



# CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

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*Disease Information Packets – Slide Set*  
*Public Health Services, Community Health Statistics*  
*08/2022*



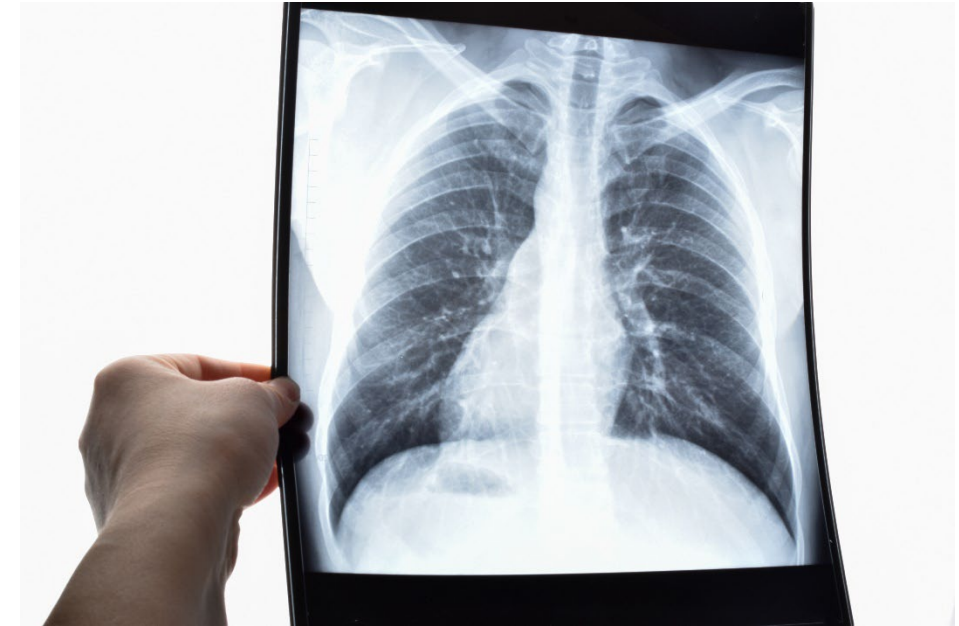
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# What is COPD?



- Chronic obstructive pulmonary disease, or COPD, is a respiratory disease that makes it hard to breathe
  - The airways of lungs become swollen, less elastic, or are damaged.
  - It gets worse over time.
  - Includes chronic bronchitis and emphysema.
  - It cannot be cured, but it can be treated.



# Demographic Risk Factors



## ■ Age

- People aged 65 years and older are more likely to report COPD than any other age group.

## ■ Sex

- Females are more likely to have COPD and die at a higher rate due to COPD.

## ■ Genetics and family history

- People with a family history of COPD are more likely to get the disease if they smoke.
- Alpha-1 antitrypsin (AAT) deficiency, a rare genetic condition, can cause COPD.



Source: Centers for Disease Control and Prevention. (2021). *Basics About COPD*. <https://www.cdc.gov/copd/basics-about.html>.

Centers for Disease Control and Prevention. National Vital Statistics System detailed mortality data at Wonder Database website. <http://wonder.cdc.gov>. Accessed March 3, 2021.

National Heart, Lung, and Blood Institute. (2022). *COPD Causes and Risk Factors*. <https://www.nhlbi.nih.gov/health/copd/causes>.

National Heart, Lung, and Blood Institute. (2022). *What is COPD?*. <https://www.nhlbi.nih.gov/health/copd>.

# Social and Behavioral Risk Factors



- **Smoking**

- 75% of COPD-related deaths are due to smoking.

- **Exposure to lung irritants**

- Secondhand smoke
- Air pollution
- Chemical fumes
- Dust from the environment or workplace
- Smoke from home cooking
- Heating fuels without ventilation

- **History of infections and respiratory conditions**

- 1 in 5 people who have COPD also have asthma.



# Intermediate Outcomes



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- **Chronic bronchitis**

- Inflammation and irritation in the lining of lung airways.
- Formation of thick mucus in airways.

- **Emphysema**

- Damage to the walls between the air sacs in lungs.





