CANCER

Disease Information Packets – Slide Set

Public Heath Services, Community Health Statistics

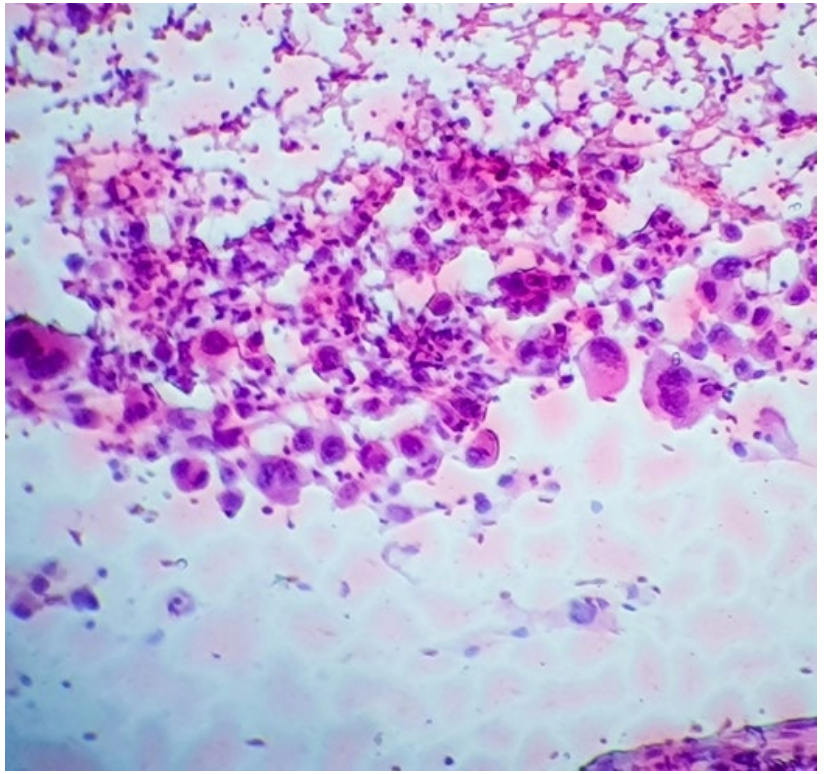
08/2022

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

What is Cancer?

- Cancer is a group of diseases that cause the uncontrolled growth, invasion, and spread (metastasis) of abnormal or damaged cells.
- Cancer is caused by:
  - External factors (environmental conditions, radiation, infectious organisms, poor diet, lack of exercise, tobacco use)
  - Internal factors (genetics, mutations, hormones)



Source: National Cancer Institute. (2021). *What Is Cancer?*. https://www.cancer.gov/about-cancer/understanding/what-is-cancer.

Demographic Risk Factors

- **Age**
  - 80% of all cancers are diagnosed in individuals 55 years and older.
- **Genetics and family history**
  - About 5-10% of all cancers are strongly hereditary.
- **Race/ethnicity**
  - Certain races/ethnicities are at higher risk of developing and dying from cancer.
- **Sex**
  - In the United States, men have approximately a 1 in 2 lifetime risk of developing cancer and a 1 in 5 lifetime risk of dying from cancer. Women have approximately a 1 in 3 lifetime risk of developing cancer and a 1 in 6 lifetime risk of dying from cancer.

Source: American Cancer Society. (2019). *Cancer Facts and Figures 2019*. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2019/cancer-facts-and-figures-2019.pdf.
National Cancer Institute. (2017). *The Genetics of Cancer*. https://www.cancer.gov/about-cancer/causes-prevention/genetics.
National Cancer Institute. (2022). *Cancer Disparities.* https://www.cancer.gov/about-cancer/understanding/disparities.

Social and Behavioral Risk Factors

- **Smoking and secondhand smoke exposure**
  - 81% of lung cancer deaths are caused by smoking.
  - Smoking causes many other types of cancer, including cancers of the mouth, throat, esophagus, stomach, colon, rectum, liver, pancreas, larynx, trachea, bronchus, kidney and renal pelvis, urinary bladder, and cervix, and acute myeloid leukemia.
  - Secondhand smoke causes more than 7,300 lung cancer deaths among nonsmokers in the United States each year.

Source: American Cancer Society. (2019). *Cancer Facts and Figures 2019*. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2019/cancer-facts-and-figures-2019.pdf.
Centers for Disease Control and Prevention. (2021). *What Are the Risk Factors for Lung Cancer?*. https://www.cdc.gov/cancer/lung/basic_info/risk_factors.htm.
Centers for Disease Control and Prevention. (2021). *Secondhand Smoke (SHS) Facts*. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/general_facts/index.htm.

Social and Behavioral Risk Factors

- **Poor nutrition, physical inactivity and obesity**
  - Up to 1/3 of cancer cases in the United States are associated with poor nutrition, physical inactivity, and/or being overweight or obese.
  - Being overweight and obese is associated with at least 13 different types of cancers.
  - Consumption of red and processed meat is associated with an increased risk of colorectal cancer and potentially stomach cancer.
  - Having a high fat diet is linked with colon, lung and postmenopausal breast cancer.
- **Alcohol abuse**
  - The risk of mouth, esophagus, pharynx, larynx, breast, liver, colon, and rectum cancer increases after consumption of one daily drink for women and two daily drinks for men.

