



PUBLIC HEALTH

**ALWAYS WORKING FOR A SAFER AND
HEALTHIER WASHINGTON**

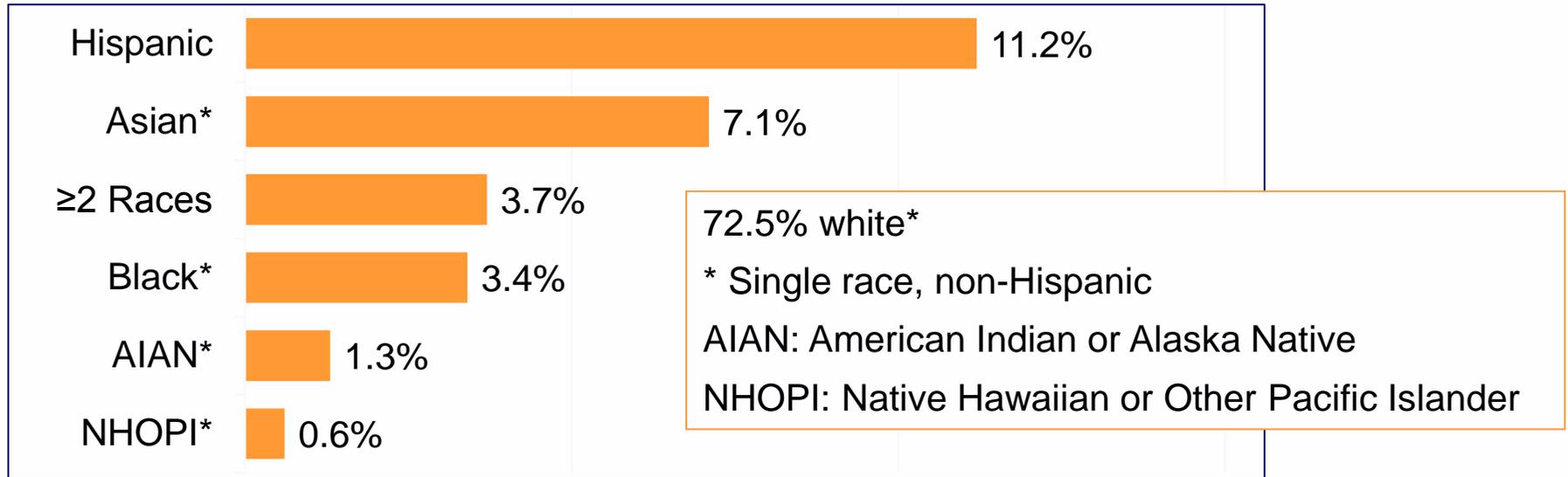
Health in Washington

Washington State Board of Health
January 11, 2012

Juliet VanEenwyk, PhD, State Epidemiologist for Non-Infectious Conditions

Who are we?

- 6.7M people with about 12% ages 65 and older



- About 13% living in poverty (US ≈ 15%)
 - Almost 1 in 5 children (WA ≈ 18%; US ≈ 21%)

Year	2007	2008	2009	2010
% people < poverty	11	11	12	13

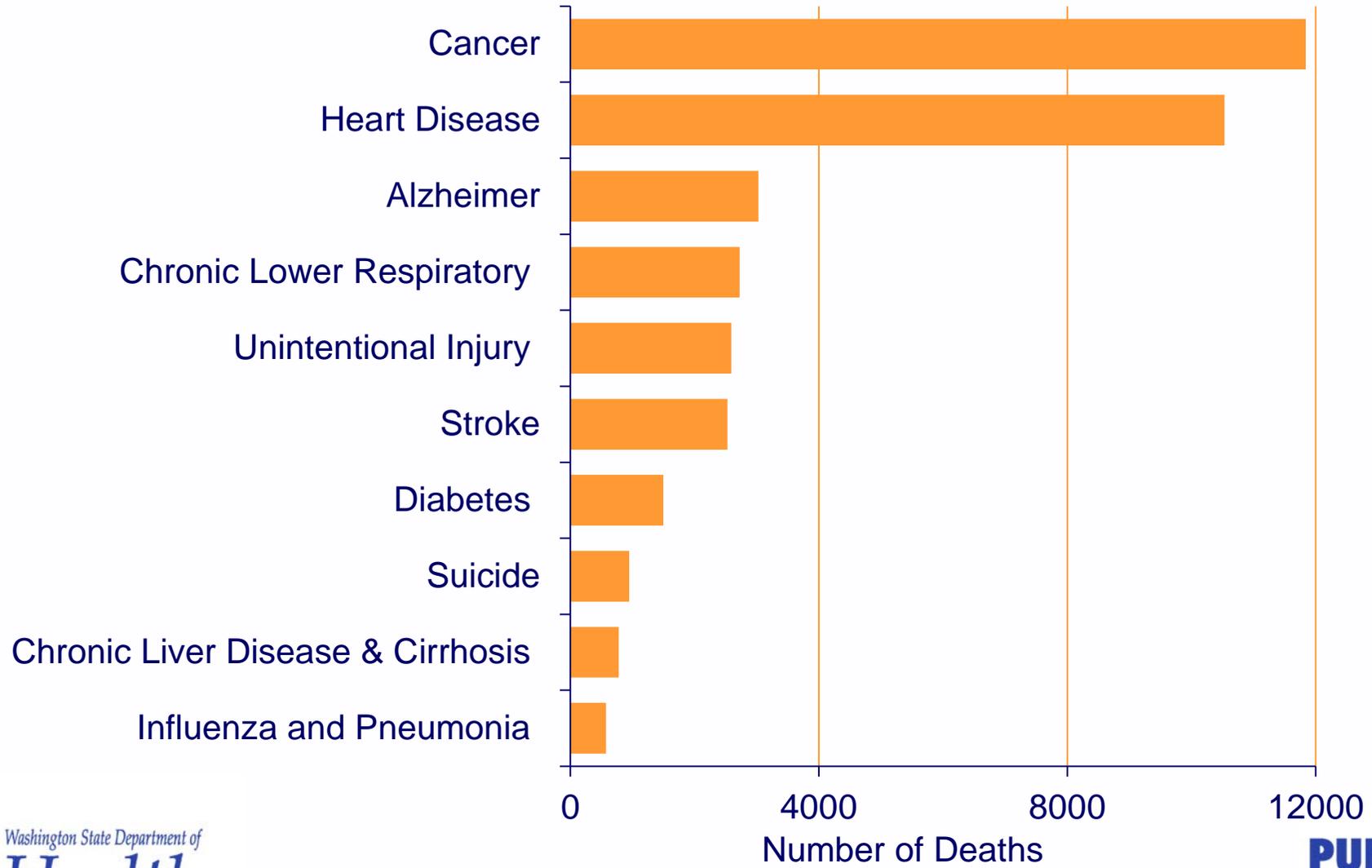
- About 34% no formal education after high school (US ≈ 43%)

Data

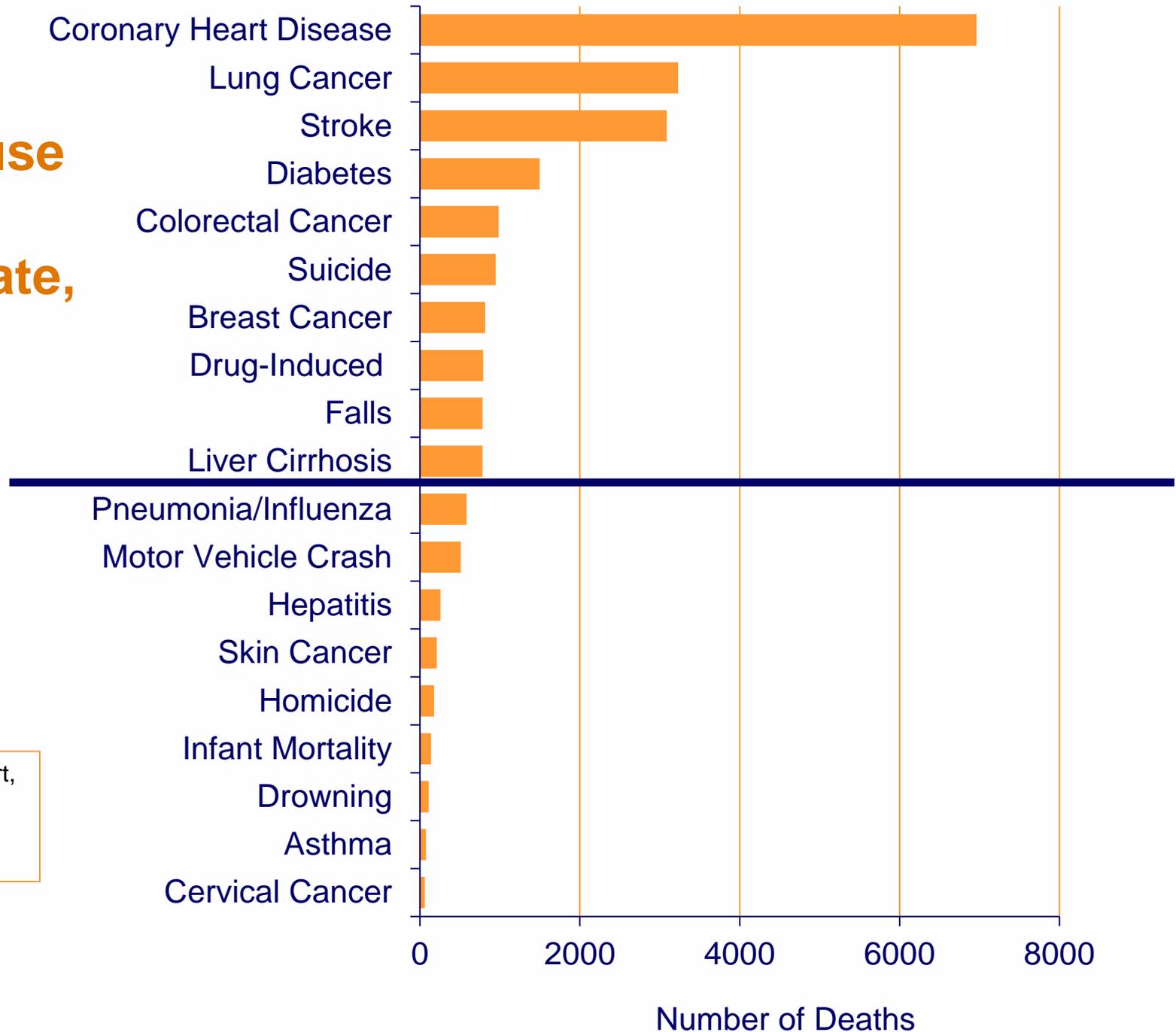
- 2010 US Census: total population, age, race/ethnicity
- ACS: poverty and education (ages 25+)

