014). *Increasing Population-based Breast and Cervical Cancer Screenings: An Action Guide to Facilitate Evidence-based Strategies*. Atlanta, GA. Centers for Disease Control and Prevention. (2013). *Increasing Colorectal Cancer Screening: An Action Guide for Working with Health Systems*. Atlanta, GA.

Strategy B: Decrease barriers to cancer screenings. ✓✓

What will success look like? All Utahns will have access to affordable cancer screenings.

Action Steps

- Increase awareness related to health care reform and subsequent changes in coverage for recommended cancer screenings.
- Educate underinsured and uninsured Utahns about available programs offering cancer screenings that are provided at little or no cost.
- Advocate for programs that provide cancer screening at little or no cost.
- Increase awareness of free or low-cost cancer screening programs
- Increase access to mobile screening facilities in rural areas
- Encourage the use of in home testing options, such as fecal occult blood test (FOBT) or fecal immunochemical tests (FIT).
- Support partnerships with organizations that provide patient navigation, case management, and community health worker services.
- Support initiatives to identify unrecognized barriers to screening, including barriers that affect disparate populations.

National Strategy Alignment: Centers for Disease Control and Prevention. (2014). *Increasing Population-based Breast and Cervical Cancer Screenings: An Action Guide to Facilitate Evidence-based Strategies*. Atlanta, GA; Centers for Disease Control and Prevention. (2013). *Increasing Colorectal Cancer Screening: An Action Guide for Working with Health Systems*. Atlanta, GA.

Structural barriers are non-economic burdens or obstacles that make it difficult for people to access cancer screening. The action steps address access issues to cancer screening including offering mobile mammography units in rural settings, free or low cost screening services, patient navigators, and community health workers.²⁴

²⁴The Guide to Community Preventive Services: The Community Guide. 2015. *Increasing Cancer Screening: Reducing Structural Barriers for Clients*. Community Preventive Services Task Force Web site.
<http://www.thecommunityguide.org/cancer/screening/client-oriented/ReducingStructuralBarriers.html>.

Strategy C: Increase uptake of recommended cancer screenings in health care settings through evidence-based strategies and policy change. ✓✓

What will success look like? Health care providers will adopt policy changes that aim to increase the uptake of recommended cancer screenings.

Action Steps

- Offer education to providers on strategies to educate patients about recommended screenings and their value.
- Encourage clinics to adopt a policy to discuss risk factors that affect routine screening recommendations (e.g. family history and genetics) with patients.
- Encourage clinics to adopt a policy to assess cancer screening during a patient's periodic health examination.
- Encourage clinics to adopt a policy to assess clinic workflow and implement a reminder system for identified patients requiring cancer screenings.

National Strategy Alignment: Centers for Disease Control and Prevention. (2014). *Increasing Population-based Breast and Cervical Cancer Screenings: An Action Guide to Facilitate Evidence-based Strategies*. Atlanta, GA; Centers for Disease Control and Prevention. (2013). *Increasing Colorectal Cancer Screening: An Action Guide for Working with Health Systems*. Atlanta, GA.

Strategy D: Encourage employers to implement policies that increase recommended cancer screenings among employees. ✓✓

What will success look like? Employers will have implemented policy changes to encourage and facilitate employees receiving recommended cancer screenings.

Action Steps

- Encourage employers to implement policies that allow employees to receive recommended cancer screenings during work time including the use of a mobile screening van or paid time off.
- Encourage employers to provide education about recommended cancer screenings, including insurance coverage, to employees
- Encourage employers to incorporate cancer screenings into worksite wellness programs.

National Strategy Alignment: Centers for Disease Control and Prevention. (2014). *Increasing Population-based Breast and Cervical Cancer Screenings: An Action Guide to Facilitate Evidence-based Strategies*. Atlanta, GA; Centers for Disease Control and Prevention. (2013). *Increasing Colorectal Cancer Screening and Promoting Screening Quality: An Action Guide for Engaging Employers and Professional Medical Organizations*. Atlanta, GA.

UCAN has taken the **80% by 2018** pledge to increase colorectal cancer screening rates to 80% by the year 2018. The **80% by 2018** is a national initiative that was launched by the National Colorectal Cancer Roundtable (NCCRT). The first step in reaching this goal is to create a Colorectal Cancer Roundtable that will be a subgroup of UCAN. The subgroup will focus on implementing the strategies developed by the NCCRT and their partners including education, decreasing barriers to screening, and promoting policy and systems changes.

Targets for Change

Increase the proportion of adults who receive a colorectal cancer screening based on the most recent USPSTF guidelines.

Baseline: 71.0% (adults ages 50-75, 2014 BRFSS)

Utah 2020 Target: 80%

Data Source: BRFSS

Aligns with: Healthy People 2020, C-16; Comprehensive Cancer Control National Priorities, National Colorectal Cancer Roundtable

Reduce the rate of colorectal cancer diagnosed at an advanced (regional or distant) stage among adults ages 50 to 74.

2014 Baseline: 36.08 per 100,000 population (2012 SEER)

Utah 2020 Target: 32 per 100,000 population

Data Source: Utah Cancer Registry/SEER

Aligns with: Healthy People 2020, C-16; Comprehensive Cancer Control National Priorities

Increase the proportion of women who receive a breast cancer screening based on the most recent USPSTF guidelines

Baseline: 73.3% of women ages 50-74 had mammography in the past 2 years (2014 BRFSS)

Utah 2020 Target: 76%

Data Source: BRFSS

Aligns with: Healthy People 2020, C-17

Reduce the rate of breast cancer diagnosed at an advanced (regional or distant) stage among women ages 40 to 74.

Baseline: 86.45 per 100,000 Women (2012 SEER)

Utah 2020 Target: 80 per 100,000 woman

Data Source: Utah Cancer Registry/SEER

Aligns with: Healthy People 2020, C-11

Increase the proportion of women who receive a cervical cancer screening based on the most recent USPSTF guidelines.

Baseline: 77.6% of women ages 21-65 had a pap test in the past 3 years (2014 BRFSS)

Utah 2020 Target: 83%

Data Source: BRFSS

Aligns with: Healthy People 2020, C-15

Reduce the rate of cervical cancer diagnosed at an advanced (regional or distant) stage among women ages 20 to 64.

Baseline: 2.88 per 100,000 woman (2012 SEER)

Utah 2020 Target: 2.5 per 100,000 woman

Data Source: Utah Cancer Registry/SEER

Aligns with: Healthy People 2020, C-15

Increase the proportion of men ages 40 and above who have discussed the prostate-specific antigen (PSA) test to screen for prostate cancer with their health care provider

Baseline: 54.7% (2012-2014 BRFSS)

Utah 2020 Target: 57.5%

Data Source: BRFSS

Aligns with: Healthy People 2020, C-19

Reduce the rate of lung cancer diagnosed at an advanced (regional or distant) stage among adults ages 55 to 74.

2014 Baseline: 69.16 per 100,000 population (2011-2012 SEER)

2020 Goal: 62 per 100,000 population

Data Source: Utah Cancer Registry/SEER

Aligns with: Healthy People 2020, C-2

Policy, Systems, and Environmental (PSE) versus Individual Behavior Approach for Cancer Screening

Setting	Individual Behavior Approach	PSE Approach
Healthcare Organizations	Tell a patient he or she is due for a cancer screening test.	Establish an electronic and paper reminder system to notify providers to recommend screenings, and to patients to get screenings. Establish clinical staff roles for following up on screening referrals and appointments.
Workplace	Provide information to employees about recommended ages for cancer screenings.	Provide incentives for employees to get cancer screenings, including paid time off, monetary incentives, or incentives for workplace wellness programs.

