

Information
about Cancer
Rates in Deer
Park 77536

From Texas Cancer Registry Website
From Centers for Disease Control and
American Cancer Society Websites
Summaries of Prior Texas Health
Department Studies of 77536

Compiled by DPCAC Facilitator Diane Sheridan
for 11-29-21 Meeting

Tonight's Main Topic

Facilitator Diane Sheridan will summarize info currently on the state health department's Texas Cancer Registry website and also summarize TCR's analyses of ZIP Code 77536 in 1995, 2000, 2004, and 2008.

Members will decide if they want to request a new cancer cluster study by TCR.

Cancer is Common and Complicated

1 in 3 people will be diagnosed with cancer in their lifetime.

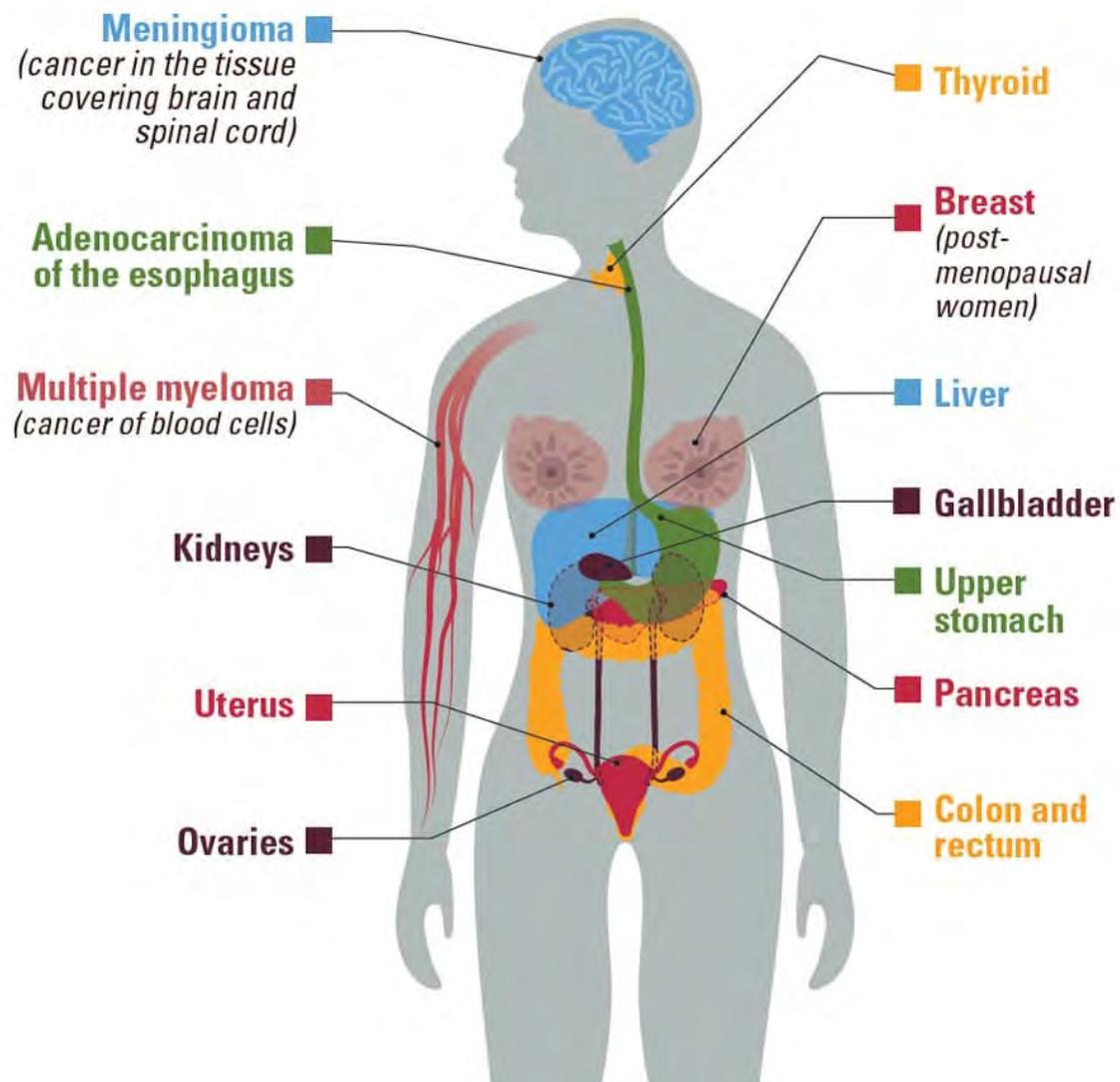
In 2021, an estimated 131,610 new cancer cases are expected to be diagnosed in Texas.