Leading Causes of Death in Washington State: 2010

National Center for Health Statistics (NCHS) Major Categories

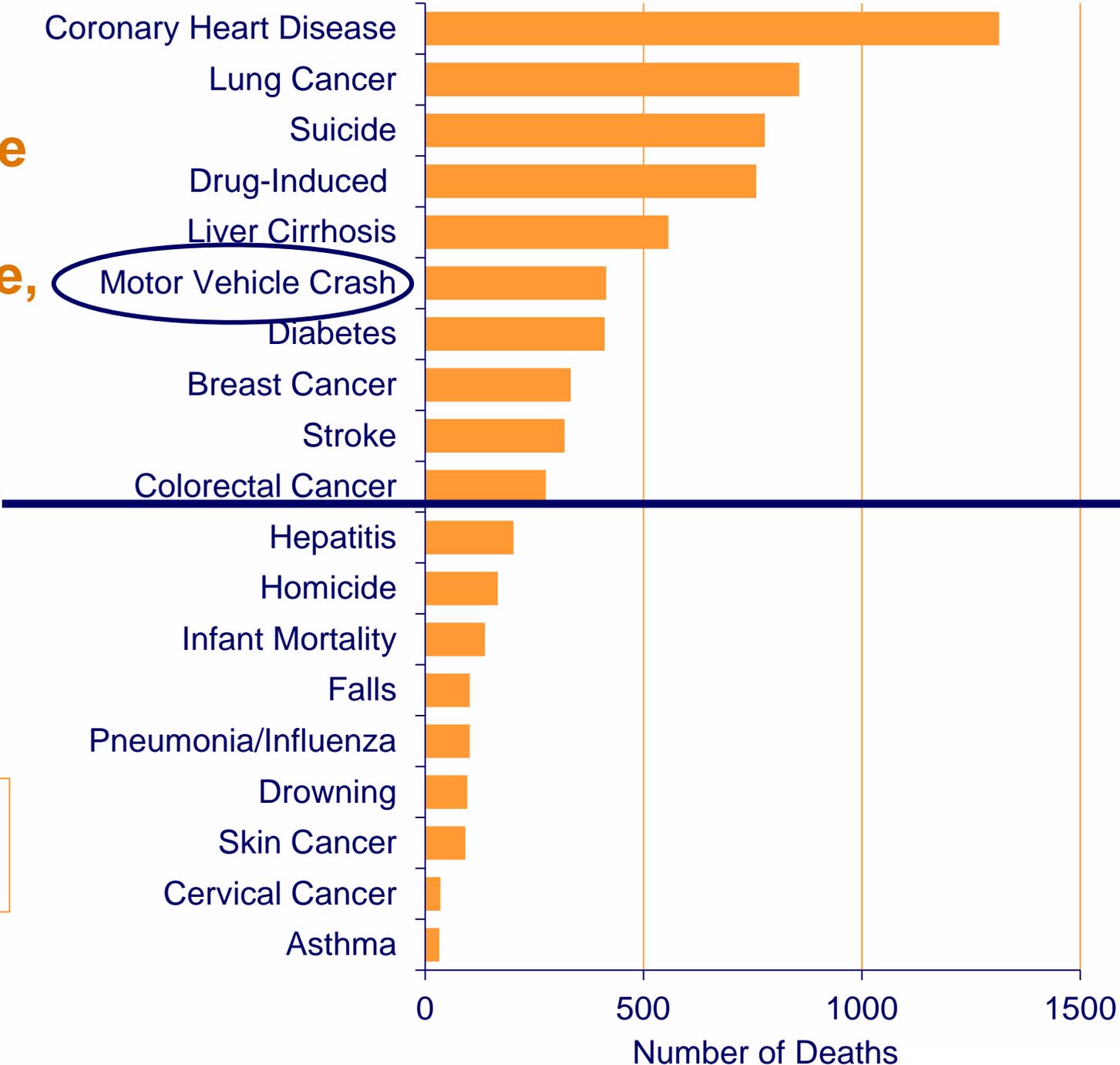


Underlying Cause of Death*: Washington State, 2010 All Ages



* Includes conditions that are, in part, preventable through public health action; grouped to be more cause-specific than NCHS categories.

Underlying Cause of Death*: Washington State, 2010 Ages 0–64



* Includes conditions that are, in part, preventable through public health action; grouped to be more cause-specific than NCHS categories.



Actual Causes of Preventable Premature Death

	Source	Estimated Number of WA Deaths ¹	
		All ages	Age 0-64
Tobacco	SAMMEC ²	7,400	1,800
Poor diet/physical inactivity	Based on national percent ³	8,000	
Alcohol abuse	ARDI	2,400	1,500
Microbes	Death Certificate	1,700	600
Toxic substances	Based on national percent ³	1,100	
Motor vehicles	Death Certificate	500	400
Firearms	Death Certificate	600	500
Sexual behavior	Based on national percent ³	400	
Illicit drug use	Death Certificate	1,000 ⁴	900 ⁴

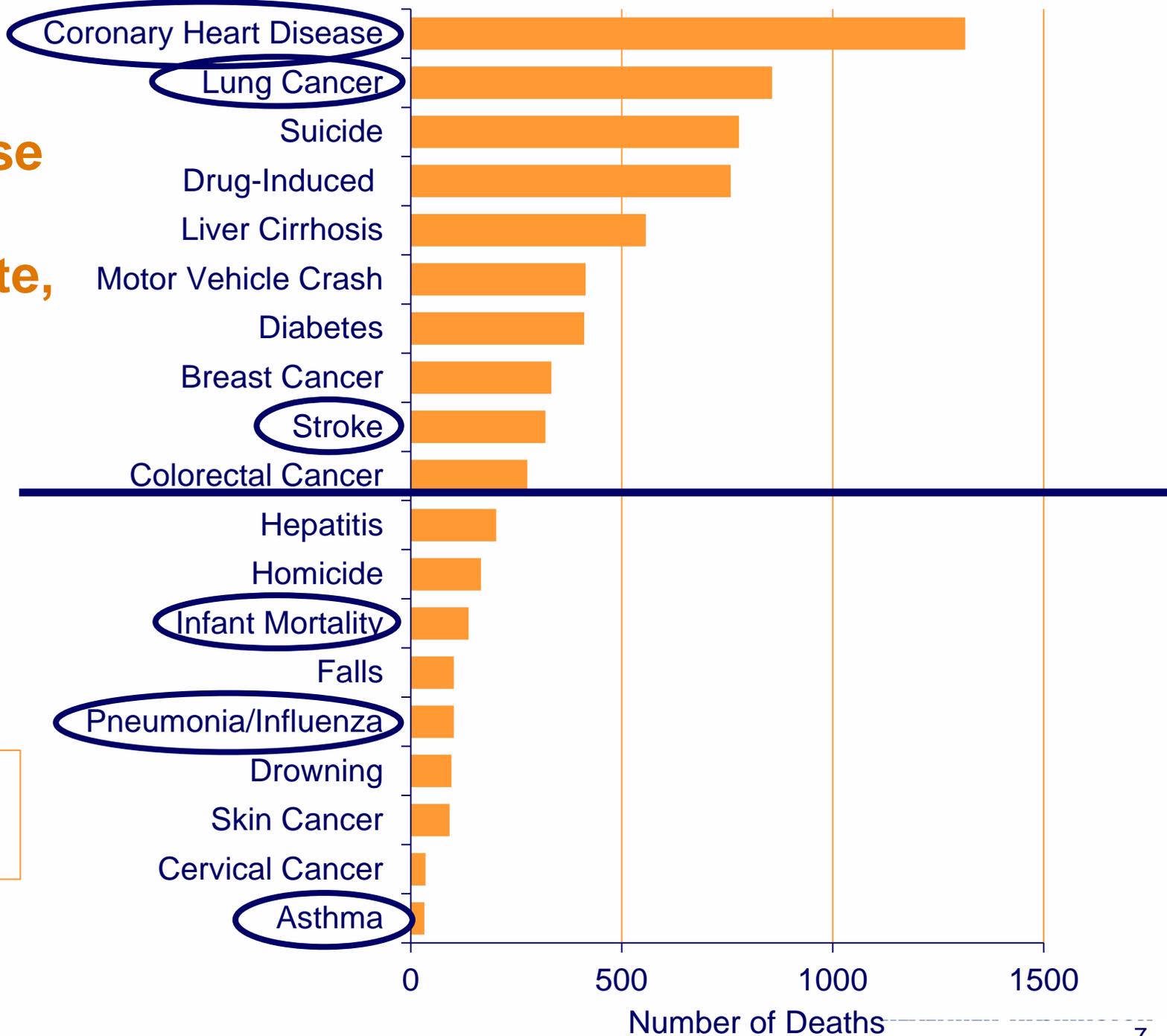
¹ Rounded to nearest 100; total 2010 deaths = 47,981