Cancer Screening Efforts

- A subgroup of UCAN, Utah Mammography Action Coalition (UMAC), is currently working with worksites to receive the *CEO Cancer Gold Standard™* Accreditation. The accreditation provides a framework for employers to have a healthier workplace by focusing on cancer risk reduction, early detection, access to clinical trials, and high-quality care.
<http://www.cancergoldstandard.org/>
- Jakob Jensen, a Professor at the University of Utah, is partnering with the Utah Department of Health, University of Utah, and Huntsman Cancer Institute screening facilities in a “real-time” evaluation study that will provide precise longitudinal data concerning the quantity, characteristics, and motivations of patients for getting a mammogram or colonoscopy. The study will also evaluate the impact of ongoing screening interventions. A survey will be administered to patients during registration and data will be sent in real-time through a secure server.
- The Utah Breast and Cervical Early Detection Program provides free and low cost breast and cervical cancer screenings to Utah’s low-income population.

Survivorship and Quality of Life

The American Cancer Society reports that there are currently more than 14 million cancer survivors living in the United States. By 2024, this number is expected to grow to almost 19 million. It is estimated that 81,260 cancer survivors reside within the state of Utah. As screenings become more efficient and treatments become more effective, it is expected that more people will enter remission for their cancer or live longer with their diagnosis.

Cancer survivorship begins at diagnosis and extends through the rest of the patient's life. Cancer survivorship can also include caregivers and support systems around the individual diagnosed. Cancer survivors include those who are undergoing treatments, have completed treatments, and those who are receiving palliative or hospice care temporarily or for the remainder of their lives. Cancer survivors face difficult realities as they cope with short- and long-term symptoms of the disease including the side effects of treatment.

Cancer can be a stigmatizing disease. Social, economic, physical, and emotional barriers exist for cancer survivors. Physical effects include peripheral neuropathy, pain, fatigue, memory and concentration loss, fertility issues, or body disfigurement. Many cancer survivors face difficulties achieving and maintaining employment, paying for medical bills, and accessing healthcare services and support. Cancer may also devastate family relationships which may result in despair, hopelessness, and isolation.

Burden in Utah

Many institutions and community groups offer excellent support programs and often find challenges in making these programs accessible to cancer survivors, in and out of treatment, and their loved ones. Often, clinicians and patients are not aware of these programs or that the need even exists. There seems to be a need within the state of Utah to determine what the needs are of cancer survivors, what resources exist, and how to best connect those affected by cancer to the programs and services that can meet those needs.

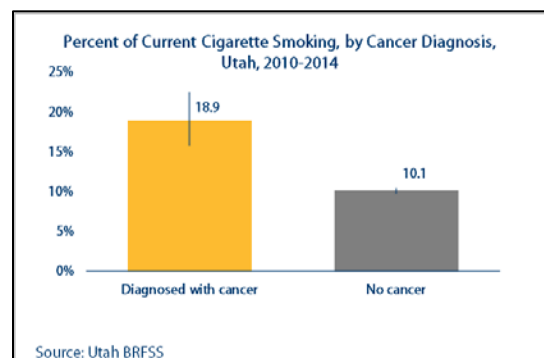
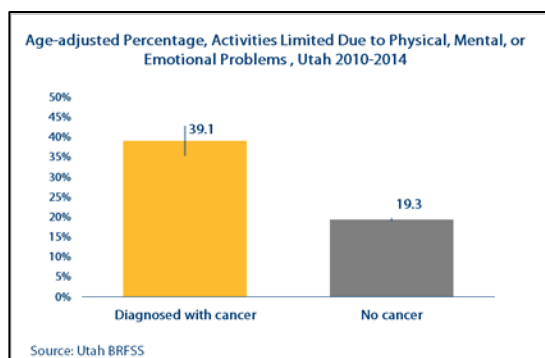
As much of the attention on cancer remains on prevention and early detection, the burden that cancer places on the quality of life issues for survivors and their caregivers is often overlooked. It is recommended that formal needs and resource assessments be conducted to improve the quality of life of cancer patients and their loved ones through access to services and the adoption of healthy behaviors. In addition, by improving access to quality treatment, appropriate supportive care, and follow-up, the burden of cancer on patients and their loved ones may become reduced throughout cancer survivorship.

Disparities

Within Utah, rural cancer survivors face geographic barriers preventing access to medical services and routine healthcare. Researchers at Huntsman Cancer Institute and Primary Children's Hospital identified that rural caregivers of children with cancer are more likely to miss work, quit or change jobs, relocate residences, and had a greater financial burden. The children themselves missed more school and were more likely to repeat a grade if they lived more than an hour away from their treatment center.

Cancer Survivors in Utah face lower health outcomes and quality of life compared to the general population. Cancer survivors are nearly twice as likely to be smokers compared to the rest of the

population and nearly twice as likely to report their activities being limited because of physical, mental, or emotional problems.



“For the 1 million LGBT cancer survivors in the country today, the impact of the disease and treatment on quality of life is significantly different from their heterosexual counterparts in the areas of sexuality, social relationships, and dealings with the medical community”.²⁷

Cancer Survivorship Care Plan

The transition from cancer treatment to primary care can be a confusing and difficult process. Many cancer survivors complete treatment without a clear understanding of how to manage ongoing symptoms and fail to receive proper follow up care moving forward. Survivorship care plans can help bridge this process by providing an individualized post-treatment plan for the survivor, their oncology team, and their primary care providers.

A survivorship care plan generally offers information about the original diagnosis, the treatment that was given, information about the treatment team, a summary of possible ongoing health symptoms and concerns, instructions for follow-up tests, a psycho-social assessment, and lists of information and resources available.

Research is being conducted within the state of Utah and nationwide to learn more about survivorship care plans, barriers to their use, and ways to make them more useful for the survivor and medical teams going forward.

A current study has shown that many US cancer survivors are eating less healthy diets than the general population, consuming too many energy dense foods and not eating the recommended amount of vegetables and whole grains. Cancer survivors also showed low dietary intakes of vitamin D, vitamin E, potassium, and calcium. The findings of the study revealed a need for dietary interventions in this vulnerable population.²⁵

²⁵ Fang Fang Zhang MD, PhD, Shanshan Liu MS, MPH, Esther M. John PhD, Aviva Must PhD, Wendy Demark-Wahnefried PhD, RD. *Diet quality of cancer survivors and noncancer individuals: Results from a national survey.* Cancer. 2015. Volume 121, Issue 23, pages 4212–4221. <http://onlinelibrary.wiley.com/doi/10.1002/cnrc.29488/abstract>. Published October 13, 2015.

Goal: Ensure that the needs of cancer survivors and their caregivers are met throughout the continuum of care

Strategy A: Identify the needs of cancer survivors and their caregivers. ✓

What will success look like? Utah cancer survivors and caregiver needs will be known and understood.

Action Steps:

- Conduct a comprehensive needs assessment to determine the unique needs of cancer survivors and their caregivers in Utah.
- Conduct a comprehensive review of survivorship programs nationwide to determine best practices for developing survivorship programs in Utah.
- Create and adopt methods or programs for connecting cancer survivors and caregivers to resources tailored to their needs, including health disparities.
- Administer the BRFSS Cancer Survivorship Module every two years to identify survivor and caregiver needs.