Breast, lung & bronchus, prostate, and colon & rectum make up about 47% of all cancer diagnoses

Scott Malm's 10-25-21 presentation to DPCAC discussed how researchers seek causes of cancer and the many factors that must be considered.

One example in this CDC chart

13 cancers are associated with overweight and obesity



Texas Cancer Registry (TCR)

- “Cancer data have been provided by the Texas Cancer Registry, Cancer Epidemiology Health and Surveillance Branch, Texas Department of State Health Services, 1100 West 49th Street, Austin, TX 78756 (www.dshs.texas.gov/tcr).”
- Statewide population-based registry that collects and maintains information on new cancer cases diagnosed and treated in Texas
- Receives state and federal funding. Meets standards for high quality.
- One of 12 state registries funded by both National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) Program (joined in 2021) and Centers for Disease Control and Prevention’s National Program of Cancer Registries.

Where TCR Obtains Data

- By law, health care team professionals are required to report information about all cancers diagnosed and treated in Texas
- In 2019, TCR received 240,900 reports of cancer from 550 hospitals, cancer treatment centers, ambulatory surgical centers, and pathology labs across the state. Also rules for physicians to report.
 - 11,621 were for out-of-state residents and were distributed to their state cancer registries

Sources of National Information

- Centers for Disease Control and Prevention's U.S. Cancer Statistics (USCS), the official federal cancer statistics.
- American Cancer Society, a nonprofit whose mission is eliminating cancer as a major health problem
- Links to these and others found on TCR website and in TCR's *Cancer in Texas 2021*.

