American Cancer Society | NATIONAL COLORECTAL CANCER ROUNDTABLE

Colorectal Cancer Facts & Figures: Recent Findings

1:45 PM – 2:20 PM

Colorectal Cancer Facts & Figures: Recent Findings

Rebecca Siegel, MPH
American Cancer Society

Colorectal cancer statistics: update 2024

Rebecca Siegel, MPH
NCCRT Annual Meeting
November 21, 2024

Objectives

- National incidence & mortality update
- Global update (sneak peak)
- CRC in Asian American, Native Hawaiian, & other Pacific Islander ethnic groups

Data sources

Incidence

- Surveillance, Epidemiology, & End Results (SEER) Program, National Cancer Institute
- National Program of Cancer Registries (NPCR), CDC
- North American Association of Central Cancer Registries (NAACCR)

Mortality

- National Center for Health Statistics (NCHS)

Estimated New Colorectal Cancer Cases and Deaths in 2024

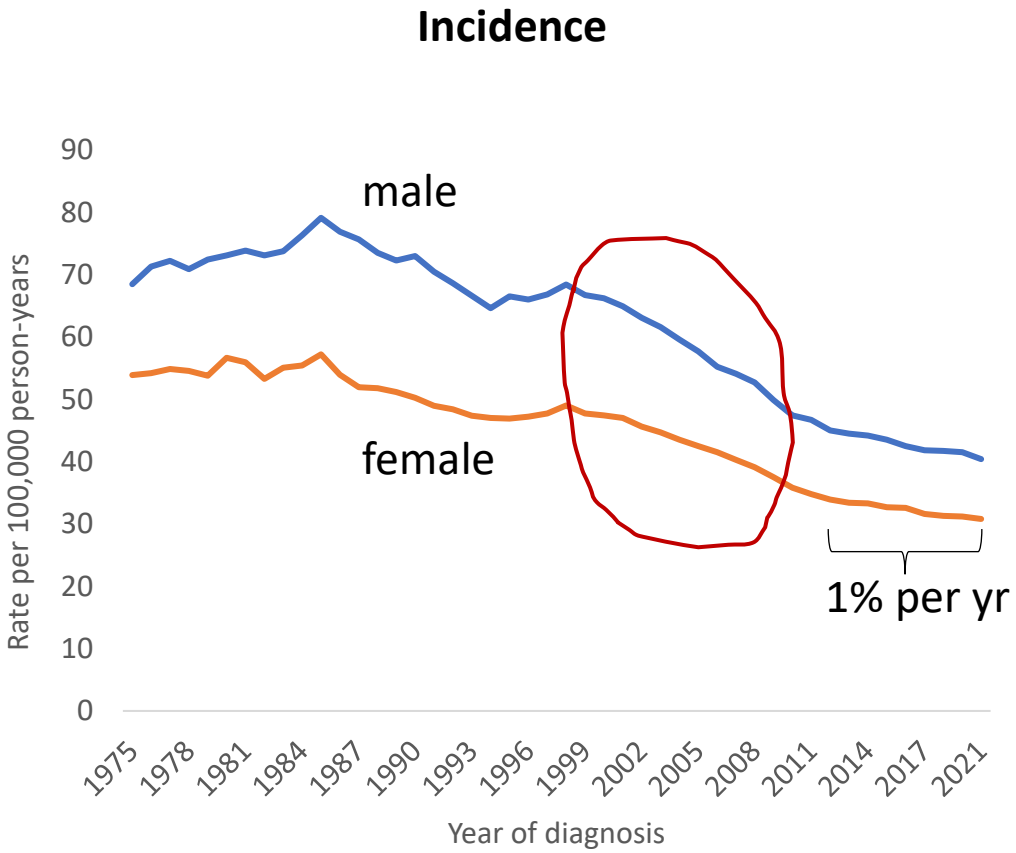
CASES		
Age, years	**Total**	**Percent**
0-49	20,260	13%
50-64	46,930	31%
65+	85,610	56%
All ages	**152,810**	**100%**

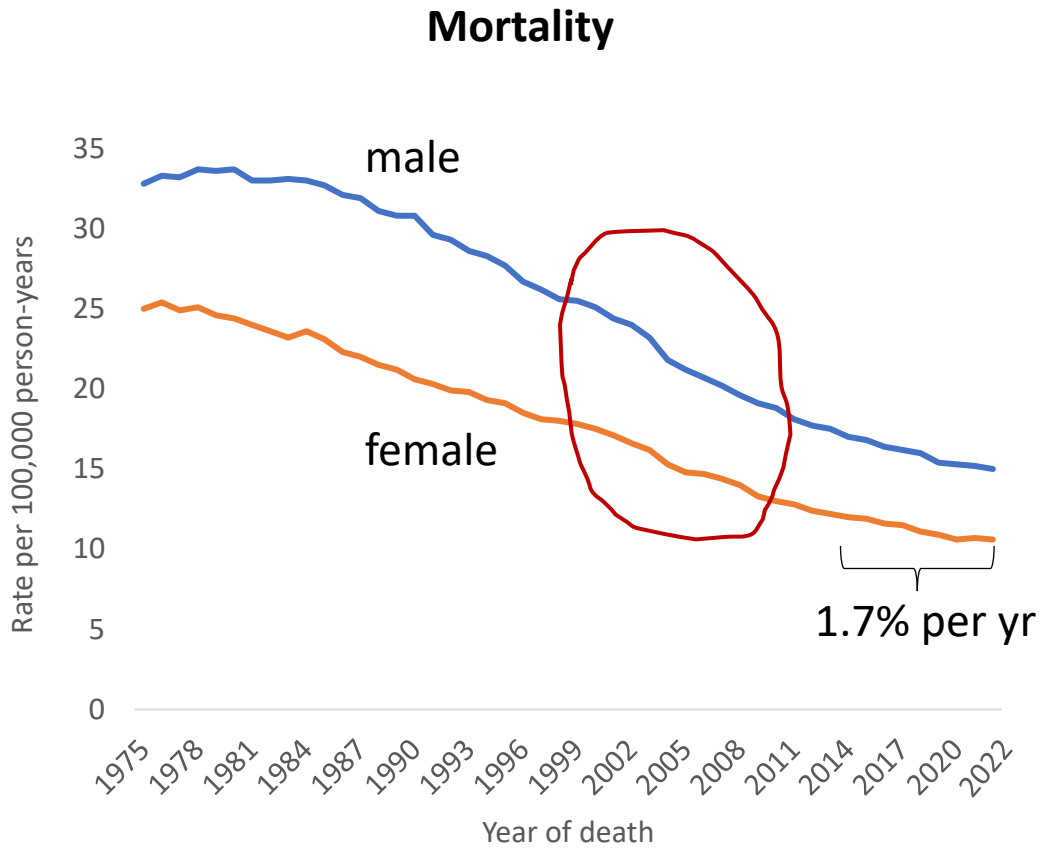
DEATHS		
Age, years	**Total**	**Percent**
0-49	3,820	7%
50-64	13,120	25%
65+	36,070	68%
All ages	**53,010**	**100%**

0–64 years: 44% of cases, up from **27%** in 1995

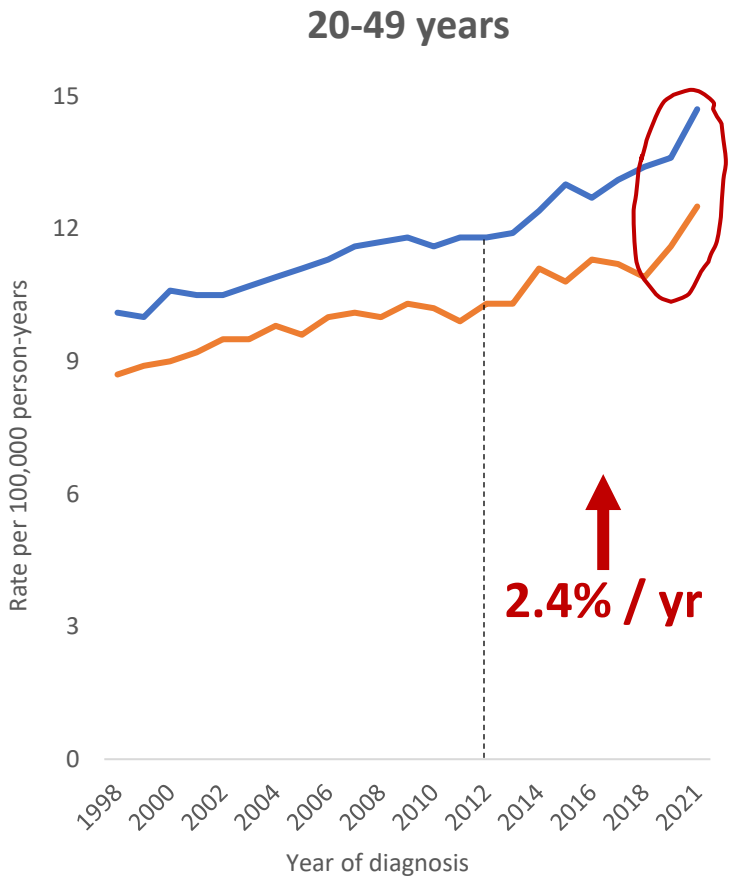
0–49 years: 56 diagnoses every day

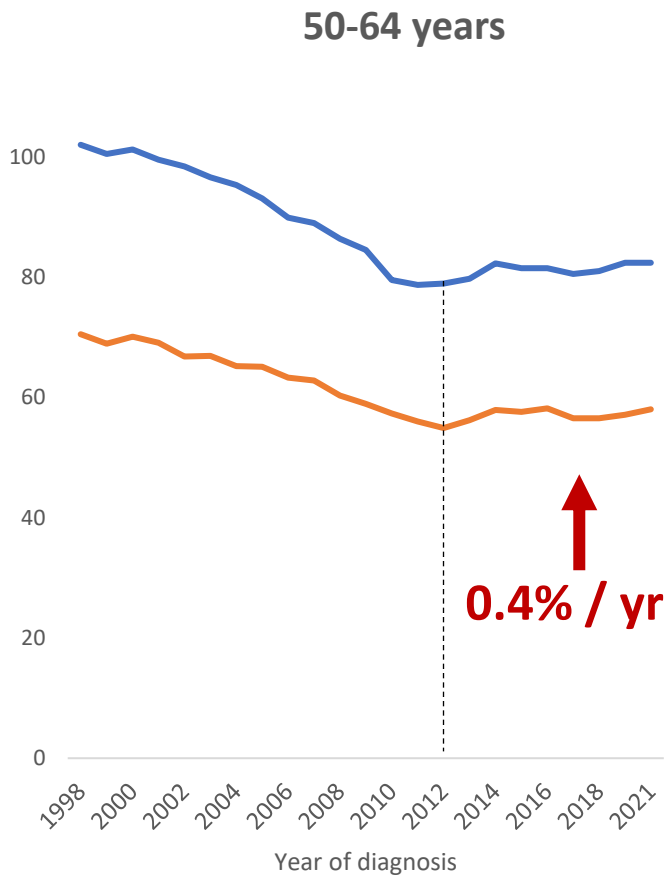
Long-term trends in colorectal cancer incidence & mortality, US

