



arizona cancer control plan



2014—2018



Arizonans
will live longer



Dear Arizonans,

Too many Arizonans die from cancer. In fact, cancer is the leading cause of death in Arizona. The pain and loss is felt by individuals, families, and our community at large.

The spirit of collaboration is strong in Arizona. In 2007, the Arizona Cancer Coalition (ACC) published the first Arizona Cancer Control Plan to act as a guide for our state's cancer control efforts. In 2013, the ACC convened a dedicated group of individuals representing governments, businesses, healthcare, research and non-profit organizations to revisit and reprioritize our cancer control plan. This collection of content experts and community stakeholders sought to advance the work accomplished in 2007 with a new vision of how to affect change at a more comprehensive level.

The **Arizona Cancer Control Plan 2014 – 2018** incorporates what we have learned in our collaborative efforts to reduce the burden of cancer so that Arizonans will live longer. We identified objectives, indicators and targets to drive collective action and address cancer holistically by addressing all aspects of the cancer continuum: prevention, early detection, diagnosis and treatment, quality of life, and cancer research.

The objectives, indicators, and targets in the Arizona Cancer Control Plan 2014 – 2018 serve as the foundation for the Arizona Cancer Coalition (ACC). The plan guides the six Action Teams within the ACC to identify strategies to better coordinate, collaborate, and integrate collective impact efforts in the years to come. Our goal is to provide a roadmap focused on improving the systems and policies that prevent disease, improve the care of our loved ones, and ultimately, that protect life.

We are grateful to those individuals whose hard work is reflected in this document. We would not be here without the pioneering steps taken to reduce Arizona's cancer burden in 2007. The Arizona Cancer Coalition would not have survived without the loyalty and dedication of our members. We are thankful for the leadership and courage of our partners – it is only through our shared vision that a cancer-free Arizona can become a reality.

Sincerely,

Sharlene Bozack
Arizona Cancer Coalition Chair
Chief Government Relations Officer
American Cancer Society-Cancer Action Network

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Introduction

Purpose

Arizona has a cancer problem. Cancer is the leading cause of death in Arizona. Approximately 28,385 Arizonans are diagnosed with cancer each year and 209 Arizonans die each week from cancer. In 2012, 10,881 Arizonans lost their lives to cancer.

The Arizona Cancer Control Plan 2014-2018 is an update to the original plan – it provides a framework for taking action to help Arizonans live longer. The overall goal of this plan is to reduce the burden of cancer in Arizona. The initial Arizona Cancer Control Plan was published in 2007. While that plan met goals and priorities specific to 2007-2012, the needs and health problems of communities across our state have changed.

Process of Development

The Arizona Department of Health Services brought together a large group of stakeholders in June of 2013. This stakeholders' group was comprised of decision makers and leaders from many health care organizations in Arizona, including hospitals, clinics, federally qualified health centers (FQHCs), cancer research centers, and tribes. Education was provided to give stakeholders a clear view of the state and its challenges regarding cancer screening, prevention, and treatment. This group of stakeholders has collectively become the Arizona Cancer Coalition (ACC).

The stakeholders prioritized areas of action for the plan around six primary goals that address the continuum of cancer care:

- ⇒ Policy;
- ⇒ Prevent cancer;
- ⇒ Detect cancer early;
- ⇒ Elevate cancer treatment;
- ⇒ Galvanize Quality of Life (QoL) survivorship care networks; and
- ⇒ Catalyze research.

Process of Development (cont.)

Small groups of ACC stakeholders formed into “Action Teams,” or work groups, dedicated to each of the six goals. Specific objectives and measures for tracking progress were systematically developed. These strategies are presented in this document.

The Action Teams submitted their objectives to the ACC Steering Committee and continue to meet and refine their objectives and measures. Each Action Team uses evidence based-strategies and best practices to reduce the burden of cancer. The goals and objectives will continually be revised as the needs of the environment and community change.

This five-year plan provides the community, in the broadest sense of that term, with a clear description of the cancer problem and the steps that can be taken to reduce the impact of cancer in Arizona. Several cross-cutting sets of strategies, addressing research, policy work, and targeted cancers like melanoma have been added to this plan. The intent is that this document can be accessible and reviewed by members of the community, health care providers, and public health professionals in order to provide an update about the work being done within the Action Teams of the ACC to fight cancer in Arizona. It also serves as an invitation; if you or your organization wish to join us in this work, please let us know.





Focus on Policy, Systems and Environmental Change

Until recently, many traditional health programs and plans focused on changing individual behavior. Achieving health, however, goes beyond individual choices. It is clear that is not enough to know how to be healthy or to teach an individual what healthy choices are; concrete, easily accessible healthy options are needed in order for real change to occur. That is where policy, system and environmental change come in.

Policy, systems and environmental (PSE) changes make it inherently easier for individuals to adopt healthier choices than to choose unhealthy options. By changing policies, systems and/or environments, communities can have larger impacts on health issues such as cancer and other chronic diseases with a relatively small investment of time and resources.

The Arizona Department of Health Services (ADHS) has partnered with several ACC member organizations to implement highly successful PSE strategies. The expansion of [Arizona's Breast and Cervical Cancer Treatment Program](#) is one of the largest recent policy changes resulting from a strong partnership between ADHS and the American Cancer Society Cancer Action Network. The expansion allows all women meeting the eligibility requirements for the [Well Women HealthCheck Program \(WWHP\)](#) to receive treatment through the Arizona Health Care Cost Containment System (AHCCCS). Prior to its expansion, only women who were screened through the WWHP qualified for treatment. During the first year of the expansion, 145 uninsured women diagnosed with breast or cervical cancer were enrolled in AHCCCS. This has truly helped reduce the burden of cancer in Arizona.

Several systems changes are currently taking place throughout community health centers and clinics in Arizona as well. For example, it is becoming routine practice for community health centers throughout the state to pull and analyze cancer screening baselines for their facilities. Community health centers and clinics that are contractors with the ADHS HealthCheck program are required to know and report on their screening baselines annually. In addition, ADHS contracted with Health Services Advisory Group to assist these health centers improve utilization of their electronic health records (EHR). Health Services Advisory Group assessed each clinic's use of their EHR and provided technical assistance to increase the capture of meaningful data in the EHR.

Given the high efficacy and sustainability of PSE strategies, the ACC and its Action Teams focus their efforts heavily on strategies and interventions that result in policy, systems and environmental change.

Social Determinants of Health and Health Equity

Social determinants of health are factors that involve the influence of the environment, community, and neighborhood someone lives in, the food they eat and have access to, the medical care they have access to and utilize, the level of education they are able to obtain, and the jobs they are hired for. These elements of an individual's life affect their overall health status, quality of life, and life expectancy – it drives what opportunities they encounter, diseases they have, how they live, and how they die.

Health risk factors are drivers for disease – they are either inherited or adopted. Family history will impact what diseases repeat themselves and are consistent among family members. Understanding one's family history and actively pursuing genetic testing are ways to understand inherited health risk factors, and potentially taking action to alter them. For example, for families with the presence of the *BRCA1* and *BRCA2* gene mutation, genetic testing for breast and ovarian cancer can be the most cost effective approach to cancer prevention, even over the use of screening technology such as mammograms.¹

Adopted health risk factors include behaviors such as smoking, inactivity, and poor diet. These behaviors negatively influence an individual's health.² Tobacco use is a primary risk factor for many cancers. An objective of the Arizona Cancer Coalition is to prevent tobacco use among youth; to prevent them from adopting this behavior is another first step in cancer prevention.

However, understanding social determinants of health is only one sphere in reducing the impact of cancer. Health equity, the ability for every person in a population to fully achieve their greatest level of health and well-being, can be achieved when no one is disproportionately impacted and disadvantaged by their social determinants of health. Multi-level approaches optimizing health equity are crucial to addressing the burden of cancer in Arizona and needed to effectively improve outcomes for *all* patients.

Arizona targets populations at risk through resources available within the Health Disparities Center at the Arizona Department of Health Services. The Health Disparities Center participates on the Core Team, a collaborative group of leaders from programs within the Arizona Department of Health Services and their key partners, as well as the Arizona Cancer Coalition. The Health Disparities Center works to identify inequities among groups in Arizona by monitoring data; provides support and linkages among community partners and stakeholders; offers health literacy technical assistance; and provides health policy support.

"To be effective and sustainable, interventions that aim to redress inequities must typically go beyond remedying a particular health inequality and also help empower the group in question through systemic changes, such as law reform or changes in economic or social relationships."³

- World Health Organization

¹Rubinstein, W. S., Jiang, H., Dellefave, L., Rademaker, A.W. (2009). Cost-effectiveness of population-based *BRCA1/2* testing and ovarian cancer prevention for Ashkenazi Jews: A call for dialogue. *Genetics in Medicine*, 11 (9). Retrieved from <http://www.nature.com/gim/journal/v11/n9/pdf/gim200994a.pdf>

²Centers for Disease Control and Prevention. (2013). *Chronic Disease Prevention and Health Promotion: Health Equity*. Retrieved from <http://www.cdc.gov/chronicdisease/healthequity/>

³World Health Organization. (2014). *Health Systems: Equity*. Retrieved from <http://www.who.int/healthsystems/topics/equity/en/>

Arizona Cancer Registry – Facts and Figures

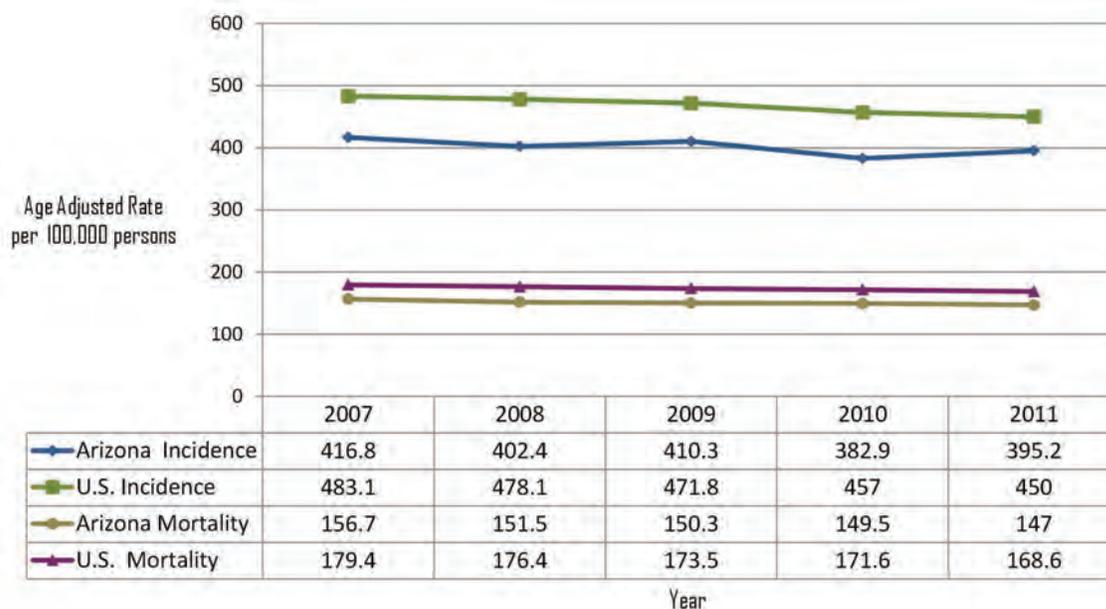
Arizona’s Cancer Burden

In 2011, 586 Arizonans were newly diagnosed with cancer each week.¹ A look at the latest Arizona mortality data shows 209 Arizonans died of cancer each week in 2012.² Arizona’s cancer incidence and mortality rates are lower than the national rates in the United States. Although the state rates are lower than national rates, it is evident that Arizona’s cancer burden is immense.