² 2010 BRFSS with 2009 death data

³ Estimated by multiplying the total number of Washington deaths by the national percentage of deaths due to this cause

⁴ Numbers include all drug abuse (illicit and legal drugs). They do NOT include adverse reactions to medicines properly prescribed and taken; includes intentional and unintentional.

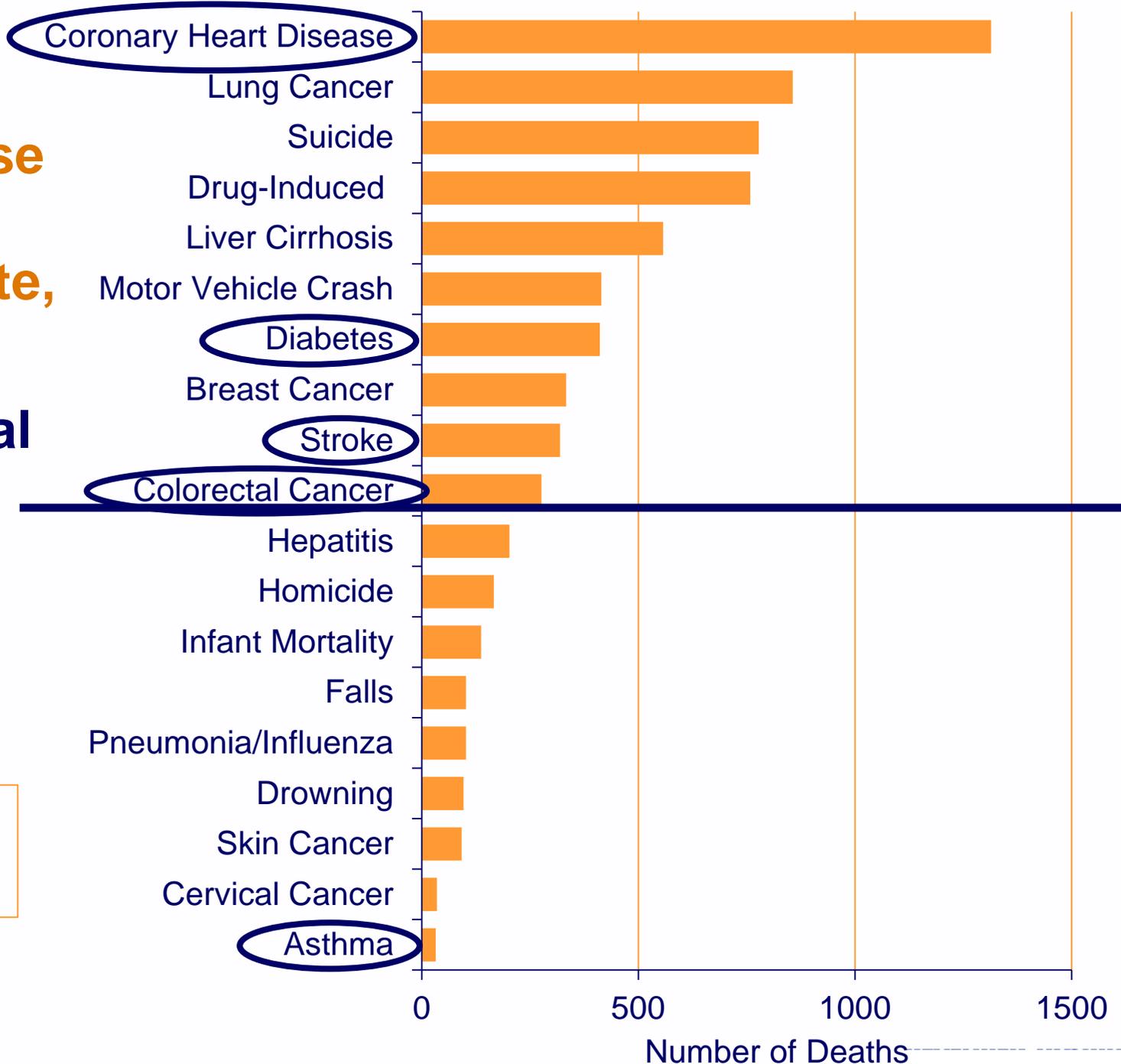
Underlying Cause of Death*: Washington State, 2010 Ages 0–64 Tobacco



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Underlying Cause of Death*: Washington State, 2010 Ages 0–64

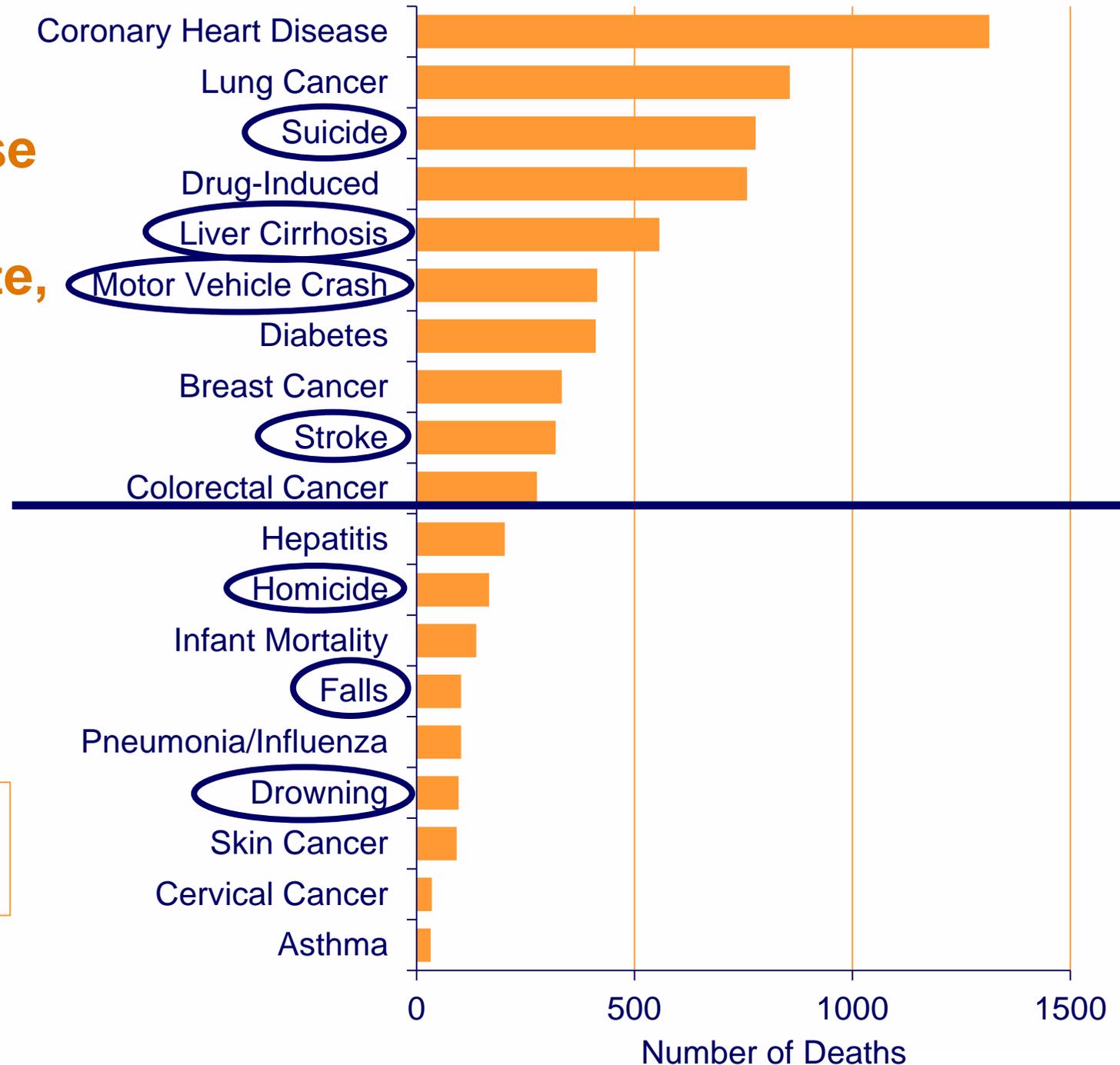
Diet and Physical Activity



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Underlying Cause of Death*: Washington State, 2010 Ages 0–64