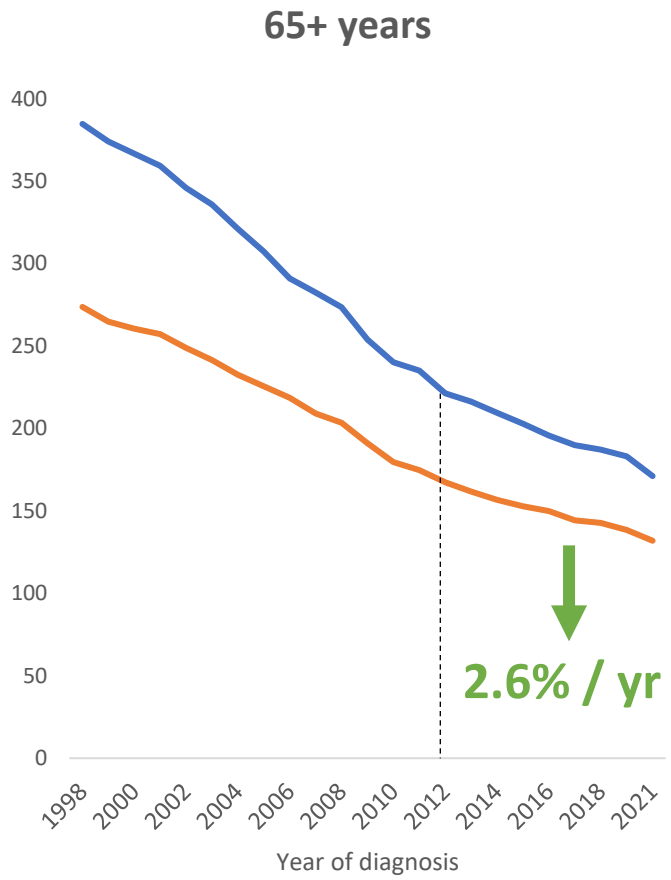




Trends in colorectal cancer incidence by age, 1998-2021







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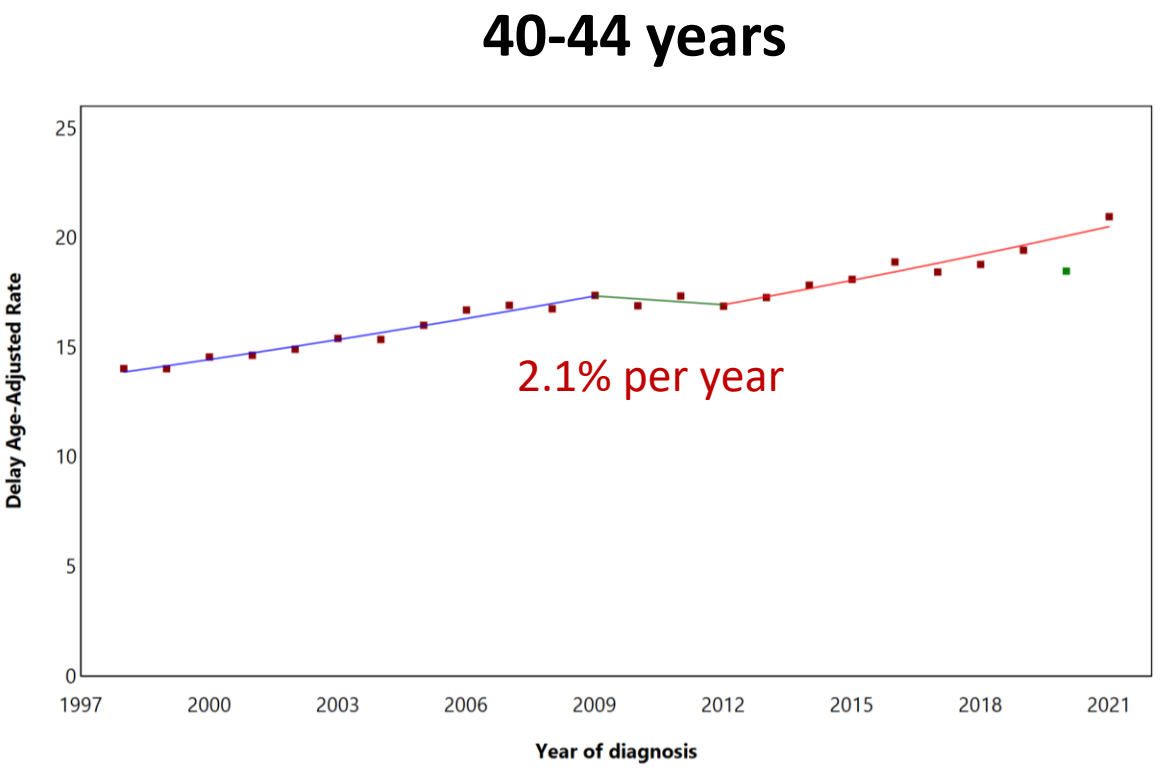
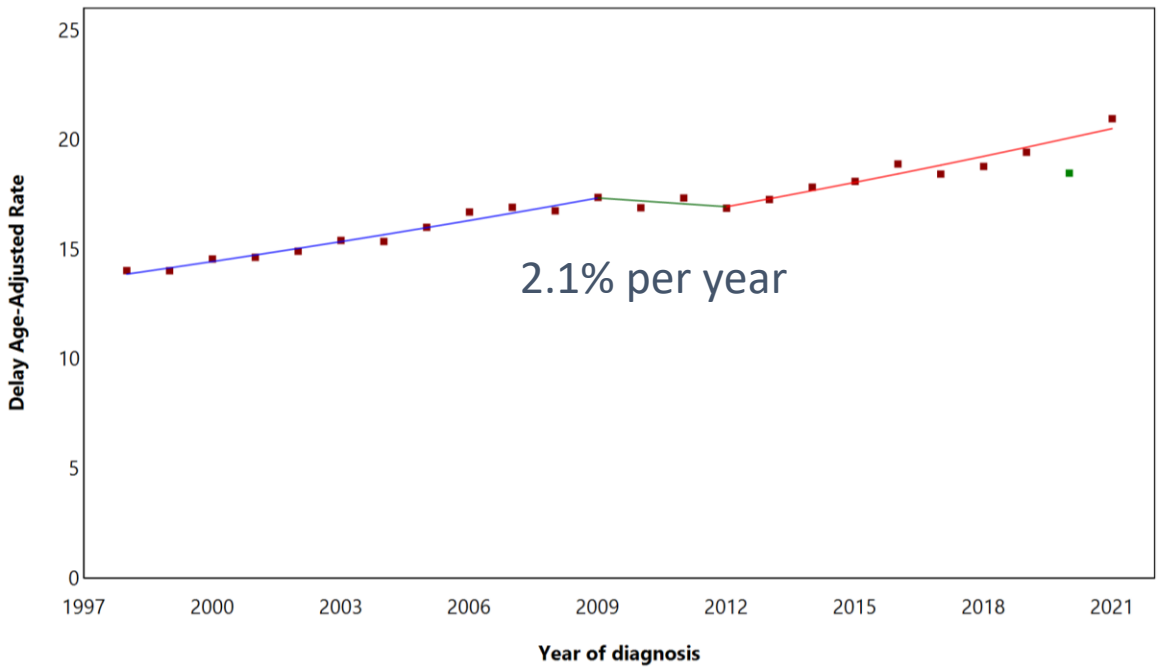
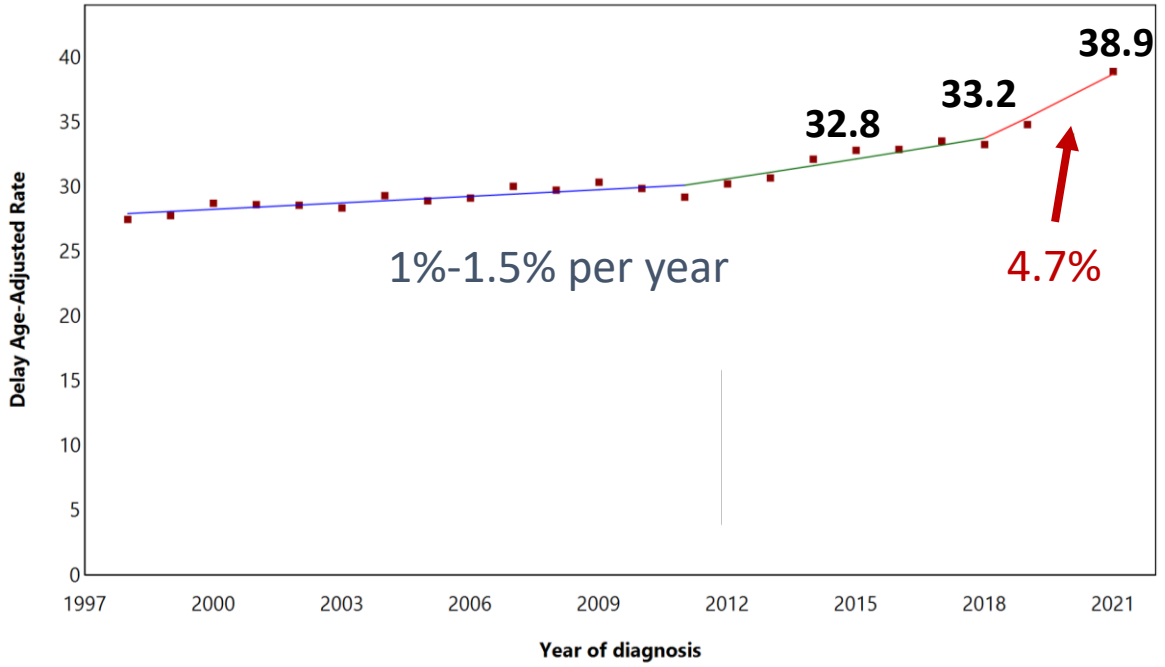


Trends in colorectal cancer incidence by age, 1998-2021

40-44 years



45-49 years



17% increase from 2018 to 2021

vs

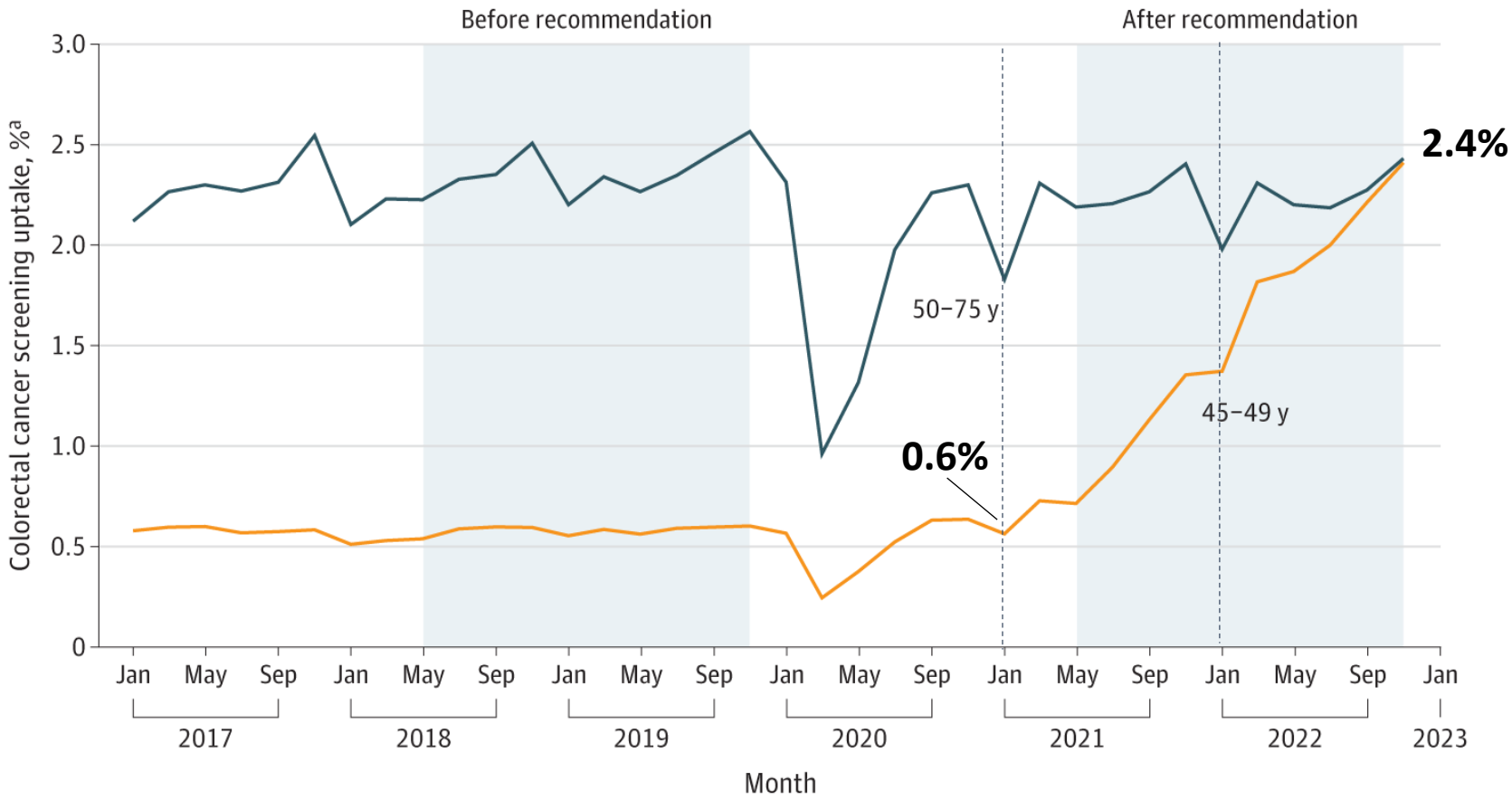
1.2% increase from 2015 to 2018

Original Investigation | Oncology

USPSTF Colorectal Cancer Screening Recommendation and Uptake for Individuals Aged 45 to 49 Years

