DFW Community Cancer Profile

SUMMER 2022

Simmons Cancer Center's mission is to ease the burden of cancer through groundbreaking discovery, transdisciplinary research, impactful community engagement, education, and exceptional patient care.

MISSION



We strive to be a preeminent leader in translating scientific discovery into cancer prevention and world-class care with an emphasis on community engagement efforts to eradicate cancer disparities in Texas and beyond.

VISION

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UT Southwestern Harold C. Simmons Comprehensive Cancer Center



Introduction

Simmons Comprehensive Cancer Center is the first and only cancer center in North Texas – one of three in Texas and 52 in the U.S. – to be recognized by the National Cancer Institute (NCI) as a **comprehensive** cancer center. This designation places Simmons in an elite group of U.S. cancer centers that have met NCI's most rigorous standards for scientific leadership, training and education, and research infrastructure in preventing, diagnosing, and treating cancer.

Like other comprehensive cancer centers recognized and funded by the NCI, Simmons has a responsibility to conduct research and outreach that **address the unique needs of the communities it serves**, particularly communities that suffer the worst cancer outcomes. In turn, it must **engage those communities in targeted research**, **outreach**, **and education** aimed at beating cancer, either by prevention or by cure. To accomplish these bidirectional goals, Simmons relies on its Office of Community Outreach, Engagement, and Equity (COEE).

The Office of COEE, led by Jasmin Tiro, Ph.D., serves as the channel for two-way communication and partnership between Simmons and its service area – the 13 counties that make up the Dallas-Fort Worth (DFW) Metroplex.

COEE regularly engages with two key groups that help reflect the needs of Simmons' service area. The first group is an internal **Patient and Family Advisory Council**, made up of Simmons patients and their caregivers. The second is Simmons' **Community Advisory Board**, whose 27 members were selected from local health agencies, health-care systems, cancer support groups, faith-based institutions, schools, and other organizations to represent a wide range of voices within the DFW population.

By gathering input and enlisting support from both the Patient and Family Advisory Council and the Community Advisory Board, the Office of COEE guides Simmons in **defining** DFW's cancer challenges, or burden; **prioritizing** research to address those challenges; **enhancing** community participation in cancer research; and **disseminating** evidence-based findings that help limit cancer's impact on our community. As we achieve success locally, we extend our programs to similar populations beyond the DFW area.

INSIDE: A DETAILED PROFILE OF THE DFW AREA:

POPULATION DEMOGRAPHICS

- **TRENDS IN NEW CANCER CASES & DEATHS**
- **CANCER DISPARITIES**

COUNTIES SERVED

CANCER-RELATED BEHAVIORAL FACTORS

In addition, you'll learn how Simmons is responding to the unique needs of the DFW area through specific research, education and outreach, and patient care designed to prevent, diagnose, or treat cancer; strengthen survivorship; reduce disparities; and increase access to cancer care.

Introduction continued

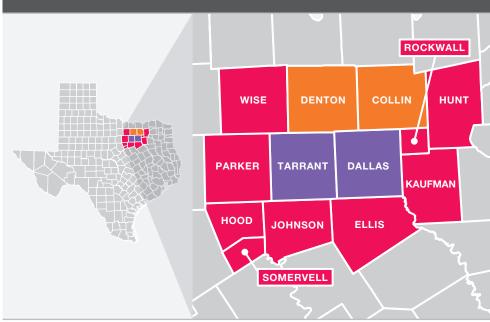
Simmons' mission is to ease the community's cancer burden through exceptional patient care, scientific research, and community outreach and education. Though our doors are open to a worldwide community, we are committed – as a center designated by the NCI as comprehensive – to addressing the unique cancer challenges felt by our local residents, particularly those hardest hit by cancer and those with limited resources.

The majority of our patients (86%) live in the 13 counties making up the DFW Metroplex, so we refer to these counties as our primary service area.

DFW Sociodemographics

Our Service Area

Simmons' DFW Metroplex service area covers a 9,300-square-mile region. Nearly all of DFW's census tracts (95%) are well-developed urban versus sparsely populated rural areas (5%). Two of the nation's fastest-growing counties – Dallas and Collin – are among the 13 that form Simmons' service area.



SIMMONS DFW METROPLEX SERVICE AREA

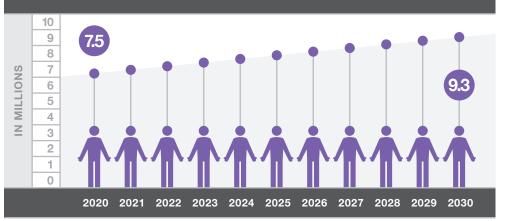
2021 POPULATION 7.5 MILLION

2030 POPULATION EXPECTED TO EXCEED 9 MILLION

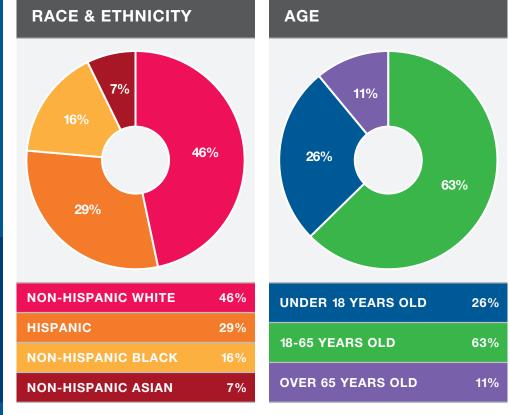
A Young, Diverse, Growing Community



POPULATION PROJECTION



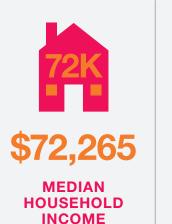
There are many opportunities to promote cancer-preventing behaviors (such as human papillomavirus [HPV] vaccination, healthy eating, exercise, and screening) and reduce behaviors that increase cancer risk (nicotine use, including smoking and vaping, alcohol use, and sun exposure).



Data Source: U.S.Census, 2019 American Community Survey, 5-year estimates

C 23% PREFER TO COMMUNICATE IN SPANISH

Income and Poverty







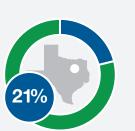
DISPARITIES IN POVERTY BETWEEN DFW COUNTIES PERCENTAGE OF COUNTY RESIDENTS LIVING IN POVERTY

			DALLAS COUNTY (POOREST)	COLLIN COUNTY (RICHEST)
	COLLIN	OVERALL	14%	6%
DAL		CHILDREN (<18)	21%	7%
	ALLAS	ADULTS (18-64)	11%	6%
		ELDERLY (65+)	12%	8%

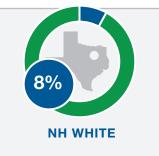
TEXAS RANKS LAST IN U.S.

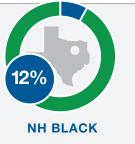
IN HEALTH CARE ACCESS AND AFFORDABILITY

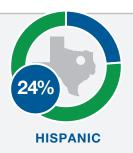




DFW RACE & ETHNICITY DISPARITIES IN UNINSURANCE







32% of dfw POPULATION LACK A REGULAR

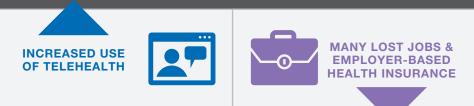
CARE PROVIDER

Data Source: U.S.Census, 2019 American Community Survey, 5-year estimates

Without insurance, community members face enormous difficulties accessing timely care, including potentially life-saving cancer screenings, the opportunity to diagnose cancer early, and treatments.