Source: National Cancer Institute. *Cancer Trends Progress Report: Diet, Physical Activity, Weight, and Sleep*. https://progressreport.cancer.gov/prevention/diet_physical-activity_weight.
Centers for Disease Control and Prevention. (2022). *Cancer*. https://www.cdc.gov/chronicdisease/resources/publications/factsheets/cancer.html.

Environmental Risk Factors

- **UV light/sunlight**
- **Chemicals and radiation**
  - Cancer can be caused by exposure to radon gas, asbestos, benzidine, cadmium, nickel, vinyl chloride, and other materials.
- **Infectious viruses and bacteria**
  - *Hepatitis B virus*, *hepatitis C virus, human papillomavirus* (HPV), and *Helicobacter pylori* caused 13% of cancers worldwide in 2018.

Source: Centers for Disease Control and Prevention. (2022). *Skin Cancer*. https://www.cdc.gov/cancer/skin/basic_info/index.htm.
World Health Organization. (2022). *Cancer*. https://www.who.int/news-room/fact-sheets/detail/cancer.
National Cancer Institute. (2018). *Cancer-Causing Substances in the Environment*. https://www.cancer.gov/about-cancer/causes-prevention/risk/substances.

National Statistics and Disparities

- Cancer is the second leading cause of death in the United States.
- Over 1.7 million Americans are diagnosed with cancer and 600,000 die from cancer per year.
- The cost of cancer care in the United States was estimated to be $150.8 billion in 2018.

Top 6 Leading Causes of Cancer Death, United States, 2020

1. Lung and bronchus
2. Colon and rectum
3. Pancreas
4. Female Breast
5. Prostate
6. Liver and intrahepatic bile duct

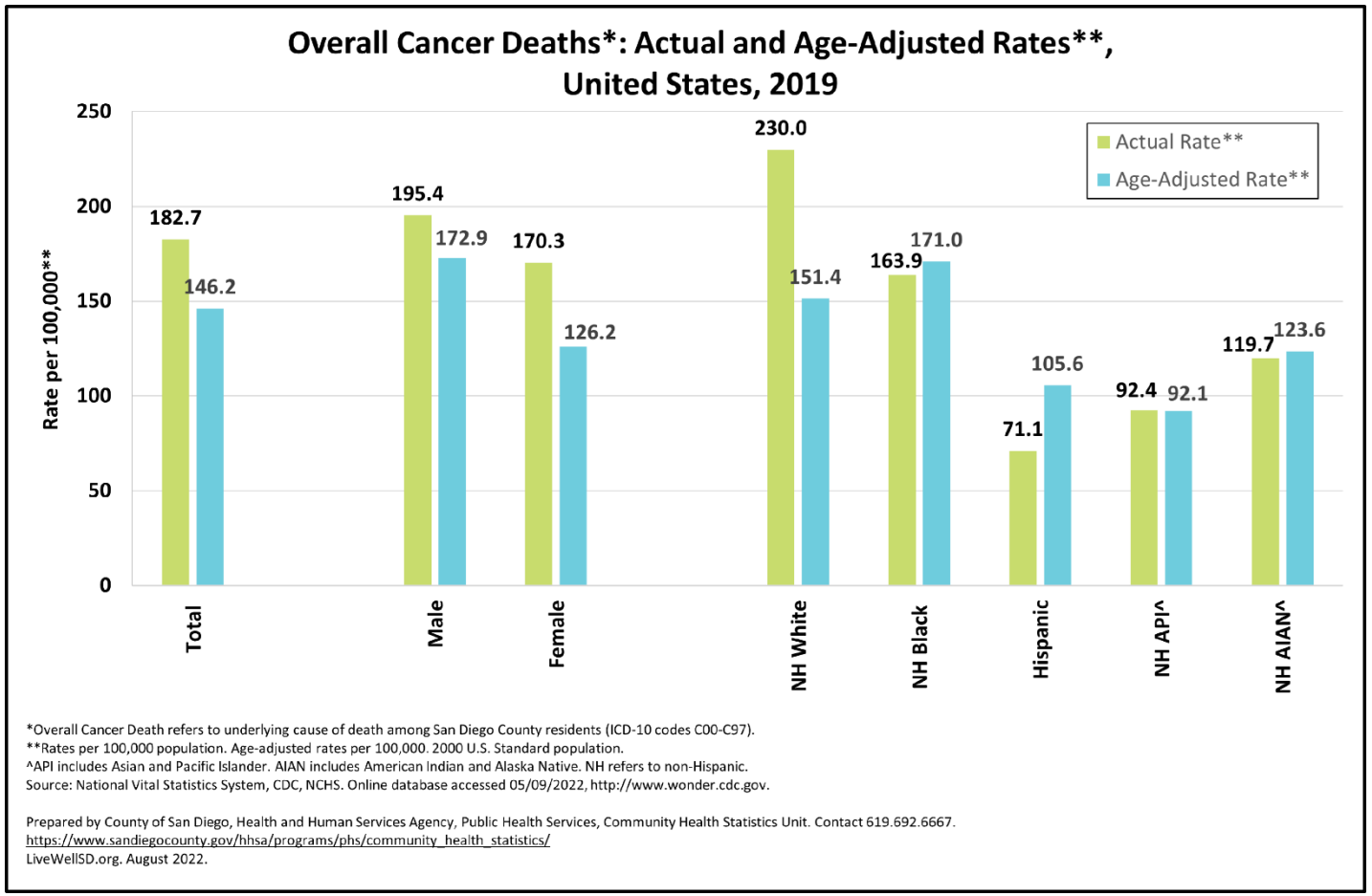
Source: Centers for Disease Control and Prevention. (2022). *Cancer.* https://www.cdc.gov/chronicdisease/resources/publications/factsheets/cancer.html.
National Cancer Institute. (2020). *Cancer Statistics*. https://www.cancer.gov/about-cancer/understanding/statistics.
Centers for Disease Control and Prevention. (2022). An Update on Cancer Deaths in the United States. https://www.cdc.gov/cancer/dcpc/research/update-on-cancer-deaths/index.htm.