Sunny Siddique, MPH; Rong Wang, PhD; Faiza Yasin, MD, MHS; Jacquelyne J. Gaddy, MD, MSc, MSCR; Lan Zhang, MPH; Cary P. Gross, MD; Xiaomei Ma, PhD

JAMA Netw Open. 2024;7(10):e2436358. doi:10.1001/jamanetworkopen.2024.36358



Annals of Internal Medicine ORIGINAL RESEARCH

Colorectal Cancer Screening Completion and Yield in Patients Aged 45 to 50 Years

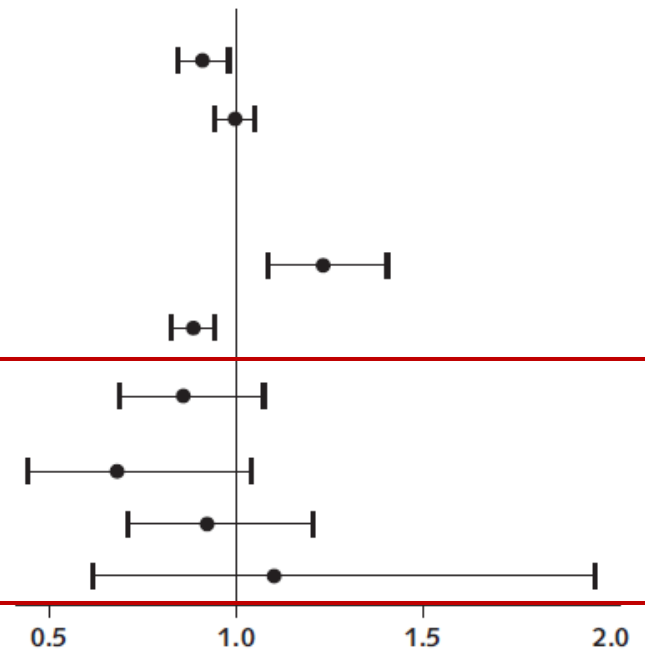
An Observational Study

Theodore R. Levin, MD*; Christopher D. Jensen, PhD, MPH*; Natalia Udaltsova, PhD; Andrea A. Burnett-Hartman, PhD; Aruna Kamineni, PhD, MPH; Chun R. Chao, PhD; Joanne E. Schottinger, MD; Nirupa R. Ghai, PhD, MPH; Gaia Pocobelli, PhD; Larissa L. White, PhD; Malia Oliver, BA; Hina Chowdhry, MPH; Brian P. Hixon, MS; Jessica M. Badalov, MS, RD; Shauna R. Goldberg, MPH; Susan C. Bradford, MS; Charles P. Quesenberry, PhD; and Jeffrey K. Lee, MD, MPH

Published online: 22 October 2024

Figure 3. Colorectal cancer screening yield measures.

Outcome	Patients, *n/N (%)*		aRR (95% CI)
	Aged 45–49 y	Aged 50 y	
FIT positivity	3015/83 175 (3.6)	813/20 195 (4.0)	0.91 (0.84–0.98)
Colonoscopy after a positive FIT result	1957/3015 (64.9)	548/813 (67.4)	1.00 (0.94–1.05)
Follow-up colonoscopy findings			
False-positive FIT result	781/1957 (39.9)	173/548 (31.6)	1.23 (1.08–1.40)
Any adenoma	1150/1957 (58.8)	371/548 (67.7)	0.88 (0.83–0.95)
Adenoma with advanced histology	259/1957 (13.2)	87/548 (15.9)	0.86 (0.69–1.07)
Polyp with high-grade dysplasia	67/1957 (3.4)	28/548 (5.1)	0.68 (0.44–1.04)
Sessile serrated lesion	202/1957 (10.3)	64/548 (11.7)	0.92 (0.71–1.21)
Colorectal cancer (adenocarcinoma)	54/1957 (2.8)	15/548 (2.7)	1.10 (0.62–1.96)



Accelerating progress to reduce the cancer burden through prevention and control in the United States

JNCI: Journal of the National Cancer Institute, 2024, 00(0), 1–9
https://doi.org/10.1093/jnci/djae204

Katrina A.B. Goddard, PhD,[1,*] Eric J. Feuer, PhD,[1] Asad Umar, DVM, PhD,[2] Philip E. Castle, PhD[2,3]

Table 3. Model-estimated number of cancer deaths averted and life-years gained from increased uptake of US Preventive Services Task Force–recommended screening for cohorts reaching the minimum age of screening eligibility in 2021-2045 over their remaining lifetime

Cancer screening	Screening rate, 2019-2021[b]	Hypothetical improved screening rate	Percentage-point increase in screening rate[c]	Total over the lifetime of 25 annual cohorts (2021-2045)[a]	
				Cancer deaths averted	Life-years gained
Lung	13%	80%	67	110 000	1.5 million
Lung and smoking cessation program	13%	80%	67	150 000	4.6 million
Colorectal	69%	80%	11	360 000	4.4 million
Breast	76%	86%	10	50 000	1.0 million
Cervical	73%	83%	10	40 000	1.5 million

[a] Mean (lung and colorectal cancer models) or median (breast cancer models) estimate across Cancer Intervention and Surveillance Modeling Network models for a given cancer site; analyses for cervical cancer screening were performed with only 1 model. Additional information is provided in the Supplementary Tables 1-3 (available online).

[b] Colorectal, breast, and cervical cancer screening rates (in accordance with contemporary US Preventive Services Task Force screening recommendations) are the average of the rates reported in the 2019 and 2021 National Health Interview Surveys (71); lung cancer screening rates are from the 2019 Behavioral Risk Factor Surveillance System survey (90).

[c] Increase necessary to bring screening rates to at least 80%, with a minimum increase of 10 percentage points.

Gut

ORIGINAL ARTICLE

Global patterns and trends in colorectal cancer incidence in young adults

Rebecca L Siegel,[1] Lindsey A Torre,[1] Isabelle Soerjomataram,[2] Richard B Hayes,[3] Freddie Bray,[2] Thomas K Weber,[4,5] Ahmedin Jemal[1]

Siegel RL, *et al*. *Gut* 2019;**0**:1–7. doi:10.1136/gutjnl-2019-319511

- ✓ **43** countries
- ✓ Incidence through **2012** (longer for several countries)
- ✓ **9** countries increasing <50 with stable/declining 50+

IN PRESS
UNDER EMBARGO

Colorectal cancer incidence trends in young versus older adults: an analysis of population-based cancer registry data

Hyuna Sung, Rebecca L. Siegel, Mathieu Laversanne, Chenxi Jiang, Eileen Morgan, Mariam Zahwe, Yin Cao, Freddie Bray, Ahmedin Jemal

- ✓ **50** countries/territories, **12** for the first time (Puerto Rico, Argentina, Chile, Ecuador, Columbia, Martinique, Qatar, Kuwait, Bahrain, Iceland, Belarus, and Uganda)

- ✓ Incidence through **2017**

Global update on early-onset CRC:
14 countries with unfavorable trends confined to <50 y

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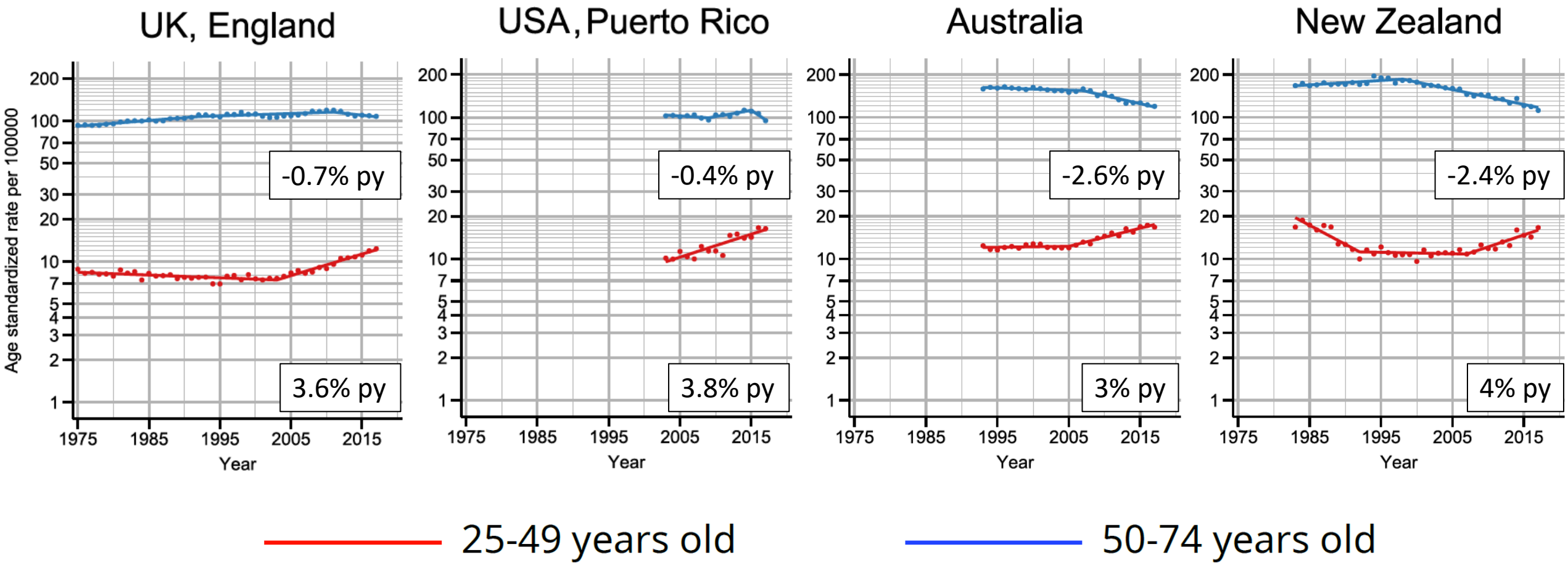
UNDER EMBARGO



Global update on early-onset CRC:
increase <50 years: new countries

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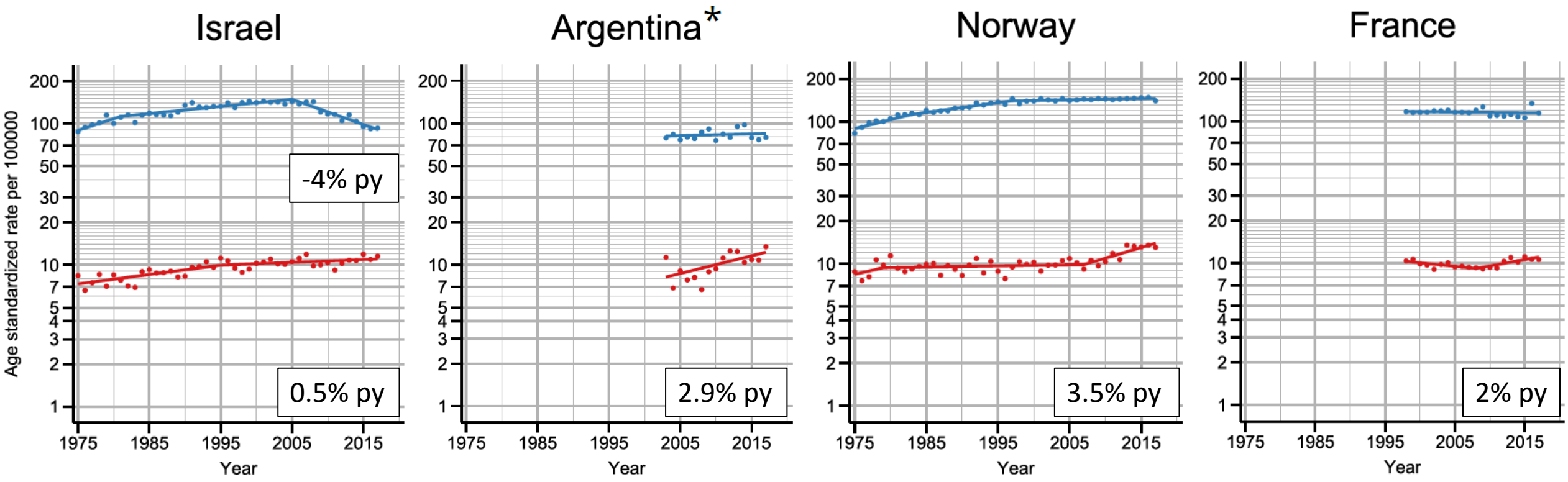