Covid-19 Pandemic

THE PANDEMIC HAS PROMPTED:



DIGITAL DIVIDE

Access to telehealth is challenging for those who don't have reliable access to the internet.





3 out of 10 homes in Dallas County do not have access to broadband. Rely on a cellular data plan with no other type of internet subscription.

THOSE WITHOUT HEALTH INSURANCE DELAY CARE DUE TO COST AND COMPETING NEEDS (FOOD & HOUSING)

- Cancer screenings are being put off due to the pandemic
- More cancers are going undiagnosed or are diagnosed at later stages
- Cancer is more difficult to treat at later stages, leading to poorer outcomes

SOLUTIONS IN PROGRESS FOR THE DFW AREA

The Texas Broadband Bill passed, which establishes a Broadband Development Office that will coordinate improvements to broadband access across Texas The Internet for Dallas Coalition provides resources to increase internet access and affordability, such as devices and teaching digital skills

The Federal Communicatior

Communications Commission has the Emergency Broadband Benefit program to help families afford internet services during the pandemic

The Dallas and Forth Worth Public Libraries allow library card holders to check out hotspots and/or laptops for up to 30 days at a time The City of Dallas and DISD created the Broadband and Digital Equituy Strategic Plan to help Dallas residents access affordable, high-speed home broadband service

Forth Worth Neighborhood Improvement Ptorgam is providing public Wi-Fi in the Ash Crscent, Como, North Side, Rosemont and Stop Six neighborhoods

Data Source: U.S.Census, 2019 American Community Survey, 5-year estimates

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Community Health Priorities

To inform and select research and outreach priorities in the area Simmons serves, we used the following criteria:

Data on cancer incidence, mortality, risk factors, and prevention/screening behaviors

Cancer disparities in outcomes

Projected catchment growth

Strengths of Simmons research programs

Input from Simmons' Community Advisory Board

On this basis, the following cancer types emerged as priorities for research and outreach:

RESEARCH PRIORITIES

COLORECTAL CANCER

LIVER CANCER

LUNG CANCER

KIDNEY CANCER

OUTREACH PRIORITIES

COLORECTAL CANCER

LIVER CANCER

LUNG CANCER

BREAST CANCER

HPV-RELATED CANCERS ORAL CAVITY AND THROAT, CERVICAL

Kidney cancer is included as a research priority but not as an outreach priority because there are no national guidelines to screen for kidney cancer. Simmons has strong programs in breast cancer screening, HPV vaccination, and cervical cancer screening, so breast and HPV-related cancers are included as outreach priorities.



Cancer Incidence and Mortality

2014-2018

INDICATES RACE DISPARITIES

LEVATED BURDEN AMONG JNINSURED AND/OR HIGH

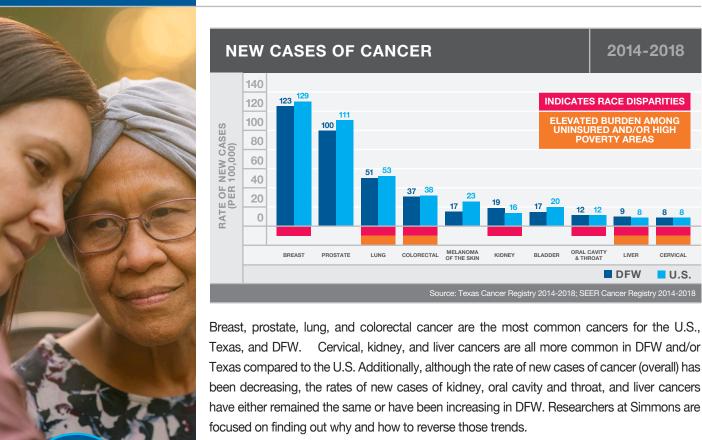
LIVER

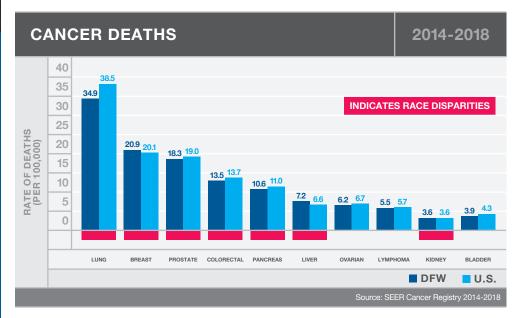
DFW

CERVICAL

U.S.

POVERTY AREAS





KIDNE)

BLADDER

In the U.S., Texas, and DFW area, the highest cancer death rates are for lung, colorectal, and breast cancers.

All the priority cancers show disparities by race/ethnicity for new cases and death rates. Lung, colorectal, liver, and cervical cancers show additional disparities by insurance or poverty status. Simmons prioritizes research and outreach activities that address these disparities to work toward eliminating them.

Cancer Prevention

Several factors can increase or decrease an individual's risk for cancer. Risk factors fall into four general categories: genetic, environmental, behavioral, and infectious/viral. The bar graph highlights behavioral risk factors that might help us understand what is driving trends in the DFW area's priority cancers. These are modifiable risk factors – behaviors that an individual can change.

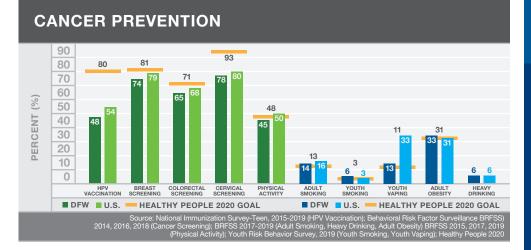
Smoking is a primary risk factor for lung cancer, and it can cause cancer in many other parts of the body, including the mouth, throat, kidney, and bladder.

Being obese or overweight, which is related to poor diet and physical inactivity, is linked to 13 cancers, particularly our priority cancers. Obesity doubles the risk for liver and kidney cancer, and it raises the chance of colon cancer by about 30%.

Heavy alcohol use amplifies the risk of six cancers, including colorectal and liver cancers.

Low human papillomavirus (HPV) vaccine uptake leaves community members vulnerable to cancers of the throat, cervix, penis, and anus.

Low breast, cervical, colorectal, and lung cancer screening rates reflect missed opportunities for finding and treating cancer in its earliest, even precancerous, stages.



Assessing protective and risk factors in the DFW area might help explain some of the consistent cancer disparities experienced in particular populations. In the DFW area, Hispanics experience a disproportionate burden for liver cancer. In addition, while rates of colorectal cancer are declining overall, new cases of colorectal cancer are increasing among those under the age of 50.

Researchers at Simmons are committed to:

Determining the underlying causes of these trends

Developing and testing interventions

Reaching out to the community to deliver effective interventions to improve the cancer-related health of our community

Healthy People is a program of health-promotion and disease-prevention goals. The U.S. Department of Health and Human Services releases these goals every 10 years and includes data to show how close we are to achieving those goals at the local, state, and national levels.



Vaping is also of increasing concern, especially among young people - 19% of DFW youth (ages 13-17) use vaping products. Vaping is not safe and could potentially have negative long-term health effects, including lung cancer. Simmons is partnering with parents and teens to dispel the myths about vaping being safer than smoking and encouraging those who wish to guit. For more information on vaping, please visit utswmed.org/-ConqueringCancer.

Cancer Screening

Cancer screening is one of the most important things people can do for their health. Detecting cancer early through screening greatly changes how treatable cancer is. Simmons works to promote screening in our communities, especially among those with limited access to screening due to lack of insurance.