The Arizona age-adjusted incidence rate was 395.2 per 100,000 persons in 2011, a 5% decrease from 2007 to 2011. Arizona’s age-adjusted mortality rate was 147 per 100,000 persons in 2011, a 6% decrease, as illustrated below.

To view further details on incidence and mortality rates displayed by cancer type, please visit the [Arizona Cancer Registry Data 2000–2010 report](#).

Comparison of Arizona and U.S.^{3,4} Age Adjusted Incidence and Mortality Rates of all Invasive Cancer, 2007-2011



¹Arizona Cancer Registry, Arizona Department of Health Services. Retrieved July 30, 2014. Note: All Arizona incidence data from the Arizona Cancer Registry.

²Arizona Department of Health Services, *Arizona Health Status and Vital Statistics, 2012*. Note: All Arizona mortality data from Arizona Vital Statistics.

³NAACCR age adjusted incidence rates: NAACCR Fast Stats 2007-2011. North American Association of Central Cancer Registries; Based on data submitted December, 2013; 2014. Accessed at <http://faststats.naaccr.org/selections.php?series=cancer> on July 10, 2014.

⁴United States Cancer Statistics: 1999 - 2010 Mortality Incidence Rate Ratios, WONDER Online Database. United States Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2014. Accessed at <http://wonder.cdc.gov/CancerMIR-v2010.html> on Aug 8, 2014 and http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf

Cancer Incidence and Mortality Data

In Arizona, 28,385 new invasive cancers and an additional 2,083 *in situ* cancers were diagnosed among residents in 2011. The total cancer incidence burden is 30,468 cancer cases diagnosed among Arizonans.

In 2012, there were 10,881 Arizonans that lost their lives to cancer.

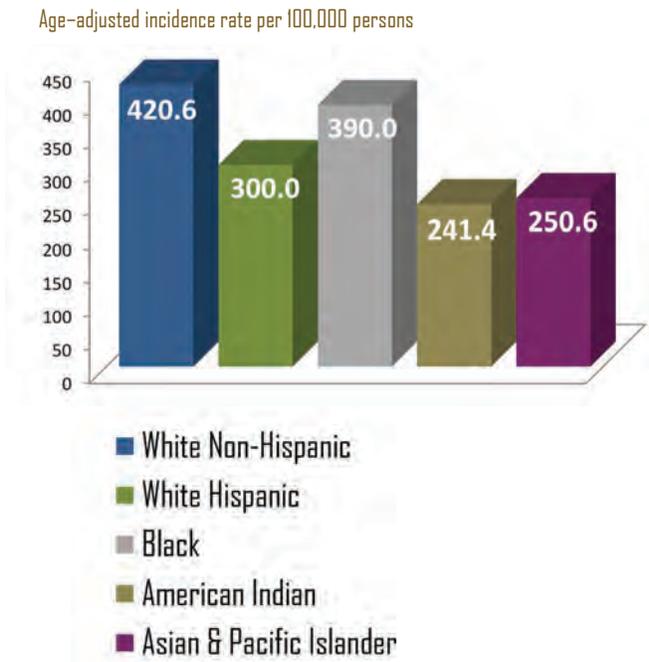
RACE/ETHNICITY

Different races and ethnicities are disproportionately affected by cancer. White Non-Hispanic residents have the highest age-adjusted incidence rate followed by Blacks.

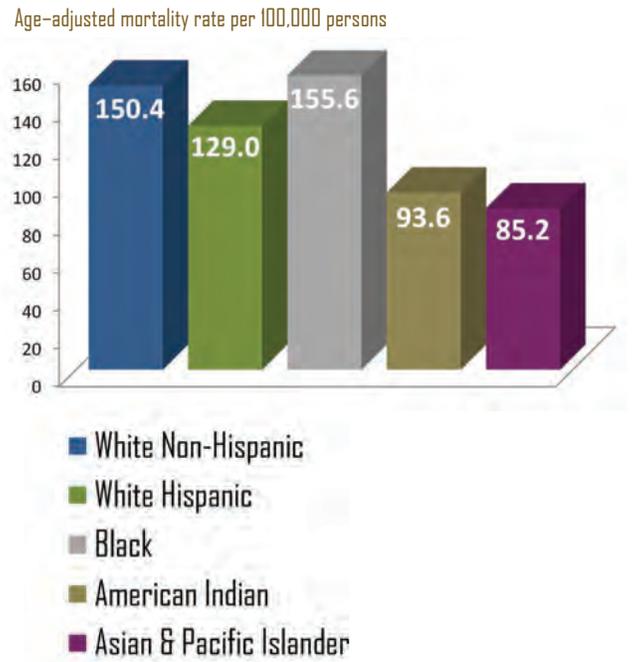
Age-adjusted mortality rates are highest among Black Arizonans followed by White Non-Hispanics.

Age-adjustment is a process used to compare incidence and mortality rates over time or among geographic areas or populations that have different age distributions. Because most disease rates increase with age, age-adjustment eliminates the confounding effect of age when comparing rates. Cancer incidence and mortality is usually expressed in the number of new cases or deaths per 100,000 persons in a population.

Age-adjusted **incidence** rate by Race/Ethnicity — 2011



Age-adjusted **mortality** rate by Race/Ethnicity—2012



Arizona Cancer Registry Facts and Figures (cont.)

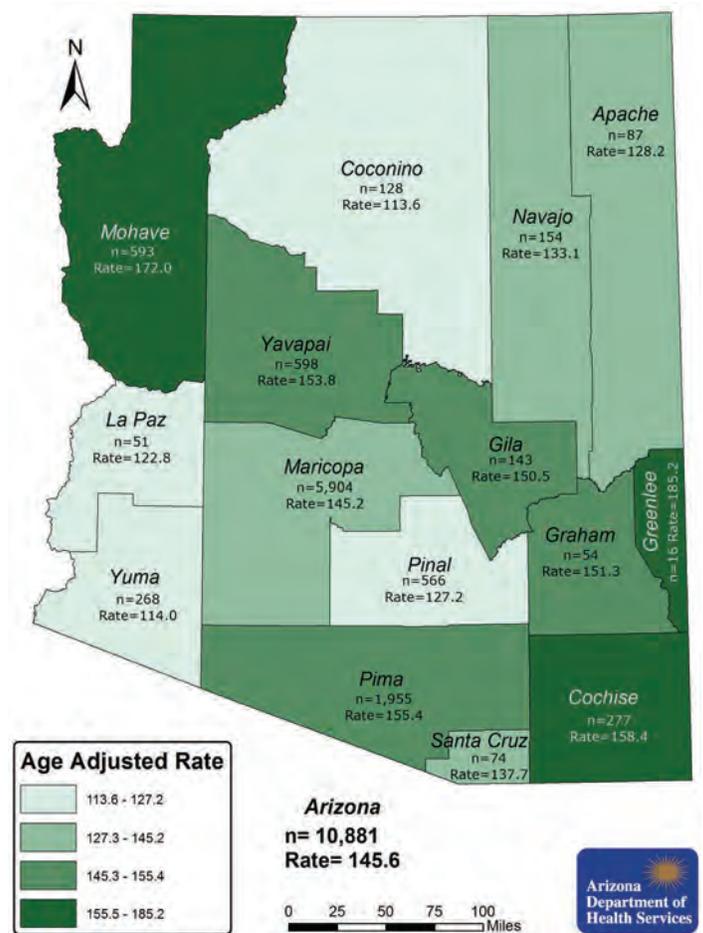
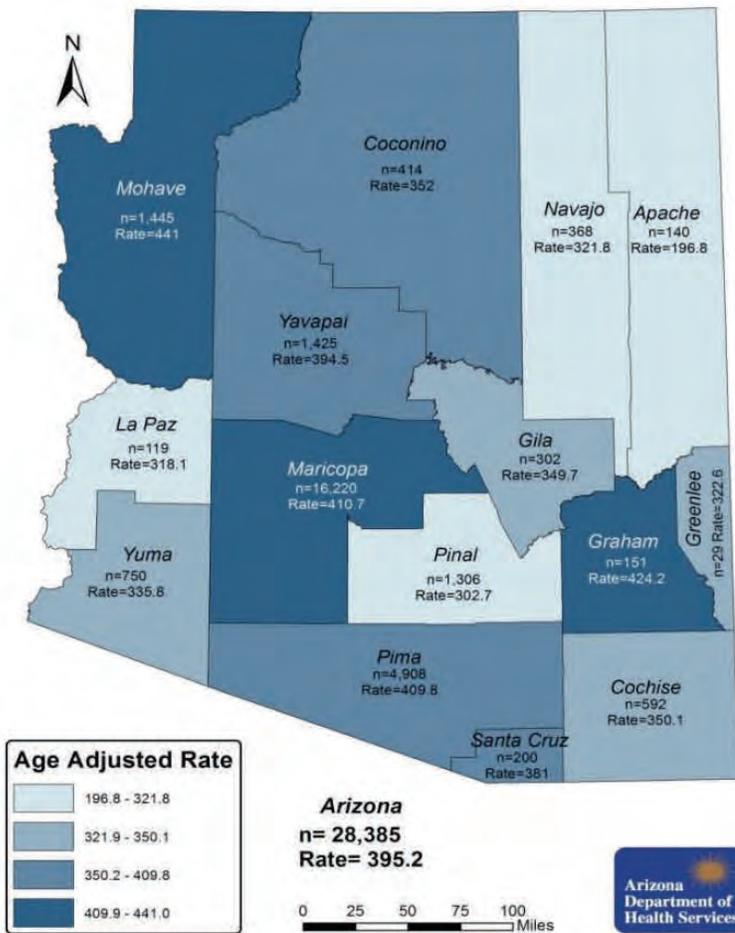
DEMOGRAPHICS

In 2011 Mohave County had the highest incidence rate of cancer (441 per 100,000) while Apache County had the lowest rate (196.8 per 100,000).

Greenlee County had the highest mortality rate of cancer (185.2 per 100,000) while Coconino County had the lowest rate (113.6 per 100,000) during 2012.