*Subnational data

Global update on early-onset CRC:
steeper increase <50 versus 50+ years

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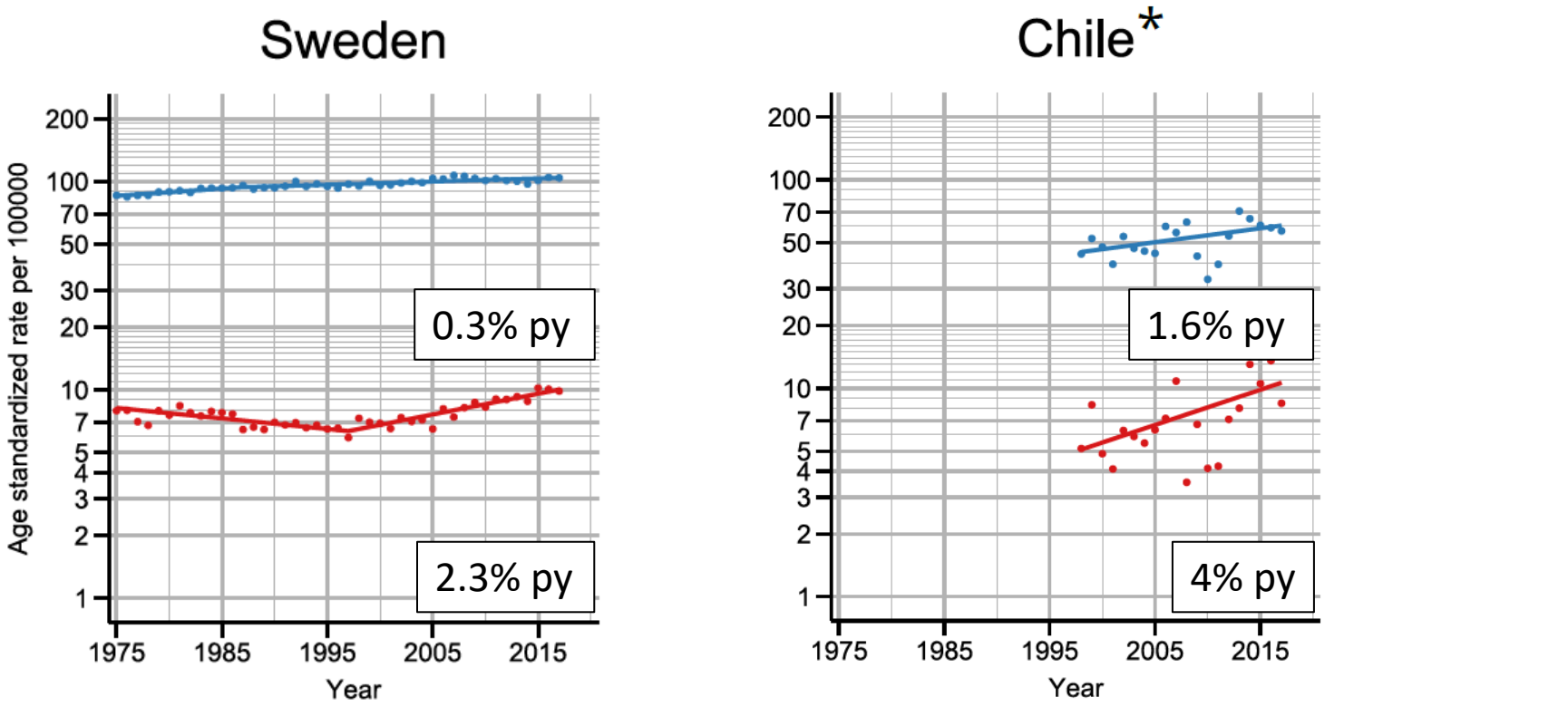
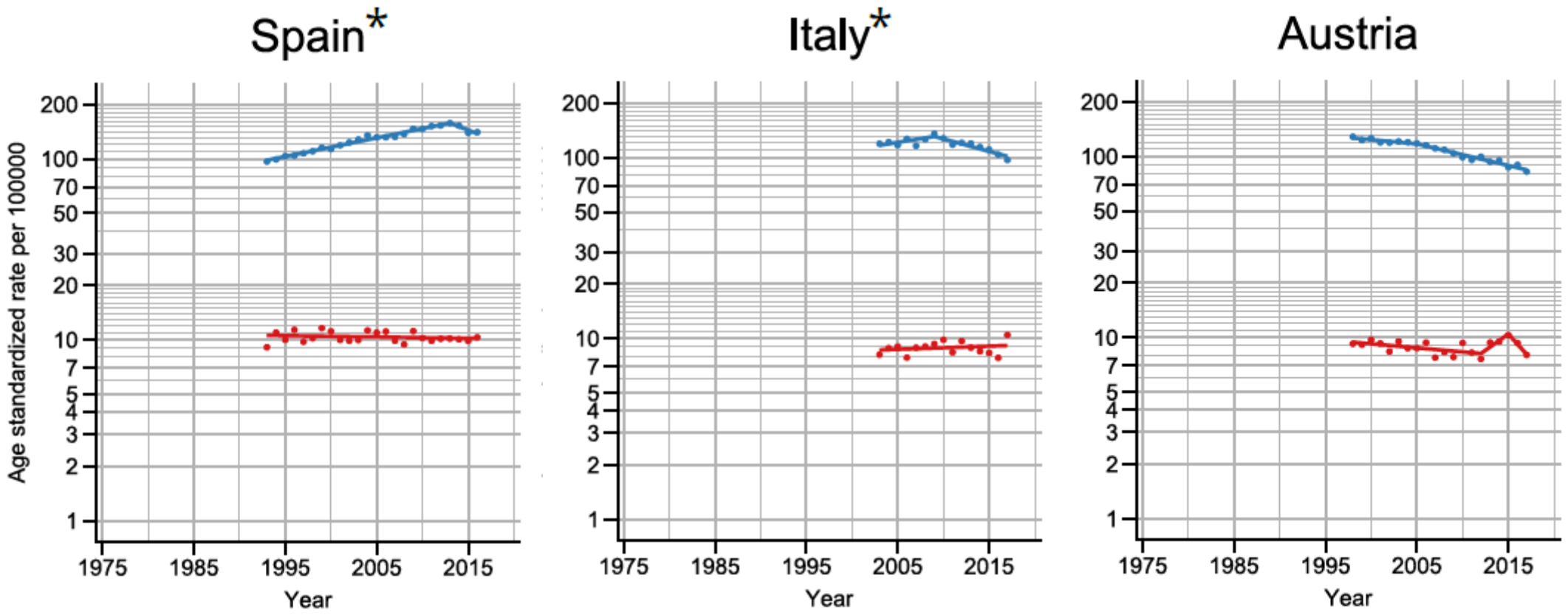


*Subnational data

Global update on early-onset CRC:
Where are rates stable?

IN PRESS
UNDER EMBARGO



*Subnational data

Global update on early-onset CRC:
Cross-sectional incidence by country, 2022

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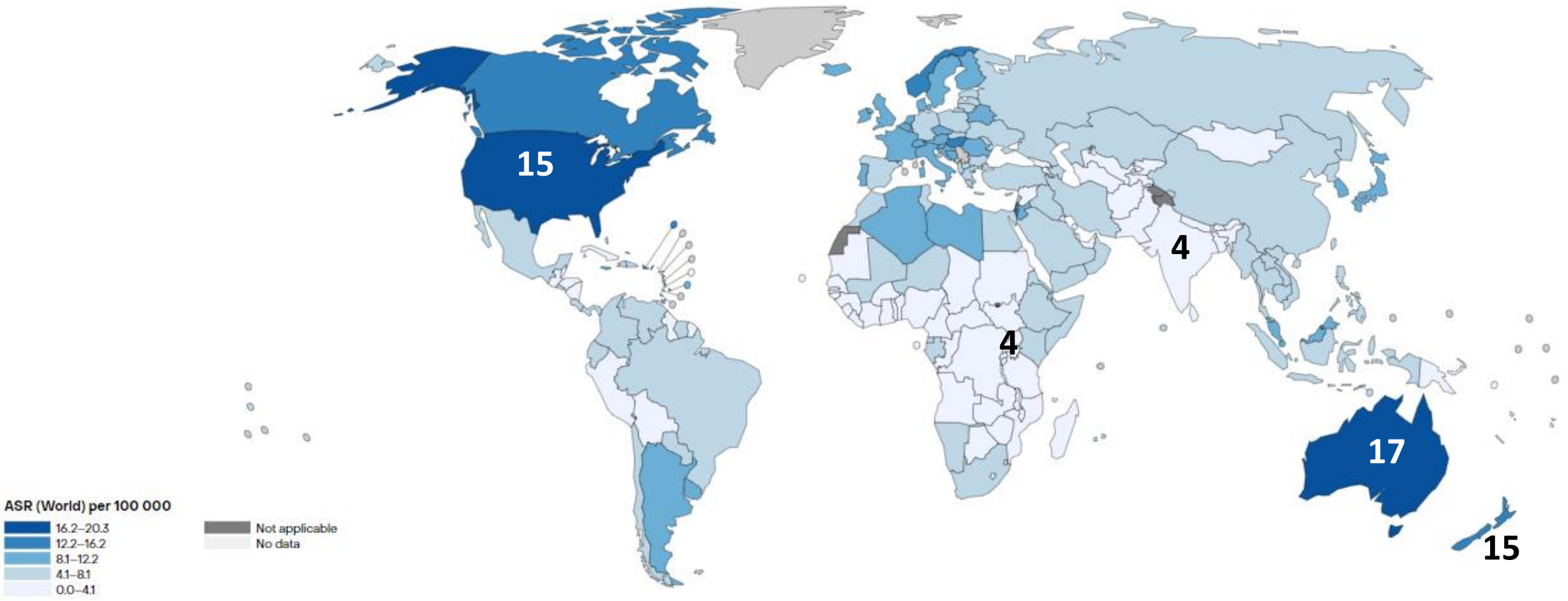
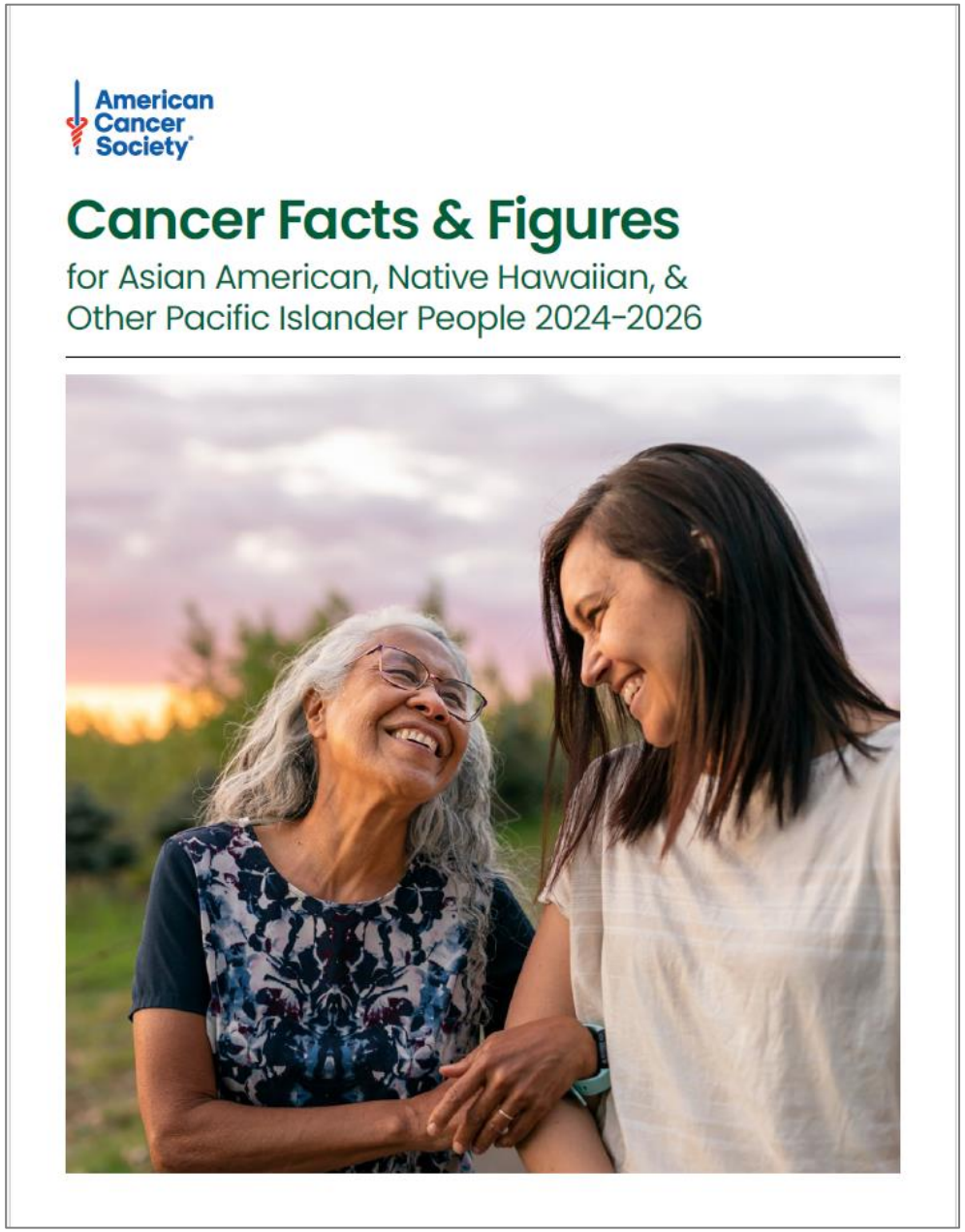