HPV vaccine: Adolescents at this age should get the HPV vaccine, though they can "catch-up" on vaccination through age 26. Depending on when the first HPV vaccine dose occurs, it is a two or three dose series administered over 6 to 12 months.

Cervical cancer screening: Women ages 21-29 should get a Pap test every 3 years. Women ages 30-65 have options: a Pap test every 3 years, both a Pap test and HPV test every 5 years, or a primary HPV test every 5 years.

Mammogram: Talk to your doctor about when to begin screening for breast cancer. Some women may benefit from regular mammograms in their 40s if they have a higher risk of breast cancer, such as having an immediate family member with breast cancer. For women at average risk, begin at age 50 having regular breast cancer screening every 1-2 years.

Colorectal cancer screening: Get screened regularly. How often will depend on which test you use and your personal risk of getting colorectal cancer (family history, previous screening results). Colonoscopy is the preferred method for colorectal cancer screening because it can find cancer and remove polyps before they become cancer.

Prostate-specific antigen (PSA) test: Men ages 55-69 should talk to their doctor about the risks and benefits of prostate cancer screening. The American Cancer Society additionally recommends that men at higher risk for prostate cancer, such as those with a family history of the disease, should have this discussion earlier.

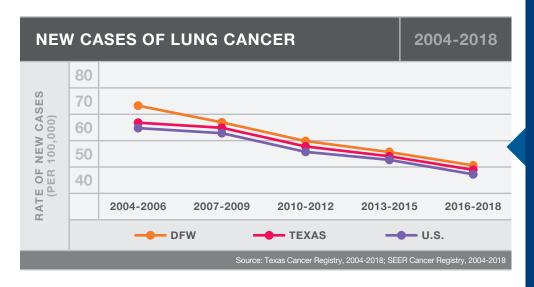
Prevention and early detection are two of the best ways we can stop cancer. In addition to encouraging HPV vaccination and nicotine cessation, Simmons conducts outreach in North Texas communities to encourage regular cancer screenings.

The United States Preventive Services Task Force (USPSTF) is an independent, volunteer group of national experts in prevention and evidence-based medicine. They work to improve the health of all people in the U.S. by making evidence-based recommendations about clinical preventive services such as cancer screenings.

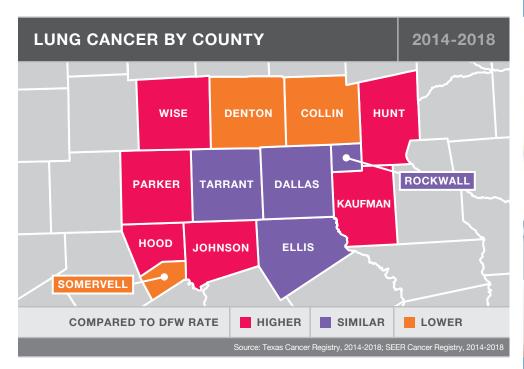


Lung Cancer

Lung cancer is the 3rd most common cancer, and the leading cause of cancer death in the United States. **The rate of new cases and deaths from lung cancer has been decreasing since 2004**, which is attributed to the decreasing rate of smoking. This trend is the same for DFW, Texas, and the U.S., with similar rates of new cases for all three.



Lung cancer is a priority for Simmons, because it is one of the most common cancer types and has the highest death rate. Moreover, nearly half of the counties in the DFW area show higher rates of new lung cancer cases (Kaufman, Wise, Hunt, Parker, Johnson, and Hood Counties) compared to the U.S., Texas, and overall DFW area.



UT Southwestern Harold C. Simmons Comprehensive Cancer Center

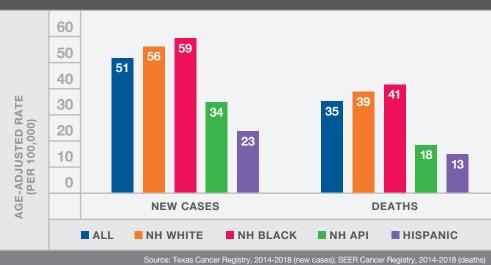
In 2016-2018, the ageadjusted new case rate for lung and bronchus cancer was 51.2 per 100,000 people. That means that for every 100,000 people in DFW, about 51 people were diagnosed with lung cancer per year in 2016-2018.



UTSW offers a nicotine cessation program to help anyone quit smoking, vaping, chewing, or using any other nicotine products. The program includes individual counseling both on the phone and in person, support groups, and access to prescriptions for medications to help quit.

Lung Cancer Disparities

Lung cancer is most frequently diagnosed among people ages 65–74. Five-year survival is 23%, regardless of stage at diagnosis (early stage/local or late stage/spread to other parts of the body). Lung cancer is more common in men than women, and men also are more likely than women to die from lung cancer. Racial differences are seen in both new case and death rates, with non-Hispanic Blacks (NH Blacks) more frequently impacted by this cancer.



LUNG CANCER: RACIAL/ETHNIC DISPARITIES

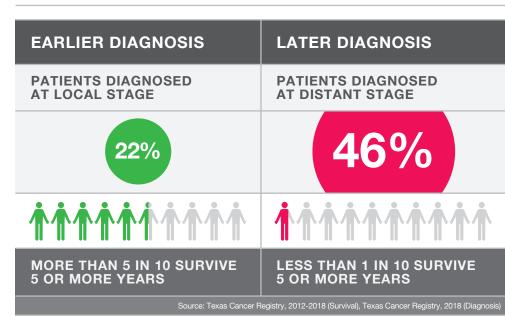
Risk Factors

Tobacco use is the leading risk factor for developing lung cancer and is linked to nearly 90% of all lung cancers. People who quit smoking have a lower risk of lung cancer than if they had continued to smoke. **Quitting smoking at any age can lower the risk of lung cancer.** This is why stopping smoking and use of other tobacco products is so important for lowering a person's risk of developing lung cancer. Although smoking rates has been decreasing in DFW and the U.S., the use of other tobacco products have been increasing, especially e-cigarettes (vaping).



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Early Detection Saves Lives



Though outcomes for lung cancer are much better when diagnosed at an earlier stage, nearly half of all lung cancers are diagnosed after the cancer has spread to other organs or lymph nodes (distant stage). When diagnosed at the distant stage, 5-year survival is only 8%. Unfortunately, lung cancer is often diagnosed in the late stages of the disease, partly because there are few or no symptoms in the early stages. This is why risk reduction (stopping smoking and use of other nicotine products) and routine screening with low dose CT scans are so important.

Lung Cancer Research Highlights

The University of Texas Special Program of Research Excellence (SPORE) in Lung Cancer is a unique collaboration between UT Southwestern Medical Center and the University of Texas MD Anderson Cancer Center (MDACC). The goal of the SPORE is to develop new treatments based on understanding lung cancers in individual patients and use this information to select (or "personalize") each patient's therapy.

Recently, UT scientists discovered that overweight lung cancer patients receiving immunotherapy treatments live more than twice as long as lighter patients, but only when dosing is based on the patient's weight.

These findings, published in the *Journal for ImmunoTherapy of Cancer*, run counter to current practice, where patients receive the same dose regardless of weight. With weight-based dosing, overweight patients lived an average of more than 20 months compared with fewer than 10 months for lighter patients. With set dosing, both groups had similar outcomes, living an average of 16 months.