Strategy B: Improve quality of life among cancer survivors and their caregivers. ✓✓✓✓

What will success look like? Utah cancer survivors will experience an increase in their quality of life.

Action Steps:

- Work with healthcare providers to ensure all survivors who use tobacco products are referred to the Utah Quitline.
- Advocate for and support programs and policies designed to assist survivors in reaching recommended nutrition and physical activity goals.
- Provide education to healthcare providers related to physical, mental, and/or emotional needs of cancer survivors.
- Provide education to cancer survivors and caregivers about financial assistance available for treatment and quality of life services.

Cancer survivors face many barriers when it comes to having their unique needs met.

In order to address these barriers one must:

1. Develop, test, maintain, and promote a patient navigation system for cancer survivors.
2. Educate decision-makers about economic and insurance barriers related to health care for cancer survivors.
3. Establish and /or disseminate guidelines that support for quality and timely service provision to cancer survivors.
4. Assess and enhance provision of palliative services to cancer survivors.
5. Establish integrated multidisciplinary teams of health care providers.²⁶

National Strategy Alignment: Centers for Disease Control and Prevention. (2004). *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies*. Atlanta, GA

Strategy C: Improve access to treatment options, symptom management, and follow-up care for cancer survivors. ✓✓✓✓

What will success look like? High quality treatment options, symptom management, and follow-up care will be accessible by all Utah cancer survivors.

Action Steps:

- Encourage healthcare providers to inform patients of opportunities related to enrollment in clinical trials.

²⁶ Centers for Disease Control and Prevention. *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies*. Published April 2004. Accessed October 2015.

- Support partners in developing specific patient navigation programs addressing the needs of disparate populations including adolescent and young adult survivors, rural populations, racial and ethnic minorities, etc.
- Advocate for improved policies and programs designed to increase the number of patients that have access to pain management and palliative care.
- Partner with healthcare systems to meet Commission on Cancer Standard 3.3 in order to ensure that all eligible patients receive survivorship care plans by 2020.
- Work with health care systems to identify gaps in the healthcare workforce and develop strategies to address the growing demand for survivorship care.
- Link cancer survivors to patient navigation or community health worker programs.
- Partner with worksites to establish policies allowing for paid time off for cancer treatment, post-treatment, and rehabilitative services.

National Strategy Alignment: Centers for Disease Control and Prevention. (2004). *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies*. Atlanta, GA

Targets for Change

Decrease the proportion of cancer patients and survivors who are current smokers.

Baseline: 19.4% (2014 BRFSS age-adjusted)

Utah 2020 Target: 17%

Data Source: BRFSS

Aligns with: Healthy People 2020 TU-1,2, National Action Plan for Cancer Survivorship

Decrease the proportion of cancer patients and survivors who report no physical activity or exercise in the past month.

Baseline: 25.8% (2013-2014 BRFSS age-adjusted)

Utah 2020 Target: 19%

Data Source: BRFSS

Aligns with: Healthy People 2020 C-14, National Action Plan for Cancer Survivorship

Increase the proportion of cancer survivors reporting “Excellent”, “Very Good”, or “Good” physical health.

Baseline: 79.1% (2010 BRFSS)

Utah 2020 Target: 83%

Data Source: BRFSS

Aligns with: Healthy People 2020 C-14, National Action Plan for Cancer Survivorship

Increase the proportion of cancer patients and survivors reporting their pain is under control.

Baseline: 88.6% (2010 BRFSS)

Utah 2020 Target: 94%

Data Source: BRFSS

Aligns with: Healthy People 2020 C-14, National Action Plan for Cancer Survivorship

Decrease the proportion of cancer survivors reporting life dissatisfaction.

Baseline: 5.2% (2010 BRFSS)

Utah 2020 Target: 4%

Data Source: BRFSS

Aligns with: Healthy People 2020 C-14, National Action Plan for Cancer Survivorship

Decrease the proportion of cancer patients and survivors reporting limitations in their usual activities due to physical, mental or emotional problems.

Baseline: 38.7% (BRFSS 2014 age-adjusted)

Utah 2020 Target: 35%

Data Source: BRFSS

Aligns with: Healthy People 2020 C-14, National Action Plan for Cancer Survivorship

Increase statewide cancer patient enrollment in clinical trials.

Baseline: 5.6% (BRFSS 2010)

Utah 2020 Target: 8%

Data Source: BRFSS

Aligns with: National Action Plan for Cancer Survivorship

Increase the proportion of cancer patients receiving survivorship care plans.

Baseline: 44.5% (2010 BRFSS)

Utah 2020 Target: 50%

Data Source: BRFSS

Aligns with: The Livestrong Essential Elements of Survivorship Care

Increase the proportion of cancer patients and survivors who report having their insurance pay for all or part of their cancer treatment.

Baseline: 91.7% (2010 BRFSS)

Utah 2020 Target: 95%

Data Source: BRFSS

Aligns with: National Action Plan for Cancer Survivorship

Policy, Systems, and Environmental (PSE) versus Individual Behavior Approach in Cancer Survivorship

Setting	Individual Behavior Approach	PSE Approach
Healthcare Organizations	Provide patients contact information for survivorship support groups.	Routinely provide a comprehensive post-treatment plan and refer to specific support groups, patient navigators, and resources in their local community.
Workplace	Host an annual fundraiser event for cancer survivors or provide information about local survivor retreats.	Develop workplace policies specifically to accommodate the needs of cancer survivors, including additional paid leave for follow up care.

Cancer Survivorship Successes

UCAN member are committed to ensuring cancer survivors needs are met throughout the state. Members efforts include:

- In 2009, the Huntsman Cancer Institute (HCI) started a patient navigation program for Spanish speaking patients. This program was developed as clinical staff noted how often Spanish speaking patients missed appointments or were noncompliant with their treatments. The Patient and Public Education program at the Huntsman Cancer Institute began researching evidence-based programs that may help to address the situation. Currently, HCI has three navigators to work with Spanish speaking patients. Often, they assist patients in accessing

resources, making appointments, asking questions of their health care team, completing paperwork, and getting cancer information. Navigators will accompany patients to appointments to ensure that linguistic and cultural barriers are addressed during the visit. The patient navigation program at HCI currently provides services for about 600 patients each year.

- Alliance Community Services offers support groups and patient navigation services specific to Hispanic cancer survivors. Alliance has run the "Triunfadoras" Spanish Language Breast Cancer Support Group for Hispanic survivors and their families since 2002. The program continues to be the only one of its kind in the State of Utah and has proven to have a substantial impact on breast cancer disparities among the Latino community.
- The Huntsman Cancer Institute has adapted the *Cancer Resource Guide* into an online database. Now it can be updated real time to provide specific information about programs and services offered to cancer patients and their loved ones.
- Intermountain Healthcare and the Huntsman Cancer Institute are part of the Molecular Analysis for Therapy Choice (MATCH) study. The study matches the patient with a specific treatment based on the DNA of the cancer. Most of the treatments used in MATCH are already FDA approved and are currently being used to treat some types of cancer.
- The Utah Certificate of Palliative Care Education (UCoPE) program offers an opportunity for health care providers to gain the skills they need to manage patients' symptoms and communicate with them requiring palliative care support. The program is an intensive, four-day training provided by facilitators from a variety of settings at the University of Utah.