American Cancer Society

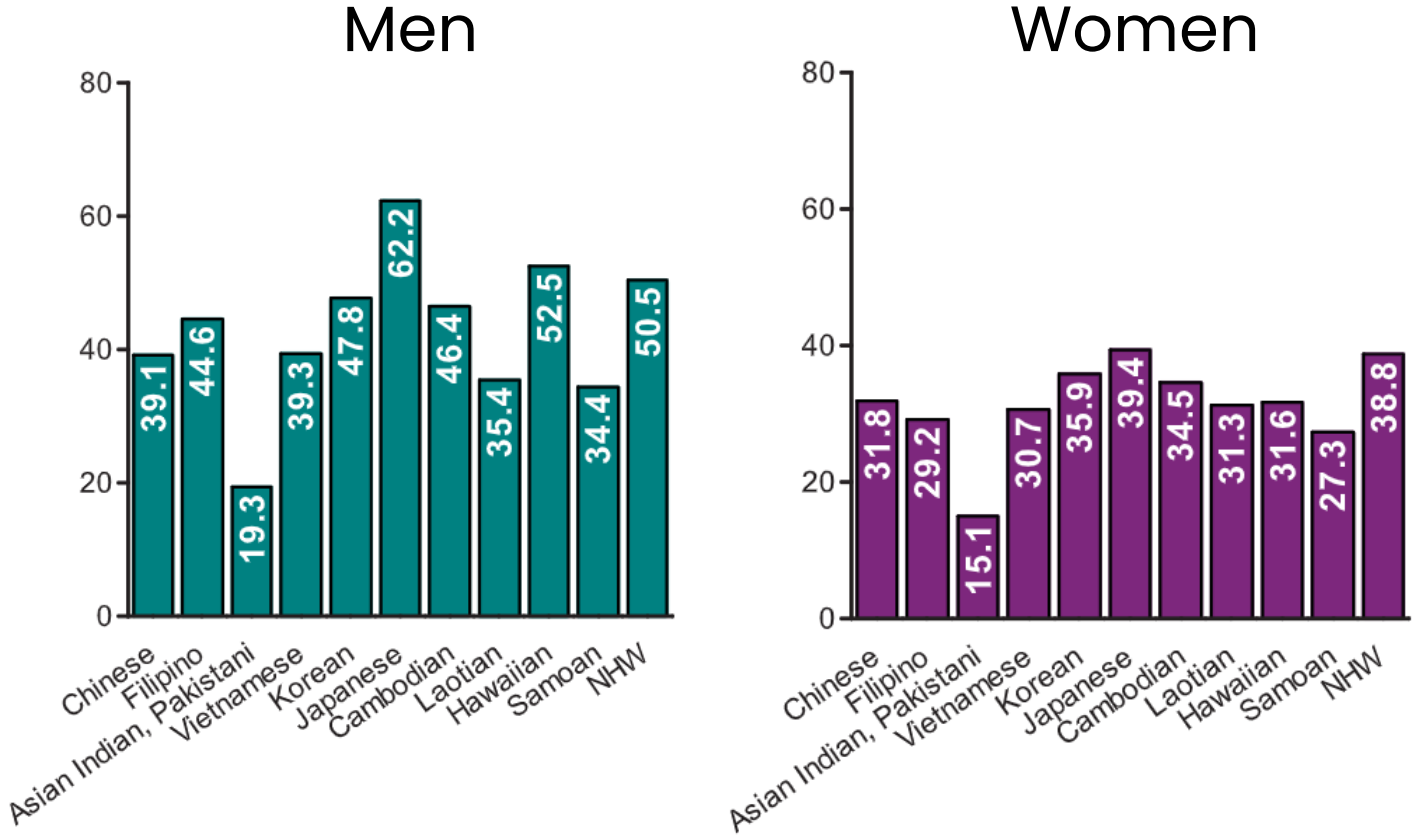
Cancer Facts & Figures

for Asian American, Native Hawaiian, & Other Pacific Islander People 2024-2026

cancer.org/statistics



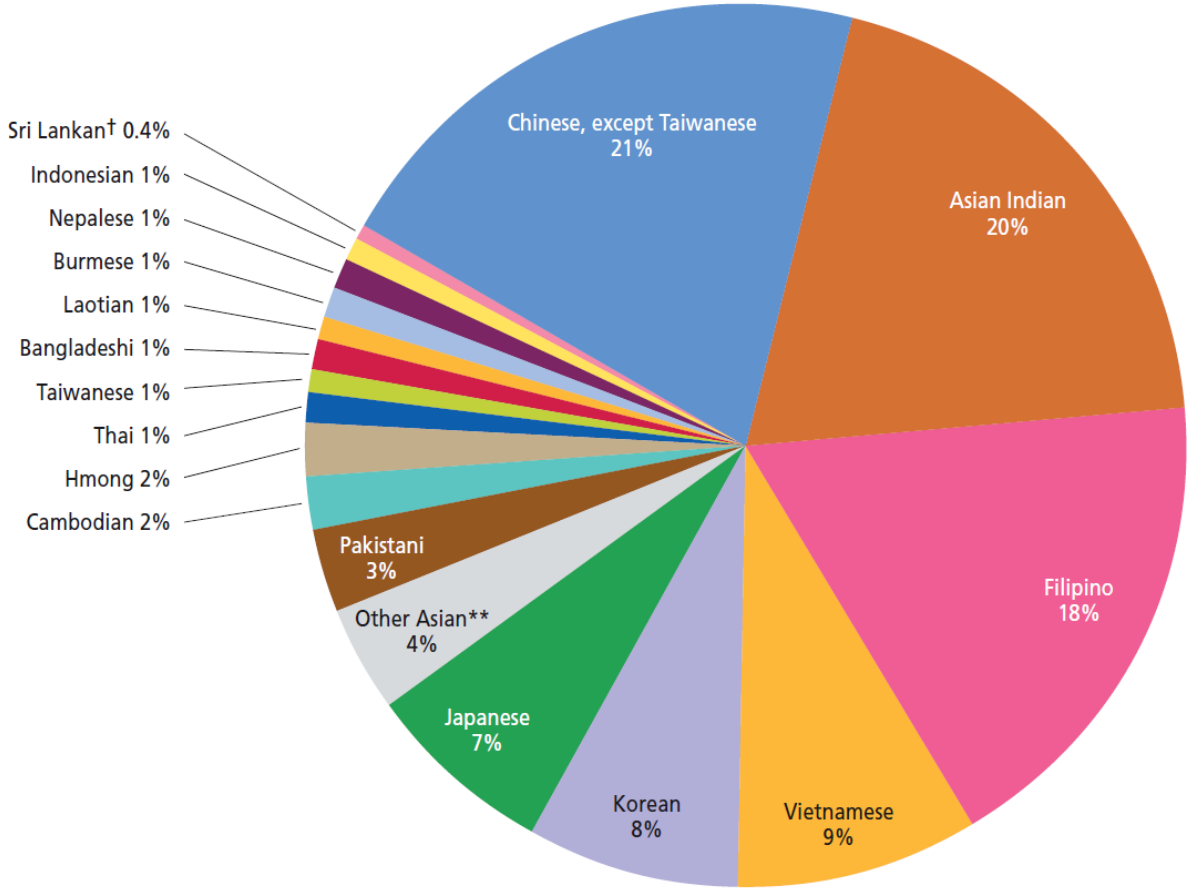
cancer.org/statistics



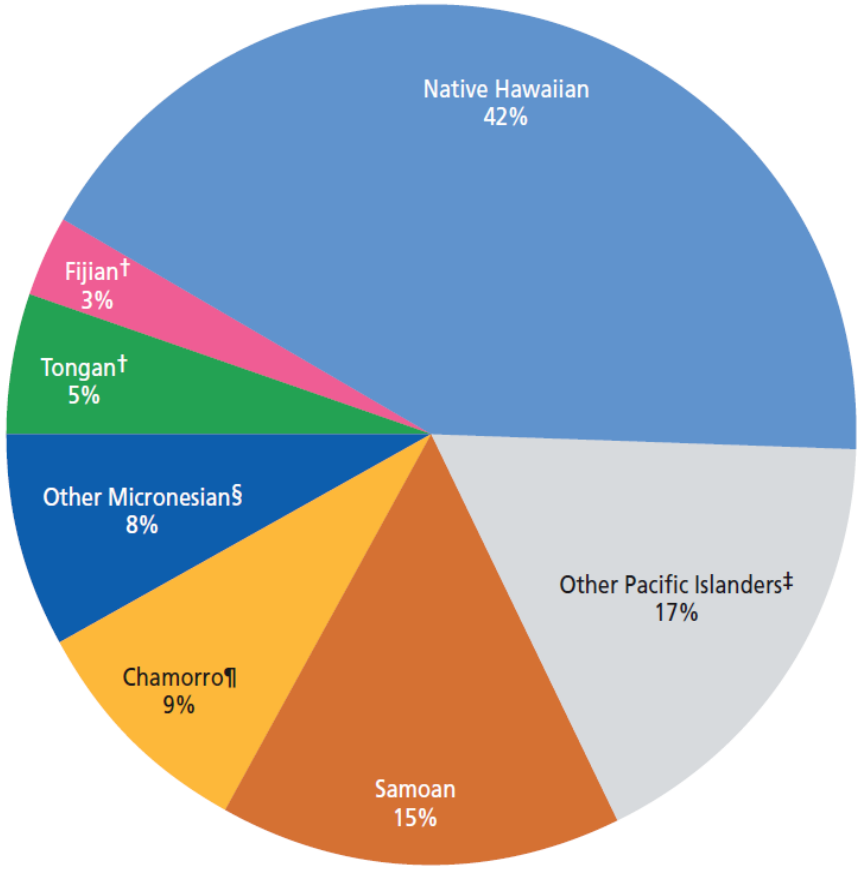
Torre LA et al. Cancer statistics for Asian Americans, Native Hawaiians, and Pacific Islanders, 2016: Converging incidence in males and females. *CA Cancer J Clin*. 2016 May;66(3):182-202.