Invasive Cancer **Incidence** 2011 Annual Count and Age-Adjusted Rate by County*

Cancer **Mortality** 2012 Annual Count and Age-Adjusted Rate by County*



* 16 cancer incidence cases had an unknown county of residence

* 13 cancer deaths had an unknown county of residence

LEADING CANCER TYPES

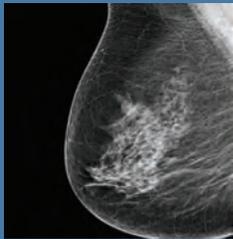
The most frequently diagnosed invasive cancer among all Arizonans is female breast cancer (4,093 cases) followed by lung and bronchus (3,793), prostate (2,905), colorectal (2,451), and bladder (1,440).

The top invasive cancer site among males is prostate (2,905) followed by lung and bronchus (1,951). The most frequently diagnosed invasive cancer site for females is breast (4,093) followed by lung and bronchus (1,842).

The leading cause of cancer death for both males and females in 2012 was lung and bronchus (2,770). Among males, the second leading cause of cancer death in 2012 was prostate (578), followed by colorectal (521), pancreas (453), and liver (302).

The second leading cause of cancer death among females in 2012 was female breast cancer (742), followed by colorectal (417), pancreas (364), and ovarian (298).

In the U.S., men have a 1 in 2 lifetime risk of developing invasive cancer and women have a 1 in 3 lifetime risk.⁵



TOP 5

DIAGNOSED INVASIVE CANCER SITES (CASE COUNTS)

Female Breast	4,093
Lung and Bronchus	3,793
Prostate	2,905
Colorectal	2,451
Bladder	1,440



TOP 5

SITES OF CANCER MORTALITY (CASE COUNTS)

Lung and Bronchus	2,770
Colorectal	938
Pancreas	817
Female Breast	742
Prostate	578

⁵American Cancer Society. *Cancer Facts & Figures 2014*. Atlanta: American Cancer Society; 2014.

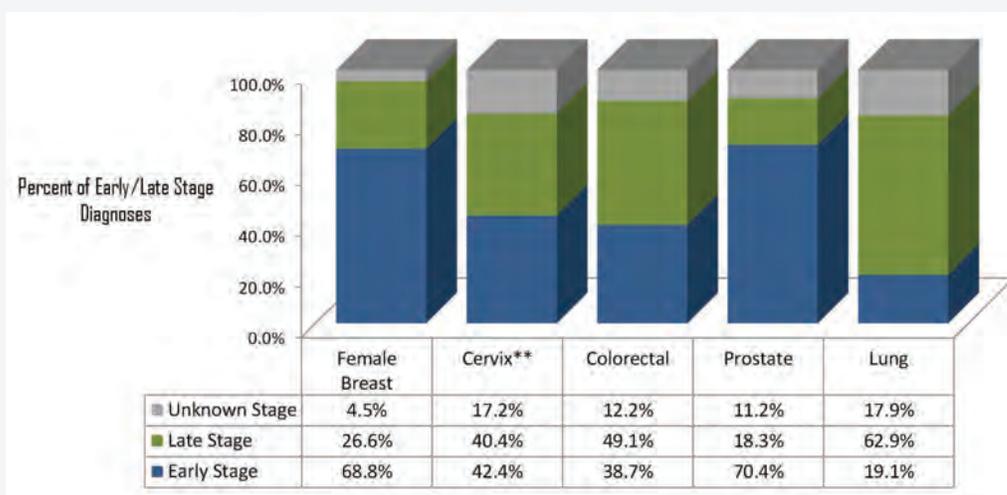
Arizona Cancer Registry—Facts and Figures (cont.)

STAGING

Summary stage is the most basic way of categorizing how far a cancer has spread from its point of origin.⁶ Early stage combines persons diagnosed at in situ and local stage. Late stage combines persons diagnosed at regional and distant stage.

In Arizona, breast, prostate, and cervical cancer continue to be diagnosed in early stages while lung and colorectal cancer continue to be diagnosed at higher rates in late stages. Different races/ethnicities are disproportionately impacted by late stage diagnoses. For more information, please visit the [Arizona Cancer Registry Data 2000—2009 report](#).

Early/Late Stage* for Selected Cancer Sites in 2011



* Early Stage = In Situ and Local Stage; Late Stage = Regional and Distant using SEER Summary Stage

** Cervical Cancer Early Stage includes Local Stage Only

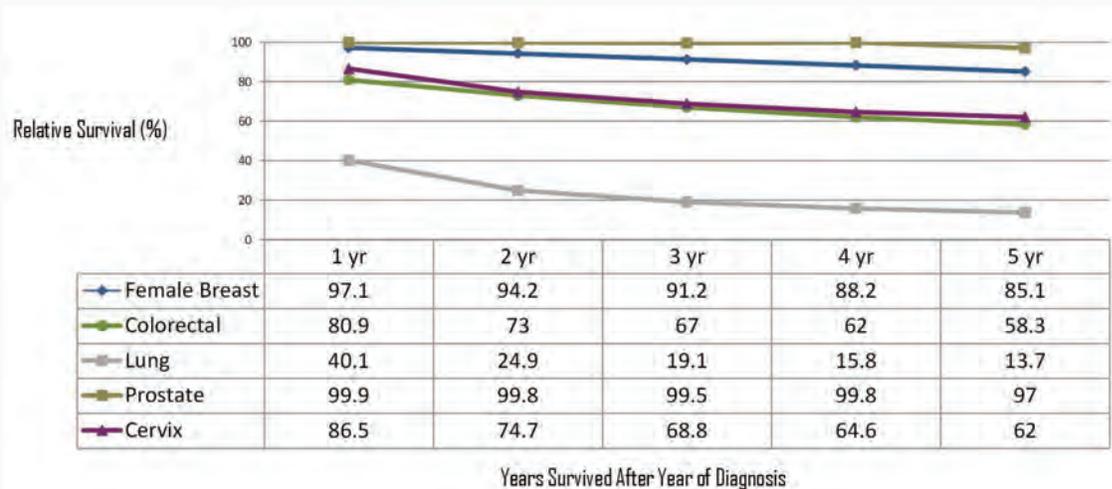
⁶Young JIJr, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (eds). SEER Summary Staging Manual – 2000: Codes and Coding Instructions, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD, 2001.

SURVIVAL

In 2014, the American Cancer Society estimates that Arizona will have 348,720 cancer survivors (5.3% of state residents) while the U.S. will have 14,483,830 cancer survivors (4.6% of the U.S. population).⁷

Stage of disease is an indicator used to measure length of survival. The figure below depicts Arizonans diagnosed from 1995 through 2008 by invasive cancer type compared to length of survival at various intervals.

Five Year Relative Survival of Invasive Cancer of Female Breast, Colorectal Cancer, Lung, Prostate, and Cervix, 1995-2008



⁷ American Cancer Society. *Cancer Treatment and Survivorship Facts & Figures 2014-2015*. Atlanta: American Cancer Society; 2014.



Goals

The Arizona Cancer Control Plan is based on six overarching goals addressing all aspects of the cancer continuum.

1. Policy
2. Prevent Cancer
3. Detect Cancer Early
4. Elevate Cancer Treatment
5. Galvanize Quality of Life/
Survivorship Care
Networks
6. Catalyze Research

Goal 1: Policy



Policy Rationale

Broad and positive impacts on cancer control in Arizona have occurred through significant policy initiatives at the federal and state legislative levels.

The Arizona Cancer Coalition is composed of national and local organizations dedicated to cancer prevention, early detection, and access to high quality care and support for cancer survivors. The work of these agencies at the local level has supported the passage of several key pieces of legislation in our state that have impacted the burden of cancer in Arizona.

- ⇒ In 2014, unanimous passage of legislation providing cost parity for oral chemotherapy medications.
- ⇒ In 2013, restoration of the adult Medicaid population that had been frozen in budget cuts.
- ⇒ Expansion of Medicaid to 133% of the federal poverty level (FPL). Annual exams and cancer screenings are restored as a benefit to Medicaid recipients.
- ⇒ In 2012, passage of legislation that allows women to access breast and/or cervical cancer treatment through Medicaid regardless of where the diagnosis occurred (moving to Option 3 in the Breast and Cervical Cancer Treatment Program).
- ⇒ In 2008, passage of bipartisan legislation providing a full smoking cessation benefit to Medicaid recipients.

The Arizona Cancer Coalition Policy Action Team seeks to shape rules, regulations, and policies with input from organizations and communities, and to increase awareness of the positive impact policy change can have on health outcomes.

Goal 1: Policy

OBJECTIVE 1 Advocate for oral chemotherapy parity

INDICATORS

- 1.a. Enactment of oral chemotherapy parity legislation.



STATUS

Completed. The Fair Access to Cancer Treatment (FACT) Act was signed into law by Governor Brewer on April 30, 2014. Arizona joins 27 other states and the District of Columbia that have enacted oral chemotherapy access laws. The network of supporters who advocated for this bill recognized the severe gaps in oral chemotherapy coverage by insurance plans and the high cost associated with oral chemotherapy medication. The law will take effect January 1, 2016.

OBJECTIVE 2 Protect funding sources for existing cancer screening and treatment programs

INDICATORS

- 2.a. Maintenance of state-appropriated funds for the screening programs.



STATUS

Arizona has been a recognized leader in its cancer prevention programs. The Well Woman and the FIT at Fifty HealthCheck Programs provide screenings for low-income, uninsured residents. The WWHP is funded through a Centers for Disease and Control Prevention (CDC) grant and a state match. The Arizona Breast and Cervical Cancer Treatment Program was recently changed to allow greater access through a state appropriation and a federal Medicaid match.

Goal 1: Policy

OBJECTIVE 3 Create a statewide Tobacco Retail Registry

INDICATORS

- 3.a. Establishment of Tobacco Retail Registry in Arizona.



STATUS

Arizona is one of a very few states that has no license or registry of retailers who sell tobacco. Enforcement of tobacco laws without known retail locations to support enforcement may lead to easier access by youth to tobacco products and potential lost revenue to the state.

OBJECTIVE 4 Establish state-appropriated funds for colorectal cancer screening and treatment

INDICATORS

- 4.a. State-appropriated funds allocated to FIT at Fifty HealthCheck Program



STATUS

Arizona is one of 25 states and four tribes that receives a federal grant to screen uninsured residents 50 years or older for colorectal cancer. However, screening by the program is not permitted for symptomatic patients. In addition, treatment for those diagnosed with colorectal cancer through the program is currently covered through an annual grant to the state from the Colon Cancer Alliance.

Goal 1: Policy

OBJECTIVE 5 Prohibit the use of indoor tanning devices by minors

INDICATORS

- 5.a. Creation of statewide policy to ban the use of indoor tanning devices by Arizona minors

STATUS

Melanoma is one of the most common, but also easily prevented, cancers. Use of indoor tanning devices by youth has been shown to dramatically increase the risk of developing melanoma. Following the recent FDA requirement of a “black box” warning on indoor tanning devices, the Policy Action Team seeks to prohibit the use of these devices by minors in Arizona.