If cancer cells have penetrated beyond the original layer of tissue, the cancer has become invasive and is categorized as local, regional, or distant, based on how far the disease has spread. Localized disease is confined to the organ it started in. Regional disease has extended into the surrounding organs and/or close-by lymph nodes. Distant disease has spread further in the body, beyond the neighboring organs and/or lymph nodes.

"Even when we accounted for differences in tumor and treatment types, overweight patients lived twice as long as smaller patients if they received weight-based dosing. However, there was no difference if they received fixed-dose immunotherapy,"

David Gerber, M.D.

Professor of Internal Medicine, UT Southwestern Division of Hematology and Oncology



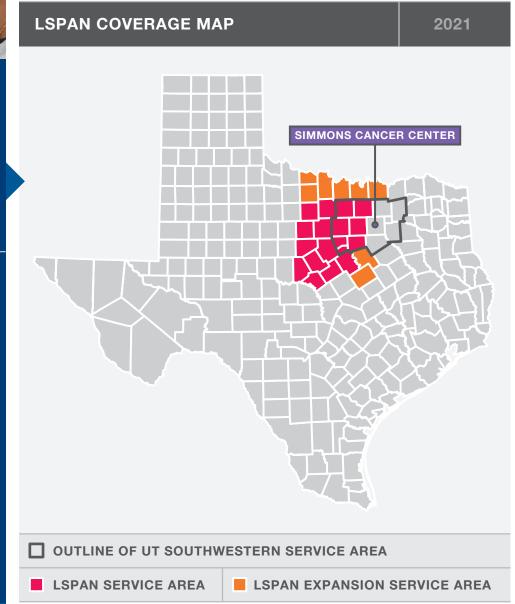
LSPAN is currently expanding services to 8 more counties in North Texas.

A low-dose CT scan involves lying flat on a table while a scanner rotates around and gathers images of the inside of the lungs. The CT images provide radiologists with detailed information that can be used to detect and diagnose lung cancer or determine if someone is cancer free. The entire screening exam takes less than 10 seconds.

Lung Cancer Outreach

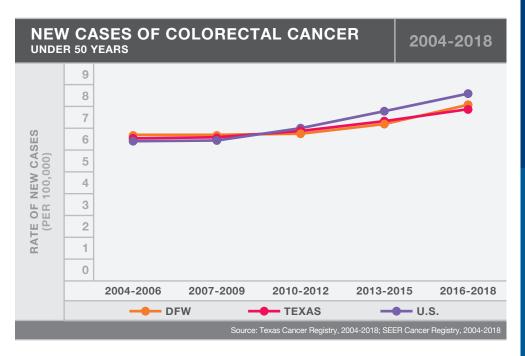
LSPAN (Lung Cancer Screening and Patient Navigation) is a lung cancer screening program that is supported by the Cancer Prevention and Research Institute of Texas. Simmons offers a low-dose computed tomography (LDCT) lung cancer screening to look for cancer in people at highest risk for developing lung cancer. Nurse navigators help guide patients through each step in the LDCT screening process. Navigators also help address barriers to screening and connect with telephone counselors to help quit smoking.

In 2019, more than 345 low-dose CT scans were delivered in 18 North Texas counties. Eight cancers were detected - 38% at the localized stage. In addition, 10% of participants successfully quit smoking with telephone counseling support.



Colorectal Cancer

Colorectal cancer (CRC) is the 4th most common cancer and the 2nd leading cause of cancer death in the United States. While the rates of new cases and deaths have been decreasing overall, a rapid increase of new cases among younger adults (before age 50) has been a cause of major concern. At Simmons, our priority is to research why CRC is developing at younger ages, raise awareness that guidelines now recommend screening start at age 45, make screening easy to access regardless of insurance status, and test new treatments.



NEW CASES OF COLORECTAL CANCER 2004-2018 **50 YEARS AND UP** 180 160 140 ----RATE OF NEW CASES (PER 100,000) 120 100 80 60 40 20 0 2016-2018 2007-2009 2010-2012 2013-2015 2004-2006 ----- DFW

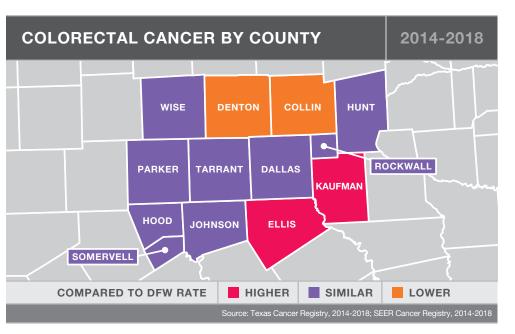
UT Southwestern Harold C. Simmons Comprehensive Cancer Center

Because rates of CRC are higher among older people, these rates are adjusted to account for the age of the patient.



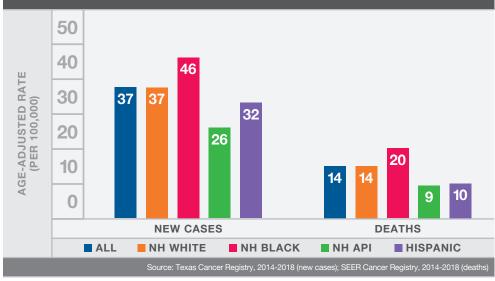
Colorectal Cancer By County

In the DFW area, Kaufman and Ellis counties show significantly higher rates, while Denton and Collin counties show lower rates compared to overall DFW.



Colorectal Cancer Disparities

CRC is most frequently diagnosed among people ages 65-74. It is more common in men than women. Ensuring access to screening and treatment is especially important for non-Hispanic Blacks because the burden of new cases and deaths is much higher compared to other race and ethnic groups (Whites, Asians, and Hispanics).



COLORECTAL CANCER: RACIAL/ETHNIC DISPARITIES

Colorectal Cancer Survival

The overall 5-year survival for CRC is 65%. Five-year survival for localized disease is higher (90%), which shows that early detection is crucial for survival in CRC patients. However, only 32% of CRC patients in the DFW area were diagnosed at the localized stage in 2018.

Five-year survival is significantly lower for non-Hispanic Blacks (60%), and a quarter (25%) of non-Hispanic Black patients are diagnosed with distant-stage disease – more than other race/ethnicities.

EARLIER DIAGNOSIS	LATER DIAGNOSIS
PATIENTS DIAGNOSED AT LOCAL STAGE	PATIENTS DIAGNOSED AT DISTANT STAGE
32%	21%
<u> *****</u> ****	*************
MORE THAN 9 IN 10 SURVIVE 5 OR MORE YEARS	LESS THAN 1 IN 5 SURVIVE 5 OR MORE YEARS
5 OR MORE YEARS	

UT Southwestern Harold C. Simmons Comprehensive Cancer Center

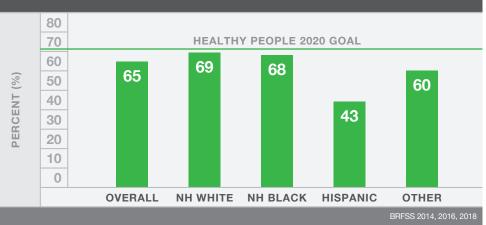


Colorectal Cancer Screening

The UTSW/Moncrief C-SPAN (Colorectal Screening and Patient Navigation) program mails CRC screening kits to eligible patients. Navigators guide participants through the screening process. Now that guidelines recommend screening start at age 45, C-SPAN has expanded services to encourage screening among younger patients (ages 45-49). To learn more, please visit: moncrief.com/colorectalcancer-screening

This study shows that events in the mother's womb may contribute to the increasing rate of CRC in young adults almost 50 years after birth. In May 2021, medical organizations recommended that CRC screening begin earlier at age 45 (previously it was age 50) and continue at regular intervals until age 75.