Asian American, Native Hawaiian, and other Pacific Islander ethnic distribution, US, 2021

Asian American

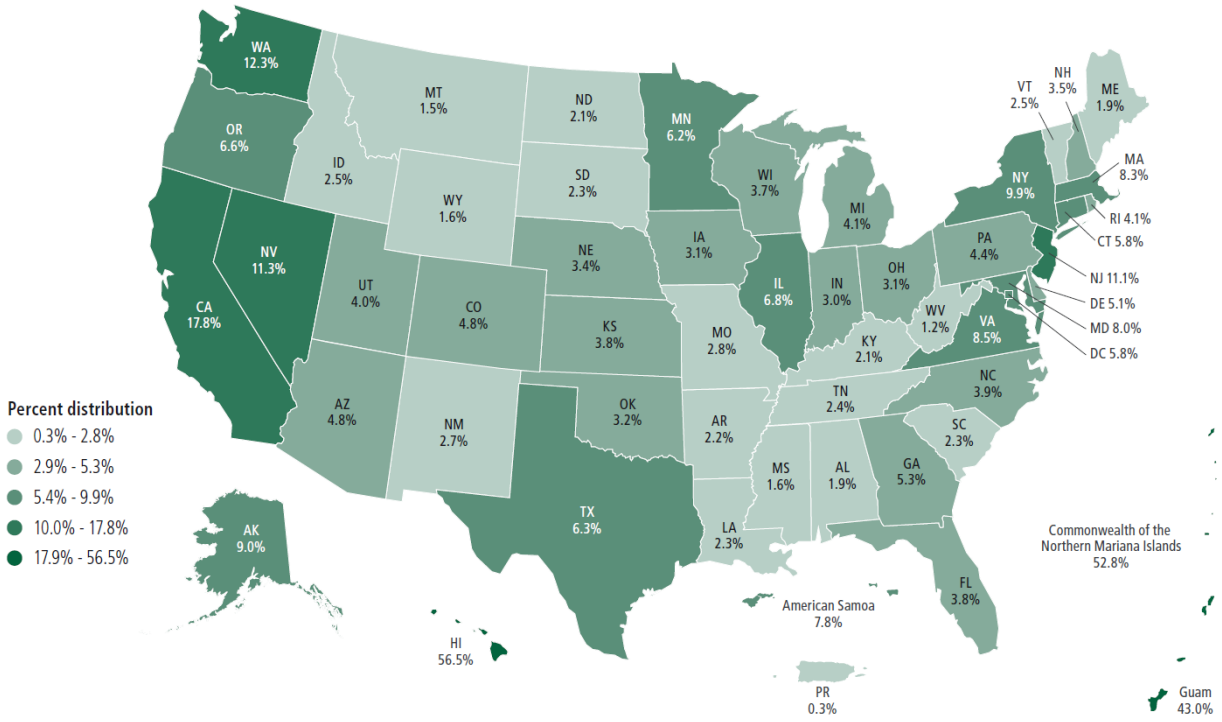


Native Hawaiian/ Pacific Islander

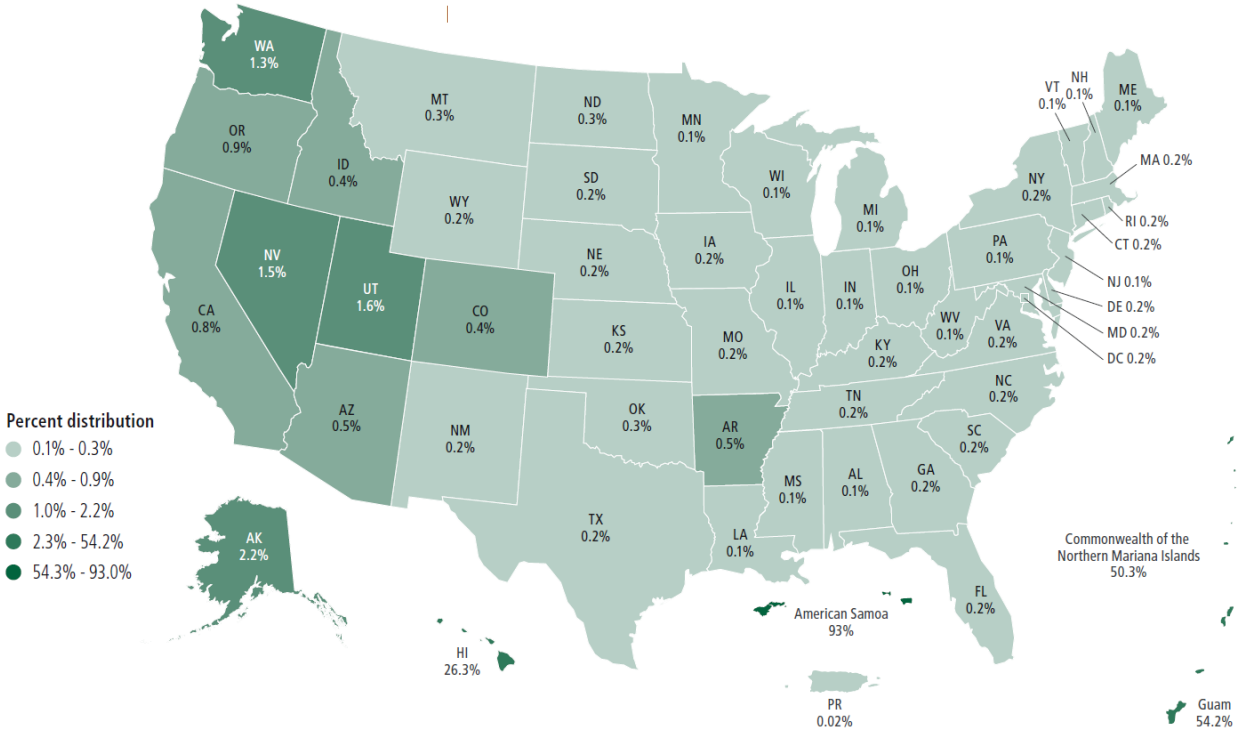


Asian American & Native Hawaiian/other Pacific Islander distribution as a % of state/territory

Asian American



Native Hawaiian/ Pacific Islander



Alone or in combination with another race(s).
Asian Americans – US Census Bureau, 2021 American Community Survey 1-Year Estimates. Native Hawaiian and Other Pacific Islanders – US Census Bureau, 2017-2021 American Community Survey 5-Year Estimates. Guam, Commonwealth of the Northern Mariana Islands, and American Samoa (Asian American and NHPI) – US Census Bureau, 2020 Census.

Most common cancers in Asian American, Native Hawaiian, & other Pacific Islander males by ethnic group, 2016–2020

	Cancer cases							
	First	%	Second	%	Third	%	Fourth	%
Males								
Asian American								
Chinese	Lung & bronchus	18%	Prostate	16%	Colon & rectum	12%	Liver & intrahepatic bile duct	7%
Japanese	Prostate	27%	Colon & rectum	12%	Lung & bronchus	12%	Urinary bladder	6%
Filipino	Prostate	23%	Lung & bronchus	16%	Colon & rectum	12%	Non-Hodgkin lymphoma	6%
Korean	Colon & rectum	14%	Lung & bronchus	14%	Prostate	14%	Stomach	10%
Vietnamese	Lung & bronchus	20%	Liver & intrahepatic bile duct	15%	Colon & rectum	12%	Prostate	12%
Laotian	Lung & bronchus	18%	Colon & rectum	17%	Liver & intrahepatic bile duct	16%	Prostate	8%
Hmong	Colon & rectum	15%	Liver & intrahepatic bile duct	12%	Lung & bronchus	10%	Oral cavity & pharynx	9%
Cambodian	Colon & rectum	19%	Liver & intrahepatic bile duct	15%	Lung & bronchus	14%	Prostate	8%
Thai	Prostate	18%	Lung & bronchus	13%	Colon & rectum	13%	Non-Hodgkin lymphoma	8%
Asian Indian	Prostate	20%	Colon & rectum	10%	Lung & bronchus	8%	Oral cavity & pharynx	7%
Pakistani	Prostate	16%	Lung & bronchus	10%	Colon & rectum	9%	Liver & intrahepatic bile duct	8%
NHPI								
Native Hawaiian	Prostate	22%	Lung & bronchus	13%	Colon & rectum	10%	Kidney & renal pelvis	5%
Chamorro/Guamanian	Lung & bronchus	19%	Prostate	13%	Colon & rectum	10%	Melanoma of the skin	6%
Samoan	Prostate	18%	Lung & bronchus	17%	Colon & rectum	13%	Stomach	7%
Tongan	Prostate	18%	Lung & bronchus	18%	Colon & rectum	11%	Liver & intrahepatic bile duct	8%
Fijian	Prostate	18%	Colon & rectum	10%	Urinary bladder	9%	Lung & bronchus	8%

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Most common cancers in Asian American, Native Hawaiian, & other Pacific Islander males by ethnic group, 2016–2020

	Cancer cases							
	First	%	Second	%	Third	%	Fourth	%
Males								
Asian American								
Chinese	Lung & bronchus	18%	Prostate	16%	Colon & rectum	12%	Liver & intrahepatic bile duct	7%
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Laotian	Lung & bronchus	18%	Colon & rectum	17%	Liver & intrahepatic bile duct	16%	Prostate	8%
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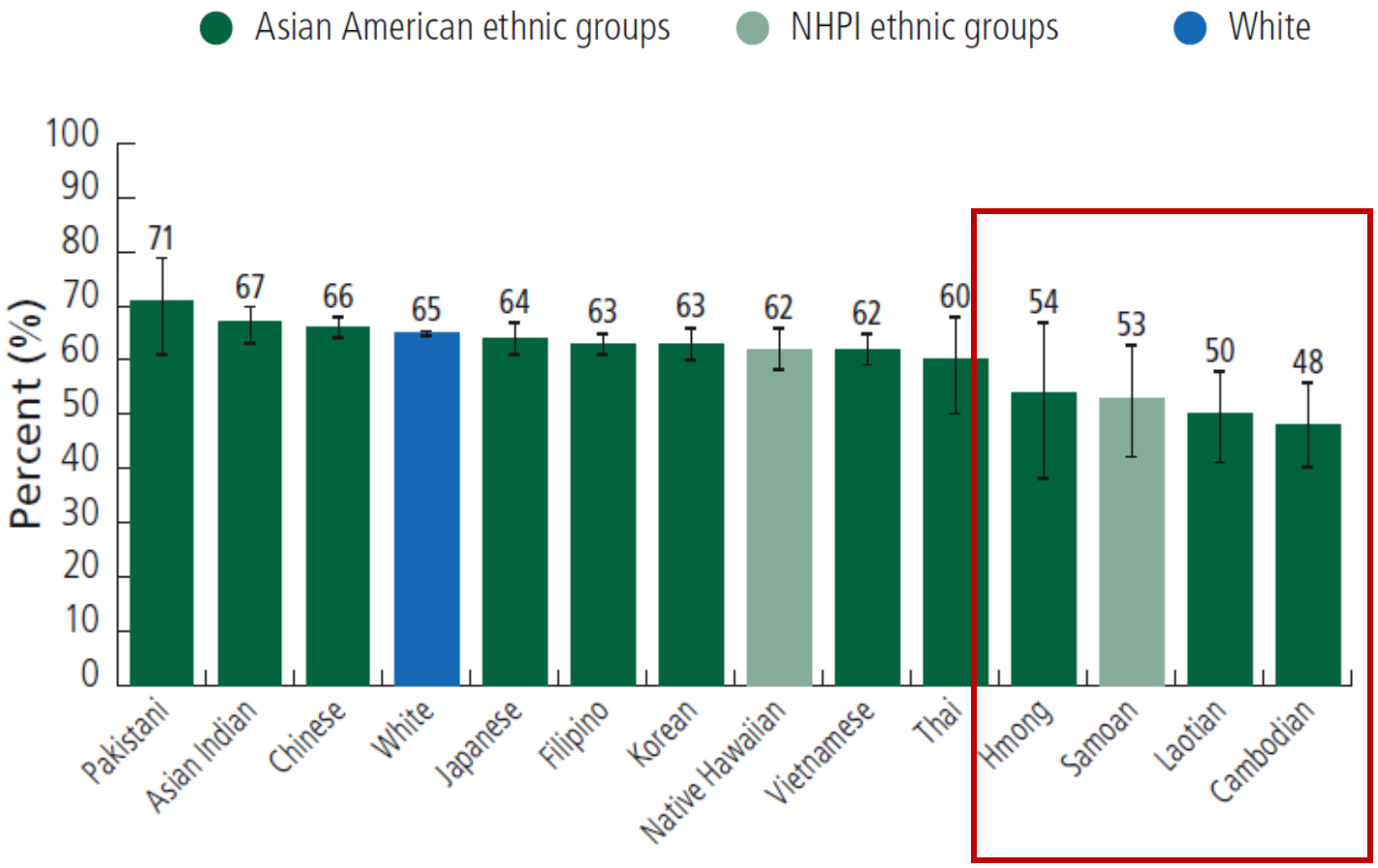
Tongan	Prostate	18%	Lung & bronchus	18%	Colon & rectum	11%	Liver & intrahepatic bile duct	8%
Fijian	Prostate	18%	Colon & rectum	10%	Urinary bladder	9%	Lung & bronchus	8%