Goal 2: Prevent Cancer



Prevention Rationale

Cancer prevention is multifaceted. According to the American Cancer Society, more than half of cancers can be prevented through healthy lifestyle choices.¹

In addition to the adoption of healthy lifestyles, vaccines against Hepatitis B (HepB) and Human Papilloma Virus (HPV) are known to prevent conditions that may lead to cancer.² The birth dose of HepB vaccine and Arizona school requirements for HepB vaccination have facilitated broad coverage of this cancer prevention vaccine. Approximately 98 percent of Arizona's sixth graders were fully immunized against HepB in 2013-2014.³

However, the 2014 Arizona coverage for complete HPV vaccination of females ages 13-17 years old is only 37 percent. This coverage rate leaves nearly two-thirds of Arizona adolescent females at risk to acquire HPV, putting them at further risk to develop cervical cancer later in life.⁴

Based on the broad evidence related to healthy lifestyle choices and the need to increase HPV vaccination coverage in Arizona, the Arizona Cancer Control Plan focuses on reducing the burden of disease through the following objectives:

- ⇒ Reduce the prevalence of smoking and smokeless tobacco use among youth
- ⇒ Increase the HPV vaccine completion rate among youth
- ⇒ Promote healthy nutrition and lifestyle among Arizonans
- ⇒ Decrease skin cancer by reducing sun exposure

The Arizona Cancer Coalition Prevention Action Team is dedicated to cancer prevention through sharing consistent cancer prevention messages, reducing silos among agencies, and building upon shared values of health promotion across disciplines. Current workgroup activities include, but are not limited to: promotion of the Arizona's Smokers' Hotline (ASHLine); educational outreach surrounding tobacco cessation benefits under the Affordable Care Act; advancement of an Arizona-wide campaign, "Protect Me With Three," an effort to normalize HPV vaccination as a routine adolescent vaccine; and dissemination of information across disciplines surrounding sun safe educational offerings and events. The Prevention Action Team is actively pursuing partners working in the healthy lifestyles areas of nutrition and exercise.

¹ American Cancer Society (2014). *Make healthy lifestyle choices*. Retrieved from <http://www.cancer.org/healthy/index>

² National Cancer Institute (2014). *Cancer vaccines*. Retrieved from <http://www.cancer.gov/cancertopics/factsheet/Therapy/cancer-vaccines>

³ Arizona Department of Health Services (2014). *Arizona sixth grade coverage levels*. Retrieved from <http://www.azdhs.gov/phs/immunization/documents/statistics-reports/sixth-grade-coverage-2013-2014.pdf>

⁴ Arizona Vaccine News (June, 2014). Human Papillomavirus (HPV) and HPV vaccination issue. Retrieved from <http://www.azdhs.gov/phs/immunization/documents/newsletters/vaccine-news/2014/az-vaccine-news-06-13-14.pdf>

Goal 2: Prevent Cancer

OBJECTIVE 1 Reduce the prevalence of smoking and smokeless tobacco use among youth (ages 12-17 yrs.)

INDICATORS

- 1.a. Percent of youth who report tobacco use in the last 30 days.
- 1.b. Percent of teens who report ever using tobacco .



STATUS

Seven percent of middle school students in 6th-8th grade reported using tobacco in the last 30 days.

About 22 percent of middle school-aged students reported *ever* using tobacco.¹

¹Bureau of Tobacco and Chronic Disease, Arizona Department of Health Services (2013). *Arizona Youth Tobacco Survey 2013 Report*. Retrieved from <http://azdhs.gov/tobaccofreeaz/reports/pdf/az-youth-tobacco-survey-report-2013.pdf>

OBJECTIVE 2 Increase the immunization rate with 3-dose series CDC recommended HPV vaccinations among youth (ages 13-17 yrs.)

INDICATORS

- 2.a. Number of children who have completed the HPV vaccination series.



STATUS

The HPV vaccine is recommended for adolescent males and females ages 11 and 12 years old, and is appropriate for youth up to 26 years of age. Three doses of the vaccine are required. Of females ages 13 - 17 years old, 37 percent reported that they completed the 3-dose HPV vaccine series. Twenty percent of males 13-17 years old reported that they completed one or more doses of the series.²

²Centers for Disease Control and Prevention. (2013). *2012 NIS-Teen Vaccination Coverage Table Data*. Retrieved from http://www.cdc.gov/vaccines/imz-managers/coverage/nis/teen/tables/12/tab01_iap_2012.pdf

Goal 3: Detect Cancer Early



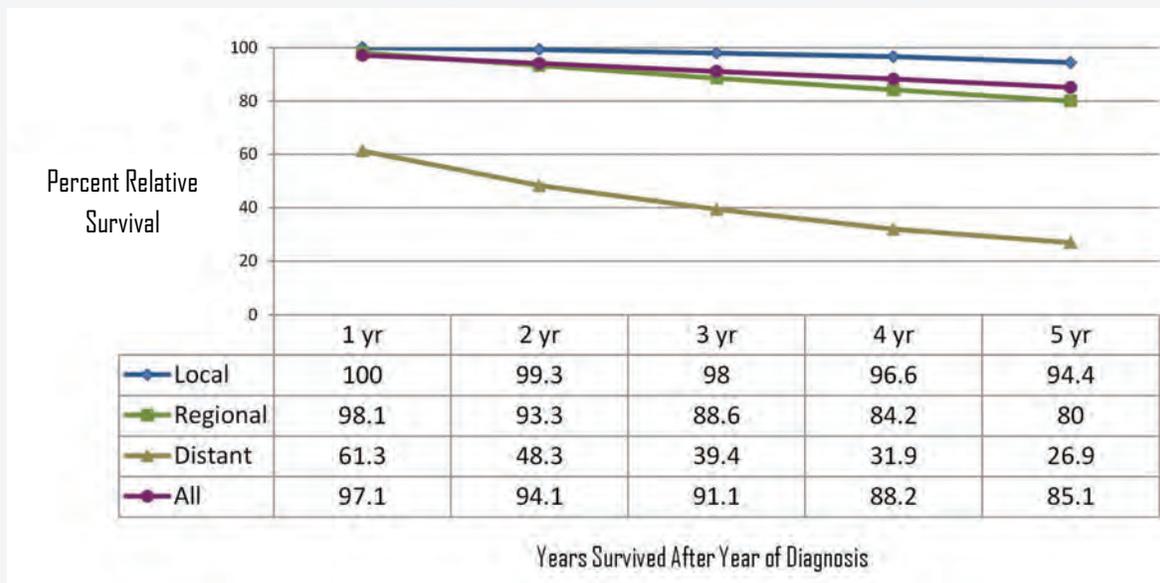
Early Detection Rationale

There are a handful of cancers considered “screenable.” In other words, reliable tests exist that can be used to determine if the patient has cancer prior to presentation of any symptoms. At this time there are reliable and accepted tests for the following cancers: breast, cervical, colorectal, oral and lung. Testing for lung cancer is new and the timing of those tests is still being developed. It is based on the number of pack years of smoking and a discussion with your provider. Oral cancer screening occurs when you go to the dentist. Your dentist and/or hygienist looks for lumps and lesions in your mouth and under your tongue.

The rationale for screening for cancer is very basic and simple. If cancer is found before it spreads beyond its original site, survival rates are much higher. Regular screening supports the early discovery of cancers to insure patients live longer and enjoy a higher quality of life. And yes, there is the very common rationale of cost. It costs far less to treat an in situ (has not spread) cancer than an invasive cancer (has spread to surrounding tissues and to other parts of the body).

The chart below illustrates survival rates for breast cancer diagnosed at Local, Regional, or Distant Stage. You will see that late stage diagnosis of breast cancer leads to a different prognosis for survival. Late stage diagnosis is usually an indicator of lack of regular screening.

Five Year Relative Survival of Invasive Female Breast Cancer 1995-2008

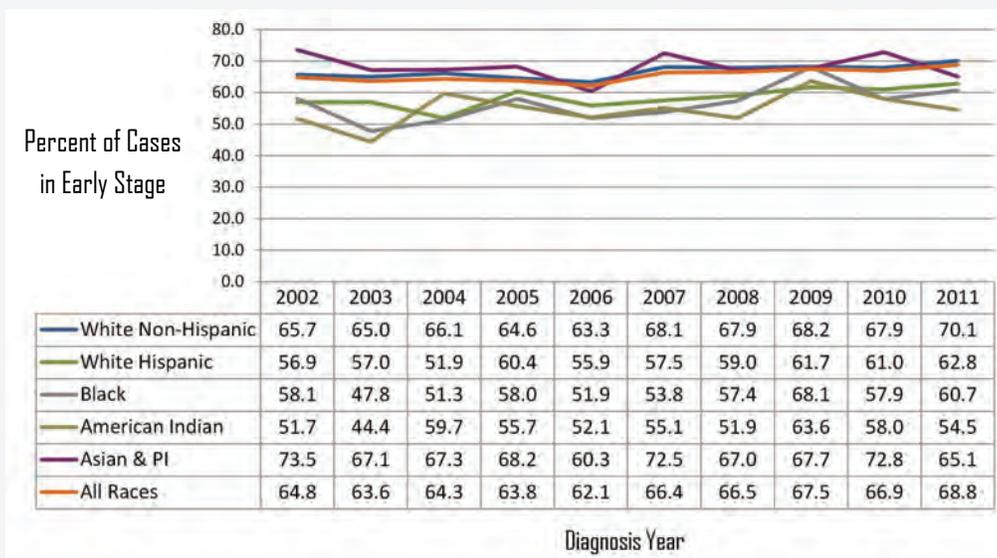


In the figure above, late (distant) stage diagnosis has a completely different prognosis for survival. Indeed, the percent of relative survival falls from 94.4% to 26.9%. This is a compelling motivator for increasing screening rates.

Historically, cancer screening rates for disparate populations have been lower and late stage diagnosis higher. Congress and the Centers for Disease Control and Prevention (CDC) created the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) to focus on these rarely and never screened women. In Arizona this program is called the Well Woman HealthCheck Program or WWHP. Serving this population has changed outcomes and led to earlier stage diagnosis across all populations.

The chart below illustrates the improvement in early stage diagnosis of breast cancer across all race groups. This is a sign of success and demonstrates the importance of ongoing attention to increasing screening rates for all populations.

Percent of Early Stage Breast Cancer Cases by Race/Ethnicity for Arizona Females, 2000–2009



*Early Stage = In Situ and Local Stage using SEER Summary Stage

The correlation between regular screening, early detection and enhanced survival is clear. Yet, there are many people hesitant to get screened. The reasons vary. For example, some of the reasons for women not receiving mammograms include: fear of pain or finding something abnormal, cultural issues, language barriers, lack of insurance or access to a screening facility. It is also known that some providers are not recommending screenings to their patients, nor do they have protocols in place to do so.. For colorectal cancer screening the reasons differ: fear of having a colonoscopy, cultural barriers, lack of knowledge of when to begin screening, or not being aware of the different methods to be screened.

Early Detection Rationale (cont.)