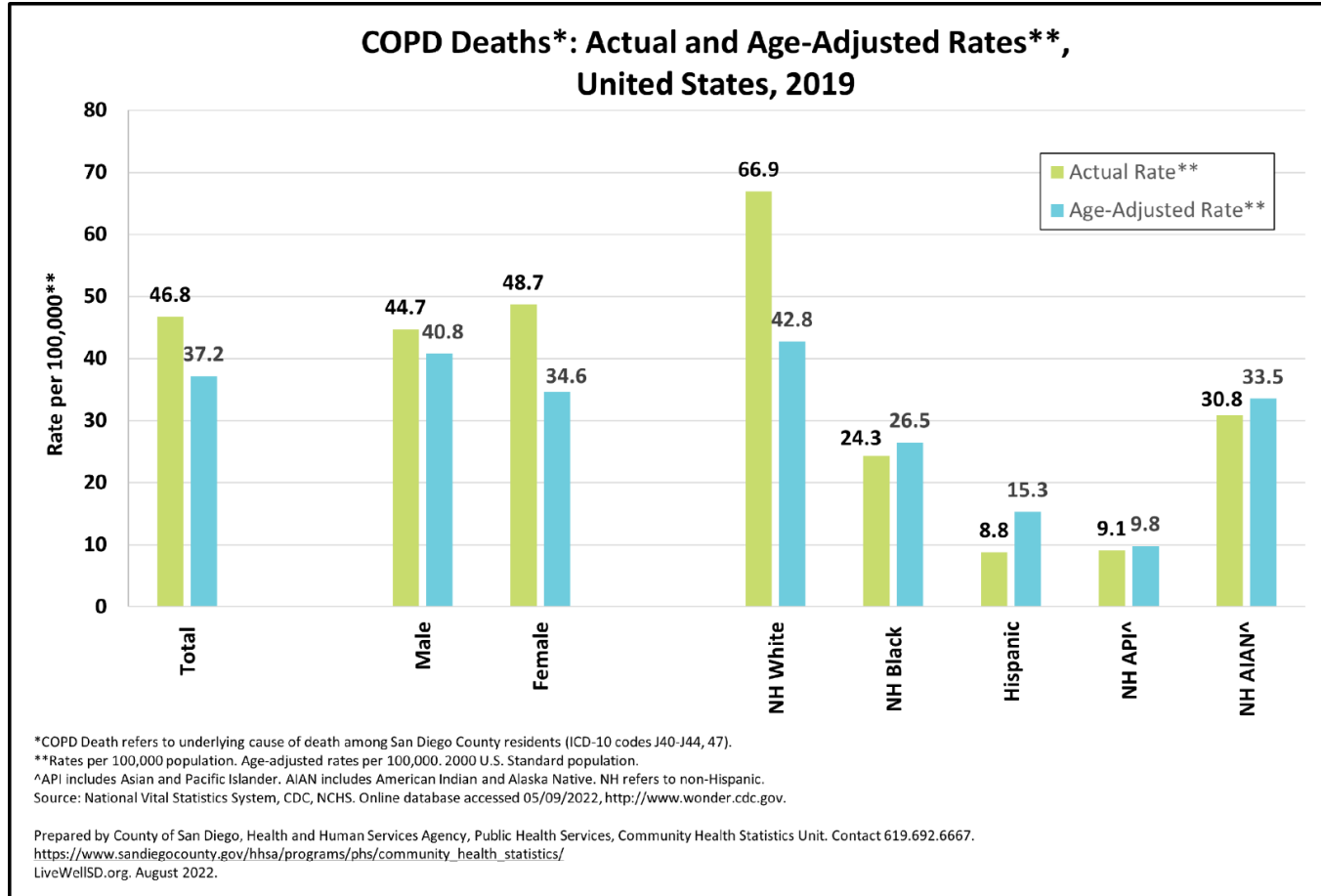
# National Statistics and Disparities



- More than 15 million Americans suffer from COPD.
- More than 150,000 Americans die of COPD each year.
- Although more women die from COPD than men, the COPD death rate is higher among men than women.
- Between 1999 and 2018, the rate of death due to COPD among men decreased 25%, while the rate of death among women remained about the same.