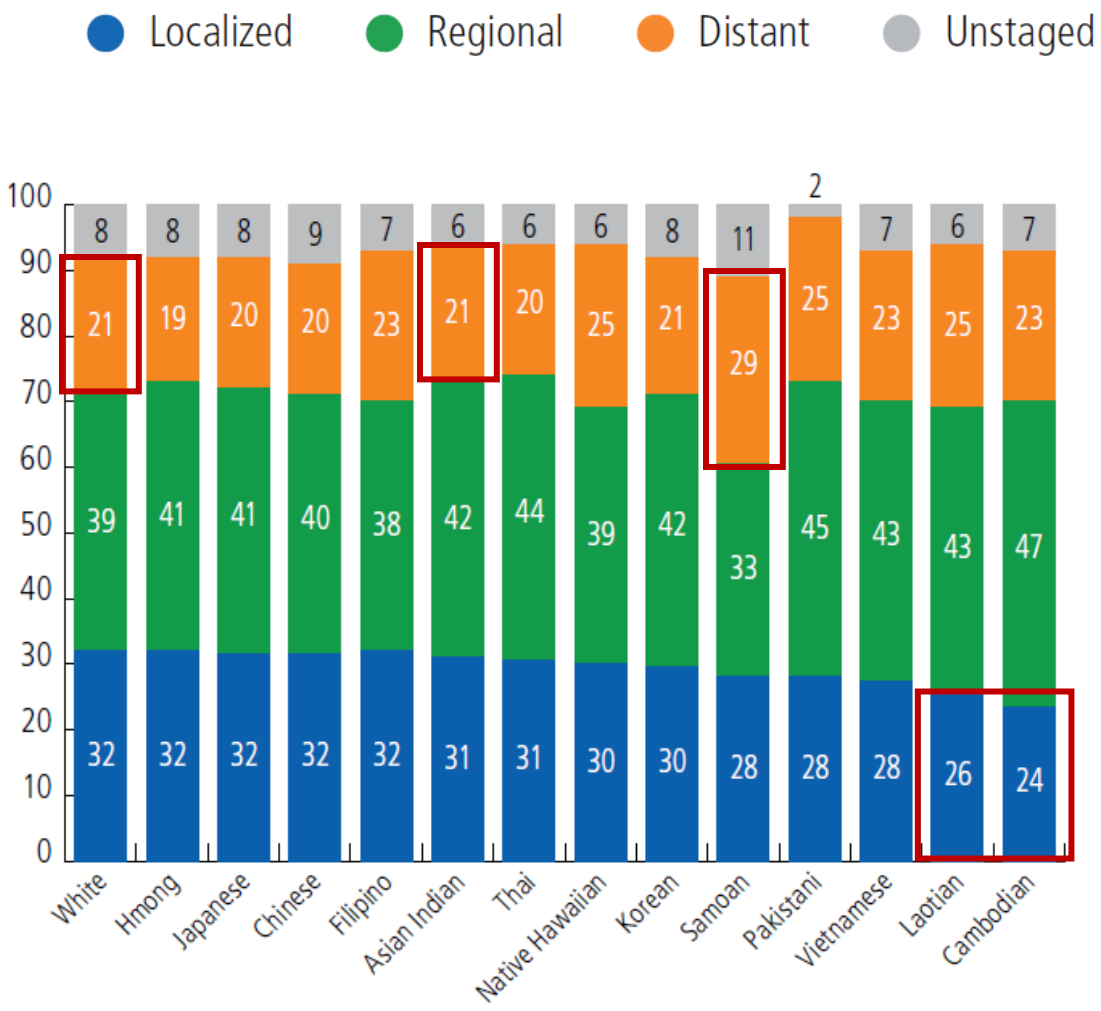
Most common cancers in Asian American, Native Hawaiian, & other Pacific Islander females by ethnic group, 2016–2020

	Cancer cases							
	First	%	Second	%	Third	%	Fourth	%
Females								
Asian American								
Chinese	Breast	32%	Lung & bronchus	13%	Colon & rectum	8%	Thyroid	6%
Japanese	Breast	35%	Lung & bronchus	11%	Colon & rectum	10%	Uterine corpus	6%
Filipino	Breast	38%	Uterine corpus	9%	Lung & bronchus	9%	Colon & rectum	7%
Korean	Breast	32%	Lung & bronchus	10%	Colon & rectum	10%	Thyroid	6%
Vietnamese	Breast	30%	Lung & bronchus	13%	Colon & rectum	9%	Thyroid	7%
Laotian	Breast	25%	Colon & rectum	12%	Lung & bronchus	9%	Liver & intrahepatic bile duct	6%
Hmong	Breast	17%	Colon & rectum	10%	Uterine corpus	9%	Lung & bronchus	9%
Cambodian	Breast	28%	Colon & rectum	13%	Lung & bronchus	10%	Liver & intrahepatic bile duct	6%
Thai	Breast	35%	Lung & bronchus	13%	Colon & rectum	8%	Uterine corpus	6%
Asian Indian	Breast	39%	Uterine corpus	8%	Thyroid	8%	Colon & rectum	5%
Pakistani	Breast	41%	Uterine corpus	8%	Thyroid	6%	Colon & rectum	5%
NHPI								
Native Hawaiian	Breast	34%	Uterine corpus	12%	Lung & bronchus	10%	Colon & rectum	7%
Chamorro/Guamanian	Breast	31%	Lung & bronchus	13%	Uterine corpus	9%	Colon & rectum	9%
Samoan	Breast	25%	Uterine corpus	23%	Lung & bronchus	9%	Colon & rectum	5%
Tongan	Breast	33%	Uterine corpus	22%	Lung & bronchus	5%	Liver & intrahepatic bile duct	5%
Fijian	Breast	44%	Uterine corpus	11%	Colon & rectum	7%	Lung & bronchus	5%

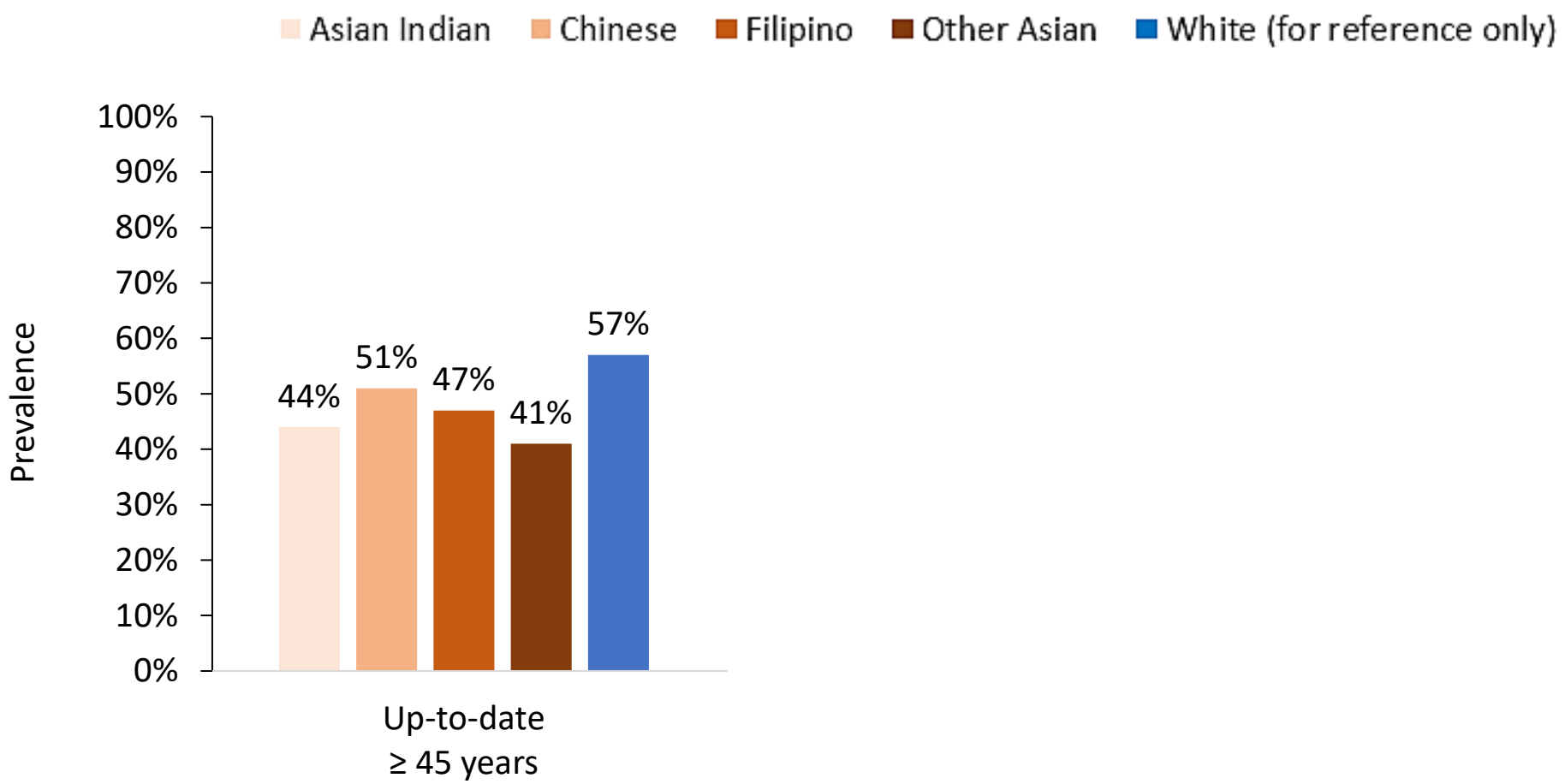
Five-year relative CRC survival rates by Asian American, Native Hawaiian, & other Pacific Islander ethnic group, 2013–2019



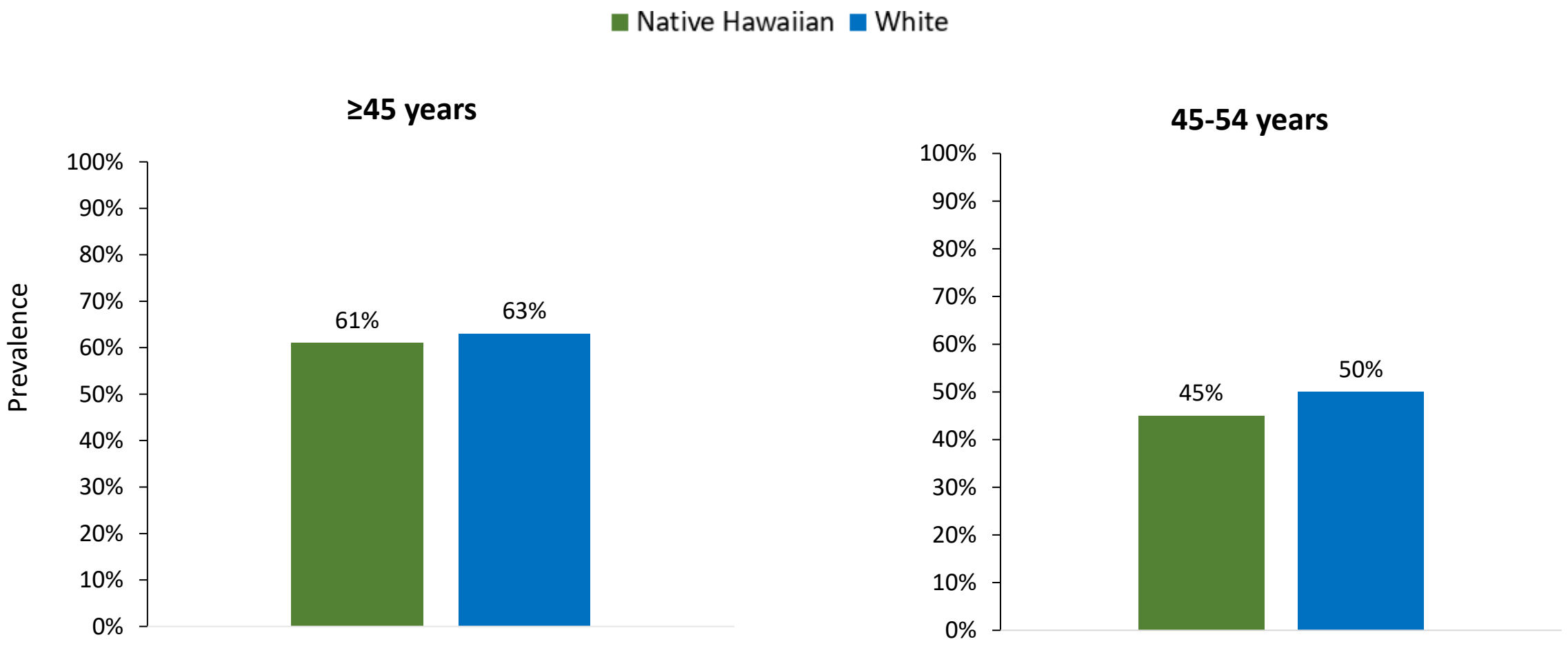
CRC stage distribution by Asian American, Native Hawaiian, & other Pacific Islander ethnic group, 2016–2020