Simmons has developed outreach programs to raise awareness about CRC screening (especially for 45- to 49-year olds, who might not know about the new guidelines) and increase access and help cover the cost for uninsured adults. Hispanics have the lowest screening rates, so our outreach program has Spanish-speaking navigators to help connect adults to screening and diagnostic services.



COLORECTAL CANCER SCREENING IN DFW

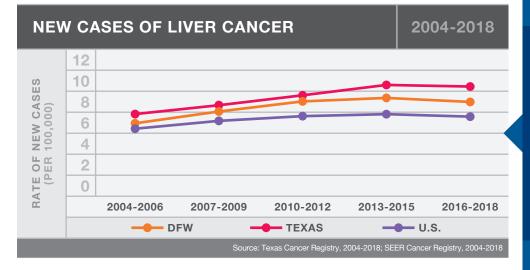
Colorectal Cancer Research Highlights

Obesity in mothers during pregnancy increased the risk for CRC in their children later on in life. As CRC has been increasing among younger adults (younger than age 50 years), UTSW researchers examined if early childhood factors affected a person's risk of colorectal cancer. They measured the mother's obesity (body mass index, or BMI), the total amount of weight gained during pregnancy, the number of pounds gained per week during pregnancy, and the baby's birth weight. Then they followed the babies through adulthood until a CRC diagnosis, death, or contact was lost.

Dr. Murphy and colleagues found that the mother's obesity almost **doubled** the risk of CRC in their children; nearly half of the children were diagnosed with CRC before the age of 50. Additionally, if the mother's weight gain was higher during early pregnancy but lower during later pregnancy, then the offspring had an increased risk of CRC. Results also showed it is possible that there is a higher risk for CRC among babies that have a higher birth weight, but more research is needed to confirm this.

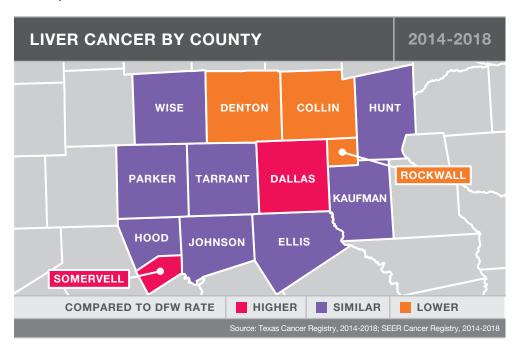
Liver Cancer

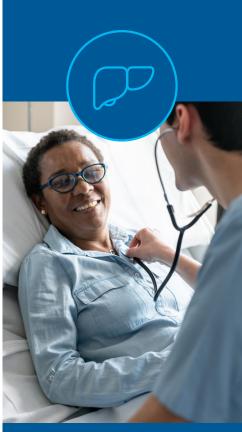
Liver cancer is the 13th most common cancer and the 6th leading cause of cancer death in the United States. However, **in Texas the numbers of new cases and deaths are rising every year**, while for most other cancers the numbers are decreasing. **Further, there are significant disparities in who experiences negative outcomes from liver cancer.** Hispanics, non-Hispanic Blacks, and Asian/Pacific Islanders are more likely to be diagnosed and die from liver cancer, and Simmons is conducting research to understand why.



The most common type of liver cancer is hepatocellular cancer (HCC). In this report, when we refer to liver cancer, we mean HCC.

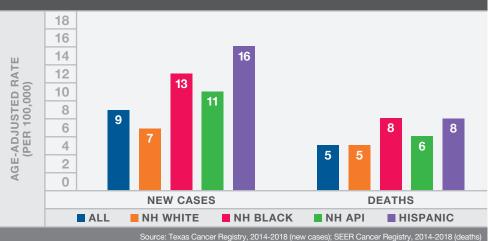
Liver cancer is a priority for Simmons, as **Texas has the highest rate of liver cancer in the United States.** Within the DFW area, Dallas County has the highest rate of new liver cancer cases, higher than the DFW area overall and Texas. Of the remaining counties, only Denton, Rockwall, and Somervell show lower rates than DFW overall.





Liver Cancer Disparities

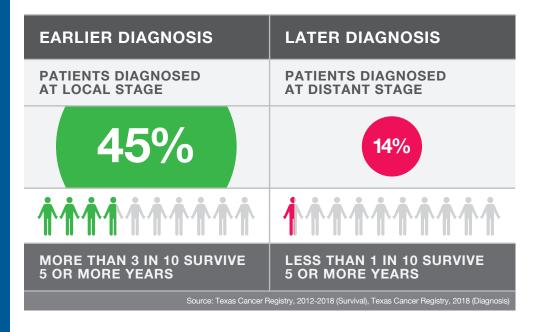
Liver cancer is most frequently diagnosed among people ages 55-64. It is more common in men than women. Racial disparities exist in both new case and death rates, with Hispanics, non-Hispanic Blacks, and Asian/Pacific Islanders bearing a disproportionate burden of this cancer.

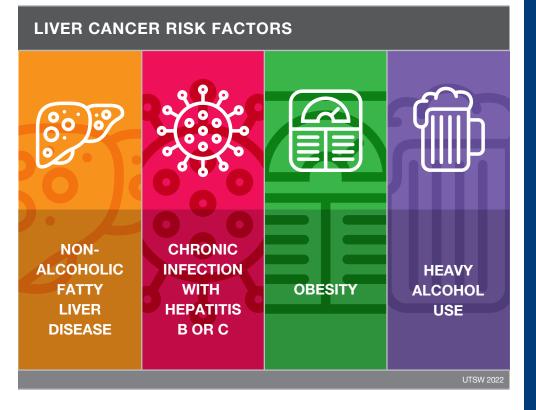


LIVER CANCER: RACIAL/ETHNIC DISPARITIES

Liver Cancer Survival

The overall 5-year survival is 24%. However, if liver cancer is diagnosed early, then 5-year survival is higher (37%), compared to only 6% when diagnosed at a distant stage. Less than half (45%) of people are diagnosed at a local stage, partly because there are few or no symptoms in the early stages.





Most liver cancers are due to infection by the hepatitis C virus. There is an effective treatment available for hepatitis C (more than 90% of patients are cured). However, many people who have hepatitis C are not aware they have it. Hepatitis C treatment is expensive and Simmons has built an outreach program to ensure access for the under- and uninsured.

Liver Cancer Research

Researchers at Simmons have developed a way to identify patients at high-risk for liver cancer, allowing health care providers to determine which patients need regular screening for the disease. Regular screening will allow providers to detect any HCC in early stages, which ensures better survival for our patients.

National liver cancer screening guidelines suggest patients with cirrhosis (scarring of the liver) should be screened every 6 months with a blood test for high levels of alpha-fetoprotein (AFP) and an abdominal ultrasound. However, current screening rates are low, and very few patients are diagnosed at a local stage.

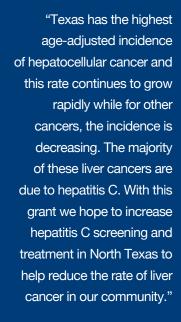
Researchers at UTSW are studying how we can optimize liver cancer screening. They identified a prognostic liver signature (PLS) to accurately identify patients at high risk for liver cancer, but it involved a liver biopsy, which was invasive and had limited use. To overcome this problem, UTSW researchers recently developed a new blood test called the prognostic liver secretome signature (PLSec). The PLSec has been validated in several patient populations to predict long-term liver cancer risk. Adding PLSec testing to current screening tests can increase the chances of early detection of liver cancer and improve cancer outcomes for our patients.