Alcohol

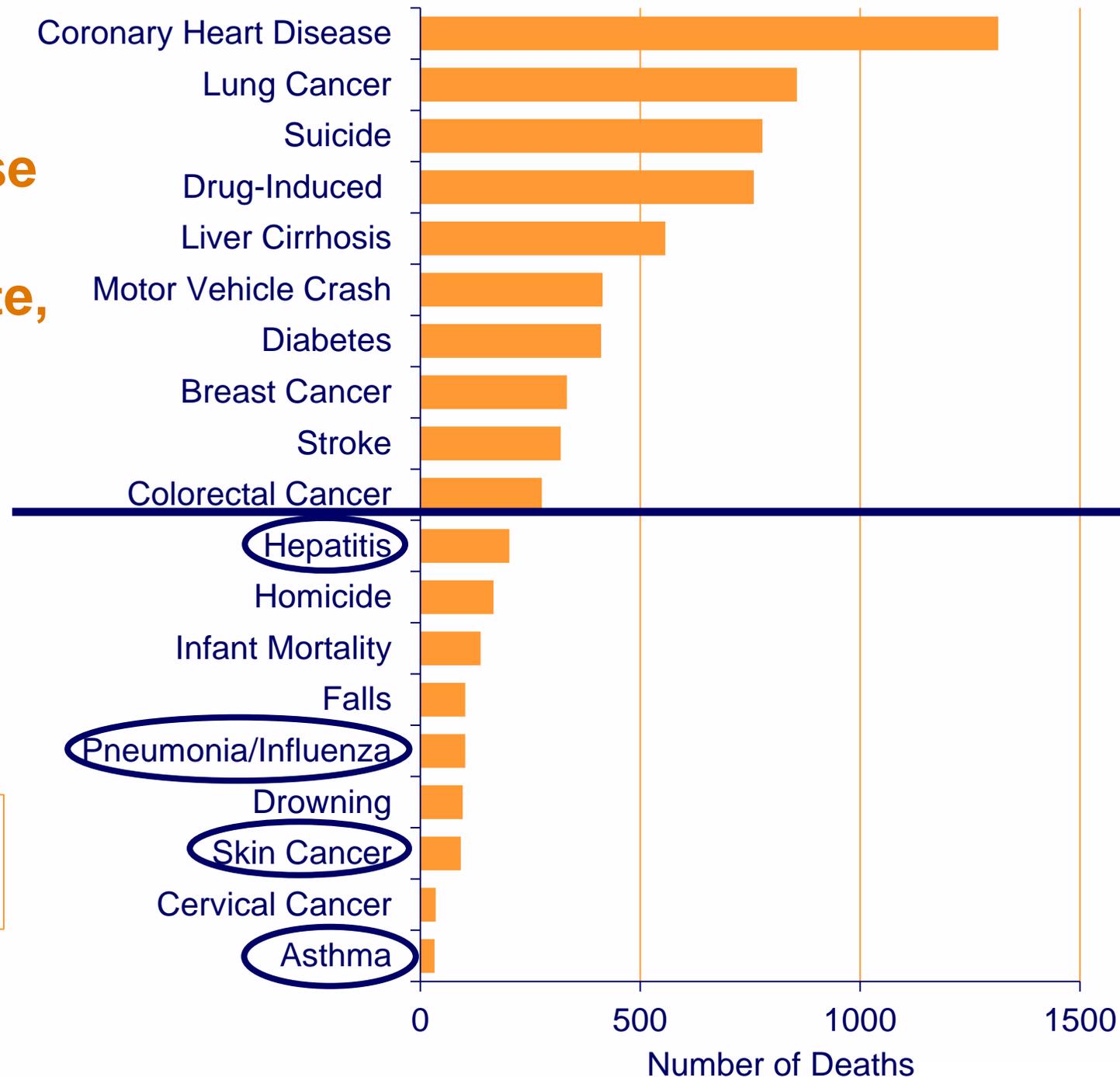


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Underlying Cause of Death*: Washington State, 2010 Ages 0–64