National Statistics and Disparities

- In the United States, men have approximately a 1 in 2 lifetime risk of developing cancer and a 1 in 5 lifetime risk of dying from cancer.
- Women have approximately a 1 in 3 lifetime risk of developing cancer and a 1 in 6 lifetime risk of dying from cancer.
- Black Americans are more likely to develop and die from many, although not all, cancer types compared to any other racial or ethnic group.

Source: American Cancer Society. (2022). *Lifetime Risk of Developing or Dying from Cancer*. https://www.cancer.org/healthy/cancer-causes/general-info/lifetime-probability-of-developing-or-dying-from-cancer.html.
National Cancer Institute. (2022). *Cancer Disparities.* https://www.cancer.gov/about-cancer/understanding/disparities.

National Statistics and Disparities

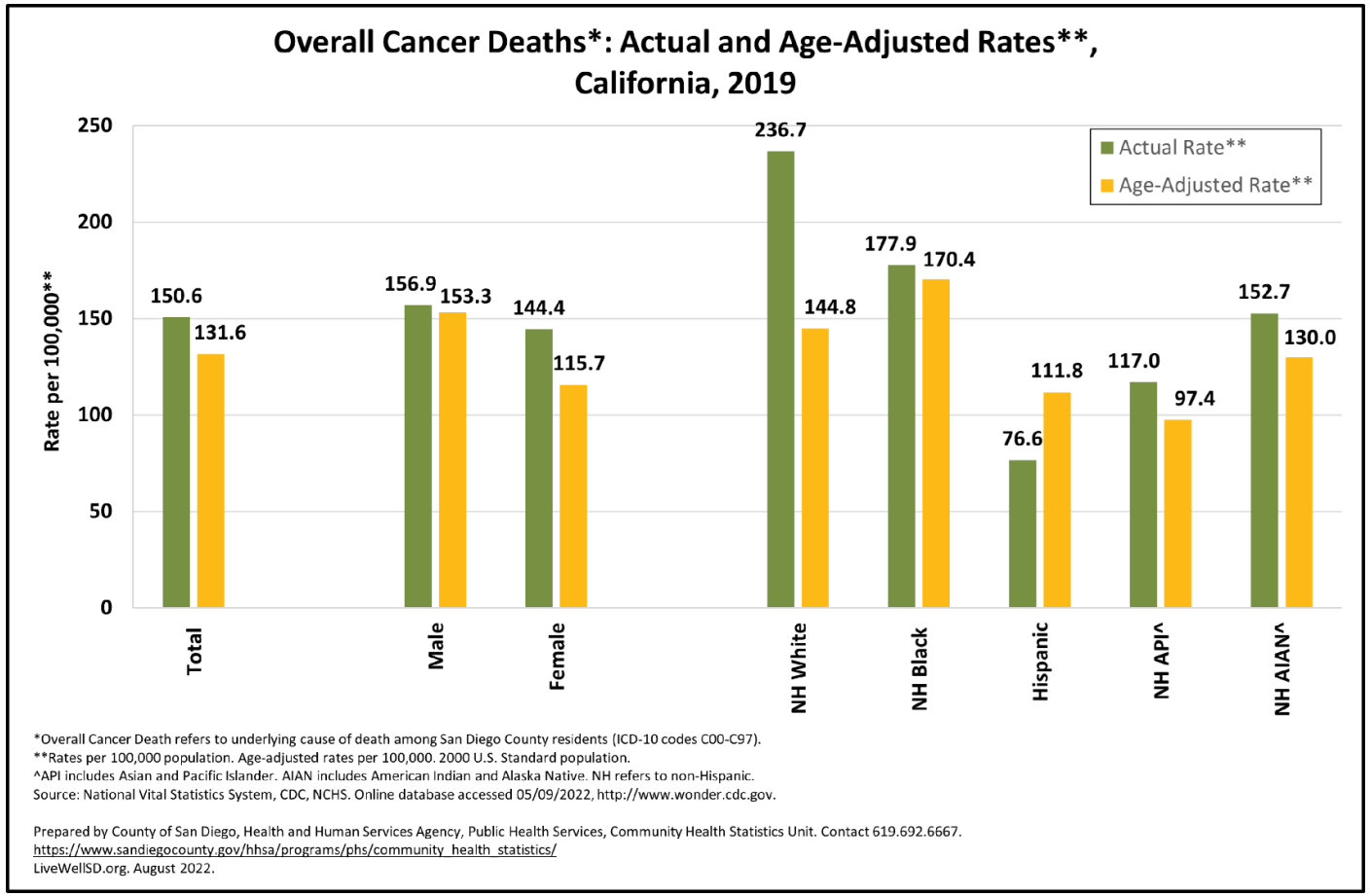


*Overall Cancer Death refers to underlying cause of death among San Diego County residents (ICD-10 codes C00-C97).
**Rates per 100,000 population. Age-adjusted rates per 100,000. 2000 U.S. Standard population.
^API includes Asian and Pacific Islander. AIAN includes American Indian and Alaska Native. NH refers to non-Hispanic.
Source: National Vital Statistics System, CDC, NCHS. Online database accessed 05/09/2022, http://www.wonder.cdc.gov.

Prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit. Contact 619.692.6667.
https://www.sandiegocounty.gov/hhsa/programs/phs/community_health_statistics/
LiveWellSD.org. August 2022.

- In the United States, men had higher actual and age-adjusted overall cancer death rates than women.
- Non-Hispanic Blacks had the highest age-adjusted overall cancer death rate followed by non-Hispanic Whites in 2019.

State Statistics and Disparities



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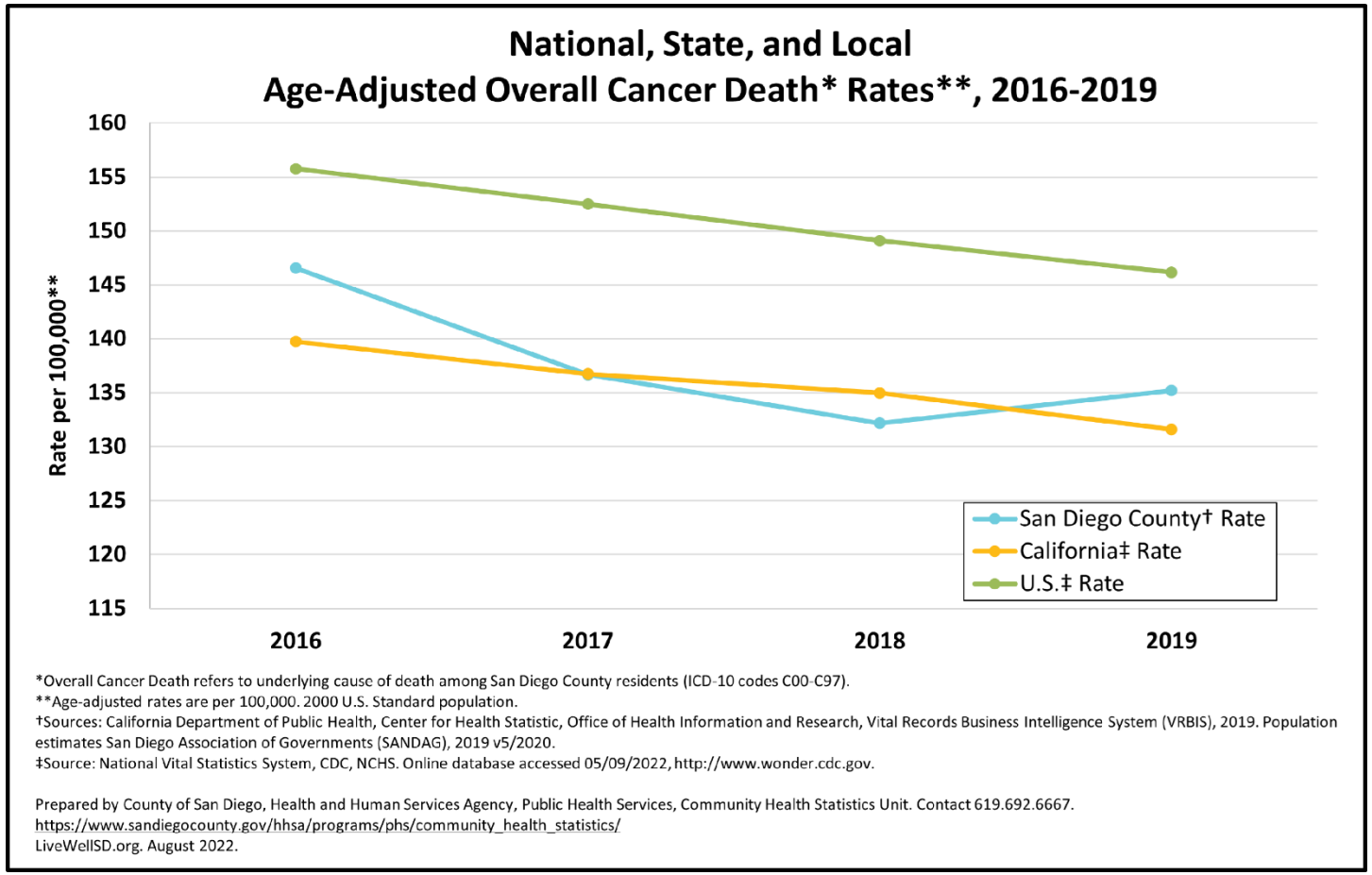
LiveWellSD.org. August 2022.

- In California, men had a higher age-adjusted overall cancer death rate than women.
- In 2019, non-Hispanic Black residents in California had the highest age-adjusted overall cancer death rate while non-Hispanic Asian/Pacific Islander residents had the lowest.

Local Statistics and Disparities



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**Age-adjusted rates are per 100,000. 2000 U.S. Standard population.
†Sources: California Department of Public Health, Center for Health Statistic, Office of Health Information and Research, Vital Records Business Intelligence System (VRBIS), 2019. Population estimates San Diego Association of Governments (SANDAG), 2019 v5/2020.
‡Source: National Vital Statistics System, CDC, NCHS. Online database accessed 05/09/2022, http://www.wonder.cdc.gov.