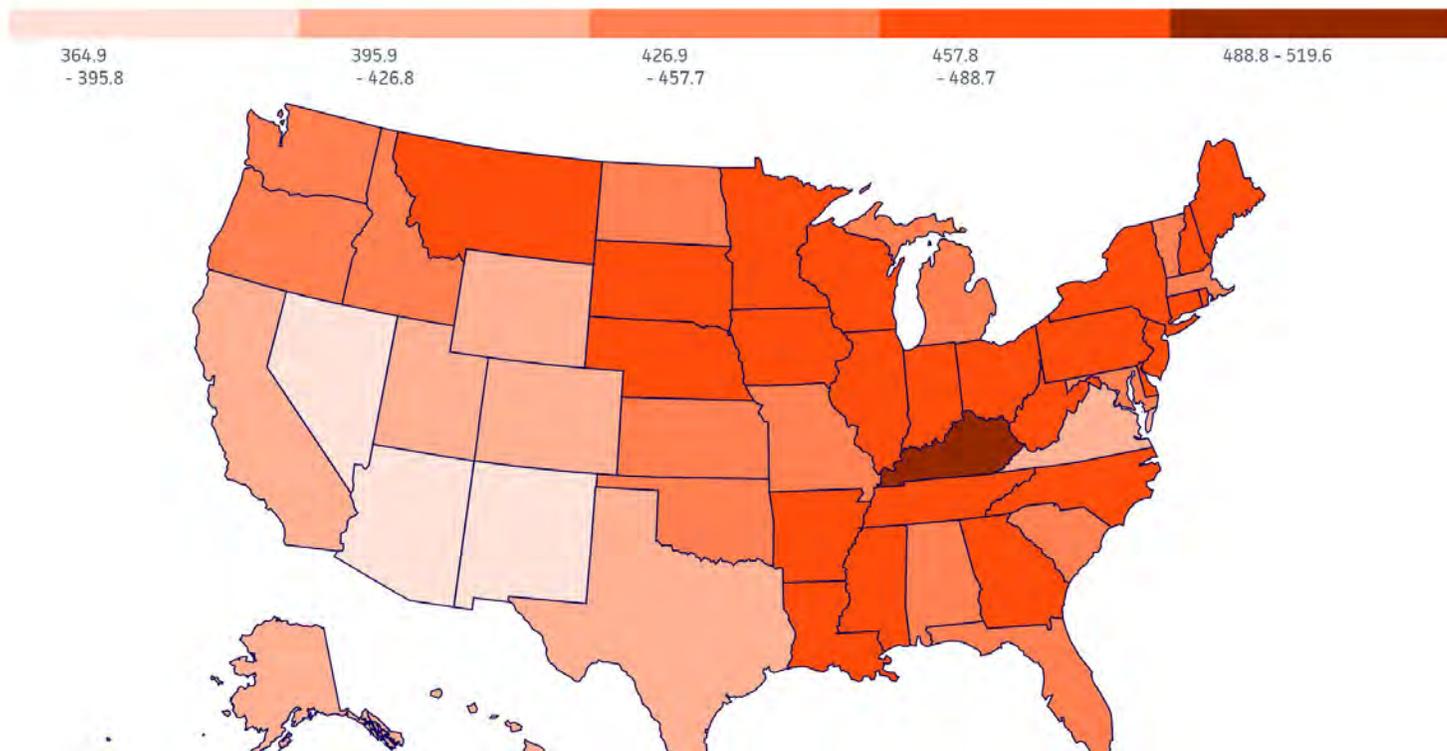
Terminology

- Cancer – “the name given to a collection of more than 100 related diseases. In all types of cancer, some of the body’s cells begin to divide without stopping and spread into surrounding tissues.” (*Texas Cancer Registry, Texas Department of State Health Resources*)
- Incidence – number of newly diagnosed **cases** during a specific time period
- Mortality – number of **deaths** during a specific time period
- Site – location of the cancer **within the body**. Primary site is where the cancer first develops.
- Metastasize -- To spread from one part of the body to another. When cancer cells metastasize and form secondary tumors, the cells in the metastatic tumor are like those in the original (primary) tumor.
- Incident rate and mortality rate – number of cases or deaths per 100,000 people
- Age-Adjusted Rate – weighted average for rates for at various ages