Microbes

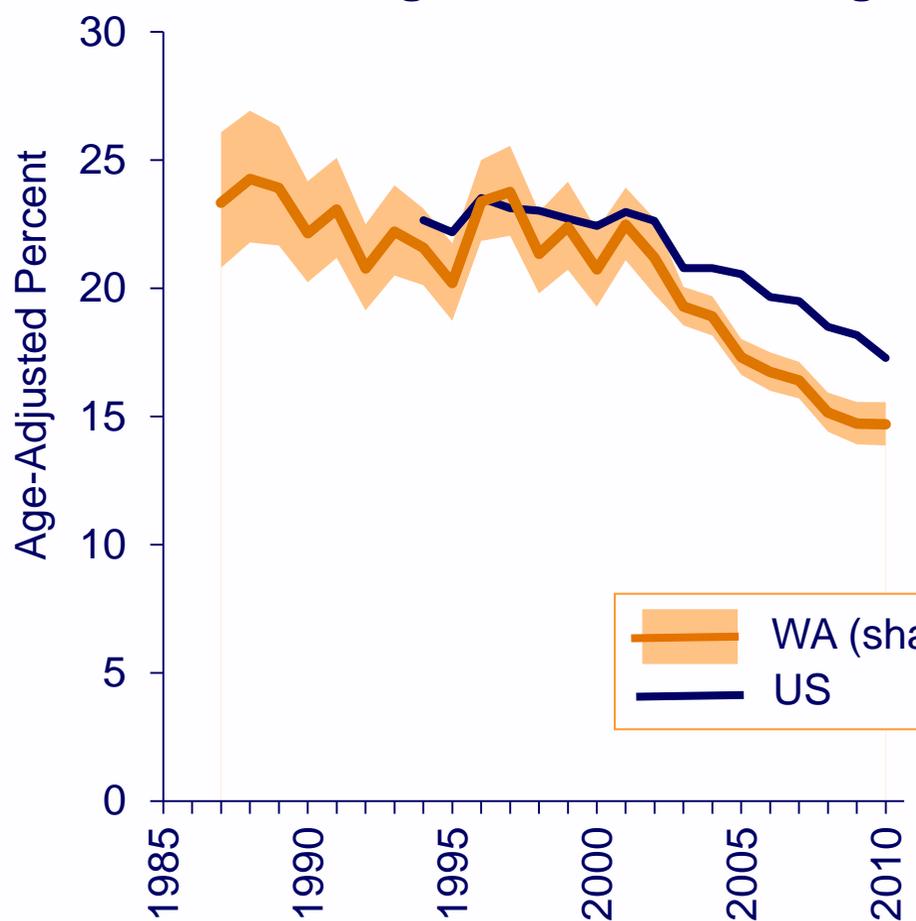


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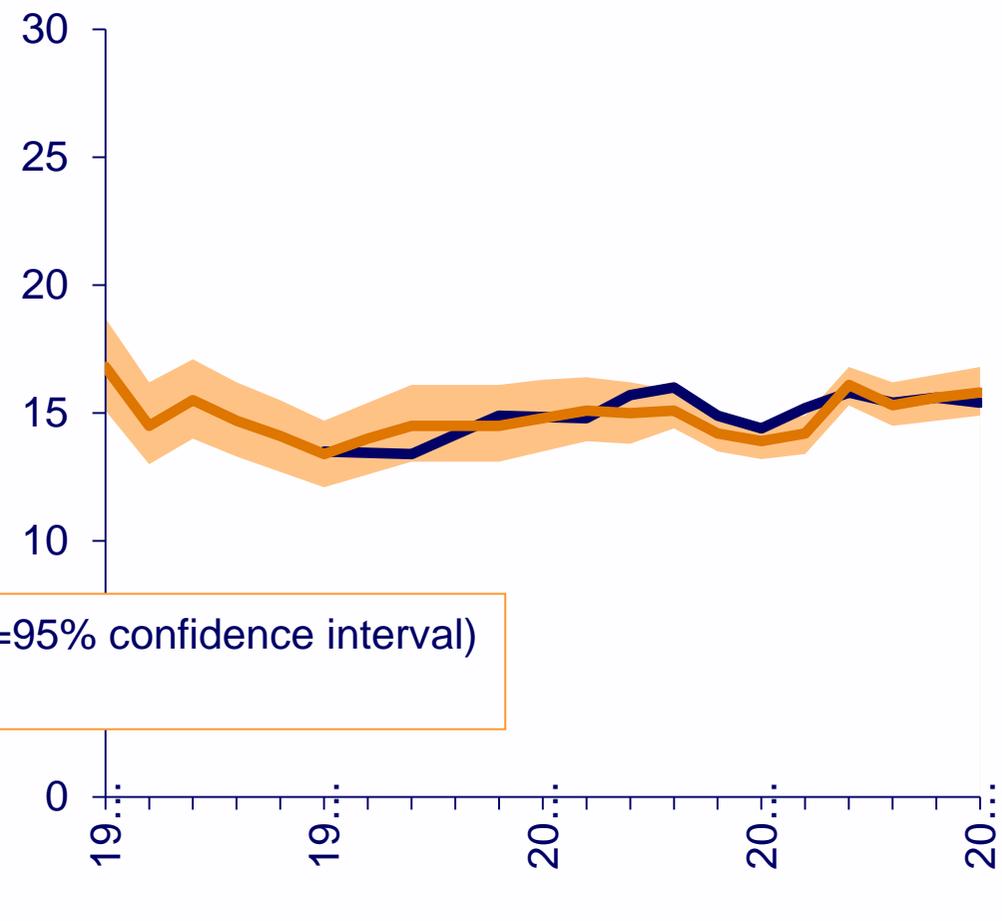


Changes Over Time

Smoking: Can we maintain gains?



Binge drinking: No change



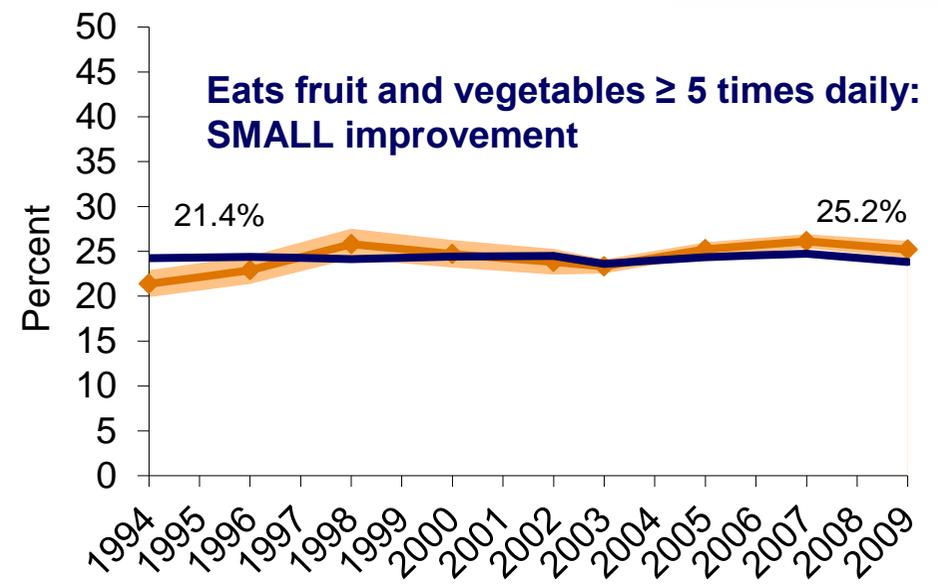
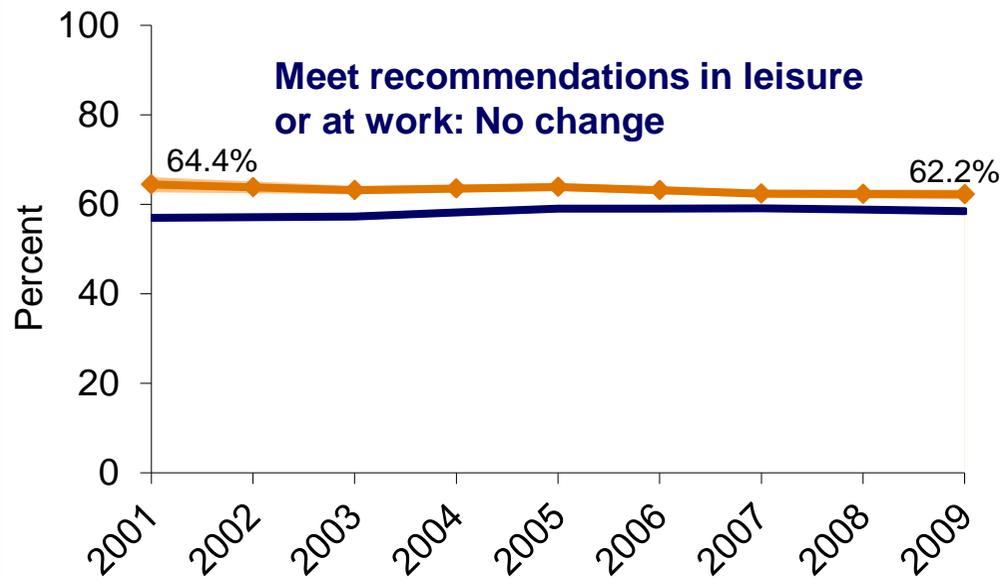
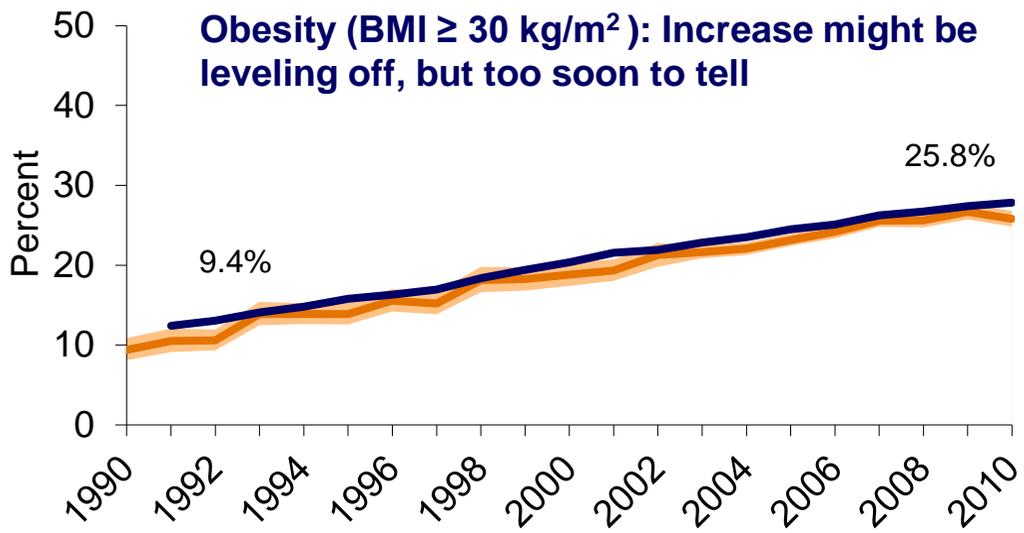
■ WA (shading=95% confidence interval)
■ US

Data: WA and US BRFSS, DOH HWS pre-publication
 • Smoking: 100 cigarettes ever and currently some days or every day
 • Binge drinking in past month: men: 5 drinks/occasion ; women 4/occasion



Changes Over Time

 WA (shading: 95% confidence interval)
 US



Data: WA and US BRFSS, DOH-NPAO
 • BMI calculated from self-reported heights and weights
 • Physical activity: Meets recommendations in leisure or at work