Page Break

UCAN Collaboration Priorities

Human Papillomavirus (HPV)

Human papillomavirus (HPV) is a common virus affecting nearly 80 million people (including teens) in the United States. HPV can cause several types of cancer including cervical, anal, oropharyngeal, penile, vaginal, and vulvar cancers. The HPV vaccine helps protect against the most common strains of the virus, including those that cause cancer. The Advisory Committee on Immunization Practices (ACIP) recommends the vaccine for preteen boys and girls at age 11 or 12. Although the efficacy of the vaccine has been proven, the uptake of the vaccine is suboptimal among adolescents and young adults in the U.S. and in Utah²⁷. Although there have been great strides to improve HPV vaccination rates in Utah, there is still work to be done. UCAN supports partners who are working to improve rates in the state.

Who is currently working on increasing HPV vaccination rates in the state?

The Intermountain West HPV Vaccination Coalition brings together immunization program representatives with cancer control, pediatric, and primary care specialists as well as parents and community members who share the common goal of improving HPV vaccination rates in the Intermountain West (Colorado, Idaho, Nevada, Wyoming, and Utah).

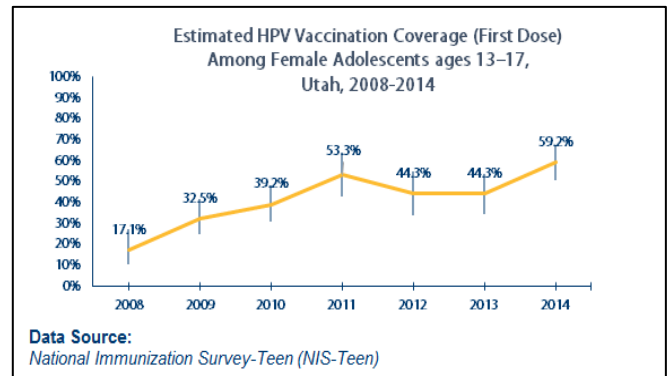
In 2014, the Utah Department of Health partnered with the American Academy of Pediatrics to present three regional conferences on HPV and the HPV vaccine. The department has disseminated education materials to providers and stakeholders; developed a comprehensive media campaign to increase awareness and provide education; and distributed surveys to understand parental and provider knowledge, attitudes, and practices around the HPV vaccine.

The Utah Immunization Program hosts the Vaccines for Children Program (VFC) and supplies the HPV vaccine to participating providers including community health centers, local health departments, private physician offices, pharmacies, and school districts. The VFC Program provides free HPV vaccine to children who are underinsured, uninsured, or covered under Medicaid or CHIP. The program also provides assessments to participating VFC providers that show the overall HPV rate and individual dose completion.

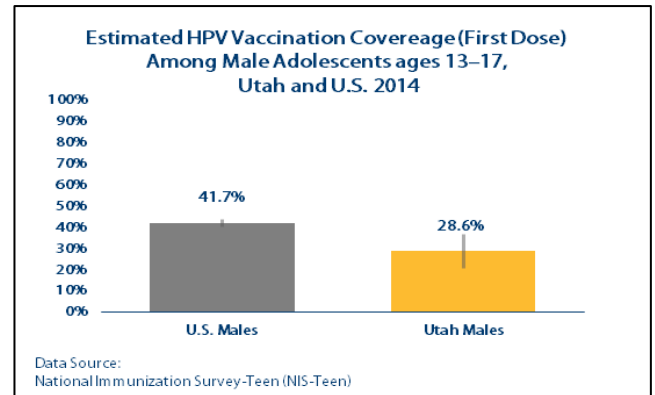
²⁷ Centers for Disease Control and Prevention. 2015. *HPV Vaccines: Vaccinating Your Preteen or Teen*. CDC. Human Papillomavirus (HPV) Web site. <http://www.cdc.gov/hpv/parents/vaccine.html>. Page last updated: January 26, 2015

Data/Disparities

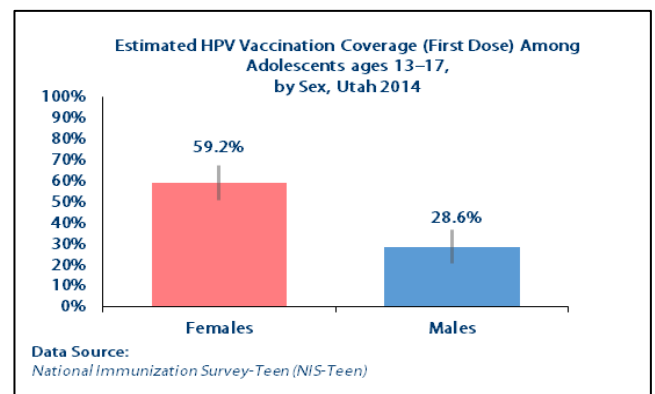
HPV vaccination has seen significant increase in Utah over the past few years, particularly among adolescent females. In past years Utah has been among the lowest states for HPV vaccination, however that trend has changed. In 2014, compared nationally there was no significant difference in the percent of females ages 13-17 receiving the first dose and the second dose of the HPV vaccine in Utah. However Utah did have significantly lower rates of completing all 3 doses of the vaccine among females.



Currently Utah adolescent males fall well below national averages with 28.6% of Utah male adolescents being vaccinated compared to the nation level of 41.7%.



Currently, female adolescents are about twice as likely to receive the HPV vaccine compared to male adolescents in Utah.



Partner strategies:

Improve HPV immunization rates among adolescents and young adults in Utah

- Increase community awareness and support of the human papillomavirus (HPV) vaccine
 - Educate parents, community members, and healthcare providers about ACIP recommendations for the HPV vaccine.
 - Create public awareness campaigns targeted at parents of adolescents and young adults, and populations at high risk for HPV infection and cervical cancer
 - Partner with local organizations to increase awareness of the HPV vaccine benefits, safety, and efficacy.
- Increase access to the HPV vaccine for adolescents and young adults
 - Educate uninsured and underinsured populations on financial assistance programs available for the HPV vaccine (i.e., VFC).
 - Support Utah's VFC Program to increase the number of healthcare providers who participate and administer the HPV vaccine.
 - Advocate for insurance coverage of the HPV vaccine according to ACIP recommendations.
 - Increase awareness and referral to Utah's VFC Program among vulnerable populations
- Implement healthcare system strategies to increase vaccination rates and vaccination series completion rates
 - Increase the number of providers who report the administration of the HPV vaccine in the Utah Statewide Immunization Information System (USIIS) to ensure the accuracy of patients who are eligible to receive the vaccine.
 - Support the implementation of reminder systems in provider offices to increase the number of patients who complete the HPV vaccination series.
 - Support school-based clinics that offer the HPV vaccine.

How can UCAN collaborate?

- Advocate for insurance coverage of the HPV vaccine according to the Centers for Disease Control and Prevention recommendations.
- Support the use of reminder systems in provider offices to increase HPV immunization rates.
- Educate partners on financial resources available for uninsured and underinsured populations for the HPV vaccine, including the VFC program.
- Support public awareness campaigns regarding the HPV vaccine.

Radon

Exposure to radon is the number one cause of lung cancer among nonsmokers and the second leading cause of lung cancer overall. Radon is an odorless, invisible gas that occurs naturally in the ground where uranium and radium exist, which can move up through the soil and into a home or building. In Utah, one in three homes tested have elevated radon levels. Radon can only be detected through testing. If a test indicates high radon levels, it can be resolved through installation of radon mitigation equipment in the building. UCAN supports partners who are working to decrease lung cancers related to radon through education, community action, and collaborations.