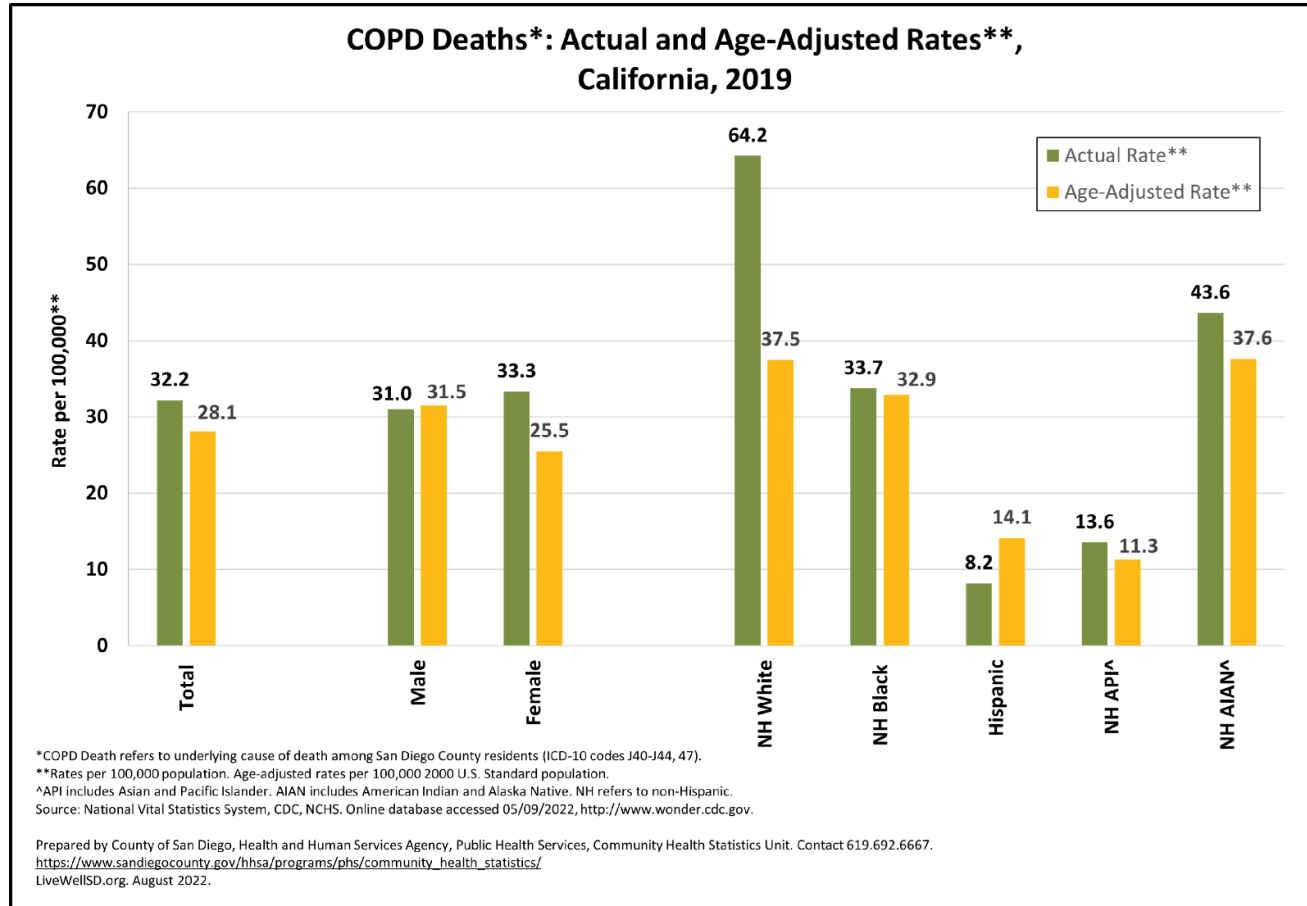


# National Statistics and Disparities



- In the United States, actual and age-adjusted COPD death rates were higher among men than women.
- Non-Hispanic Whites had the highest age-adjusted death rate due to COPD while non-Hispanic Asian/Pacific Islanders had the lowest.