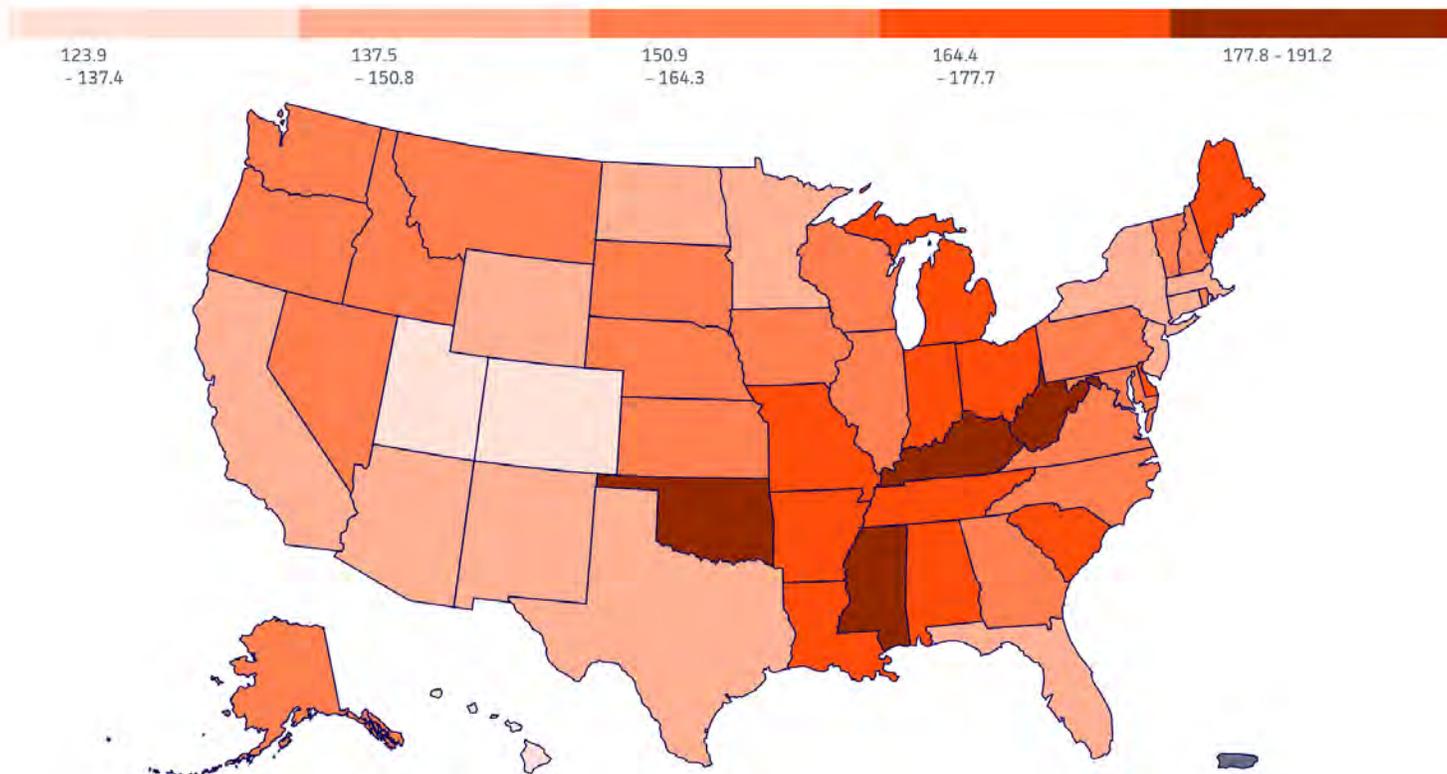
Texas vs Other States

Cancer Incidence 2013-2017 (ACS)