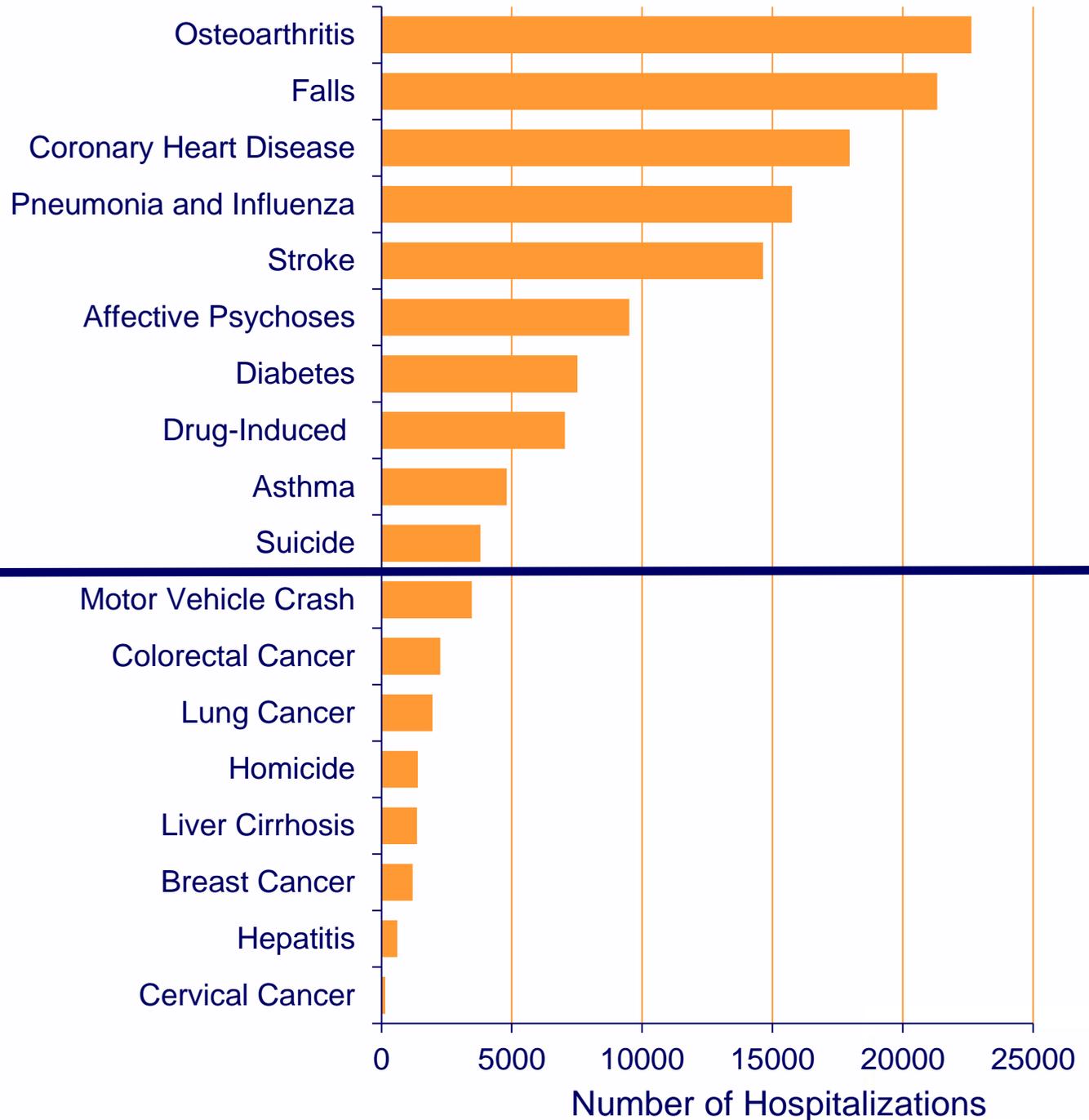
Percent Washington adults ages 25 and older meeting selected USDA dietary guidelines 2006-2007



*Total of 4-13 serving/day, based on caloric intake, not considering relative proportions of fruits and vegetables.

Leading Causes of Hospitalization*: First Recorded Diagnosis

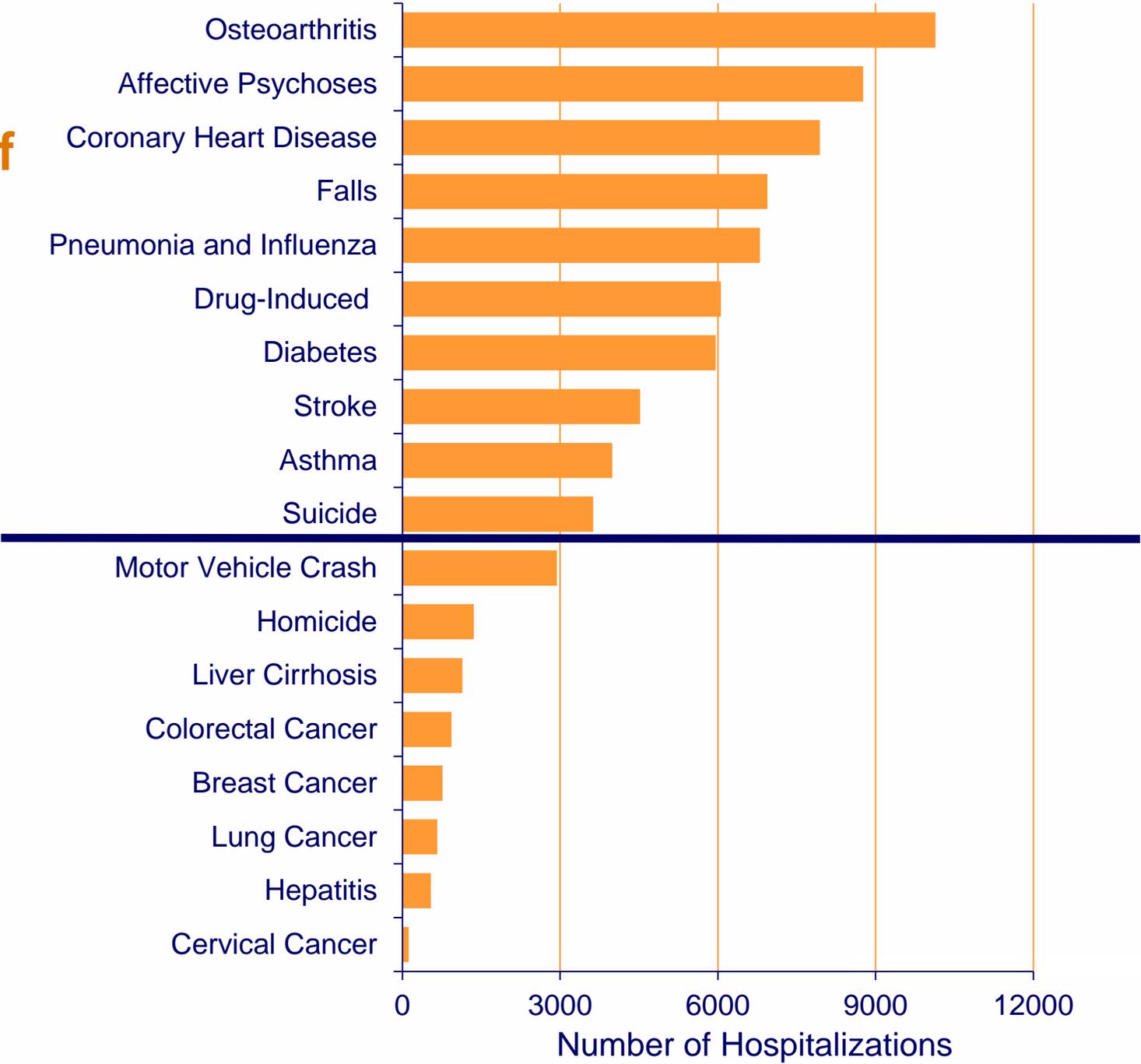
All Ages Washington 2010



* Washington acute care non-federal hospitals (CHARS); prepared by Center for Health Statistics