# State Statistics and Disparities



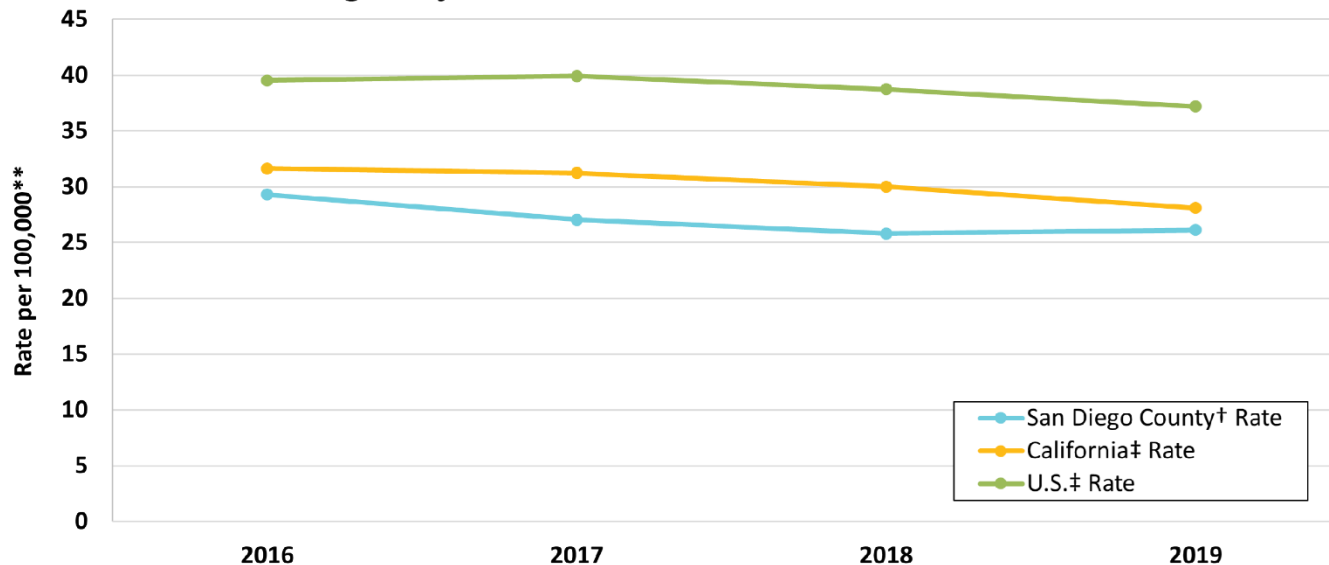
- Men had a higher age-adjusted COPD death rate than women.
- Non-Hispanic American Indian/Alaska and non-Hispanic White residents in California had the highest age-adjusted COPD death rate.



# Local Statistics and Disparities



**National, State, and Local  
Age-Adjusted COPD Death\* Rates\*\*, 2016-2019**



\*COPD Death refers to underlying cause of death among San Diego County residents (ICD-10 codes J40-J44, 47).

\*\*Age-adjusted rates are per 100,000, 2000 U.S. Standard population.

†Sources: California Department of Public Health, Center for Health Statistics, 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>.

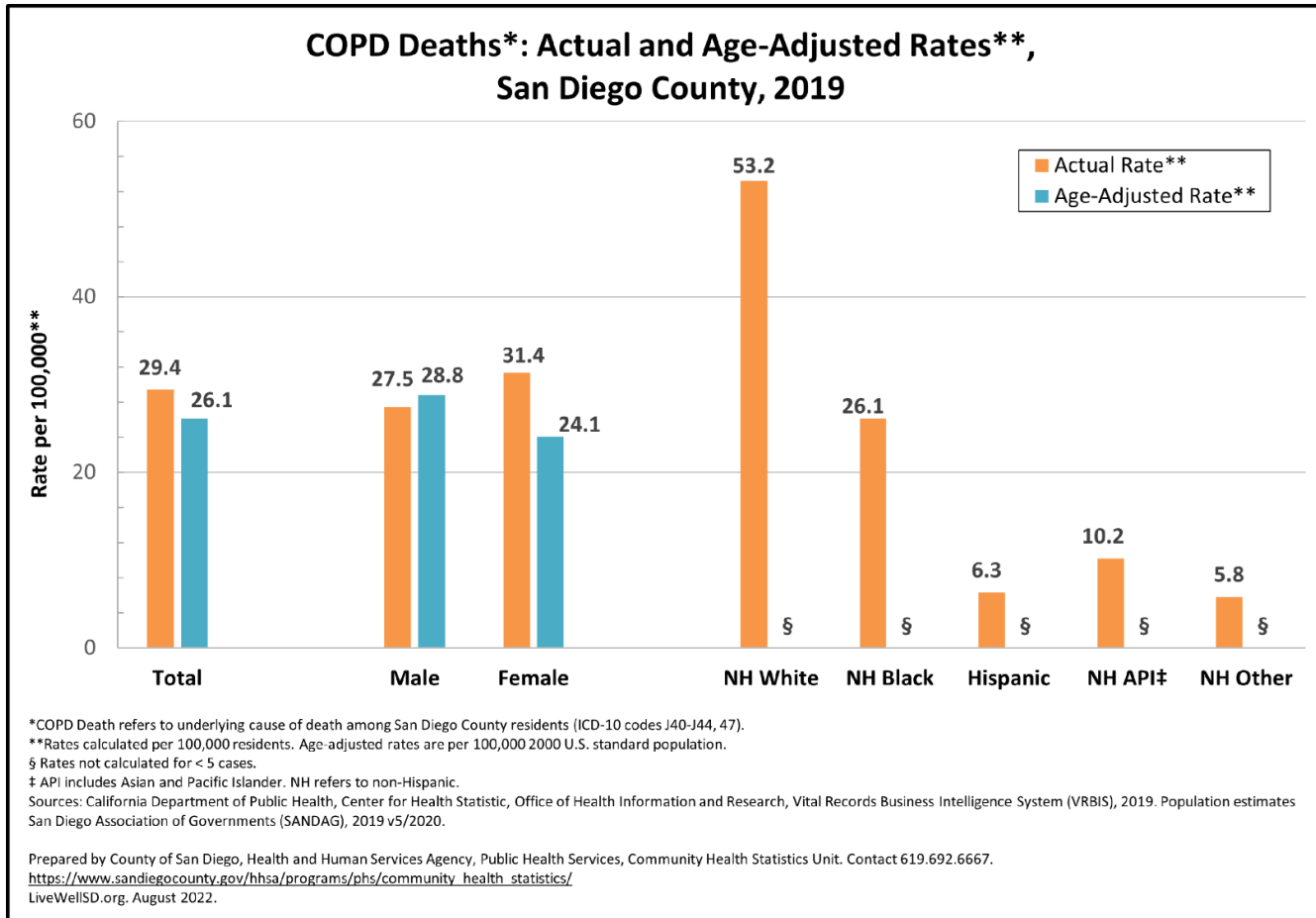
Prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit. Contact 619.692.6667.