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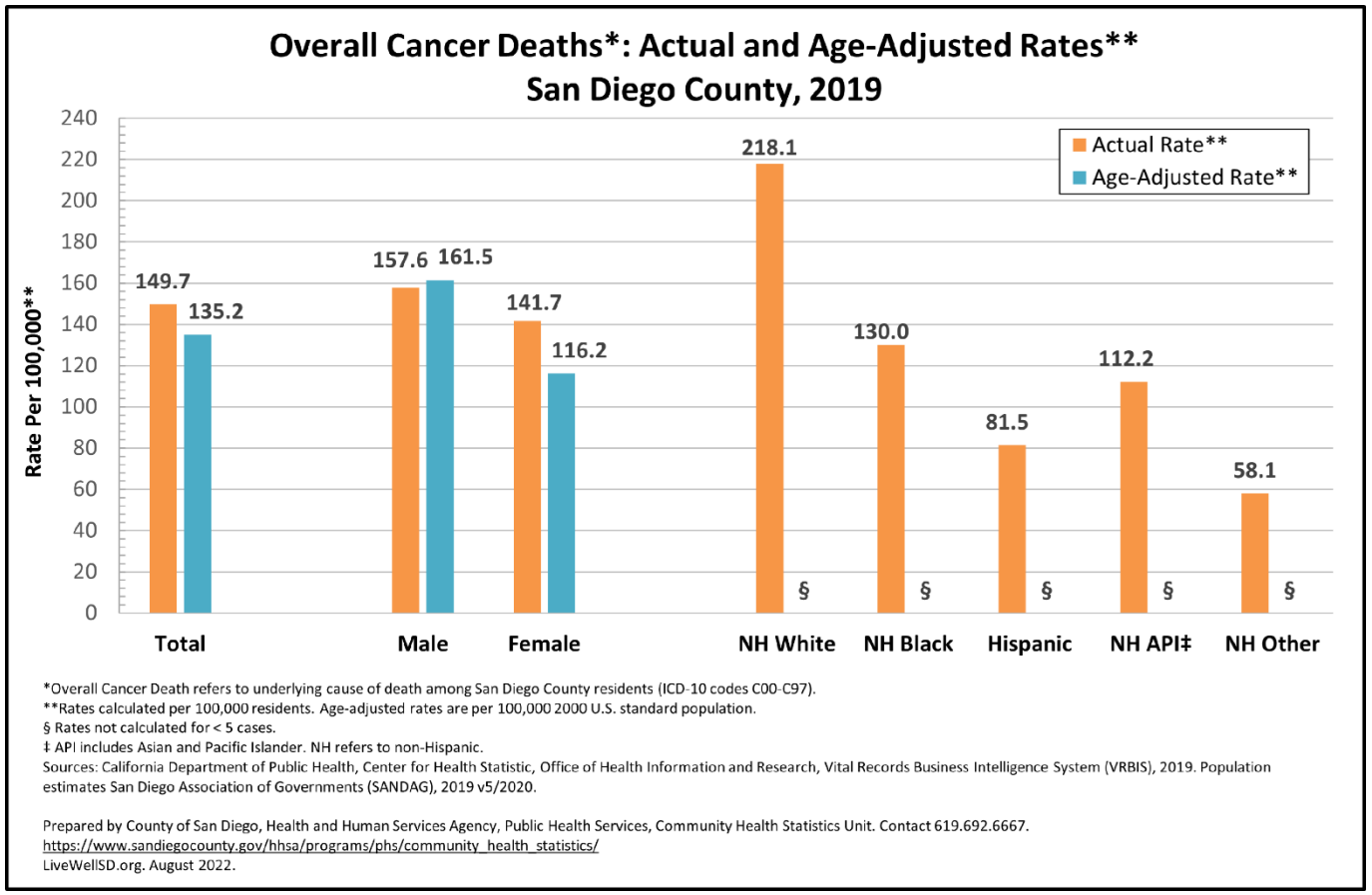
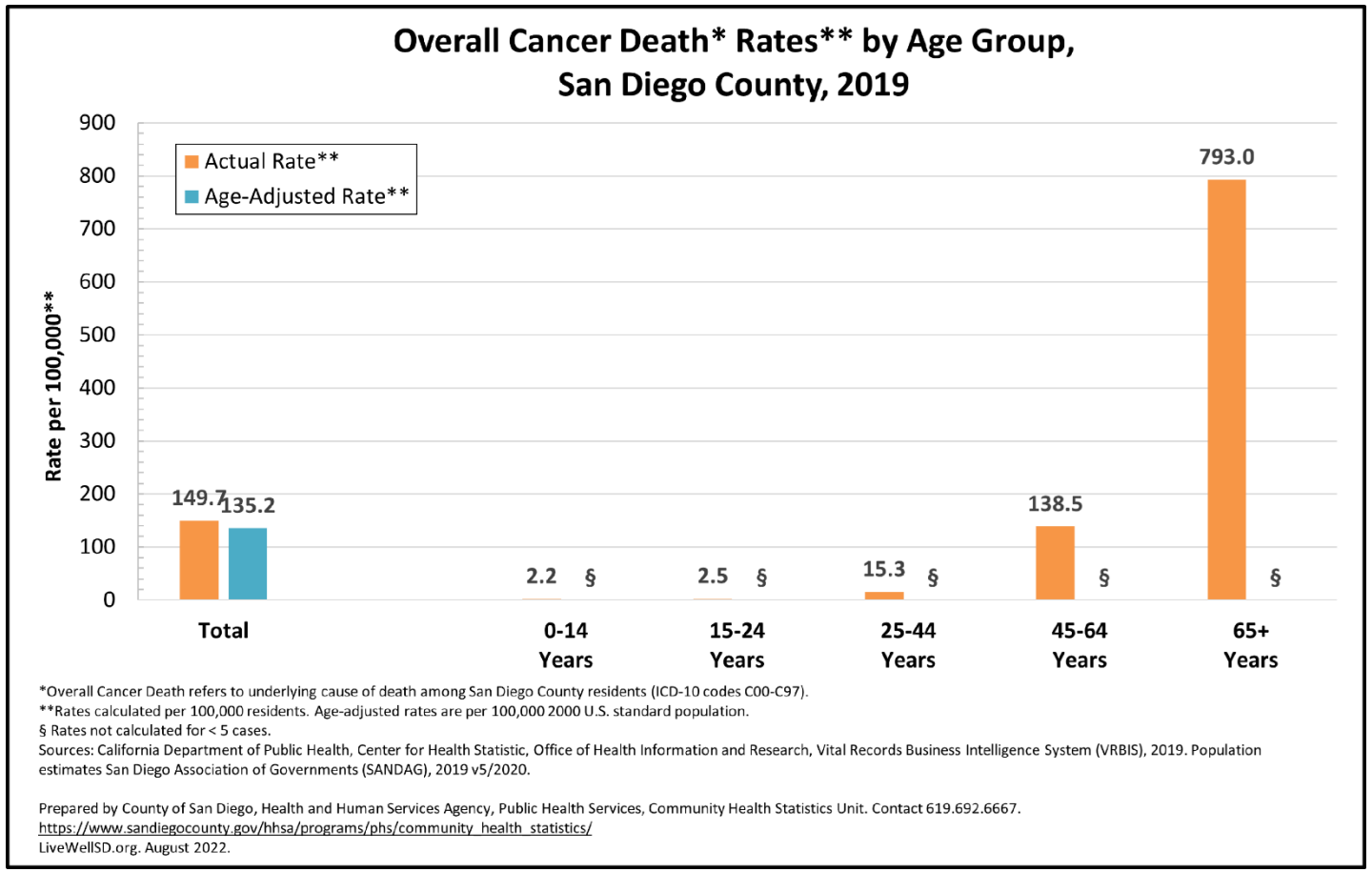
- From 2016 to 2019, the age-adjusted overall cancer death rates in California and San Diego County remained below the national rate.
- In 2019, the age-adjusted overall cancer death rate in San Diego County surpassed the state rate but remained below the national rate.