Leading Causes of Hospitalization*: First Recorded Diagnosis

**Ages 0–64
Washington 2010**

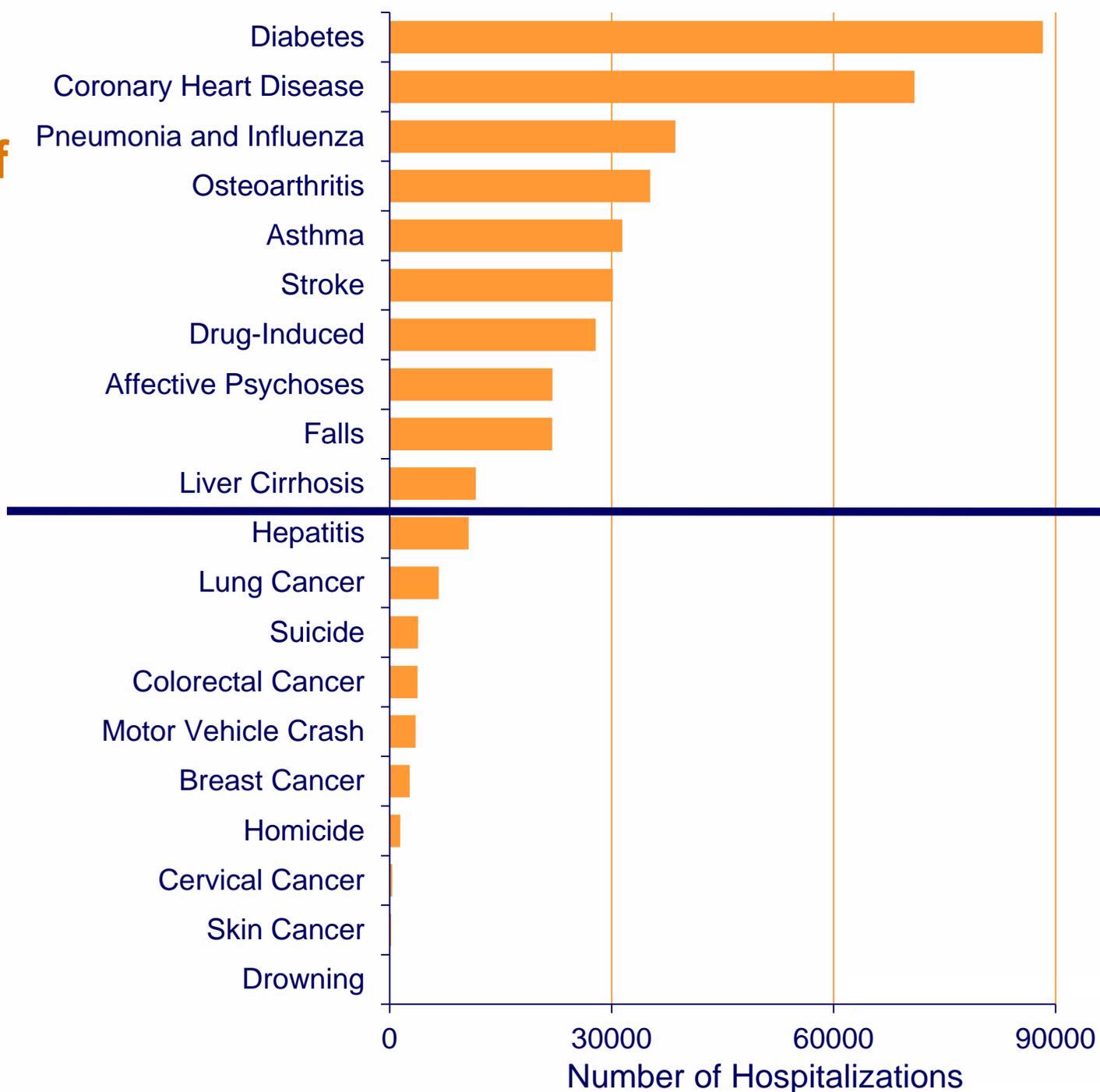


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Leading Causes of Hospitalization*: First 9 Diagnoses

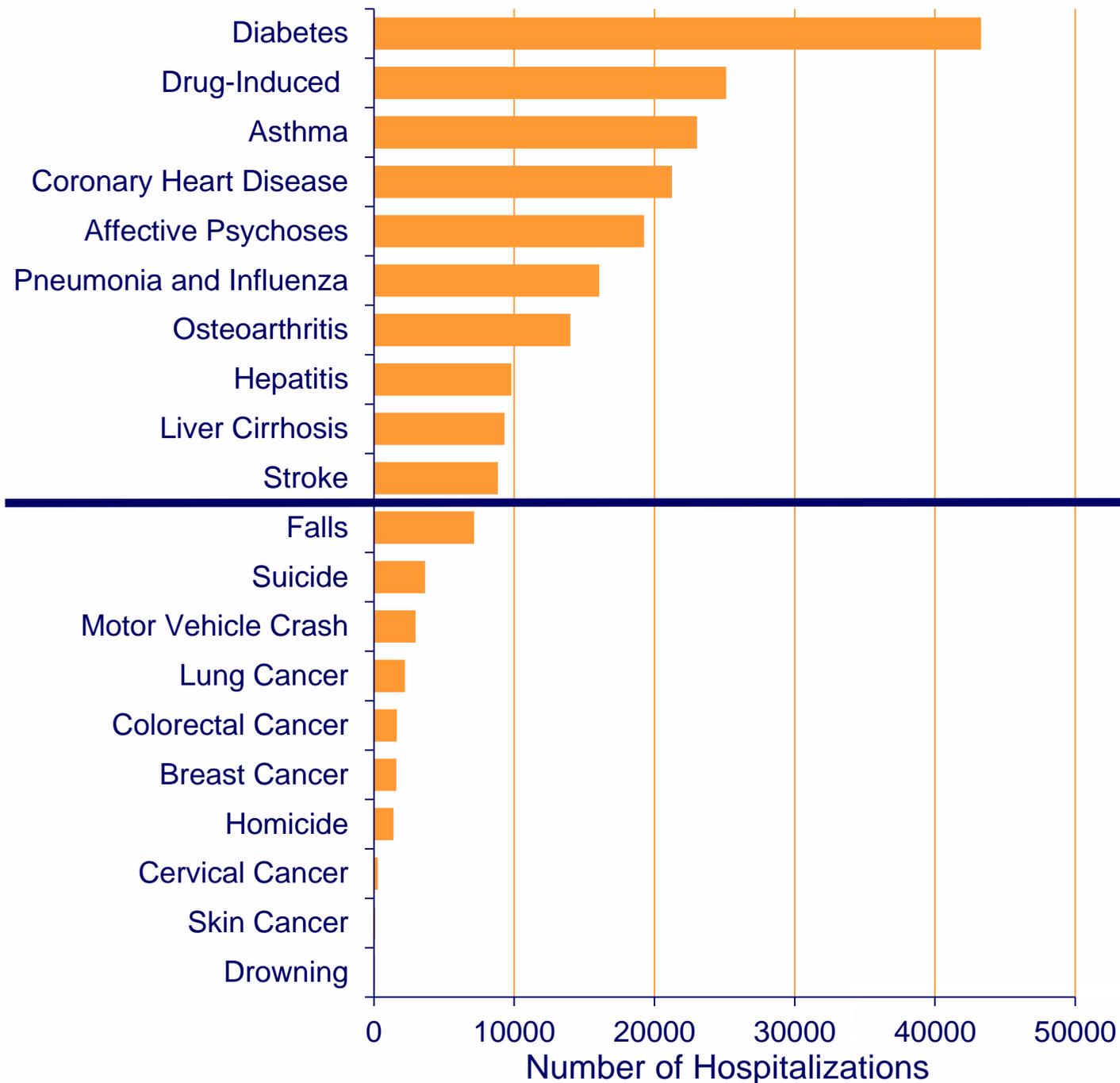
All Ages Washington 2010



* Washington acute care non-federal hospitals (CHARS); prepared by DOH CHS and NICE

Leading Causes of Hospitalization*: First 9 Diagnoses

**Ages 0–64
Washington 2010**



* Washington acute care non-federal hospitals (CHARS); prepared by DOH CHS and NICE



Summary View 1: Cause of Death and Hospitalization Rankings

	Death Rankings (1=most frequent)		Hospitalization Ranking (1=most frequent)			
	All Ages	0-64	First Diagnosis		Diagnoses 1–9	
			All Ages	0-64	All Ages	0-64
Coronary Heart	1	1	3	3	2	4
Lung Cancer	2	2				
Stroke	3	9	5	8	6	10
Diabetes	4	7	7	7	1	1
Colorectal Cancer	5	10				
Suicide	6	3	10	10		
Breast Cancer	7	8				
Drug-induced	8	4	8	6	7	2
Falls	9		2	4	9	
Cirrhosis	10	5			10	9
Motor Vehicle		6				

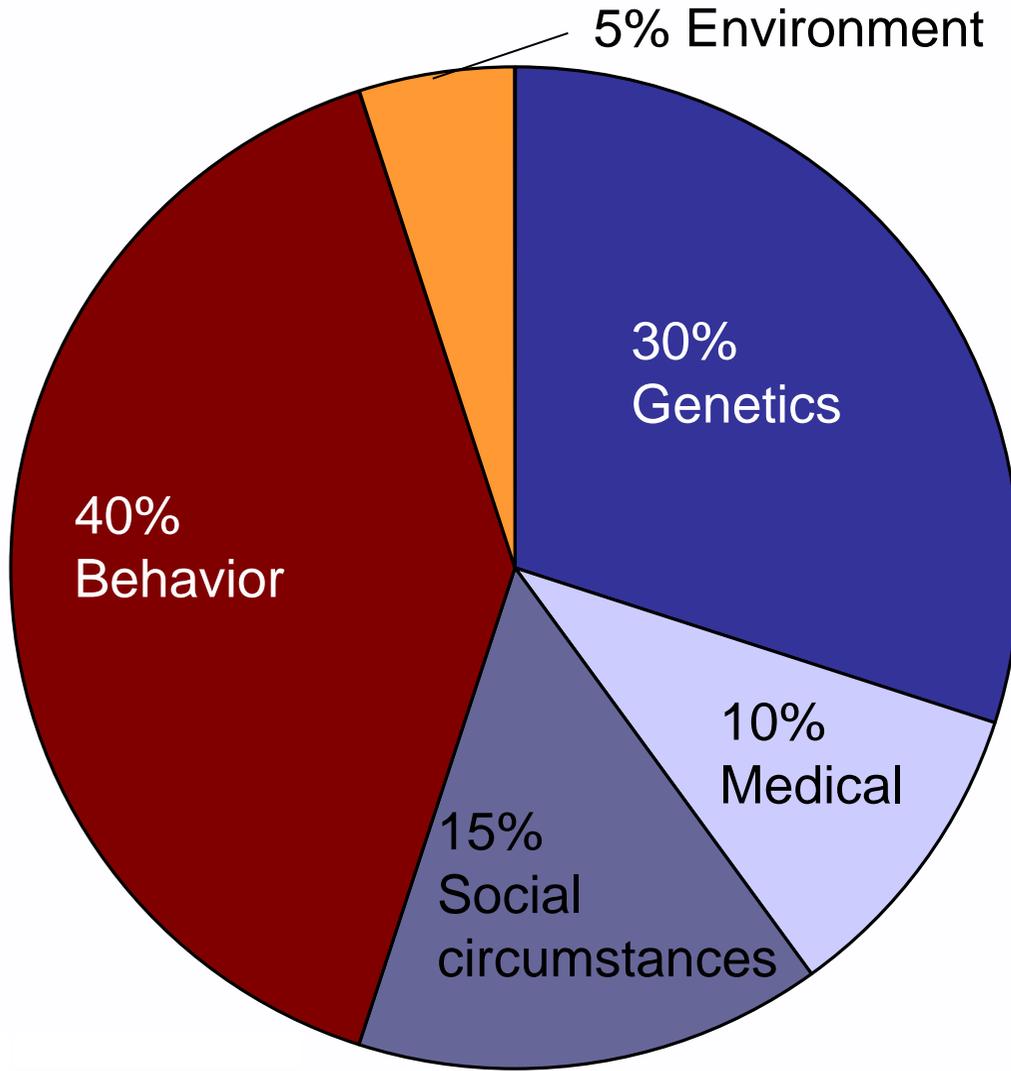
Summary View 2: Cause of Hospitalization and Death Rankings