[https://www.sandiegocounty.gov/hhsa/programs/phs/community\\_health\\_statistics/](https://www.sandiegocounty.gov/hhsa/programs/phs/community_health_statistics/)

LiveWellSD.org. August 2022.

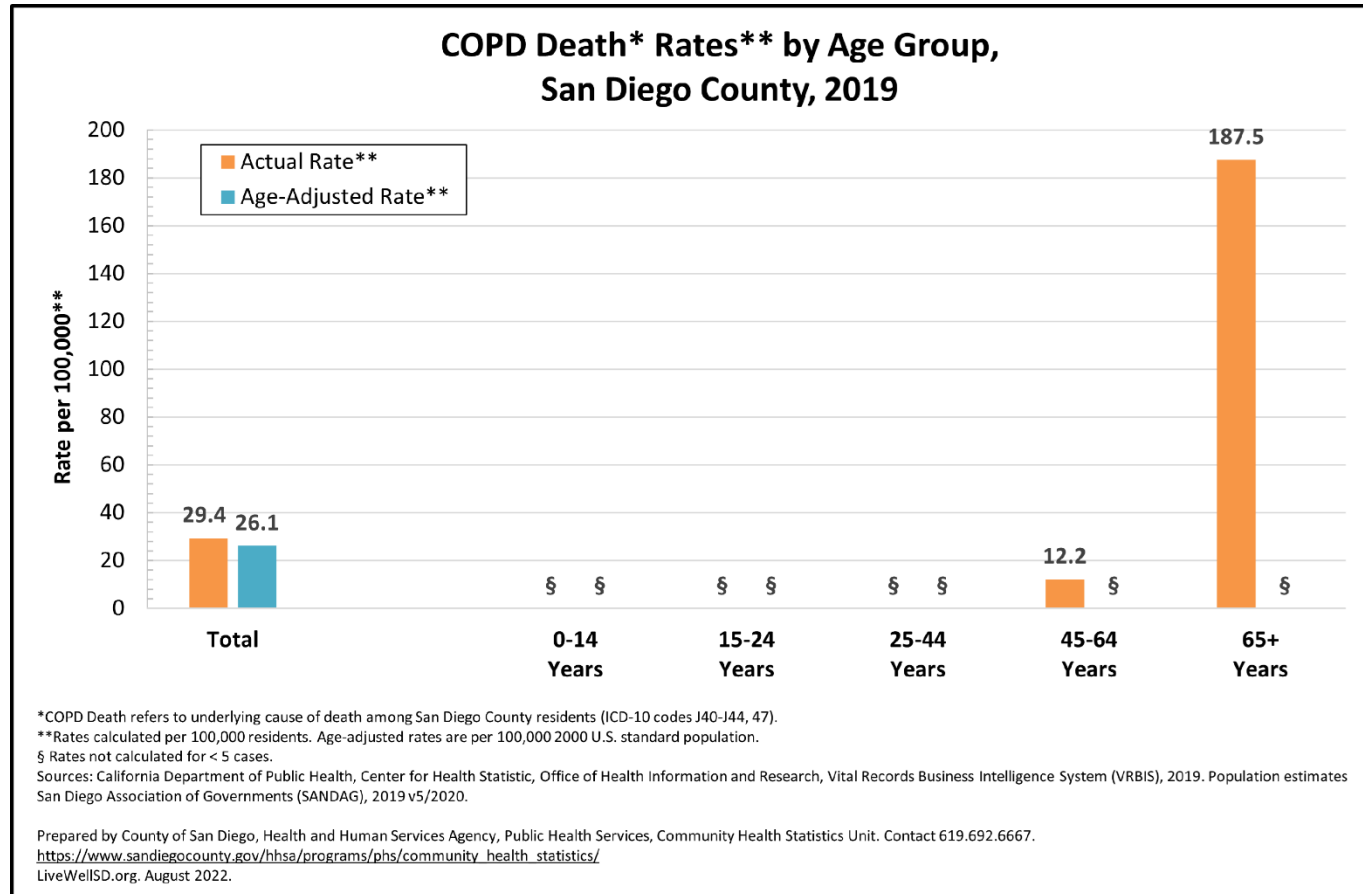
- From 2016 to 2019, the age-adjusted COPD death rates in San Diego County and California remained below the national rate.