Whatever the reason is, we know that in Arizona cancer screening rates are too low. The ADHS cancer screening programs have been gathering baseline screening rates for contracted and non-contracted clinics for several years. **Figure 3** compares Arizona’s clinic screening rates with Healthy People 2020 Goals. It is clear there is room for improvement.

Arizona Clinic Screening Rates Compared to Healthy People 2020 Goals

Type of Cancer Screening	Clinic Rates	Healthy People 2020 Goal ⁴
Breast Cancer	4-71%	81.1%
Cervical Cancer	15-72%	93.0%
Colorectal Cancer	28-44%	70.5%

The screening rates for contracted clinics listed above represent actual screening rates. There is another tool used nationally to measure these rates and that is the Behavioral Risk Factor Surveillance System or BRFSS. BRFSS is a survey tool applied via phone calls to individual homes and cell phones. In Arizona we are using the actual clinic screening rates and BRFSS to measure changes in screening rates.

Prostate and lung cancer screening have not yet been addressed in this section. The algorithms for lung cancer screening are new and just beginning implementation. Lung cancer screening will be addressed in a future addendum to the Arizona Cancer Control Plan. At this time, there is discussion and disagreement among providers and across organizations about prostate cancer screening. If we selected a protocol for prostate cancer screening many providers would disagree. This lack of clarity does not mean these cancers won’t be addressed in this document, the focus will differ. The focus will be on discussing you and your family’s health history with your provider.

The Arizona Cancer Control Plan focuses on the following objectives

- ⇒ Increase screening rates for breast, cervical and colorectal cancers
- ⇒ Increase the number of clinics able to run reports locally to determine their screening rates
- ⇒ Increase the number of health plans working with the coalition with the focus on increasing their screening rates
- ⇒ Decrease late stage diagnosis
- ⇒ Increase the proportion of women with a family history of breast and/or ovarian cancer who receive genetic testing
- ⇒ Increase the number of men, 40 and older, who have worked with their provider to create a plan for their prostate health

Goal 3: Detect Cancer Early

OBJECTIVE 1 Increase the number of Arizonans receiving breast, cervical, colorectal, and lung cancer screening

INDICATORS

- 1.a. Number/percentage of people screened

STATUS

ARIZONA BRFSS DATA

59.7% of women reported having a mammogram in the past year (vs. 63.8% nationally)

80.5% of women reported having a Pap test in the past three years (vs. 85.1% nationally)

35.6% of adults reported having a Fecal Occult Blood Test ever in their lifetime: (vs. 36.2% nationally)¹

ARIZONA FQHC DATA

The HealthCheck Programs at ADHS work to improve the use of electronic health record systems (EHRs) to collect accurate patient health data. The HealthCheck Program contracted clinics are required to report, from data collected in their clinic EHR, the rate of uninsured and insured patients who are up-to-date on their cancer screenings.

In order to obtain accurate and reliable screening data, the Early Detection Action Team continues to work on training and technical assistance within several clinics across the state. Rates captured in clinic-level EHRs are included in the Early Detection Rationale.



¹ Arizona Department of Health Services. (2012). *BRFSS 2012, Arizona Behavioral Risk Factor Surveillance System Survey*. Retrieved from <http://www.azdhs.gov/phs/phstats/brfs/reports/brfss-annual-report-2012.pdf>

Goal 3: Detect Cancer Early

OBJECTIVE 2 Improve the utilization of electronic health records (EHRs) and standards for meaningful use by federally qualified community health centers (FQHCs)

INDICATORS

2.a. Number of clinics able to run reports determining screening baselines for breast, cervical and colorectal cancers

STATUS

In the state of Arizona, there are currently 19 federally qualified community health centers (FQHCs) and two FQHC Look-Alikes. FQHCs are organizations receiving grants under Section 330 of the Public Health Service Act. These health centers serve an underserved population in the community and offer sliding fee scales for discounted services for low-income patients. FQHCs provide comprehensive health care services, including behavioral health services, to patients. A board of directors govern the FQHC, and an ongoing quality assurance program is in place to continually monitor and evaluate patient services and outcomes. The Arizona Alliance for Community Health Centers (AACHC) is Arizona's state Primary Care Association (PCA) that advances the expansion of FQHCs across the state and supports on going quality improvements.³



³ Arizona Alliance for Community Health Centers. (2013). *Health centers*. Retrieved from <http://www.aachc.org/what-is-a-healthcare-center/health-centers/>

OBJECTIVE 3 Develop strategies with insurers and payers to increase screening rates

INDICATORS

3.a. Number of plans partnering with the Coalition to use evidence based strategies to increase counts/percent of covered individuals being screened.



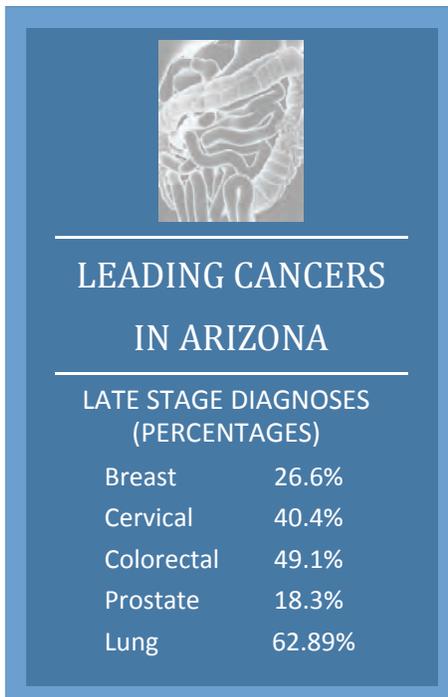
STATUS

The Early Detection Action Team is currently working with two health plans to increase their screening rates. This effort will be broadened to include additional health plans. The “Get Screened!” Infographic (*left*) has been distributed to 200,000 plan members. Progress is being measured.

OBJECTIVE 4 Decrease late stage diagnosis for breast, cervical, colorectal, prostate, and lung

INDICATORS

4.a. Proportion of late stage diagnosis in each cancer



STATUS

Regular, timely cancer screening reduces late stage diagnosis. With clinics and health plans focused on increasing their screening rates, the proportion of late stage diagnosis will decrease over time. The current rates of late stage diagnosis can be seen in the table to the left.

Goal 3: Detect Cancer Early (cont.)

OBJECTIVE 5 Increase the proportion of individuals with a family history of breast, ovarian, and/or colorectal cancer who receive genetic counseling and testing when appropriate.

INDICATORS

5.a. Percent of men and women completing family history and receiving genetic counseling and/or testing.



STATUS

This is a new endeavor for Arizona. In December 2013 the United States Preventive Task Force (USPSTF) released a grade B recommendation that providers screen women who have family members with breast, ovarian, tubal or peritoneal cancer.¹ The Evaluation of Genomic Applications in Practice and Prevention (EGAPP) recommends *all* individuals newly diagnosed with colorectal cancer receive genetic testing for Lynch syndrome as an effort to prevent cancer in their close relatives.² Healthy People 2020 has an objective to increase genetic counseling for breast and/or ovarian cancer, with a baseline measurement of 34.6 percent and a target of 38.1 percent. Healthy People 2020 is currently developing an objective and target for genetic testing for Lynch syndrome.³

¹U.S. Preventive Services Task Force. (2013). *Final recommendation statement: BRCA-related cancer: Risk assessment, genetic counseling, and genetic testing*. Retrieved from <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/brca-related-cancer-risk-assessment-genetic-counseling-and-genetic-testing>

²Centers for Disease Control and Prevention. (2011). Genetic Testing. Lynch Syndrome EGAPP Recommendation. Retrieved November 24, 2014 from <http://www.cdc.gov/genomics/gtesting/EGAPP/recommend/lynch.htm>

³U.S. Department of Health and Human Services. (2014). Genomics. Retrieved October 23, 2014 from <http://www.healthypeople.gov/2020/topics-objectives/topic/genomics/objectives>

OBJECTIVE 6 Increase the number of men 40 and older who have worked with their provider to create a plan for their prostate health.

INDICATORS

6.a. Percent of men discussing/
creating a prostate health plan
with their provider

STATUS

Under development.



Goal 4: Elevate Cancer Treatment



Treatment Rationale

In as little as two generations, there has been a revolution in cancer care. Long-term investments in cancer research, technological innovation, and advances in cancer care delivery have improved the promise of survival rates for millions of people with cancer. Patients, their families, and healthcare professionals face unique challenges in today's cancer treatment landscape:

- ⇒ Increasingly complex cancer diagnoses and treatment;
- ⇒ Rapidly growing number of patients requiring cancer care services;
- ⇒ Growth in cancer care costs; and
- ⇒ Persistent disparities in access to high quality care.¹

Cancer survivors, their families, and the cancer care community in Arizona have indicated that access to care is their primary, overarching concern. Providers also indicate that the complex array of entry points in diagnosing cancer challenge the provider community with ensuring a high quality, rapid transition from the detection of cancer into cancer treatment.

In addition, new professionals with unique skillsets to support cancer patients and their families in navigating this complex system are an emerging need across Arizona.

Furthermore, the changing landscape of healthcare coverage will offer opportunities and challenges to our communities. The Arizona Cancer Coalition Treatment Action Team seeks to ensure a well-prepared, well-resourced cancer care community, address access to care through innovative practice models, and support the linkage to care for underinsured and uninsured patients.

¹American Society of Clinical Oncology. (2014). The State of Cancer Care in America: 2014. Retrieved from http://www.asco.org/sites/www.asco.org/files/cancerinamerica2014-lowres_1.pdf.

Goal 4: Elevate Cancer Treatment

OBJECTIVE 1 Decrease the time from abnormal detection to definitive diagnosis of breast, cervical, colorectal, and prostate cancers

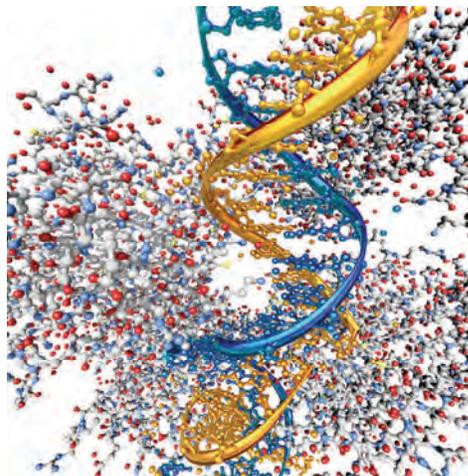
INDICATORS

- 1.a. Time from abnormal detection to diagnosis
- 1.b. Time from diagnosis to treatment

STATUS

The HealthCheck Programs at the Arizona Department of Health Services (ADHS) are required to follow guidelines from the Centers for Disease Control and Prevention (CDC) for patient follow-up in order to optimize patient outcomes. All patients that enter the program must meet the requirements for timeliness into diagnostic and treatment services.

Examples of Core Program Performance Indicators for the programs are presented in the table below. To view the full performance reports for the HealthCheck Programs, please visit the programs' Data, Manuals, and Forms [webpage](#).