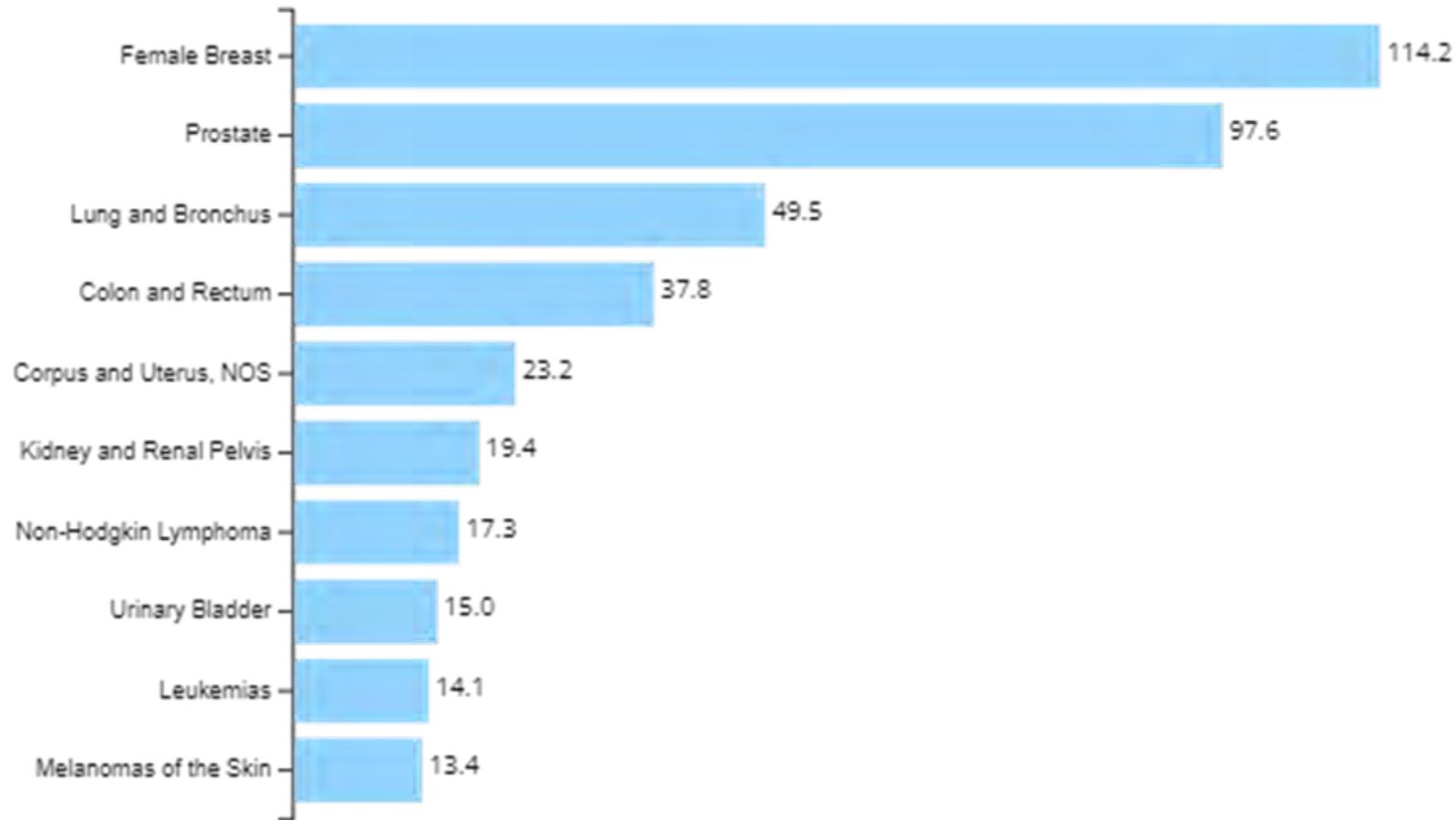
By cancer type



Cancer Deaths 2014-2018 (ACS)