# Local Statistics and Disparities



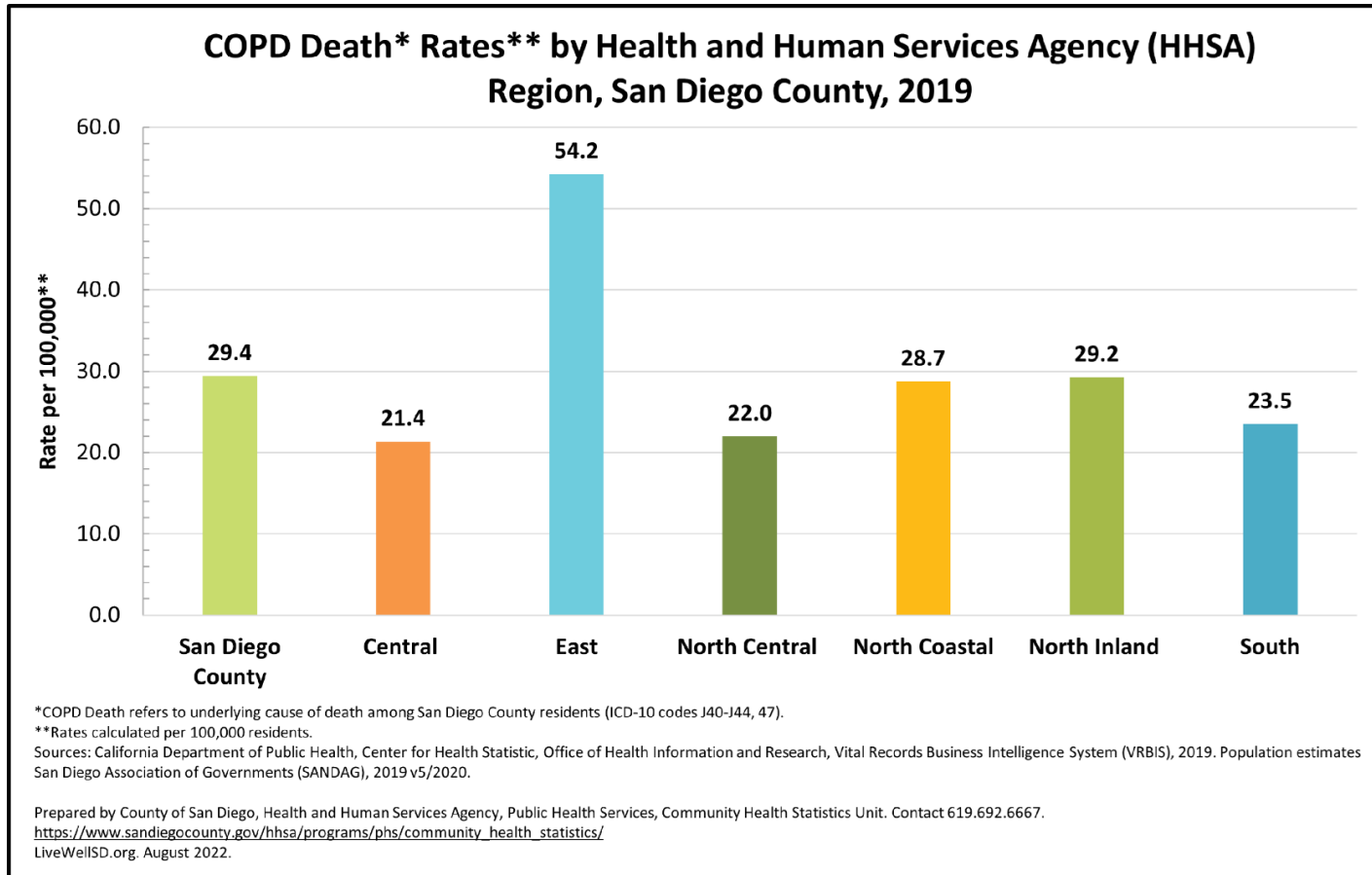
- Male residents in San Diego County had a lower actual COPD death rate than female residents but had a higher age-adjusted COPD death rate in 2019.
- Non-Hispanic Whites had an actual COPD death rate that was 1.8 times greater than the total actual COPD death rate in San Diego County.