Local Statistics and Disparities



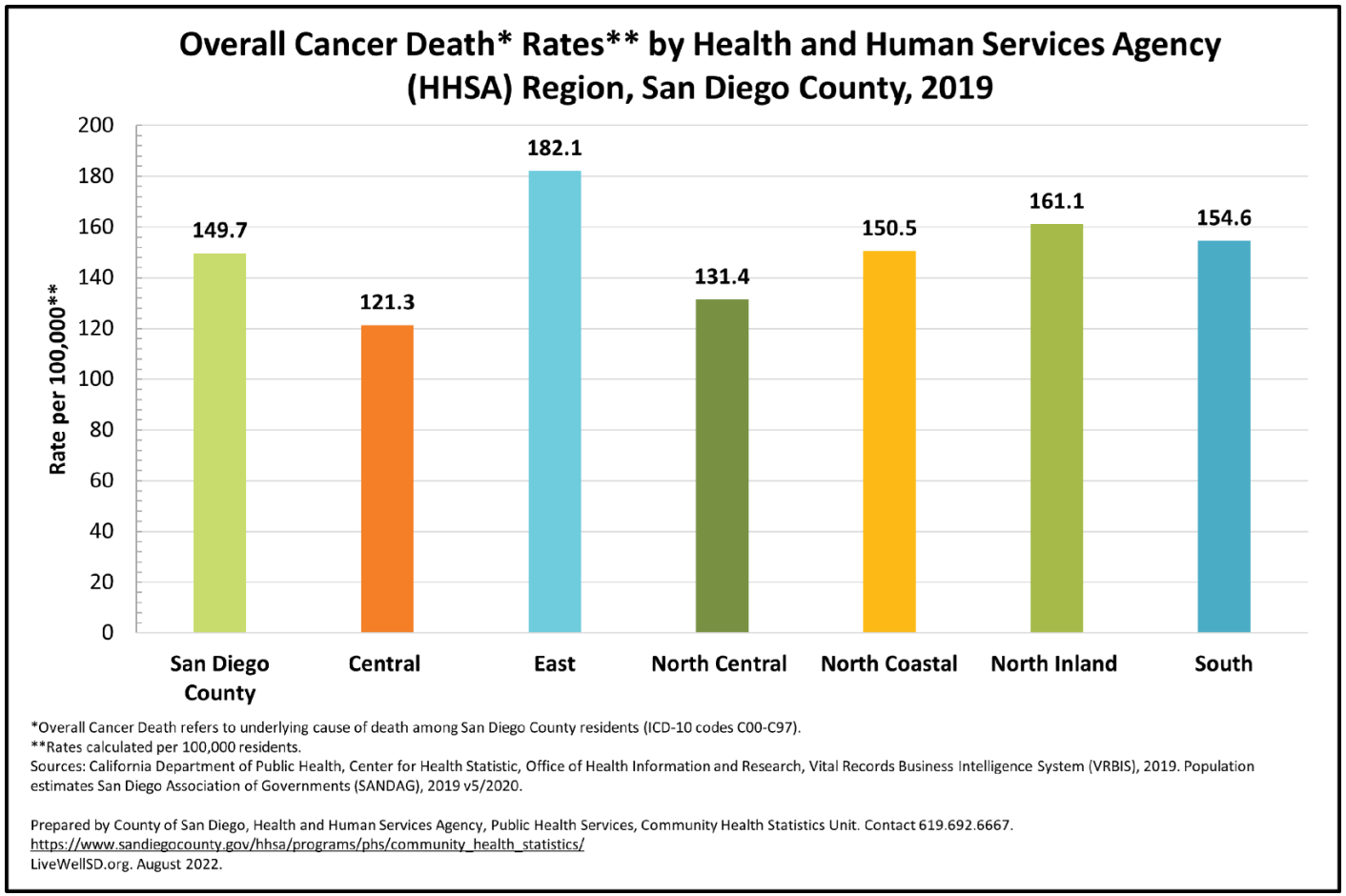
- In 2019, the age-adjusted overall cancer death rate among male residents in San Diego County was nearly 1.4 times greater than the age-adjusted overall cancer death rate of female residents.
- Non-Hispanic Whites had the highest actual overall cancer death rate in San Diego County compared to other races/ethnicities.