ADHS HealthCheck Programs: Core Program Performance Indicators

Indicator Type	Program Performance Indicator	CDC Standard	Arizona Results	
			Percentage	Standard Met?
Cervical Cancer Diagnostic Indicator	Abnormal Screening Results; Time from Screening to Diagnosis > 90 Days	≤ 25%	14.3%	YES
Breast Cancer Diagnostic Indicator	Time from Diagnosis to Treatment > 60 Days	≤ 25%	5.1%	YES
Colorectal Cancer Treatment Initiation Timeliness and Completeness	Initial Tests Requiring a Diagnostic Colonoscopy: Percentage Followed by Diagnostic Colonoscopy within 90 Days	≥ 80%	87.7%	YES

Goal 4: Elevate Cancer Treatment (cont.)

OBJECTIVE 2 Reduce the number of uninsured patients in Arizona

INDICATORS

- a. Number of uninsured patients
- b. Number of Marketplace Navigators and Certified Application Counselors.

STATUS

From October 1, 2013 to April 19, 2014, 120,071 Arizonans gained health insurance coverage from the online Health Insurance Marketplace. In addition, 238,928 Arizonans gained coverage through Medicaid from October 1, 2013 to July 1, 2014. In total, 358,999 Arizonans gained health insurance coverage in 2014. This represented new coverage for 35 percent of Arizona's uninsured.



OBJECTIVE 3 Advocate for oral chemo parity

INDICATORS

- 3.a. Enacted legislation.

STATUS

Completed. House Bill 2078, the "Fair Access to Cancer Treatment Act", was passed on April 23, 2014. Governor Brewer signed the bill into law on April 30, 2014. This policy ensures the equal cost coverage of oral chemotherapy medications by health insurance companies, allowing patients taking oral chemo treatments to receive the same insurance coverage as other chemotherapy regimens. The law will take effect on January 1, 2016.



OBJECTIVE 4 Utilize telemedicine to increase access to state of the art diagnosis and treatment techniques

INDICATORS

4.a. Number of providers participating in telemedicine programs

STATUS

Arizona is a geographically diverse state in terms of population density and access to healthcare. The Arizona Telemedicine Program at the University of Arizona utilizes telecommunications technology to reach all patients in Arizona. In addition to providing Arizona residents with clinical specialty services in multiple rural communities across the state, telecommunication technology provides unique opportunities to ongoing clinical education for providers. The Arizona Cancer Coalition Treatment Action Team aims to promote increased participation and utilization of the Arizona Telemedicine Program.

To learn more about telemedicine in Arizona, please visit telemedicine.arizona.edu.



Goal 4: Elevate Cancer Treatment (cont.)

OBJECTIVE 5 Increase the number of reported melanoma cases

INDICATORS

5a. Proportion of melanoma cases reported as in situ compared to invasive.

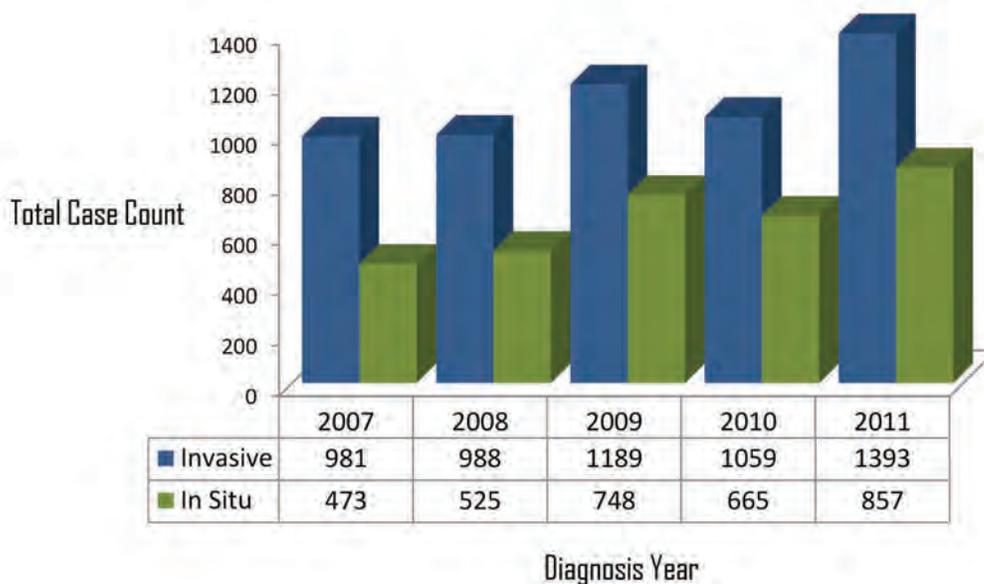
STATUS

The Melanoma Task Force determined there was substantial under-reporting of early stage melanoma cases in the state. A 2009 pilot study that reviewed 15 dermatology practices showed that 72% of the study cases were not reported to the Arizona Cancer Registry. The purpose of the task force is to identify barriers and develop strategies to improve melanoma reporting by physicians in Arizona. The task force increased efforts to report melanoma in 2011.

The Arizona Cancer Registry data for 2011 show 1,393 (62%) invasive and 857 (38%) in situ melanoma cases.

The figure below demonstrates reported melanoma cases (in situ and invasive) by year of diagnosis. **Please note:** the demonstrated increase in cases reflects an *increase in case reporting* to the Arizona Cancer Registry.

Arizona Melanoma In Situ vs. Invasive Cases Reported by Year of Diagnosis, 2007-2011



Goal 5: Galvanize Quality of Life (QoL)/ Survivorship Networks



Survivorship Rationale

The number of cancer survivors is on the rise. More cancer patients are beating cancer and living longer as a result of significant improvements in cancer treatment and early detection. A recent report by the American Cancer Society estimates there are almost 14.5 million Americans with a history of cancer alive in the US today, and that number is projected to grow to almost 19 million by 2024.¹ In Arizona, as of January 1, 2014, there were an estimated 348,720 cancer survivors in the state.¹ This includes only persons with a history of cancer. The number of cancer survivors is far larger utilizing the National Coalition for Cancer Survivorship expanded definition of cancer survivorship which includes family members, friends and caregivers.²

Cancer survivors have unique medical, psychological, and social needs. As this population grows, ensuring they have the right care and support is becoming increasingly important. Appropriate post-treatment survivorship care can increase independent living, positively affect quality of life, and ease the economic burden on the U.S. from a reduced workforce.³ The Arizona Cancer Control Plan focuses on improving the quality of life of cancer survivors from diagnosis to end of life through the following objectives:

- ⇒ Develop and promote the utilization of common definitions
- ⇒ Raise awareness and utilization of existing survivorship resources
- ⇒ Assess and increase the use of survivorship care plans

The Arizona Cancer Coalition Survivorship Action Team is working to improve and facilitate access to resources and systems to enhance the quality of life for all cancer survivors in Arizona. Current Action Team activities include, but are not limited to: establishing and promoting consistent definitions surrounding survivorship, assessing the use of survivorship care plans and working to increase their use throughout the state, promoting existing resources and accessing gaps.

The Survivorship Action Team reviewed existing definitions for the terms *Cancer Survivor*, *Community Health Worker*, *Palliative Care*, and *Patient Navigator* and asked group members to rank the definitions in order of their preference. The definitions with the highest rankings were selected by the group and are currently being utilized and promoted by the Action Team.

The Action Team collaborated with the University of North Carolina to modify a survey on survivorship care plan utilization that they had developed and conducted on a national level. That survey was adapted by the Action Team for use in Arizona and survey results are currently being collected.

¹Cancer Treatment and Survivorship Facts and Figures 2014-2015. American Cancer Society Web site. <http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-042801.pdf>. Published 2014. Accessed October 1, 2014.

²About Us. National Coalition for Cancer Survivorship Web site. <http://www.canceradvocacy.org/about-us/our-history/>. Accessed October 1, 2014.

³Executive Summary of Cancer Survivorship: A Policy Landscape Analysis. National Cancer Survivorship Resource Center Web site. <http://www.cancer.org/acs/groups/content/@editorial/documents/document/acspc-033812.pdf>. Accessed October 1, 2014.

Goal 5: Galvanize Quality of Life (QoL)/Survivorship Networks

OBJECTIVE 1

Develop and promote the utilization of a common definition for cancer survivor, patient navigator, community health worker (CHW) and palliative care throughout Arizona

INDICATORS

1.a. Number of organizations that adopt the definitions.



STATUS

The Survivorship and QoL Action Team collaboratively selected and is actively promoting definitions for the following terms: Cancer Survivor, Community Health Worker, Palliative Care, and Patient Navigator. The definitions chosen by the Survivorship and QoL Action Team can be found in the Glossary at the end of this document.

OBJECTIVE 2

Raise awareness and utilization of existing survivorship resources in Arizona by developing an online user-friendly and bilingual database.

INDICATORS

2.a. Online database of survivorship information and resources developed.

2.b. Number of persons utilizing the database.



STATUS

Numerous resources and tools currently exist for cancer survivors but are often underutilized due to accessibility issues or lack of awareness. The Survivorship and QoL Action Team is working with key partners to actively identify existing resources and strategize on ways to improve their accessibility and use among cancer survivors within Arizona.

Goal 5: Galvanize Quality of Life (QoL)/Survivorship Networks (cont.)

OBJECTIVE 3 Assess and increase the use of survivorship care plans among health care organizations in Arizona

INDICATORS

- 3.a.** Completed assessment of survivorship care plan use in Arizona.
- 3.b.** Number of health care facilities in Arizona utilizing survivorship care plans.

STATUS

National Survivorship Care Plan (SCP) Survey Data:¹

- ⇒ 56% reported SCPs were not used
- ⇒ SCP use restricted primarily to breast cancer (82%) and colorectal cancer (55%)
- ⇒ Barriers to Use:
 - * Insufficient Resources (76%)
 - * Difficulty of Use (29%)
 - * Lack of Advocacy for Use (24%)

Arizona SCP Survey:

The Survivorship and QoL Action Team, in collaboration with the University of North Carolina, adapted the national survey referenced above for use in Arizona. The Action Team has distributed the survey to key participants at cancer treatment programs throughout the state. The results will help the Action Team determine which programs are using survivorship care plans and the barriers to use.



¹Birken S, Mayer D, Wiener B. Survivorship Care Plans Prevalence and Barriers to Use. *J Cancer Education*. 2013; 28(2): 290-296. doi: [10.1007/s13187-013-0469-x](https://doi.org/10.1007/s13187-013-0469-x)

Goal 6: Catalyze Research



Research Rationale

Ongoing cancer research in Arizona occurs through many organizations across the state, including the University of Arizona Cancer Center, Mayo Clinic, Banner MD Anderson Cancer Center, Scottsdale Healthcare, Translational Genomic Institute (TGen) and Arizona Oncology. Additionally, under the leadership of the Arizona Biomedical Research Commission (ABRC), Arizona has been developing an infrastructure to undertake strategic initiatives of national importance such as fostering collaboration for the acceleration of biomedical research and innovation. With these resources, Arizona has the opportunity to continue to grow as a major contributor to state, national, and global cancer research.