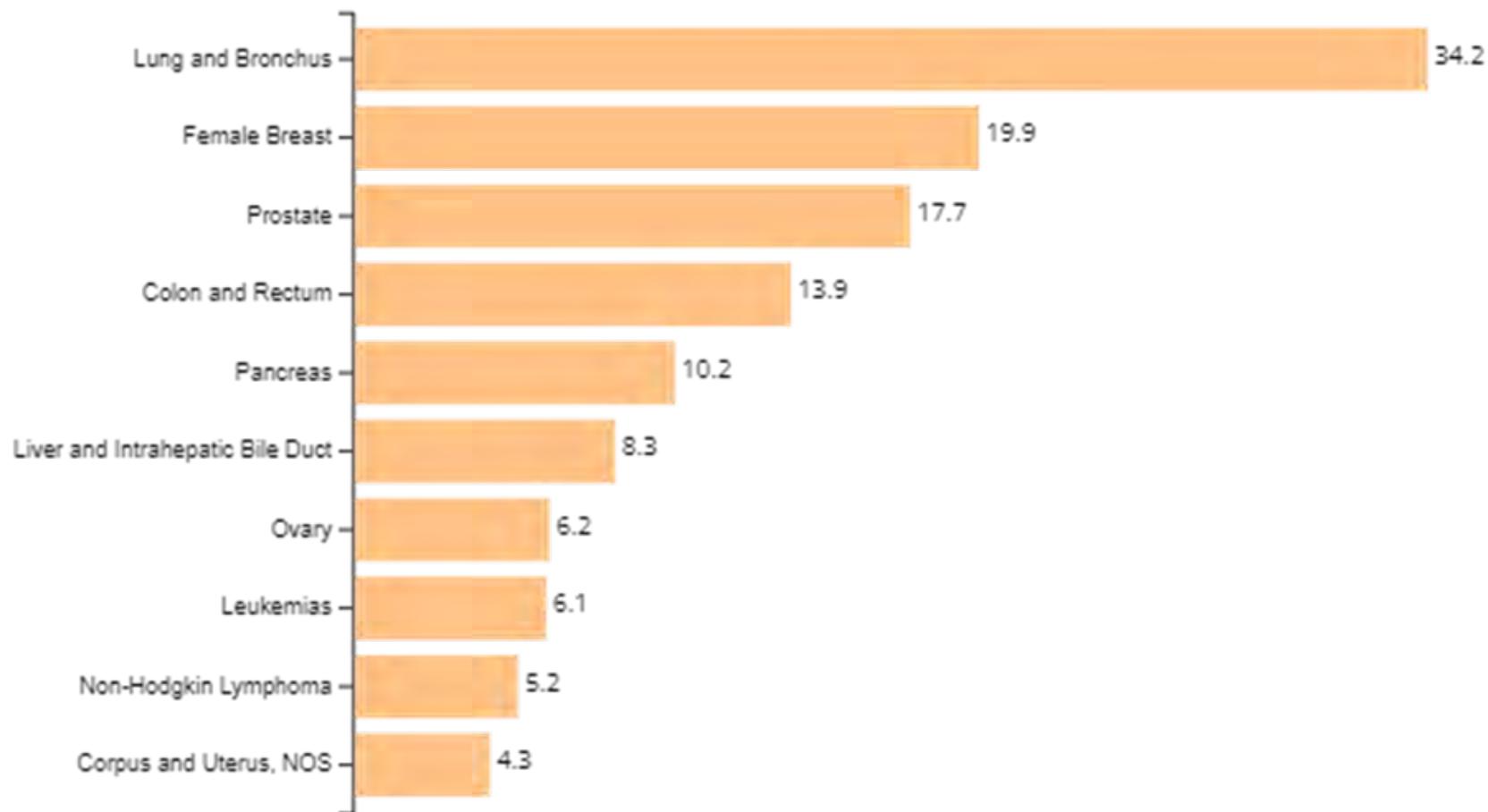
Top 10 Cancers by Rates of New Cancer Cases All Types of Cancer, Texas, 2014-2018



Rate per 100,000 people

Data source - U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2020 submission data (1999-2018); U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; <https://www.cdc.gov/cancer/dataviz>, released in June 2021.

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TCR Charts and
Tools at

<https://www.dshs.texas.gov/tcr>

Cancer in Texas 2021 Report

- Pg 3 – trends in cancer cases 1995-2018
- Pg 6 – trends in cancer mortality 1995-2018
- Pg 8 – leading causes of death by county 2015-2019

Web Query Tool – sort data for 2014-2018 by

- Incidence vs. mortality
- Geography (county, public health region, council of governments, metropolitan statistical area, micropolitan statistical area)
- All cancer sites or individual sites, and more

TCR Cancer Cluster Studies

A cancer cluster is a greater-than-expected number of cancer cases that occurs within a group of people in a geographic area over a period of time. (CDC)

From 2017-2021, TCR lists 14 summary reports of *Assessments of the Occurrence of Cancer* in specific cities.

None in Deer Park.