Data/Disparities

Risk estimates extrapolated from epidemiological studies of underground miner data indicate that 10% to 15% of lung cancer deaths per year in the United States may be attributed to residential radon.²⁸ Studies have also indicated that exposure to both radon and cigarette smoke increases an individual's risk of lung cancer more than either one of these factors alone due to synergistic effects between the two factors. The risk of lung cancer from radon exposure is estimated at between 25 times greater for persons who smoke cigarettes as compared with those who have never smoked.²⁹

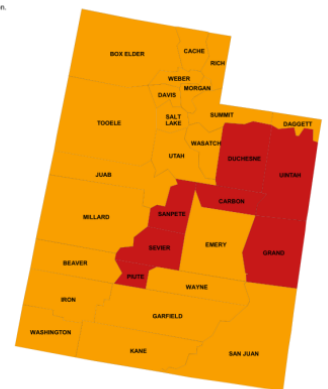
In the United States, the average radon concentration in indoor air is about 1.3 pico Curies per Liter (pCi/L), but in Utah the average is near 5 pCi/L, a measurement based on over 42,000 short term radon test results received by the Utah Department of Environment Quality from 1990-2015.³⁰ ³¹ Nationally, 1 out of every 15 homes is estimated to have elevated radon levels, but in Utah about 1 out of every 3 homes have elevated radon levels.³² Radon risk reduction is particularly relevant in Utah because all counties in the state are classified as an EPA Zone 1 or 2, which denotes areas of high radon potential.³³

UTAH - EPA Map of Radon Zones

The purpose of this map is to assist National, State and local organizations to target their resources and to implement radon-resistant building codes.

This map is not intended to determine if a home in a given zone should be tested for radon. Homes with elevated levels of radon have been found in all three zones. All homes should be tested, regardless of zone designation.

IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of Utah" (USGS Open-File Report 93-202-4) before using this map. See <http://energy.cr.usgs.gov/radon/gprinfo.html>. This document contains information on radon potential variations within counties. EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.



Less than 20% of Utahns have had their homes tested for radon. Public awareness of Radon in Utah is limited, with 51.6% of Utahn BRFSS respondents in 2013 able to correctly name lung cancer as the health condition associated with

²⁸ Environmental Protection Agency EPA Assessment of Risks From Radon in Homes. Washington, DC: Office of Radiation and Indoor Air; June 2003

²⁹ Darby, Sarah, et al. "Radon in homes and risk of lung cancer: collaborative analysis of individual data from 13 European case-control studies." *Bmj* 330.7485 (2005): 223.

³⁰ United States Environmental Protection Agency (EPA), A Citizen's Guide to Radon: The Guide to Protecting Yourself and Your Family from Radon. 2009: Washington, DC.

³¹ <http://www.radon.utah.gov/docs/2014/07Jul/RadonShortTerm2014.pdf>

³² United States Environmental Protection Agency (EPA), A Citizen's Guide to Radon: The Guide to Protecting Yourself and Your Family from Radon. 2009: Washington, DC.

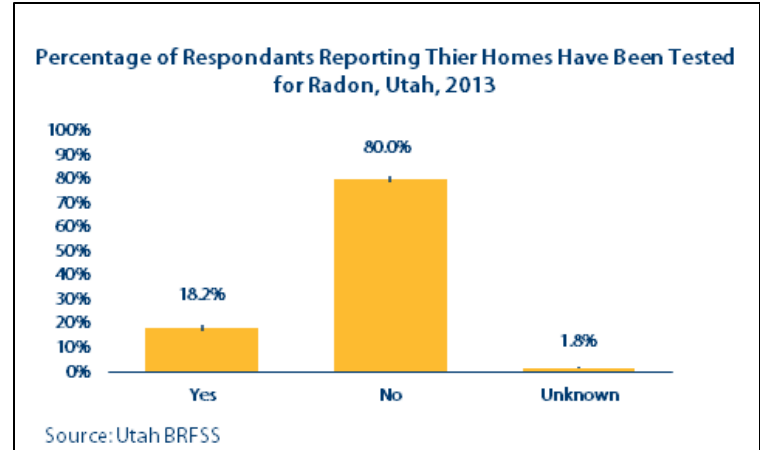
³³ <http://geopub.epa.gov/Radon/>

radon. Generally, those with higher education and income have been shown to be more knowledgeable about radon and were more likely to have had their house tested for radon.

Who is currently working on decreasing exposure to radon?

The Utah Department of Environmental Quality Division of Radiation Control, the Utah Department of Health Cancer Control Program, and the Utah Environmental Public Health Tracking Network, within the Environmental Epidemiology Program work with partners to implement strategies to reduce Utah residents' exposure to radon gas. Partners such as The Utah Radon Coalition, The Utah Radon Policy Coalition, local health departments, community hospitals, home builders, and radon mitigators and measurers work together across the state work to educate the public and implement local and state policies to protect Utahns from the dangers of exposure to radon gas.

The mission of The Utah Radon Coalition is to eradicate radon-induced lung cancer by eliminating exposure to radon gas through education and awareness activities, community action, and collaborative planning and coordination. Members include private citizens and private and public organizations. The Utah Radon Coalition works in tandem with The Utah Radon Policy Coalition whose mission is to eradicate radon-induced lung cancer through the passage of federal, state, county and municipal laws, ordinances, and regulations that will facilitate the elimination of exposure to dangerous levels of radon gas.



Partner strategies:

- Work with partners to establish a statewide surveillance program to track and monitor radon.
 - Establish data priorities.
 - Compile surveillance plans/programs from other states.
 - Support policy that requires radon measurers and mitigators to submit testing and mitigation data to a statewide program.
 - Improve the quality of professional radon gas measuring and remediation by supporting policy that requires the training, testing and licensing of radon measurers and mitigators.
 - Continue to collect data from subsidized home self-test kits.
- Provide radon awareness activities for the general public that demonstrate the importance, feasibility, and value of radon testing and mitigation.
 - The Utah Department of Health will add radon awareness questions to the BRFSS to help develop a radon awareness baseline and assess the results of radon awareness activities.
 - Develop funding to create and launch a statewide radon awareness campaign to include television, radio, and other electronic and print media.
 - Support Radon Awareness Action Month (NRAM).
 - Support the National Radon Poster Contest.
 - Work with state, county, and local government to provide radon awareness materials to residents.
 - Increase awareness concerning the cost efficiency of Radon Resistant New Construction.
- Increase radon testing and subsequent mitigation of high radon levels.

- Assist and encourage homeowners and home buyers to acquire and use self-test kits, or hire certified radon-measurement specialists to test all buildings before they are sold and at the time of sale.
- Assist and encourage homeowners and home buyers to hire certified radon mitigators to remediate elevated radon levels in the home.
- Develop funding to provide free radon test kits to low income residents.
- Promote radon testing and mitigation in schools and public buildings.
- Utah Department of Environmental Quality, community hospitals, and Utah health plans will help provide free radon test kits to new mothers throughout Utah.

How can UCAN collaborate?