Currently, there are more than 400 open clinical trials in Arizona. Several barriers have been identified regarding connecting patients to opportunities in research. Primarily, it is difficult for lay members of the community to understand and access enrollment into clinical trials. Even greater challenges exist among vulnerable populations in Arizona, including those of low socioeconomic status (SES), low health literacy, and low access to healthcare.

Further, the lack of complete reporting on certain types of cancers to the Arizona Cancer Registry has resulted in a significant under reporting of the state's cancer burden.

As a result, the Arizona Cancer Control Plan works to address these obstacles through the Research Action Team within the Arizona Cancer Coalition.

Goal 6: Catalyze Research

OBJECTIVE 1 Enhance collaborations, among cancer research institutions and cancer researchers

INDICATORS

- 1.a. Establish a current database of cancer research institutions and cancer researchers in Arizona, and identify key contact points at each institutions for cancer research.
- 1.b. Complete Arizona Cancer Research Network Analysis study.
- 1.c. Establish the Arizona Cancer Research Collaborative.
- 1.d. Complete the Arizona Cancer Research Collaborative Work Plan based on the opportunities identified by the survey.

STATUS

- 1.a. The 2014 database of cancer research institutions and cancer researchers has been established.
- 1.b. The Arizona Cancer Research Network Analysis Survey instrument has been developed and will be deployed in fall 2014.
- 1.c. The planning for the first Arizona Cancer Research Collaborative Summit is underway. The summit will take place in winter 2015 and the Research Collaborative will be established at that time.
- 1.d. The Research Collaborative work plan will be completed by fall 2015.



Goal 6: Catalyze Research (cont.)

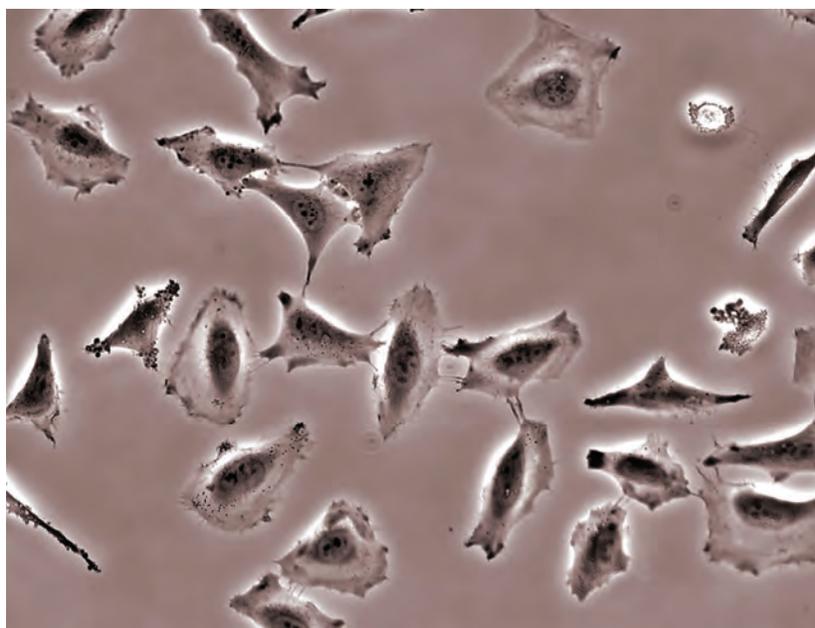
OBJECTIVE 2 Establish better resources for Arizona cancer patients to be able to search for appropriate clinical trials for their condition/and situation

INDICATORS

- 2.a.** Establish the baseline of numbers of patients entering cancer clinical trials in Arizona.
- 2.b.** Increase the percentage of patients entering clinical trials by 5% a year for five years.
- 2.c.** Increase the percentage of minority populations enrolled in clinical trials by 5% a year for five years.

STATUS

- 2.a.** The baseline data required for this objective has been included in the Arizona Cancer Research Network Analysis Survey instrument.
- 2.b.** The question of increasing patient access and entry to clinical trials will be included in the 2015 Arizona Cancer Research Collaborative Summit.
- 2.c.** The 2015 work plan established by the Arizona Research Collaborative will include an action plan to increase patient access and entry to clinical trials.





Resources

Arizona's State Health Improvement Plan and the Arizona Cancer Control Plan — How Do They Align?

Arizona Department of Health Services (ADHS) began their accreditation work with the creation of a State Health Assessment. The assessment provided a snapshot of Arizona's health status, issues, and concerns. The county health departments conducted their own county health assessments (CHAs) and this information was integrated into the state's health assessment. The continuation of this process is the creation of health improvement plans at the state and county level. At the state level, the health improvement plan is referred to as the Arizona State Health Improvement Plan (AzHIP); at the county level, the County Health Improvement Plan, or CHIP.

Creation of the AzHIP is led by a steering committee. To view the webinar regarding the AzHIP creation process, please visit the [Managing for Excellence Program](#) online. The steering committee designed tools for gathering and consolidating information from throughout ADHS. Each area of ADHS was asked to address specific topics and summarize an area of focus. To view the summary provided to the steering committee regarding Arizona and cancer, visit the [Cancer Health Issue Brief](#). The next step is the creation of a Cancer Work Group, supporting the AzHIP, that will review available data and select priorities to address cancer in Arizona.

As ADHS and the counties were creating their health assessments, the Arizona Cancer Coalition and the ADHS Cancer Prevention and Control Programs were creating the Arizona Cancer Control Plan. The Arizona Cancer Control Plan contains objectives to be achieved by the Arizona Cancer Coalition Action Teams and partners over the next five years. The objectives were determined by each of the Action Teams: Policy, Prevention, Early Detection, Treatment, Survivorship, and Research. As evidenced by the objective statuses provided in this report, work has already begun and continues to move forward.

The Cancer Work Group for the AzHIP will benefit greatly from work done by the Cancer Coalition. They will have concise and descriptive data, objectives with measures and baselines, and currently active work groups poised and ready to support achievement of the AzHIP's goals. This timely alignment of stakeholders around cancer is promising. This alignment will support:

- ⇒ Data-based decision making;
- ⇒ Prioritized efforts, based upon data, to be the focal point of many;
- ⇒ Broadened input on priorities from many stakeholders;
- ⇒ An infrastructure, the work groups, already taking action geared toward reducing the burden of cancer in Arizona; and
- ⇒ Stakeholders from across the state willing to support the actions via time talent and treasure.

Cancer is the leading cause of death in Arizona. We lose 209 Arizonans each week to cancer. The alignment of the AzHIP with the Arizona Cancer Control Plan has the potential, through collective impact, to reduce that number.



Cancer Programs and Resources at the Arizona Department of Health Services

The Arizona Department of Health Services (ADHS) possesses several programs working collaboratively to address the burden of cancer in Arizona. The Bureau of Public Health Statistics, Office of Health Registries, houses the Arizona Cancer Registry at the Arizona Department of Health Services. The Office of Cancer Prevention and Control resides in the Division of Public Health Services, Bureau of Health Systems Development, at ADHS. Together, these programs make up the Arizona Cancer Prevention and Control Team.

Arizona Cancer Registry

The Arizona Cancer Registry (ACR) supports the collecting of cancer cases (incidence) and deaths (mortality) from cancer across the state of Arizona. Cancer reporting became mandatory on January 1, 1992. All cancer cases are reported to the ACR by providers, hospitals, pathology laboratories, and clinics across the state. The ACR reviews data accuracy, provides statistical support, responds to data requests, and monitors data trends.

The ACR also engages in special projects to improve its reporting levels, as evidenced by the Melanoma Task Force, which witnessed questionably low rates of melanoma in Arizona. The Melanoma Task Force found that melanoma cases are currently under-reported by providers, and now actively works with dermatologists to improve their reporting practices to the ACR. Without this data, the true impact of melanoma in Arizona remains under-estimated.

To view a complete report on the status of cancer in Arizona, along with the level of late stage diagnoses by cancer type, please view the Arizona Cancer Report.

In conjunction with the Office of Cancer Prevention and Control, the ACR produces several factsheets, reports, and other data documents on the state of cancer in Arizona. The ACR reviews for data accuracy, provides statistical support, responds to data requests and monitors data trends.

Cancer Programs and Resources (cont.)

Office of Cancer Prevention and Control (CPC)

The Office of CPC contains three CDC-funded programs: the Comprehensive Cancer Control Program, the Breast and Cervical Cancer Early Detection Program, and the Colorectal Cancer Control Program. Locally, the Comprehensive Cancer Control Program facilitated the reformation of the Arizona Cancer Coalition and Action Teams across the state.

The Breast and Cervical Cancer Early Detection Program, known locally as the Well Woman HealthCheck Program (WWHP), and the Colorectal Cancer Control Program, also known locally as the FIT at Fifty HealthCheck Program (FFHP), provide cancer screening and diagnostic services and linkage to treatment to uninsured Arizonans. In addition, the Office of CPC seeks to educate providers and the community about the importance of timeliness of services and appropriate patient follow up, systems change approaches, and effective electronic health record (EHR) system utilization within federally qualified health centers (FQHCs).

Comprehensive Cancer Control Program (CCC)

The Arizona Comprehensive Cancer Control Program enabled the development of the Arizona Cancer Coalition (ACC), a statewide group of public health professionals, providers, medical directors, survivors, and patients, who aim to reduce the incidence and mortality of cancer in Arizona. The ACC is composed of six “Action Teams” having specific cancer-related goals: Policy, Prevention, Early Detection, Treatment, Survivorship, and Research. The objectives and goals of these Action Teams are the core informants of this Cancer Control Plan, which are referenced and outlined in detail within this report. To find out more about the Arizona Cancer Coalition, visit azcancercoalition.org



HealthCheck Programs

The HealthCheck Programs at ADHS encompasses two programs that serve Arizona residents directly: the [Well Woman HealthCheck Program \(WWHP\)](#) and the [FIT at Fifty HealthCheck Program \(FFHP\)](#).

Well Woman HealthCheck Program (WWHP)



The WWHP provides breast and cervical cancer screening, including clinical breast exams, mammograms, Pap tests, HPV tests, and diagnostic services to uninsured and underinsured women aged 21 – 65 years old in Arizona. The WWHP has been offered in Arizona since 1993 and screens 10,000 women each year across the state and is the local implementation of the National Breast and Cervical Early Detection Program (NBCCEDP). The WWHP is offered in all fifteen counties of Arizona through contracted providers belonging to federally qualified health centers (FQHCs). To view a listing of contracted providers and to learn more about the program, visit wellwomanhealthcheck.org.

If cancer is found, Arizona offers the [Breast and Cervical Cancer Treatment Program \(BCCTP\)](#), and patients are enrolled in an AHCCCS-health plan at no cost to them. The patient’s cancer treatment is completely covered. To learn more about the BCCTP, please visit the [BCCTP Eligibility](#) webpages.