Closest is area of northeast Houston inside Loop 610

DPCAC's Cancer Cluster Study Results

DPCAC wanted to know if more people in Deer Park had cancer than would be expected

Generally asked state health department to look for the type of cancers occurring most often in Deer Park

Studies compared numbers of cases and deaths *observed* in ZIP Code 77386 to number *expected*, using statewide data for comparison

Speakers explained the statistical analysis and why a bigger number is not necessarily *statistically* significant

1995 Texas
Dept. of
Health

No data available on cancer *incidence*

Number of observed vs. number of expected *deaths* in ZIP Code 77536 from 1981-1991 from cancers of the lung, prostate, colon, pancreas, and liver were not significantly higher.

Significantly lower number of *deaths* from breast cancer than expected but health department cautioned this was likely due to underreporting

2000 Texas Dept. of Health

Cancer incidents from 1995-1997 and cancer mortality from 1990-1998 in 77536 for 8 cancer sites

Three significantly higher than expected:

- Female lung cancer *incidence*
- Female breast cancer *incidence*
- Male prostate cancer *deaths*

Listed common risk factors but could not say with certainty what the causes might be

2004 Texas
Dept. of
Health

Looked at 1995-2000 incidence and
1992-2001 mortality data

No significant excess for 8 cancer sites
in adults

Also looked at children 0-19 years

- No significant excess of cancer *incidence* 1995-2000
- No significant excess of cancer *deaths* 1992-2001

2008 Texas
Dept. of State
Health
Services

- Analyzed *incidence* 1996–2005
- Looked at cancers of the prostate, breast, lung, oral cavity and pharynx, bladder, liver and intrahepatic bile duct, kidney and renal pelvis, pancreas, total childhood cancers, Hodgkin's lymphoma, non-Hodgkin's lymphoma, multiple myeloma, and select leukemia subtypes.
- Found incidence within expected ranges in both males and females.

2013 Texas Dept. of State Health Services Leading Causes of Death 2001-2011

Texas Residents	TX %		Deer Park Residents (Zip 77536)	DP %
Heart Diseases	25		Heart Diseases	27
Cancers	22		Cancers	23
Strokes	6		Accidents	7
Accidents	6		Strokes	5
Lower Respiratory Diseases	5		Lower Respiratory Diseases	5
Diabetes	3		Diabetes	3
Alzheimer's Disease	3		Alzheimer's Disease	2
Influenza/Pneumonia	2		Septicemia	2
Nephritis/Nephrosis	2		Pneumonia/Influenza	2
Septicemia	2		Suicide	2

Summary of Data

- 2014-2018 cancer **incidence** rate per 100,000 population
 - US 449
 - Texas 411
 - Harris County 393
- 2014-2018 cancer **death** rate per 100,000 population
 - US 156
 - Texas 148
 - Harris County 145
- Did not find recent data specific to Deer Park 77536
- Previous cluster studies did not find significantly higher rates except for 3 sites in 2000 report that occurred in the 1990s.

Cancer Cluster Studies

Texas Department of State Health Service's
Environmental Surveillance and Toxicology Branch
conducts them

Follows CDC guidelines

Multi-step, lengthy process that starts with an
inquirer identifying a possible cluster

CDC reports that a review of 576 cancer cluster
investigations conducted over 20 years found that
for only 72 of the apparent clusters could an
increase in cancer rate be confirmed. Only 3 of the
72 could be linked to a possible exposure. In just
one case was a clear cause identified.

DSHS Cancer Cluster Protocol

Factors Indicating a Possible Cluster

- Could meet the definition of a cluster
- Cancers of concern are all the same type
- Concern involves a rare cancer or something atypical like male breast cancer
- Known or suspected environmental issue in area and literature supporting its association with a cancer of concern

Factors NOT Indicating Cluster

- Cancers are within genetically-linked family members
- Reports include a few cases of a common cancer
- Reported cases include many different cancers
- Cases did not all live in the area of concern during the time during which they would have been exposed to a common carcinogen