- Encourage members to advocate for radon testing and mitigation policies within their workplace organization, public buildings, and schools.
- Support the Utah Radon Coalition in achieving statewide PSE solutions to reduce Utahns' exposure to radon gas.
- Leverage coalition memberships to support radon policy efforts in the state and local organizations.
- Encourage those asking about radon testing and test kits to contact their local health department or go to radon.utah.gov to purchase a subsidized test kit or find a certified mitigator.
- Encourage school staff and administrators to adopt policies to require testing, mitigation, and radon resistant new construction in local schools.

Tobacco

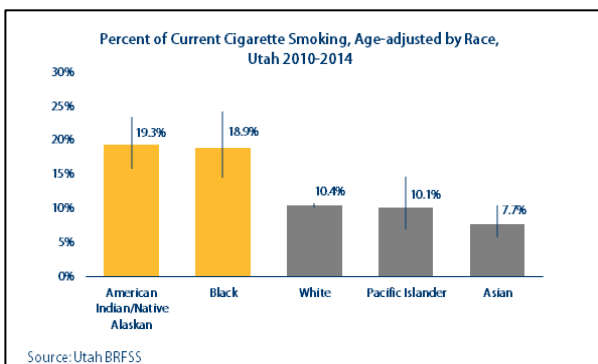
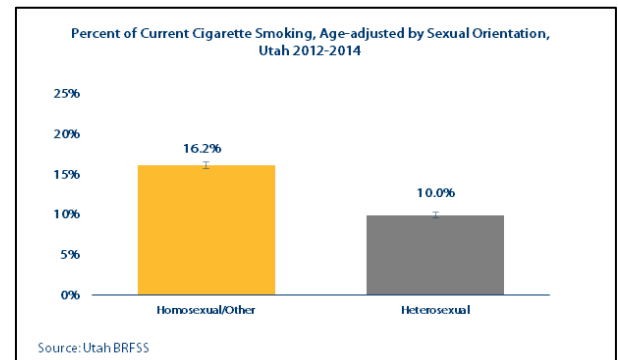
Tobacco is the number one cause of preventable death in the United States. Utah adult and youth tobacco use rates remain the lowest in the nation. In fact, Utah is the first state in the nation to meet the Healthy People 2020 goal of decreasing adult smoking to less than 12%. In 2014, 9.5% of Utah adults (approximately 190,000) reported that they currently smoked cigarettes and 3% of adults reported use of chewing tobacco, snuff, or snus. Additionally, electronic cigarettes or e-cigarettes have found increased popularity and use in the past few years.³⁴

UCAN supports partners who work to reduce tobacco use and tobacco-related disease in Utah through education, policy changes, and cessation and control programs.

Data/Disparities

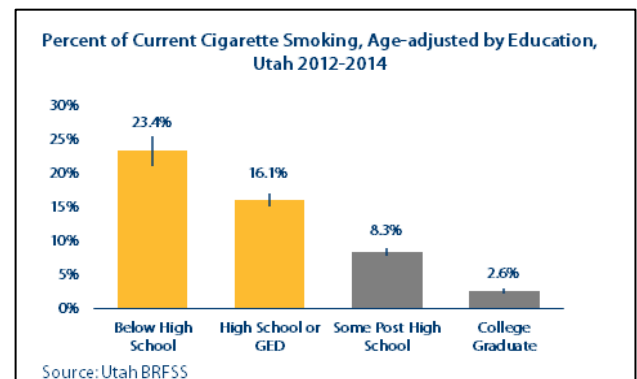
The prevalence of tobacco use varies significantly among different population groups and socio-demographic characteristics such as race, ethnicity, geographic location, income and education level, gender, and sexual orientation, many of which correlate with other health disparities.

Smoking rates are significantly higher among the LGBT community in Utah.



Utah American Indians and Black populations have significantly higher rates of smoking in Utah compared to all other racial and ethnic groups.

Populations with low educational attainment and income have the highest rates of smoking in Utah. Utah males have higher rates of smoking compared to females.



³⁴ Utah Department of Health. 2015. <http://www.tobaccofreeutah.org/facts-issues.html>. Utah Tobacco Prevention and Control Program Web site.

Who is currently working on decreasing tobacco use in Utah?

The Utah Department of Health Tobacco Prevention and Control Program (TPCP) works with partners to implement proven comprehensive strategies to reduce tobacco use and related disease and death in Utah. TPCP's partners across the state work to pass local policies to protect everyone from the dangers of tobacco use and secondhand smoke. The tobacco control strategic plan includes goals and objectives aimed at making high level policy, systems, and environmental changes to affect tobacco use rates in Utah. The TPCP and its partners are committed to working toward implementing policies that will de-normalize the use of tobacco in our state. To date, dozens of policies across the state have been passed which prevent smoking in bars, clubs, taverns, worksites, parks, recreation centers, music venues, fairs, apartment buildings, hospitals, schools, and other areas.

The Utah Tobacco Free Alliance (UTFA) is a statewide coalition established to improve the quality of life for all Utah residents by eliminating tobacco use statewide. The members of the UTFA include concerned citizens, businesses, non-profit organizations, agencies, and healthcare professionals that advocate and advance tobacco prevention, cessation, and control; improve, energize, and facilitate tobacco prevention and cessation in clinical settings; partner with health care systems to facilitate sustainable change in reducing tobacco use and prevalence; develop and facilitate comprehensive tobacco-free workplace and cessation policies.

TPCP partners with over 70 funded and non-funded partners, including Utah's thirteen local health departments, American Lung Association, American Cancer Society, the Campaign for Tobacco-Free Kids, Huntsman Cancer Institute at the University of Utah, Intermountain Healthcare, Medicaid, March of Dimes, Pediatricians Against Secondhand Smoke, and others.

Partner strategies:

- Raise the Price of Tobacco Products
 - Work with partners to educate policy makers and local leader about the effectiveness of reducing smoking rates by increasing taxes on tobacco products
 - Provide training and materials to partners who wish to educate local leaders
 - Educate policy makers about the benefits of a federal tax increase in reducing the consumption of tobacco products
- Maintain Funding for Sustainable and Comprehensive Programs
 - Work with a media vendor to increase public awareness of the Utah Tobacco Prevention and Control Program and promote program successes
 - Work with local partners to showcase successes
 - Create an annual report to detail program efforts and share the report with legislators
 - Ensure that when legislation that could generate revenue is available, a portion is allocated to tobacco prevention and control
- Reduce Exposure to Secondhand Smoke
 - Increase the number of government-owned and private worksites with comprehensive tobacco-free policies
 - Increase the number of colleges, universities, and technical/trade schools with comprehensive tobacco-free policies
 - Increase the percentage of Utahns who do not allow smoking inside their home
- Expand Efforts in the Retail Environment
 - Increase the legal age for the purchasing of tobacco products from 19 to 21

- Increase the number of jurisdictions with policies that regulate retail advertising, tobacco discounts, and/or density of retail outlets
- Increase the number of jurisdictions with policies that regulate the retail licensing for the sale of electronic nicotine delivery systems (ENDS)
- Decrease youth exposure to tobacco marketing by restricting promotion at the point-of-sale via policy initiatives adopted by Outrage, a statewide, youth-led anti-tobacco coalition
- Increase Cessation Services
 - Promote tobacco cessation counseling and increase the number of self-referrals to the Utah Tobacco Quit Line
 - Improve Utah Tobacco Quit Line referral interventions for health care systems and providers

How can UCAN collaborate?