CRC screening prevalence in Asian American ethnic groups, 2015–2018

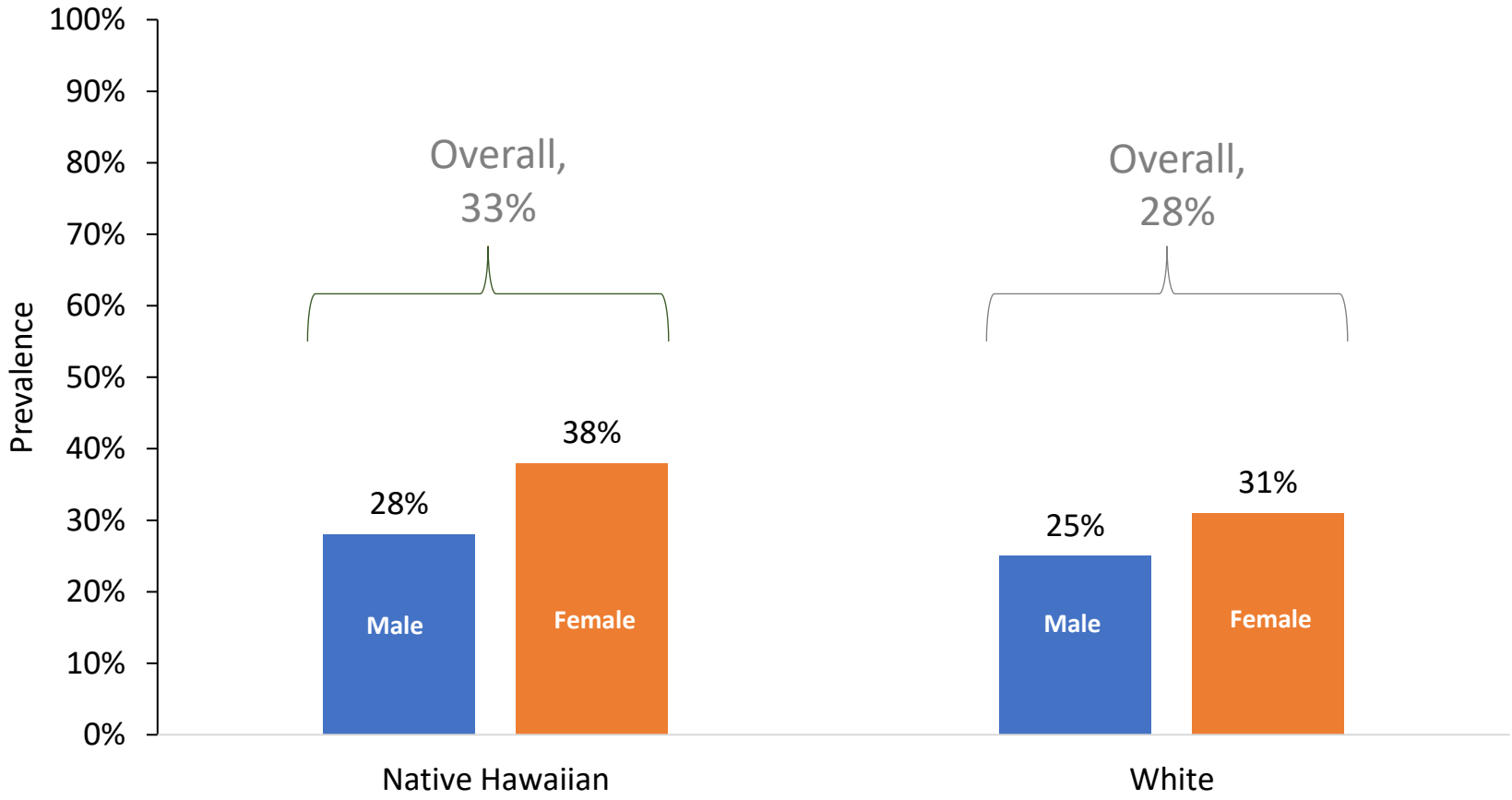


CRC screening prevalence in Native Hawaiian vs White people in Hawaii, 2022

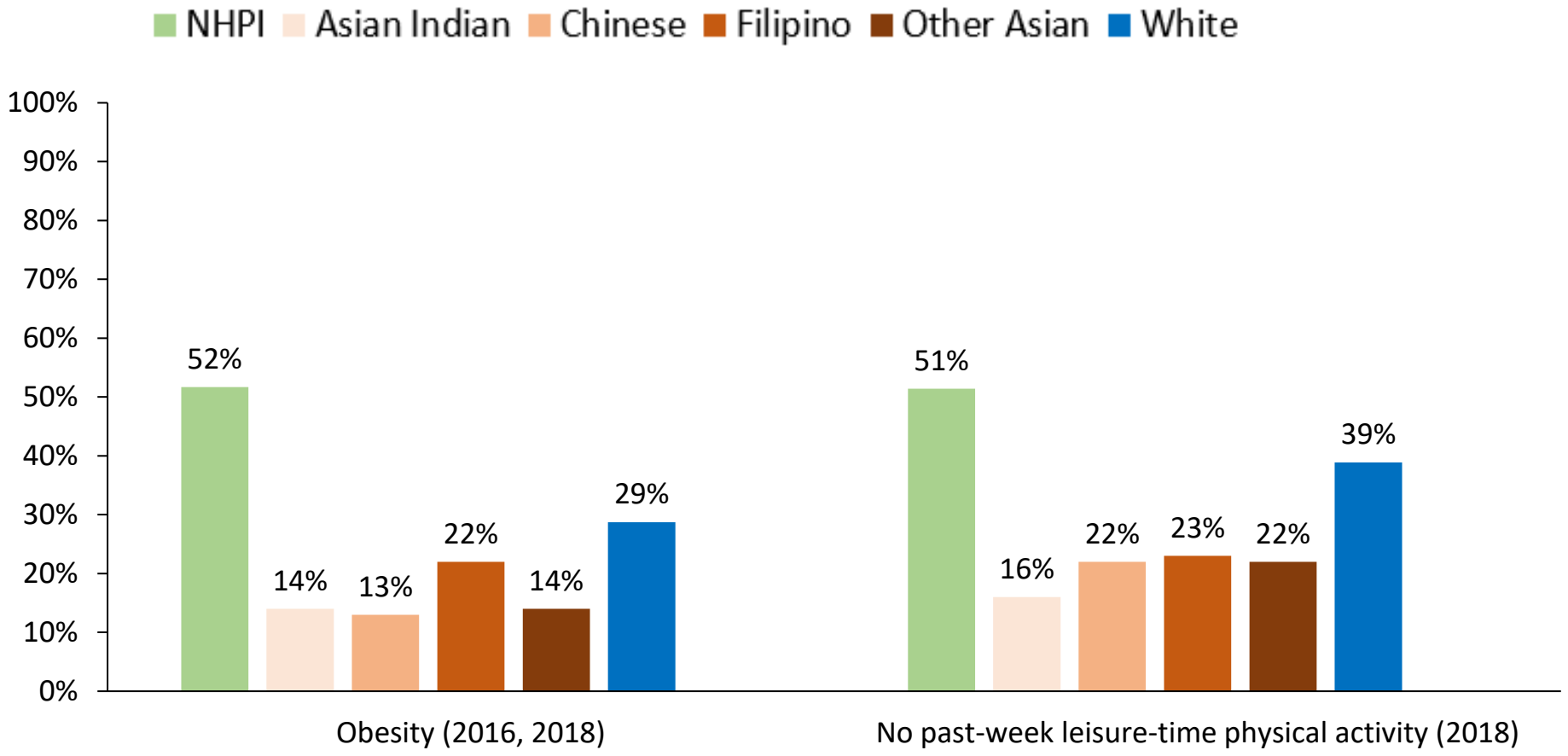


Note: All percentages exclude individuals of Hispanic ethnicity, are age adjusted to the 2000 US standard population, and rounded to the nearest whole number.
Source: Hawaii Behavioral Risk Factor Surveillance System, 2022.

Prevalence of Native Hawaiian vs White people never screened for CRC in Hawaii by sex, ≥45 years, 2022

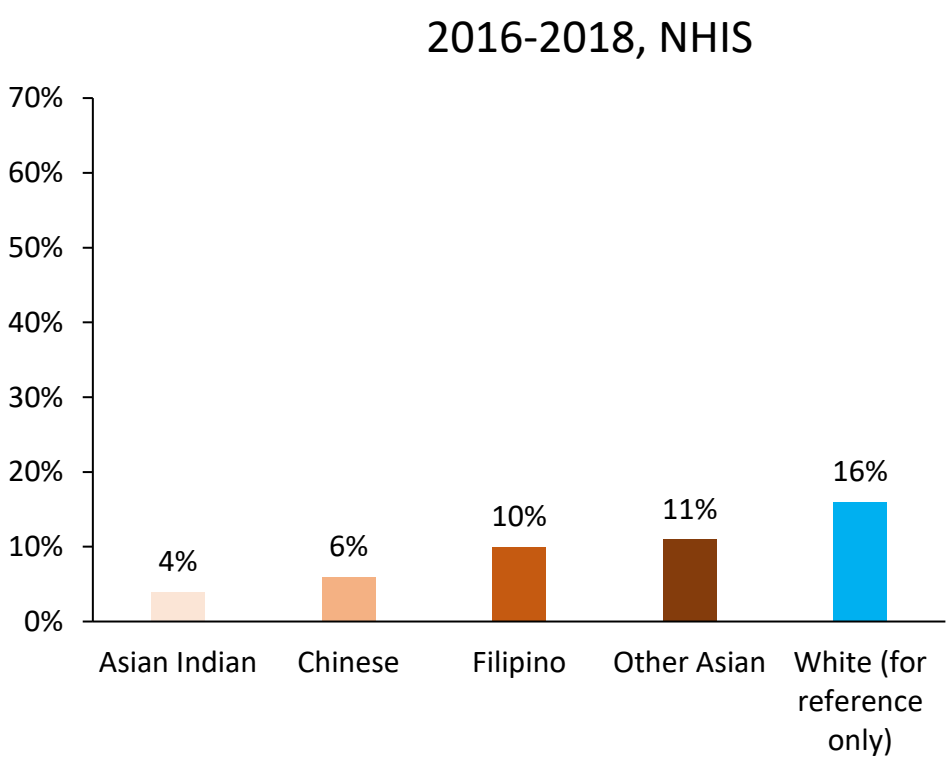


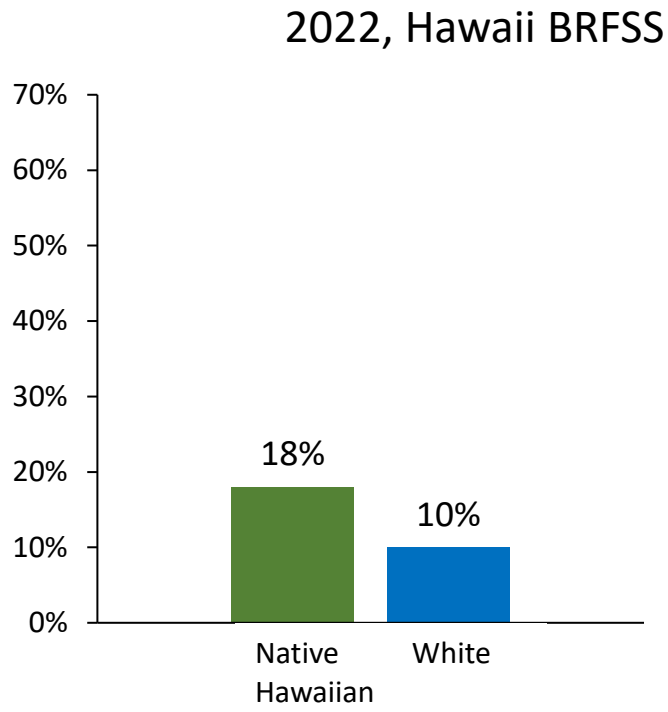
Obesity & physical inactivity prevalence in Asian Americans & Native Hawaiian or other Pacific Islanders



Source: Adults - CDC 2020. Summary Health Statistics: National Health Interview Survey: 2016. Table A-15a ; Summary Health Statistics: National Health Interview Survey: 2018..
Accessed from: https://minorityhealth.hhs.gov/obesity-and-native-hawaiianspacific-islanders

Current smoking prevalence in Asian American ethnic groups & Native Hawaiians in Hawaii





NHIS, National Health Interview Survey; BRFSS, Behavioral Risk Factor Surveillance System

Summary

- Progress against CRC confined to age 65+
  - 20-49 y increasing by 2.4% per year
  - 50-64 y increasing by 0.4% per year
- Acceleration in 45-49 y consistent with screening uptake
- Global rise in early-onset:
  - 14 countries/territories with increasing EO despite stable/declining trend in 50+ y
- Asian American, Native Hawaiian, and Pacific Islander people
  - Heterogeneity! (survival, stage at diagnosis)
  - Low screening
  - Native Hawaiian – high disease rates??

Thank you!

National Cancer Registrars Association

SEER

NPCR
NATIONAL PROGRAM of CANCER REGISTRIES

NAACCR North American Association of Central Cancer Registries

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American Cancer Society®

NATIONAL COLORECTAL CANCER ROUNDTABLE

Thank You