Local Statistics and Disparities



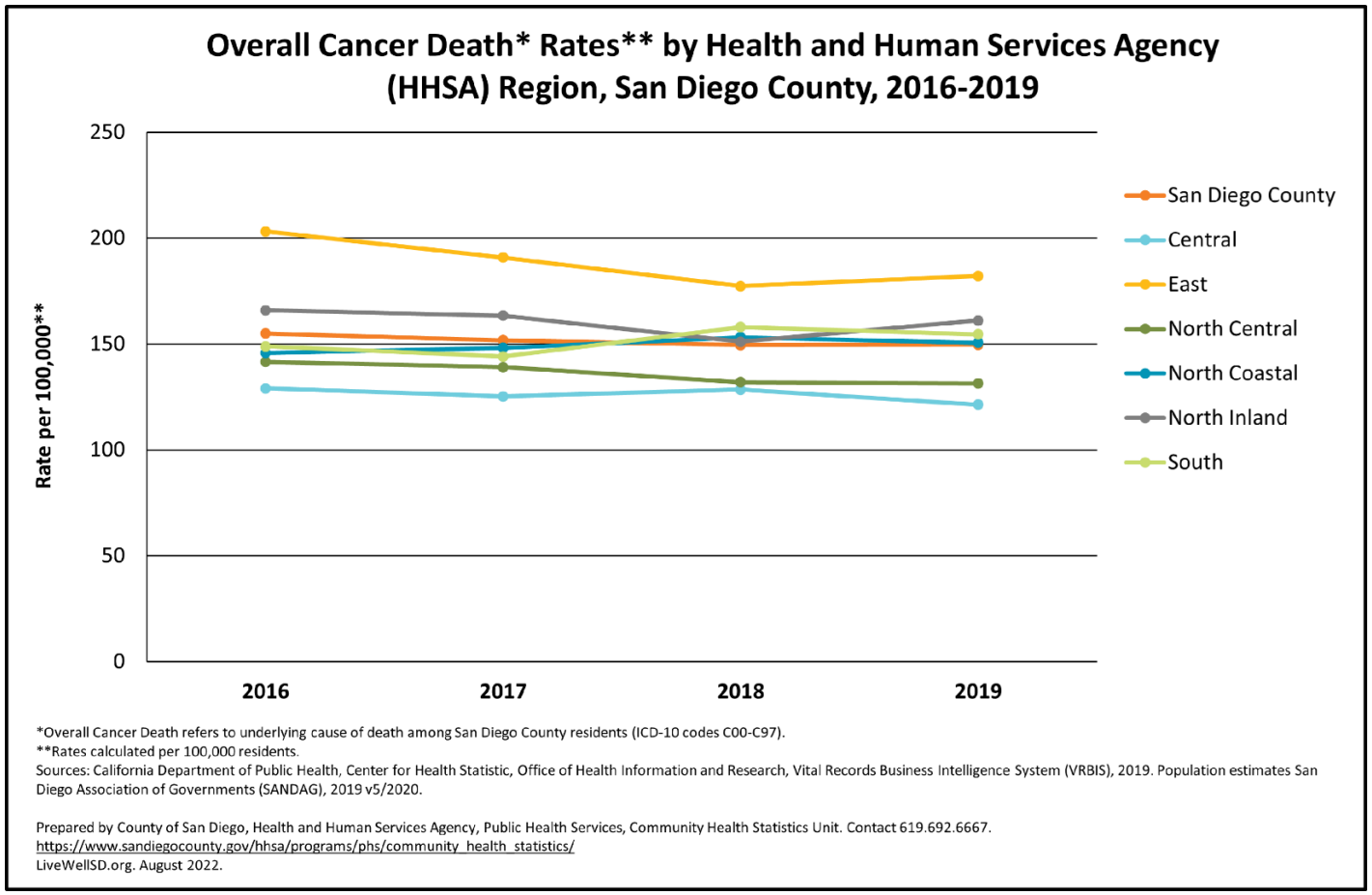
- The actual overall cancer death rate among residents aged 65+ years was 793.0 per 100,000 residents, approximately 5.3 times the total death rate in San Diego County in 2019.