FIT at Fifty HealthCheck Program (FFHP)



The FFHP offers colorectal cancer screening, including the Fecal Immunochemical Test (FIT) and colonoscopy, to uninsured men and women in Arizona who are 50 years of age and older. The FFHP is a five-year old program and screens 1,500 men and women every year; it is the local implementation of the Colorectal Cancer Control Program. The FFHP services are provided through contracted providers located at federally qualified health centers (FQHCs) in regions across Arizona. To find a contracted provider and to learn more about the program, visit fitatfiftyhealthcheck.org. If colorectal cancer is found, patients may be eligible to receive support through a partnership with the local chapter of the Colon Cancer Alliance.

Cancer Programs and Resources (cont.)

Arizona Biomedical Research Commission

For more than 30 years, the Arizona Biomedical Research Commission (ABRC) has been partnering with Arizona's researchers, universities, and nonprofit organizations to conduct research on diseases, find cures, establish best practices and acceptable treatment methods, and seek out new drug discoveries. One of ABRC's priority areas for research funding has been cancer. As a result, new insights on cancer fighting drugs such [halistatins](#) has been introduced while the progress continues on fighting cancer at a [molecular and cellular level](#).

Although ABRC may be more widely recognized for its role in providing competitively awarded funding to Arizona Researchers through the Research Grants Program, we also fund the Arizona Biospecimen Locator, Research Education, and the Arizona Public Cord Blood Program.

Arizona Biospecimen Locator. Acquiring quality biospecimens is one of the largest obstacles researchers face as they strive to advance medical science and improve patient care. ABRC facilitated the creation of the Arizona Biospecimen Consortium and Locator to provide researchers with specimens needed to advance their research studies. The Locator is a web-based biospecimen database of both diseased and normal solid tissues, cells, fluids and molecular samples stored at participating Arizona hospitals and tissue banks. Using the Locator encourages research collaboration that may lead to more effective treatments and potential cures.

Research Education. In working with Arizona researchers, ABRC identified a need to aid in policy development and make high quality educational resources available. The ABRC Educational Initiative sought to create a shared sense of community by bringing national and local experts together to engage Arizona researchers and clinical professionals in emerging topics. ABRC also offers on-line access at no cost to a comprehensive suite of courses for those engaged in performing and overseeing human subject clinical research and remains committed in providing affordable in-person workshops throughout the year.



Arizona Public Cord Blood Program. Currently, seven out of ten patients that have genetic or life-threatening diseases such as leukemia or lymphoma will depend on a public registry (such as the National Marrow Donor Program) to find a bone marrow transplant match. The Arizona Public Cord Blood Program was created to advance the collection of umbilical cord blood. Umbilical cord blood is blood that remains in the blood vessels of the placenta and the umbilical cord after the baby is born and the cord has been clamped and cut. Umbilical cord blood contains hematopoietic stem cells or blood-forming cells (cells that can form other blood cells). These blood-forming cells are also found in bone marrow.

In the past, the placenta and umbilical cord were thrown away. Today, the blood can be collected, stored, and made available for transplant. Through this program, ABRC works with Arizona hospitals to collect, store, and add diverse cord blood units to the National Marrow Donor Program registry – increasing the likelihood that all patients will find a match.

ABRC also supports the Arizona Alzheimer’s Consortium and the Translational Genomics Research Institute. To view all projects supported by ABRC, please view the [ABRC Annual Reports](#).



Arizona Biomedical
Research Commission

Grants · Biospecimen Locator · Education · Public Cord Blood

Cancer Programs and Resources (cont.)

The Core Team

The Core Team for the Arizona Cancer Prevention and Control Programs was developed in 2012 to improve program outcomes by enhancing collaboration and streamlining efforts among cancer and chronic disease programs within the Arizona Department of Health Services. The team comprised leaders from key programs within the Arizona Department of Health Services, including: Bureau of Tobacco and Chronic Disease, Sun Wise Skin Cancer Prevention Program, Arizona Cancer Registry, Arizona Health Disparities Center and Arizona Cancer Prevention and Control Programs which includes Comprehensive Cancer Control and the Well Woman and FIT at Fifty HealthCheck Programs. The Core Team meets on a monthly basis to share program updates, strategize on ways to facilitate collaboration, and reduce duplicity of work in order to increase the impact of programs. Including key partners such as Arizona Alliance for Community Health Centers and Health Services Advisory Group has expanded the scope of project work achieved by the team.



Evaluation

An evaluation team from LeCroy & Milligan Associates, Inc. was engaged to monitor process and outcome evaluation measures for the activities within the Arizona Cancer Coalition (ACC). A comprehensive evaluation plan was developed to measure the 25 objectives determined by the ACC Action Teams. Continuous evaluation of the work and process within the Action Teams, Steering Committee, Core Team and the ACC as a whole guides the coordination of work being conducted throughout Arizona and ensures activities are focused, effective, and aligned with statewide objectives.

The evaluation team provides support to the Steering Committee and Action Teams by assisting with planning and facilitation of Action Team meetings, identifying the activities of the work groups that align with their work groups' objectives and goals, providing ad-hoc professional development and data analysis technical assistance for work groups' activities and reporting on quarterly progress within work groups' Action Plans. In addition, the evaluation team provides expertise and coordination among collaboration opportunities between the Core Team and all components of the Arizona Cancer Prevention and Control Programs. Meetings are assessed based upon their level of effectiveness, collaboration, and quality of leadership.



Glossary of Terms

Age-Adjusted Incidence and Mortality Rates

Age adjustment is a process used to compare incidence and mortality rates over time or among geographic areas or population that have different age distributions. Because most disease rates increase with age, age-adjustment eliminates the confounding effect of age when comparing rates. Cancer incidence and mortality is usually expressed in the number of new cases or deaths per 100,000 persons in a population.

Age-Specific Rates

The rate of incidence or mortality of a specific age group, calculated per 100,000 people.

Best Practices

A practice supported by a rigorous process of peer review and evaluation indicating effectiveness in improving health outcomes, generally demonstrated through systematic reviews.

Built Environment

The built environment is defined as the human-made features of our communities. The way we design and build our communities can affect our physical and mental health; in turn designing and building healthy communities can improve the quality of life for all people.

Cancer Burden

An estimate of the financial, emotional, or social impact that cancer creates within the population. Different racial, ethnic, geographic, and age groups in the United States do not share the burden of disease equally.

Cancer Survivor

An individual is considered a cancer survivor from the time of diagnosis, through the balance of his or her life. Family members, friends, and caregivers are also impacted by the survivorship experience and are therefore included in this definition.

Community Health Worker

A Community Health Worker (CHW) is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.

Continuum of Care

In medicine, describes the delivery of health care over a period of time. In patients with a disease, this covers all phases of illness from diagnosis to the end of life.

Disparities (Health)

Healthcare 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.

Distant Stage

Cancer that has spread from the primary site to distant organs or distant lymph nodes.

Early Stage

Early stage combines in situ and local stage using the SEER Summary Stage guidelines.

Evidence Based Strategies (Practices)

Evidence-based practices are approaches to prevention or treatment that are validated by some form of documented scientific evidence. This includes findings established through controlled clinical studies, but other methods of establishing evidence are valid as well.

Federally Qualified Health Center (FQHC)

Federally qualified health centers (FQHCs) include all organizations receiving grants under Section 330 of the Public Health Service Act (PHS). FQHCs qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors.

Health Equity

Health equity is achieved when every person has the opportunity to “attain his or her full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.

Health Promotion

Health promotion is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behavior towards a wide range of social and environmental interventions.

Health Risk Factors

A risk factor is any attribute, characteristic or exposure of an individual that increases the likelihood of developing a disease or injury.

Glossary of Terms (cont.)

In situ cancer

Early cancer that is present only in the layer of cells in which it began. There is no penetration of the basement membrane of the tissue.

Incidence

The number of newly diagnosed cases of cancer during a specific time period.

Invasive Cancer

Cancer that has spread beyond the layer of tissue in which it developed and is growing into surrounding, healthy tissues -- generally, the stage is either "localized," "regional," or "distant."

Late Stage

A term used to describe cancer that is far along in its growth, and has spread to the lymph nodes or other places in the body. Late stage combines regional and distant stage using the SEER Summary Stage guidelines.

Local Stage

Cancer that is limited to the organ in which it began, without evidence of spread.

Meaningful Use

Meaningful use is using certified electronic health record (EHR) technology to:

- Improve quality, safety, efficiency, and reduce health disparities
- Engage patients and family
- Improve care coordination, and population and public health
- Maintain privacy and security of patient health information

Mortality

The number of deaths from cancer during a specific time period.

Palliative Care

Palliative care is specialized medical care for people with serious illnesses. It is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness—whatever the diagnosis. The goal is to improve quality of life for both the patient and the family.

Patient Navigator

Patient navigators—a diverse group of lay people and health care professionals who assist patients at all stages of cancer care, from screening and diagnosis to treatment and survivorship.

Prevalence

The number of people alive on a certain date who have been diagnosed with cancer at any time in their lives. This is different from incidence in that it considers both newly diagnosed and previously diagnosed people.

Prognosis

The likely outcome or course of a disease; the chance of recovery or recurrence.

Quality of Life

The overall enjoyment of life. Many clinical trials assess the effects of cancer and its treatment on the quality of life. These studies measure aspects of an individual's sense of well-being and ability to carry out various activities.

Regional Stage

Cancer that has spread beyond the original (primary) site to nearby lymph nodes or organs and tissues.

Relative Survival

The National Cancer Institute defines relative survival as a net survival measure representing cancer survival in the absence of other causes of death. Relative survival is defined as the ratio of the proportion of observed survivors in a cohort of cancer patients to the proportion of expected survivors in a comparable set of cancer free individuals. Relative survival in this cancer plan adjusts for age and sex.

Screening (Cancer)

Cancer screening is looking for cancer before a person has any symptoms. Screening tests can help find cancer at an early stage, before symptoms appear. When abnormal tissue or cancer is found early, it may be easier to treat or cure. By the time symptoms appear, the cancer may have grown and spread. This can make the cancer harder to treat or cure.

Sliding-Fee-Scale

Sliding-scale-fees are variable costs for products, services, or taxes based on one's ability to pay. Such fees are thereby reduced for those who have lower incomes or less money to spare after their personal expenses, regardless of income.

Social Determinants of Health

The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.

Stage

Stage provides a measure of disease progression, detailing the degree to which the cancer has advanced.

Glossary of Terms (cont.)

Survival

Survival examines how long after diagnosis people live. Cancer survival is measured in a number of different ways depending on the intended purpose.

Telemedicine

Telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status. Telemedicine includes a growing variety of applications and services using two-way video, email, smart phones, wireless tools and other forms of telecommunications technology.

Underinsured

Having some insurance coverage but not enough, or when one is insured yet unable to afford the out-of-pocket responsibilities not covered by his or her insurer.

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