Liver Cancer Outreach

Through the STOP-HCC (Screen Treat or Prevent HCC) program, UTSW conducts hepatitis C screening with the goal of reducing liver cancer.

STOP-HCC partners with safety-net health systems and clinics in underserved communities to identify and treat people with hepatitis C. STOP-HCC also uses a mobile van to screen residents in rural North Texas counties for hepatitis C. Patient navigators help connect people who have hepatitis C to treatment and follow-up care, including financial resources for uninsured patients. Recently, STOP-HCC expanded their services to include vaccination for hepatitis B.



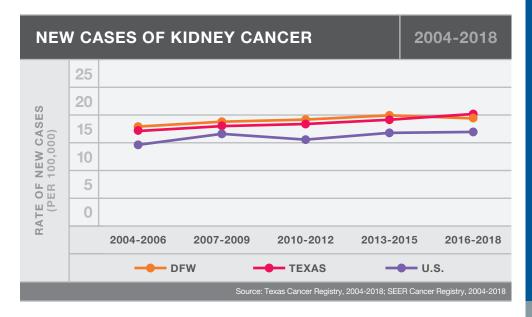
Mamta Jain, M.D. Professor of Internal Medicine, UT Southwestern Division of Infectious Diseases



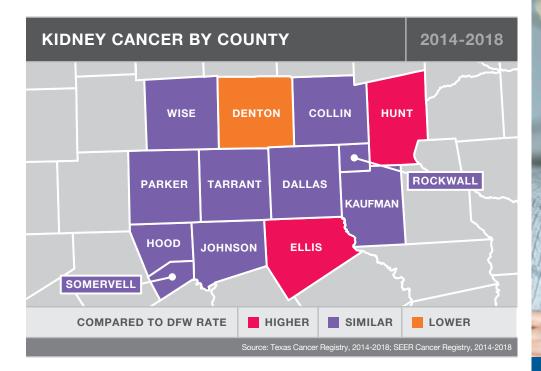
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Kidney Cancer

Kidney cancer is the 8th most common cancer and the 12th leading cause of cancer death in the United States. **Kidney cancer has been slowly increasing, especially among Hispanic populations.** In addition, kidney cancer is more common in DFW and Texas, compared to the United States. Simmons prioritizes research to determine why this cancer is more prevalent in DFW and among Hispanics.



Compared to the overall DFW rate, Ellis and Hunt counties have higher rates, while Denton County has significantly lower rates of new kidney cancer cases.



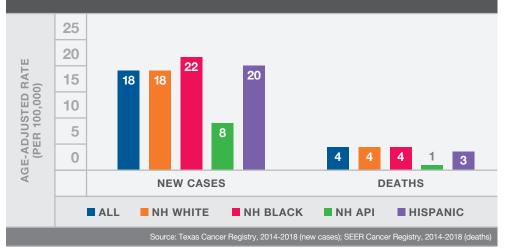
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Kidney Cancer Disparities

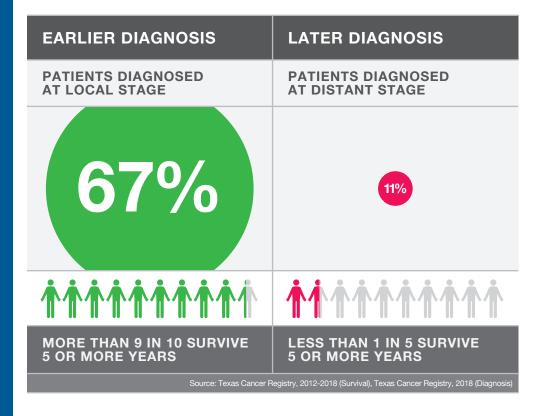
Kidney cancer is more common among Hispanics and non-Hispanic Black populations, with similar disparities seen in kidney cancer deaths.

KIDNEY CANCER: RACIAL/ETHNIC DISPARITIES



Kidney Cancer Survival

The overall 5-year survival for kidney cancer is 80%. Five-year survival when diagnosed with localized disease is 93%, and most patients (67%) are diagnosed in this stage.



Kidney Cancer Research

Kidney SPORE

There are no screening tests for detecting kidney cancer early. That is why Simmons' researchers currently focus on understanding how kidney cancer develops and improving treatment. This research is funded by an \$11 million Specialized Program of Research Excellence (SPORE) grant, awarded by the National Cancer Institute in 2016. The National Institutes of Health, CPRIT, the American Chemical Society, and the Howard Hughes Medical Institute have also invested in Simmons' Kidney Cancer Program.

Simmons Cancer Center is the only academic institution to develop a new drug (belzutifan) for kidney cancer treatment, going from gene discovery to clinical trials, to recent approval by the FDA. Previously, all FDA-approved drugs for kidney cancer had been developed by the pharmaceutical industry.

In the 1990s, UTSW scientists discovered HIF-2a, a protein key to fueling the growth of kidney and other cancers. The UTSW Kidney Cancer Program successfully led the clinical trials to demonstrate that the drug that inhibits the HIF-2a protein was effective against kidney cancer.

"The approval of belzutifan represents a new paradigm in the treatment of kidney cancer. By exclusively targeting HIF-2α, which is essential for kidney cancers but dispensable for normal processes, belzutifan specifically disables cancer cells while sparing normal cells. Belzutifan is the best-tolerated kidney cancer drug today and one suitable for patients with familial kidney cancer. It is a testament to the prowess of designer drugs and carefully chosen targets of which it is a prime example."

James Brugarolas, M.D., Ph.D Director of the UT Southwestern Kidney Cancer Program





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Breast Cancer

Breast cancer is the most common cancer, and the 3rd leading cause of cancer death in the United States. The rate of new cases is much higher in the DFW area compared to Texas overall. While the rate of new cases is decreasing for most cancers, the rate of new cases of breast cancer has not changed and remains consistently high.

NEW BREAST CANCER CASES				
	DFW	TEXAS		
2010-2012	66/100,000	61/100,000		
2013-2015	66/100,000	61/100,000		
2016-2018	67/100,000	61/100,000		
		Source: Texas Cancer Registry, 2010-2018		

Breast cancer is most frequently diagnosed among people ages 65–74. Both new case and death rates show disparities by race, with non-Hispanic Blacks bearing a higher burden of this cancer. There are several reasons for this, one key factor being when a person is diagnosed.

BREAST CANCER DIAGNOSIS & SURVIVAL RATES

LOCAL STAGE DIAGNOSIS	DISTANT STAGE DIAGNOSIS	FIVE YEAR SURVIVAL
63%	5%	91%
66%	4%	94%
53%	8%	82%
57%	6%	88%
ALL NH	WHITE NH BLACK	HISPANIC

Only 53% of breast cancers for non-Hispanic Blacks and 57% for Hispanics are detected at the local stage, compared to 66% for non-Hispanic Whites. Late-stage diagnoses are two times higher among non-Hispanic Blacks compared to non-Hispanic Whites (8% vs. 4%).

This is one reason why 5-year survival is significantly lower for non-Hispanic Blacks (82%) and Hispanics (88%), compared to non-Hispanic Whites (94%).