- Continue to partner with and support TPCP and UTFa
- Support the implementation of the Policy Agenda for Tobacco Prevention and Control in Utah
- Encourage members to advocate for tobacco-free policies within their workplace organization

Genomics

Scientific advances in our understanding of the development of cancer has also led to the ability to detect genetic mutations which significantly increase an individual's risk of developing particular cancers. Ultimately, this ability identify those at significantly increased risk for certain cancers presents an opportunity delay such diagnoses, vigilantly screen for related cancers in order to diagnosis them at an earlier stage when they are more treatable, and even prevent some cancers from ever occurring. Not only do such efforts result in fewer cancer diagnoses and deaths, they may also lead to reductions in the physical, psychological and economic burdens associated with cancer.

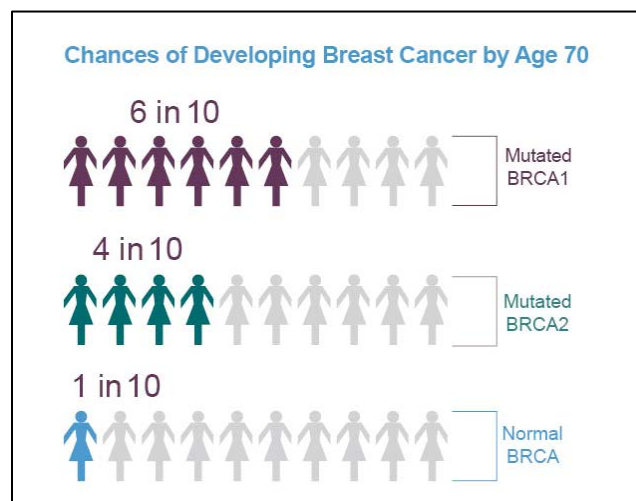
While there are several tests available to identify genetic mutations associated with an increased risk of cancer, many of them have limited implications for public health due to the limited proportion of the population with the mutations or the lack of interventions available to individuals with such mutations. Currently, public health efforts focus specifically on Lynch Syndrome and Hereditary Breast and Ovarian Cancer (specifically the mutations associated with Breast Cancer Susceptibility Genes 1 and 2 [BRCA1/2]) as there are very clear recommendations for who may benefit from tests for these mutations and risk management guidelines for those who test positive.

While genetic testing for Lynch Syndrome and BRCA1/2 can be very beneficial, they are only recommended for individuals with specific personal or family histories of cancer. Those interested in learning if genetic testing for Lynch Syndrome or BRCA1/2 may be right for them should visit cancerutah.org/genomics education or speak with a genetic counselor. Speaking with a genetic counselor is an important step in the genetic testing process, as it is crucial for individuals considering such testing to understand what the test will tell them, what the possible test results mean, and what their options may be after learning their results.

Data/Disparities

About 12% of the general population of U.S. women will be diagnosed with breast cancer sometime during their lives.³⁵ However among women with *BRCA1/2* mutations that risk is drastically higher. Similarly, women positive for *BRCA1/2* mutations have greatly increased risk for ovarian cancer.

According to the most recent estimates, 55-65% of women who inherit a harmful *BRCA1* mutation and around 45% of women who inherit a harmful *BRCA2* mutation will develop breast cancer by age 70 years.^{36 37} According to most recent estimates, 39% of women with a *BRCA1* mutation and 11-17% of women who inherit a harmful *BRCA2* mutation will



³⁵ Howlader N, Noone AM, Krapcho M, et al. (eds). SEER Cancer Statistics Review, 1975-2011, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2011/, based on November 2013 SEER data submission, posted to the SEER web site, April 2014.

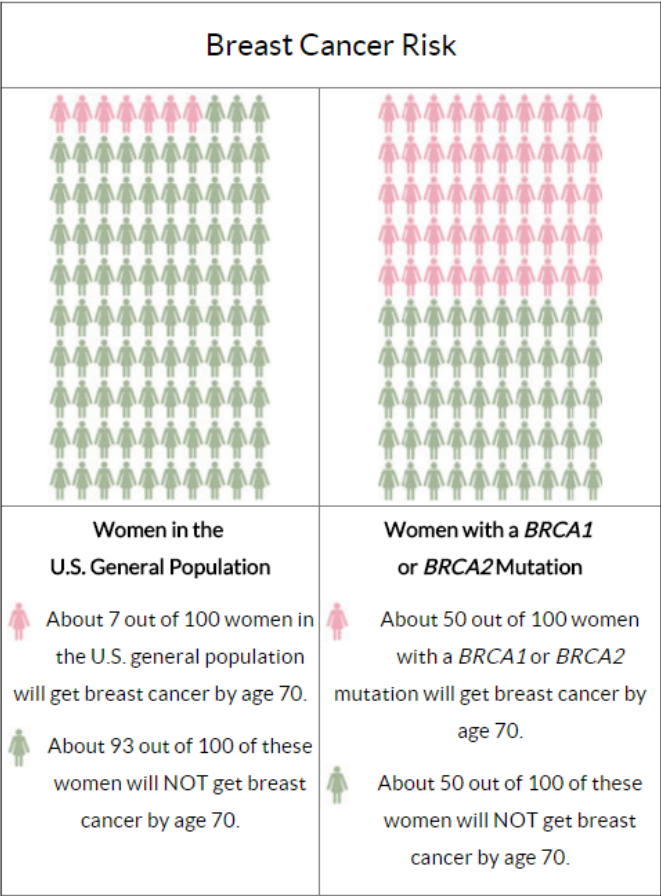
³⁶ Antoniou A, Pharoah PD, Narod S, et al. Average risks of breast and ovarian cancer associated with BRCA1 or BRCA2 mutations detected in case series unselected for family history: A combined analysis of 22 studies. American Journal of Human Genetics 2003; 72(5):1117–1130 (<http://www.ncbi.nlm.nih.gov/pubmed/12677558>)

³⁷ Chen S, Parmigiani G. Meta-analysis of BRCA1 and BRCA2 penetrance. Journal of Clinical Oncology 2007; 25(11):1329–1333. (<http://www.ncbi.nlm.nih.gov/pubmed/17416853>)

develop ovarian cancer by age 70 years.³⁸³⁹

Lynch syndrome substantially increased risk of colorectal and endometrial cancers. Lynch syndrome accounts for ~1-3% of all colorectal cancers. Lynch syndrome also increases risk of other cancers mainly transitional cell carcinoma of the ureters and renal pelvis and cancers of the stomach, pancreas, ovary, small intestine, and brain; as well as a suggested association with other cancers including breast, prostate, adrenal cortex.

Among those with Lynch syndrome, the lifetime risk of colorectal cancer ranges from 10-68.7% and lifetime risk of endometrial cancer ranges from 15 – 71% depending on the specific mutation.



Who is currently working on genomics?

Future Utah population genomics data is underway. Three genomics questions were added in 2015 Utah BRFSS which centered on health care providers asking about family history. In the 2016 BRFSS, in addition to the three questions added in 2015, three more genomics questions were added covering familiarity with family history of cancer, attitude toward genetic testing, and use of genetic counseling.

In 2014, the Utah Department of Health received one of four five-year cooperative agreements from the Centers for Disease Control and Prevention to increase the use of genetic counseling, testing, and risk management services associated with Breast Cancer 1 or 2 gene mutations or Lynch Syndrome. UDOH is working with a number of community partners including health care systems, universities, and nonprofit organizations to increase utilization of these services. Additionally, the Huntsman Cancer Institute-Intermountain Healthcare Partnership has committed to the elimination of Lynch Syndrome-related colorectal cancers in the state.