# Local Statistics and Disparities



- San Diego County residents aged 65+ years had the highest actual COPD death rate compared to other age groups in 2019.
- The actual COPD death rate among residents aged 65+ was approximately 6.4 times the total death rate in San Diego County in 2019.

# Local Statistics and Disparities

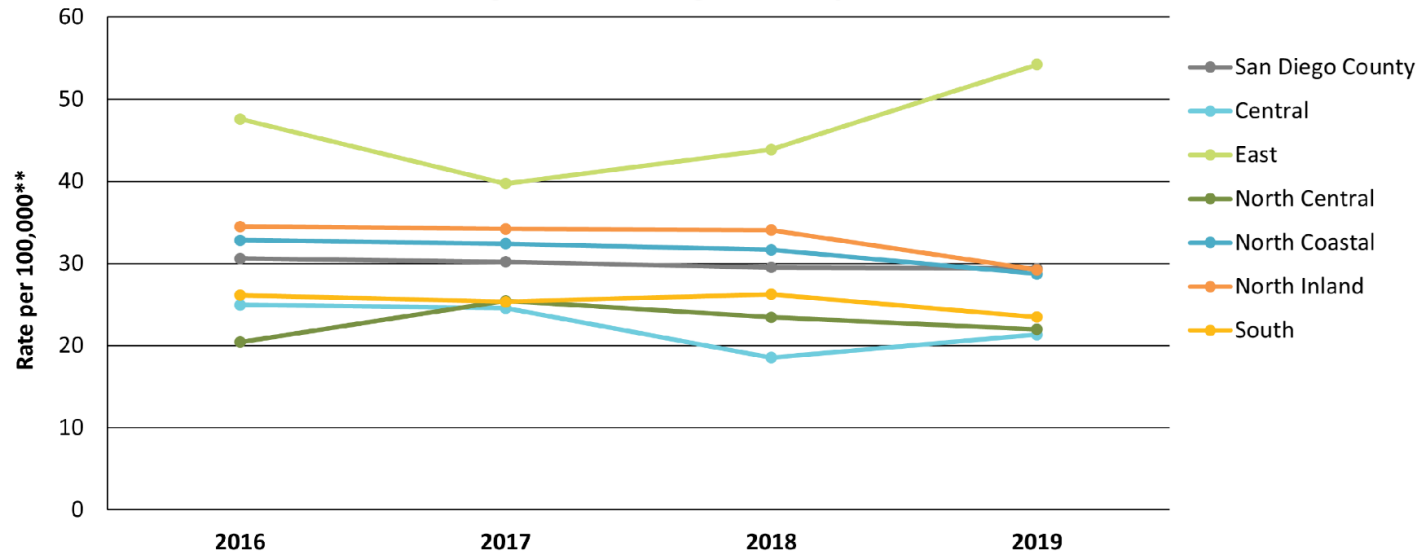


- In 2019, East Region of San Diego County had the highest COPD death rate while Central Region had the lowest.

# Local Statistics and Disparities



**COPD Death\* Rates\*\* by Health and Human Services Agency (HHS) Region, San Diego County, 2016-2019**



\*COPD Death refers to underlying cause of death among San Diego County residents (ICD-10 codes J40-J44, 47).

\*\*Rates calculated per 100,000 residents.

Sources: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System (VRBIS), 2019. Population estimates San Diego Association of Governments (SANDAG), 2019 v5/2020.