DISTANT-STAGE DIAGNOSES ARE

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2 HIGHER FOR NON-HISPANIC **BLACKS** COMPARED TO

NON-HISPANIC

Breast Cancer Screening

Regular breast cancer screening can help find breast cancer at an early stage, when treatment is most successful. Screening for breast cancer is done with mammograms – low-dose X-rays of the breast.

However, screening rates are lower in the DFW area compared to Texas and the U.S. Hispanics have the lowest number screened in the past 2 years (68%). While more non-Hispanic Blacks have had a recent mammogram (80%), the cancers are detected at a later stage, suggesting a pattern of under-screening. These data highlight the importance of reaching out to our communities to encourage **regular** cancer screening – having a mammogram every 1-2 years.

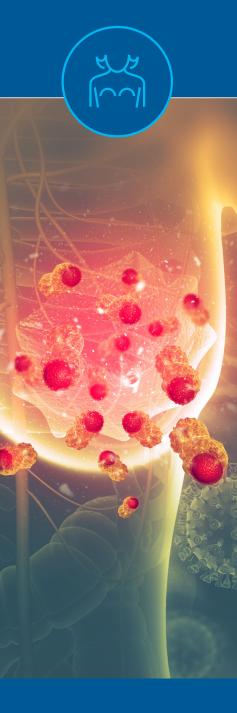
BPSAN Program

The **Breast Screening and Patient Navigation (BSPAN)** program works with community providers and other local organizations to increase access to mammograms and diagnostic services for under- and uninsured women. We also offer a mobile mammography unit that brings mammograms to workplaces, churches, community outreach events, and other locations.

To learn more, please visit moncrief.com/content/mobile-outreach.



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HPV-Related Cancers

Human papillomavirus (HPV) is the most common sexually transmitted infection (STI) in the United States. The CDC estimates that approximately 85% of people in the U.S. will get an HPV infection in their lifetime. Most of these infections go away on their own, but those that don't can cause cancer.

Two of the most common HPV-related cancers are cervical cancer and oral cavity and throat cancer, for which 12,143 and 19,775 new cases, respectively, are diagnosed every year in the U.S. HPV infections are responsible for nearly all cervical cancers and are driving the increase in oral cavity and throat cancers. HPV also causes cancers of the penis, vulva, vagina, and anus.

Pap and HPV tests can screen for and detect cervical cancer early. There is no screening test for oral cavity and throat and other HPV-related cancers. That is why the best way to prevent all HPV-related cancers is to get the HPV vaccine, which prevents HPV infection.

Cervical Cancer

Cervical cancer is rare compared to other cancers in the United States. Only 302 cases of cervical cancer were diagnosed in the DFW area in 2018. However, while most cancers are showing decreases in the rate of new cases, **cervical cancer rates have not changed.**

Overall, the rate of new cervical cancer cases in Texas, especially the DFW area, is higher than the U.S. Simmons conducts outreach throughout the DFW area to encourage cervical cancer prevention and screening.

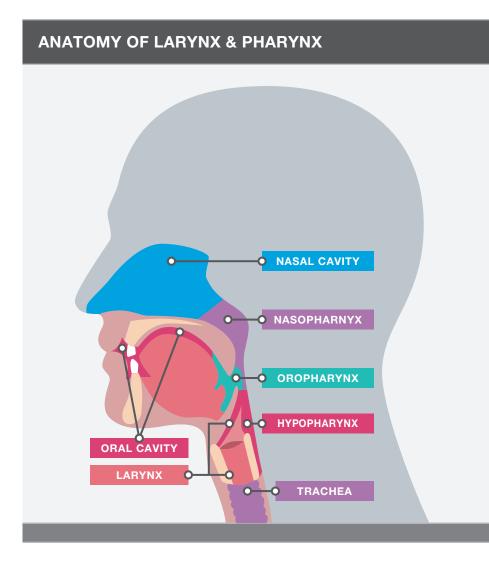
Cervical cancer is most frequently diagnosed among women ages 35-44, which is younger compared to other cancers. New case and death rates are higher among non-Hispanic Blacks and Hispanics, highlighting the need for focused prevention efforts for these groups.

Early detection and prevention are two of the best ways we can stop cervical cancer. In addition to encouraging HPV vaccination, UTSW conducts outreach in North Texas communities to encourage regular cervical cancer screening through E-XSPAN (Regional Expansion of Cervical Cancer Screening and Patient Navigation).

For more information on cervical cancer screening, please visit moncrief.com/content/mobile-outreach.

Oral Cavity and Throat Cancer

Oral cavity and throat cancer is also not as common as other cancers; 257 cases were diagnosed in DFW in 2018. However, the rate of new cases of this cancer has been increasing rapidly, and DFW has higher rates of this cancer than Texas and the U.S.



Unlike other cancers highlighted in this profile, non-Hispanic Whites have the highest rates of oral cavity and throat cancer cases and deaths. Although non-Hispanic Blacks have lower rates of new cases, they have similar death rates to non-Hispanic Whites. There are gender disparities as well; both new case and death rates are three times higher among men compared to women.



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UTSW is working to prevent cancer by encouraging HPV vaccination. Looking Forward is an app that helps parents consider all relevant information, identify topics to discuss with their child's health care providers, and even find places to get the vaccine if they decide to do so. It also allows parents to voice their specific concerns and ask questions. This app is available in both English and Spanish. For more information, visit utswmed.org/ cancer/community-outreach/ join-a-conversation/beatingnicotine-together/ get-vaccinated.

Oral Cavity and Throat Cancer Continued

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ORAL CAVITY AND THROAT CANCER: GENDER DISPARITIES

Cancer Prevention: HPV Vaccination

A safe and effective vaccine is available to protect against HPV-related cancers. The Advisory Committee on Immunization Practices recommends all adolescents start the HPV vaccine series at ages 11-12, although they can "catch-up" on vaccination through age 26. Depending on when the first dose of the vaccine occurs, the HPV vaccination is a two- or three-dose series administered over 6 to 12 months.

Adolescent HPV vaccination has been increasing over the past decade. In Texas, HPV vaccination increased by about 5% from 2018 to 2019. Although HPV vaccine coverage in Texas is slightly lower than the U.S., this gap in vaccine coverage has been decreasing in recent years. In 2016, Texas ranked 47th out of 50 states for up-to-date HPV vaccination. In 2019, Texas ranked 41st, with 48% of adolescents (ages 13-17) being up-to-date on HPV vaccination.

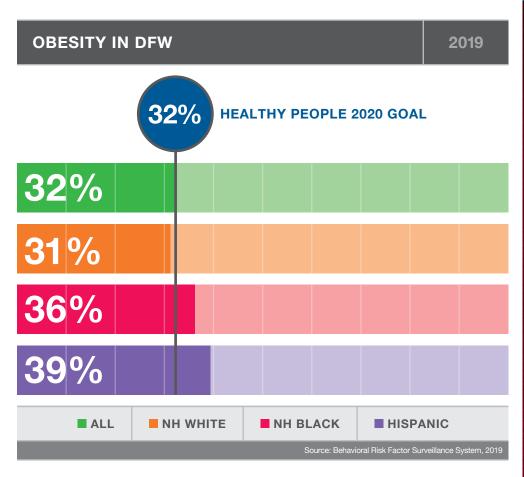
Special Highlights

Addressing Obesity and Cancer

The National Cancer Institute (NCI) defines obesity as an unhealthy amount of body fat or an unhealthy distribution of fat across certain parts of the body. Scientists have now linked obesity to 13 types of cancer, including liver, kidney, and colon cancers, which are key concerns in DFW. According to the NCI, obesity doubles the risk for liver and kidney cancer, and it raises the risk of colon cancer by about 30%.