Local Statistics and Disparities



- In 2019, East Region of San Diego County had the highest rate of overall cancer deaths while Central Region had the lowest.
- East Region, North Inland Region, South Region, and North Coastal Region had overall cancer death rates that surpassed the county overall cancer death rate in 2019.

Local Statistics and Disparities



- East Region of San Diego County had the highest overall cancer death rates while Central Region had the lowest overall cancer death rates from 2016 to 2019.

Prevention: Screenings

- **Mammograms**
  - Women can start yearly breast cancer screenings with mammograms as early as 40 years old.
- **Colorectal cancer screening**
  - Routine screening for colorectal cancer should start at age 45. Screenings include stool tests, flexible sigmoidoscopies, colonoscopies, and CT colonographies.
- **Pap tests**
  - Women ages 21 through 29 should be screened for cervical cancer with a pap test every 3 years.
  - Women ages 30 through 65 should receive one of the following tests every 3 or 5 years: Pap test (every 3 years), high-risk HPV testing (every 5 years), or pap and high-risk HPV cotest (every 5 years)

Source: American Cancer Society. *Cancer Screening Guidelines by Age*. https://www.cancer.org/healthy/find-cancer-early/screening-recommendations-by-age.html#40-49.
Centers for Disease Control and Prevention. (2022). *Colorectal Cancer Screening Tests*. https://www.cdc.gov/cancer/colorectal/basic_info/screening/tests.htm.
National Cancer Institute. (2022). *HPV and Pap Testing*. https://www.cancer.gov/types/cervical/pap-hpv-testing-fact-sheet.

Prevention: Lifestyle Changes

- **Abstain from smoking**
- **Avoid exposure to secondhand smoke**
- **Protect skin from the sun**
  - Use sunscreen with at least SPF 15 from the hours 10 a.m. to 4 p.m. during daylight savings time (9 a.m. – 3 p.m. during standard time).
- **Avoid tanning beds**
- **Avoid exposure to chemicals and radiation**
- **Cancer vaccines**
  - HPV vaccination can be started at 11-12 years old.
- **Maintain a healthy diet and exercise regularly**

Source: Centers for Disease Control and Prevention. (2022). *What Can I Do to Reduce My Risk of Skin Cancer?*. https://www.cdc.gov/cancer/skin/basic_info/prevention.htm.
Centers for Disease Control and Prevention. (2022). *Cancers Caused by HPV*. https://www.cdc.gov/hpv/parents/cancer.html.

Critical Pathway for Cancer

Critical Pathway

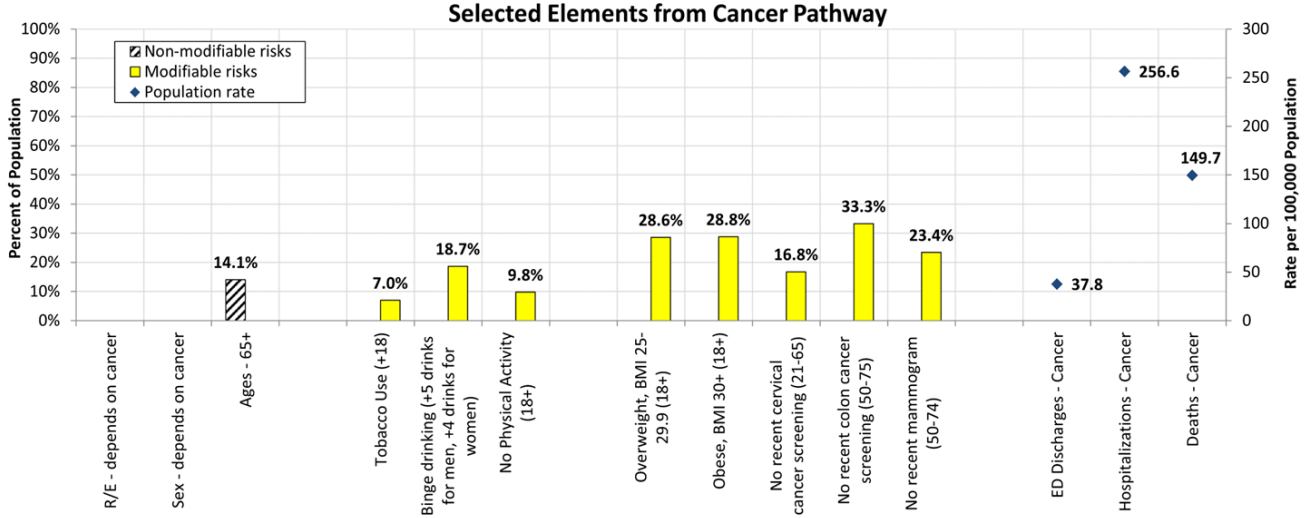
Cancer

OPPORTUNITIES FOR PREVENTION

	PRIMARY	SECONDARY	TERTIARY	
Birth	**Demographic Risk Factors*** Age (older) Genetics/family history Race/ethnicity (R/E) Sex	**Behavioral & Social Risk Factors*** Substance use Lack of physical activity Poor nutrition Poor medical care access Environmental exposures	**Intermediate Outcomes** Abnormal cells Precancerous lesions Metastases	Cancer Death

*SOCIAL DETERMINANTS OF HEALTH

Characteristics of Residents, San Diego County
Selected Elements from Cancer Pathway



Contact Us

For more information, including data, resources and reports from the County of San Diego's Community Health Statistics Unit:

www.SDHealthStatistics.com

(619)692-6667