³⁸ Antoniou A, Pharoah PD, Narod S, et al. Average risks of breast and ovarian cancer associated with BRCA1 or BRCA2 mutations detected in case series unselected for family history: A combined analysis of 22 studies. American Journal of Human Genetics 2003; 72(5):1117–1130 (<http://www.ncbi.nlm.nih.gov/pubmed/12677558>)

³⁹ Chen S, Parmigiani G. Meta-analysis of BRCA1 and BRCA2 penetrance. Journal of Clinical Oncology 2007; 25(11):1329–1333. (<http://www.ncbi.nlm.nih.gov/pubmed/17416853>)

Partner strategies:

- Educate patients and healthcare providers on heritable cancers caused by Breast Cancer 1 or 2 (BRCA1/2) gene mutations or Lynch Syndrome and the appropriate use of associated genetic counseling, testing, and risk management services.
 - Offer professional education workshops and presentations to healthcare clinicians.
 - Develop and promote an educational web page on genetic counseling, testing, and risk management services associated with BRCA1/2 gene mutations or Lynch Syndrome for patients and providers.
 - Implement an intervention to increase family communication regarding heritable breast, ovarian, colorectal, or uterine cancers associated with BRCA1/2 gene mutations or Lynch Syndrome and encourage cascade screening for these conditions.
- Develop a statewide surveillance system to monitor the burden of hereditary cancers and appropriate use of genetic services.
 - Assess the incidence and mortality of breast, ovarian, colorectal and uterine cancers indicative of BRCA1/2 gene mutations or Lynch Syndrome.
 - Assess the proportion of the Utah population potentially at risk of developing breast, ovarian, colorectal or uterine cancer due to deleterious BRCA1/2 gene mutations or Lynch Syndrome based on guidelines from the National Comprehensive Cancer Network.
 - Assess Utahns' attitudes and behaviors associated with BRCA1/2 gene mutations or Lynch Syndrome through the Behavioral Risk Factor Surveillance System.
- Encourage policy and systems changes which increase access to genetic services.
 - Offer opportunities for healthcare providers to consult with genetic counselors on specific patient cases regarding need for genetic services, referrals, or risk management for patients at increased risk of developing a heritable breast, ovarian, colorectal or uterine cancer.
 - Assess the availability and usability of family history and genetic testing information in cancer patients' medical records to determine the feasibility of regularly including this information in surveillance data sources.
 - Develop programs to cover genetic services and risk management services for low-income populations at risk of developing breast, ovarian, colorectal, or uterine cancers due to BRCA1/2 gene mutations or Lynch Syndrome.
 - Improve insurance coverage of genetic counseling, testing and risk management services for individuals at risk of developing breast, ovarian, colorectal or uterine cancers due to BRCA1/2 gene mutations or Lynch Syndrome.

How can UCAN collaborate?

- Undertake efforts to understand how to more effectively communicate cancer risk.
- Encourage individuals to know their family history of cancer, share it with their healthcare provider, and understand their personal cancer risk.
- Promote the use of genetic counseling, testing, or risk management to those who need it.
- Address barriers to accessing genetic counseling, testing, and risk management services.
- Educate healthcare providers (including primary care providers and cancer specialists) on family health histories indicative of cancer syndromes which may be managed through genetic counseling, testing, and risk management.
- Establish relationships between healthcare providers and genetic counselors.

Glossary

BMI: Body Mass Index (BMI) is a person's weight in pounds divided by the square of height in inches. A high BMI can be an indicator of high body fatness. BMI can be used to screen for weight categories that may lead to health problems but it is not diagnostic of the body fatness or health of an individual.

BRFSS: The Behavioral Risk Factor Surveillance System (BRFSS) is a system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.

Disparities: Disparities refer to differences in access to or availability of facilities and services. Health status disparities refer to the variation in rates of disease occurrence and disabilities between socioeconomic and/or geographically defined population groups.

Ethnicity: of or relating to large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background.

Evidence-Based Practice: Evidence-Based Practice (EBP) is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of the individual patient.

Genetic Counseling: A communication process between a specially trained health professional and a person concerned about the genetic risk of disease. The person's family and personal medical history may be discussed, and counseling may lead to genetic testing.

Genomics: The study of the complete genetic material, including genes and their functions, of an organism.

Health Policy: Health policy refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society. An explicit health policy can achieve several things: it defines a vision for the future which in turn helps to establish targets and points of reference for the short and medium term. It outlines priorities and the expected roles of different groups; and it builds consensus and informs people.

HMO: A health maintenance organization (HMO) is an organization that provides or arranges managed care for health insurance, self-funded health care benefit plans, individuals, and other entities in the United States and acts as a liaison with health care providers (hospitals, doctors, etc.) on a prepaid basis.

HPV: Human papillomavirus (HPV) is a type of virus that can cause abnormal tissue growth (for example, warts) and other changes to cells. Infection for a long time with certain types of HPV can cause cervical cancer.

Incidence: The number of new cases of a disease diagnosed each year.

Mammogram: An X-ray of the breast that is taken with a device that compresses and flattens the breast.

Mortality: A term used for death rate, or the number of deaths in a certain group of people in a certain period of time.

Obesity/Overweight: Labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems. An adult who has a BMI between 25 and 29.9 is considered overweight. An adult who has a BMI of 30 or higher is considered obese (see above for definition of BMI).

Pap Test: A procedure in which a small brush or spatula is used to gently remove cells from the cervix so they can be checked under a microscope for cervical cancer or cell changes that may lead to cervical cancer.

Prevention: Action taken to decrease the chance of getting a disease or condition. For example, cancer prevention includes avoiding risk factors (such as smoking, obesity, lack of exercise, and radiation exposure) and increasing protective factors (such as getting regular physical activity, staying at a healthy weight, and having a healthy diet).

Quality of Life: The overall enjoyment of life. Studies on the effects of cancer and its treatment on the quality of life measure aspects of an individual's sense of well-being and ability to carry out various activities.

Race: A group of people united or classified together on the basis of common history, nationality, or geographic distribution.

Screening: Checking for disease when there are no symptoms. Since screening may find diseases at an early stage, there may be a better chance of curing the disease. Examples of cancer screening tests are the mammogram (breast), colonoscopy (colon), and the Pap test and HPV test (cervix). Screening can also include checking for a person's risk of developing an inherited disease by doing a genetic test.

SEER: The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute works to provide information on cancer statistics in an effort to reduce the burden of cancer among the U.S. population.

Survivor: One who remains alive and continues to function during and after overcoming a serious hardship or life-threatening disease. In cancer, a person is considered to be a survivor from the time of diagnosis until the end of life.

Survivorship: In cancer, survivorship focuses on the health and life of a person with cancer post treatment until the end of life. It covers the physical, psychosocial, and economic issues of cancer, beyond the diagnosis and treatment phases. Survivorship includes issues related to the ability to get health care and follow-up treatment, late effects of treatment, second cancers, and quality of life. Family members, friends, and caregivers are also considered part of the survivorship experience.

YRBSS: The Youth Risk Behavior Surveillance System (YRBSS) monitors health-risk behaviors that contribute to the leading causes of death and disability among youth and adults in the United States.

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The Utah Department of Health and the Utah Cancer Action Network would like to thank the following individuals for their time and energy in preparing this document.

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