However, obesity is modifiable – individuals can get (or stay) active, eat a healthy diet, and get plenty of rest to reduce their weight.

Through its Office of Community Outreach, Engagement, and Equity, Simmons promotes education about the cancer risks related to obesity and the benefits of diet and exercise in achieving and maintaining a healthy weight.



Community members looking for compassionate care for obesity can find help through UT Southwestern's Weight Wellness Program. The program offers the latest treatments in weight management and empowers patients with the skills needed to take ownership of their wellness journey. For more information, please visit utswmed.org/locations/wcb3/im-subspecialties-clinic-weight-wellness.

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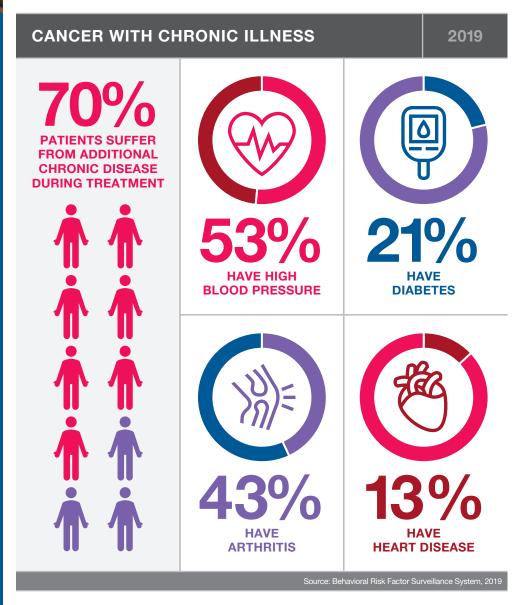


Cancer Survivorship

Advances in early detection and treatment of cancer have led to a decline in cancer death rates in the U.S. More people are able to live longer after a cancer diagnosis, and, as a result, scientists are devoting more attention to improving the physical and mental quality of life for cancer survivors, both during and beyond treatment.

Caring for Cancer Survivors with Chronic Illness

Nearly 70% of cancer patients – particularly older ones – face the daunting task of navigating cancer treatment while, at the same time, dealing with one or more ongoing illnesses, such as diabetes, high blood pressure, arthritis, or heart disease. These patients rely on their oncologists and primary care providers to work together on a plan that ensures optimal health and quality of life. Simmons researchers are studying how to optimize care coordination for these cancer survivors with other chronic illnesses.



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Mental Health and Survivorship

Almost all cancer patients feel distressed after hearing a diagnosis. The challenge of coping with health- and family-related needs during treatment can lead to feelings of sadness, grief, and despair. Most cancer patients deal with these emotions by relying on support from friends and family, faith affiliations, or cancer support groups. At Simmons, we ensure that behavioral health treatment is available – at any point during the cancer journey – for patients who feel sadness that doesn't go away, even with support from loved ones. Providers at Simmons promote regular screening for symptoms of depression and anxiety so patients can be referred for treatment and counseling.

With improved screening and referral processes in place, Simmons increased depression screening and follow-up rates from 59% to 91% within a year. Providers are able to connect a greater number of at-risk patients to psychological support before depression symptoms become unmanageable.

Fertility Preservation After a Cancer Diagnosis

Although today's cancer treatments are less toxic than they used to be, chemotherapy, radiation, and surgery can still harm a patient's fertility.

Cancer patients of reproductive age, or parents of very young cancer patients, rely on their oncologists to discuss infertility as a treatment side effect and to present options for preserving fertility. Yet many cancer patients do not recall having a conversation with their doctor about fertility preservation.

In 2016, Simmons-Fort Worth launched an oncofertility program to ensure that fertility discussions begin at the time of cancer diagnosis.

Oncofertility connects cancer and reproductive health. Oncologists and fertility doctors work together to address reproductive health needs of cancer patients.

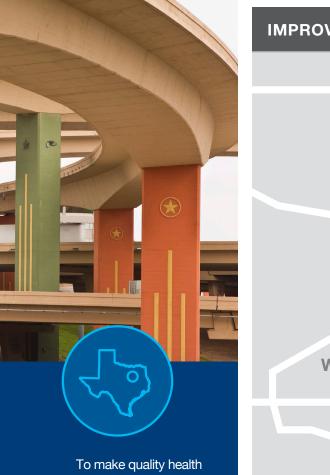
Simmons providers help patients think through the complex issues associated with banking sperm or freezing eggs and embryos before starting cancer treatment.

For adolescent patients at Children's Medical Center, pediatric oncologists and their care teams discuss fertility preservation as soon as a child or adolescent is diagnosed with cancer.

Adolescent and young adult (AYA) cancer patients, ages 15 to 39, face unique challenges while dealing with cancer. Simmons doctors implemented a 6-week cognitive behavioral therapy group structure to help young cancer patients establish peer connections, share their personal experiences, and learntechniques to address AYA concerns.



Redbird Initiative



care more accessible and convenient to patients living throughout our 13-county service area, UT Southwestern has been steadily expanding its footprint by opening new regional locations in Dallas, its northern suburbs, the "mid-cities" area to the west, and Fort Worth. Each of these new facilities houses primary and multispecialty care clinics supported by the latest technology, research, and quality patient care that UT Southwestern is known for.

IMPROVING ACCESS TO CANCER CARE IN DFW



In late 2022, UT Southwestern Medical Center at RedBird will bring these same services to a medically underserved urban community in southern Dallas County, which is home to five zip codes with the lowest life expectancies in the region.

Cancer care at RedBird will include breast cancer screening with mammography, treatments for a variety of cancers, and access to cutting-edge clinical trials. Advanced imaging, including MRIs and CT scans, will also be on-site. Our goal is to become not only a trusted RedBird health care provider but also an active member of the RedBird community.

Next Steps

This Community Cancer Profile represents Simmons' first step toward keeping Dallas-Fort Worth informed about how cancer is impacting our community and what we can do, collectively, to lower our risks. In future reports, we hope to share data that reflect progress in reducing local cancer incidence and mortality – especially as we make new discoveries and promote behaviors that lead to better health.

In the coming year, we'll continue our efforts to give all community members a fair opportunity to achieve optimal health. We look forward to:

Bringing specialized cancer care to a medically underserved area in southern Dallas County

Encouraging inclusion of under-represented minorities in clinical trials so treatments can be evaluated for our diverse population

Incorporating community input in the cancer research process so that studies are culturally appropriate, and results are relevant to those we serve

Initiating cancer research that addresses the unique concerns voiced by community members who recently participated in town halls and virtual group discussions

Improving health literacy by enabling individuals to find, understand, and successfully use cancer-related information and services

Advocating for better broadband access so that telehealth is available to those who may not be able to attend an office visit in person

We invite you to partner with Simmons as we work to ease cancer's burden on the Dallas-Fort Worth community. To learn more about partnership opportunities, contact the Office of Community Outreach, Engagement, and Equity at OfficeofCOEE@utsouth-western.edu or 833-722-6237.

To stay up to date with programs and resources offered at Simmons Comprehensive Cancer Center, please visit our website at utswmed.org/cancer.

833.722.6237 OfficeofCOEE@UTSouthwestern.edu We would like to thank our Community Advisory Board and our Patient and Family Advisory Council for their input on the development of this report. We would also like to thank the many community members who participated in town halls and group discussions to share their cancer concerns.







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Harold C. Simmons Comprehensive Cancer Center



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