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LiveWellSD.org. August 2022.

- East Region of San Diego County had the highest rate of death due to COPD from 2016 to 2019.



# Prevention



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- **Abstain from smoking**
  - Smoking is the leading cause of COPD.
- **Avoid exposure to secondhand smoke and lung irritants**
- **Early detection**
- **See your doctor regularly and seek treatment early**
  - Treatment includes medicine, pulmonary rehabilitation, prevention and treatment of lung infections, and supplemental oxygen.
- **Get an annual flu shot**



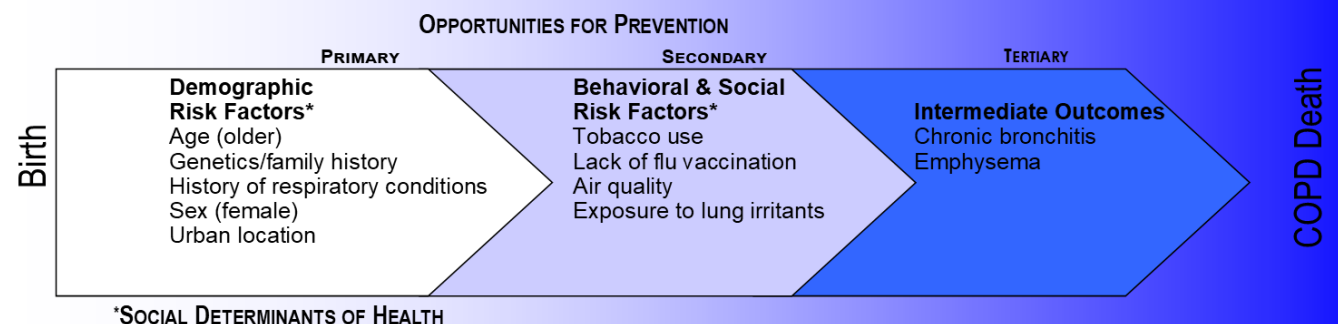
# Critical Pathway for COPD



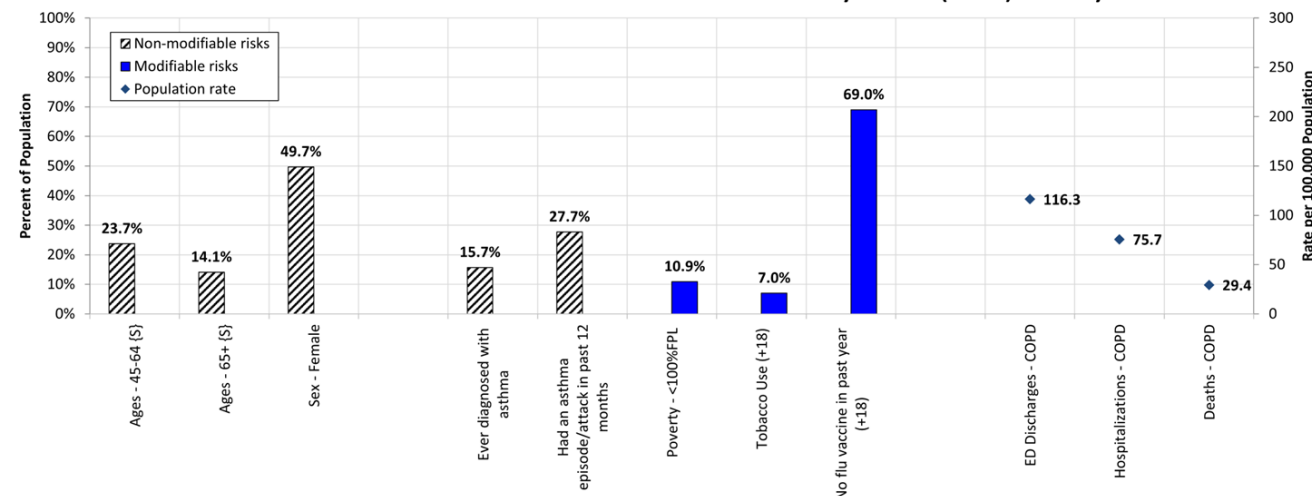
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## Critical Pathway

### Chronic Obstructive Pulmonary Disease (COPD)



Characteristics of Residents, San Diego County  
Selected Elements from Chronic Obstructive Pulmonary Disease (COPD) Pathway



# Contact Us



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

[www.SDHealthStatistics.com](http://www.SDHealthStatistics.com)

(619)692-6667