	Hospitalization Ranking (1=most frequent)				Death Rankings (1=most frequent)	
	Diagnoses 1–9		First Diagnosis			
	0-64	All Ages	0-64	All Ages	0-64	All Ages
Diabetes	1	1	7	7	7	4
Drug-induced	2	7	6	8	4	8
Asthma	3	5	9	9		
Coronary Heart	4	2	3	3	1	1
Affective Psychoses	5	8	2	6		
Pneumonia/Influenza	6	3	5	4		
Osteoarthritis	7	4	1	1		
Hepatitis	8					
Cirrhosis	9	10			5	10
Stroke	10	6	8	5	9	3
Falls		9	4	2		9
Suicide			10	10	3	6

Other Conditions Affecting Large Numbers of People

- **Chlamydia**: about 21,000 new cases a year (2009 & 2010)
- **Chronic hepatitis**: 100,000 with chronic Hep B or C (mid-point estimate based on U.S. rates; about 1,500 new cases Hep B a year; 6,000 cases Hep C)
- **Teen pregnancy**: about 2,000 births to mothers ages 15-17 a year (2005–2009)
- **HIV**: 10,000 with HIV (about 500 new cases each year)
- **Gonorrhea**: about 2,500 a year (2009 & 2010)

More Causes Behind the Causes

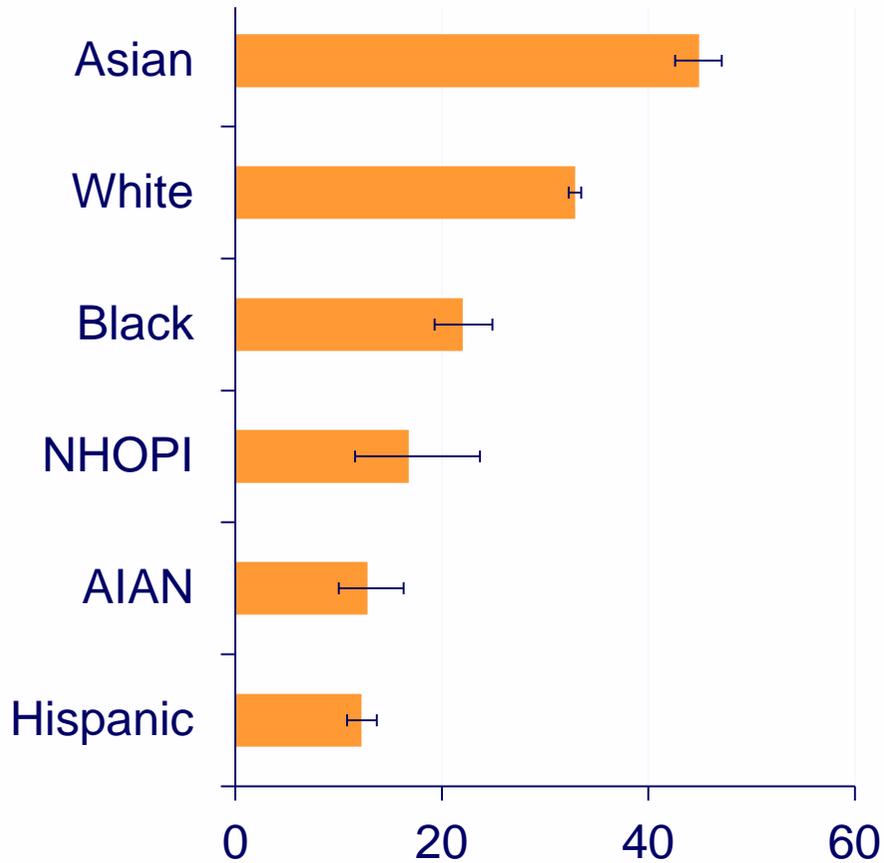


our “health...is determined by factors acting not...in isolation but by our experience where domains interconnect.”

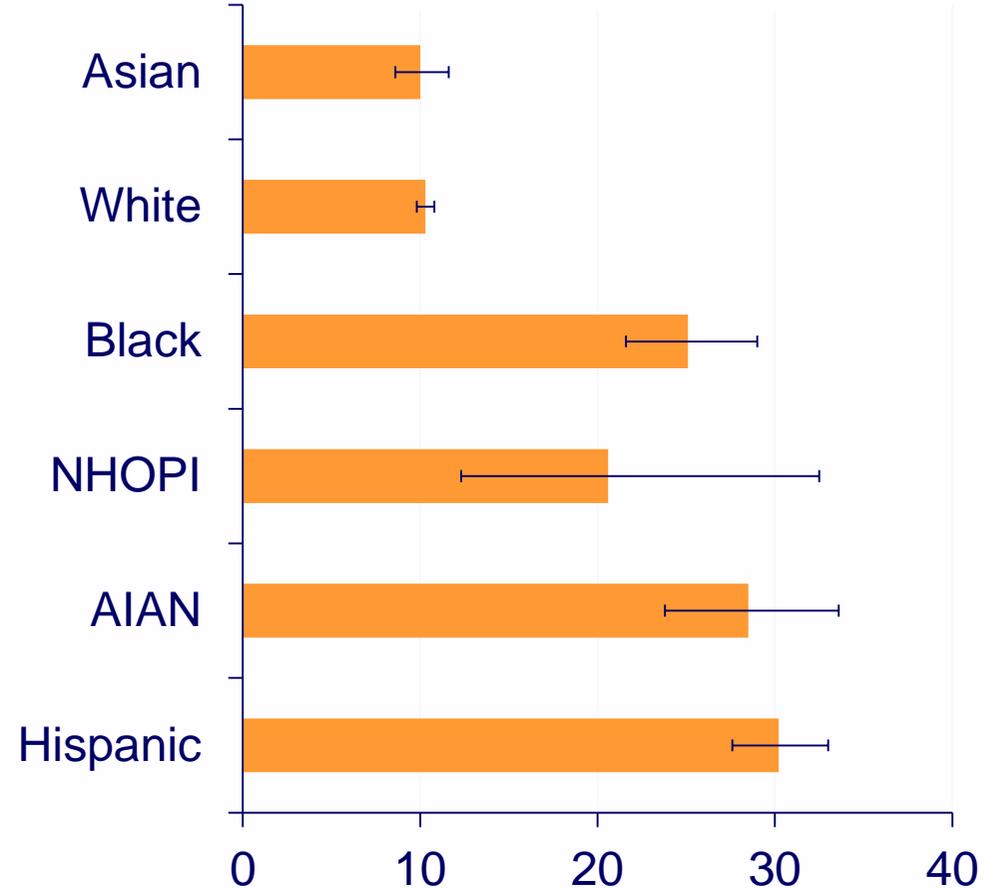
McGinnis et al. 2002

Poverty and Education: Racial and Ethnic Groups are not Distributed Equally

Percent College Degree or Higher



Percent Below Poverty



- Data: American Community Survey, WA 2010; compiled by DOH-NICE
- Race groups include single race only, non-Hispanic; AIAN: American Indian or Alaska Native; NHOPI: Native Hawaiian or Other Pacific Islander

Economic Factors: In Washington, those with fewer economic resources at higher risk for....

- No health insurance (18-64)
- No flu vaccination (65+)
- Not current for colorectal cancer screening (50+)
- Infant mortality
- Motor vehicle crash death
- Suicide
- Drug-induced death
- Teen birth rate
- Preterm birth
- Coronary heart disease (CHD) death
- Homicide
- Obesity
- Asthma
- Diabetes
- Hypertension (HT)
- Binge drinking
- Smoking

Washington High Risk Groups by Racial and Ethnic Grouping

AIAN

- Obesity
- Diabetes
- Hypertension
- Coronary Heart Dis*
- Asthma
- Smoking
- Preterm birth
- Infant mortality*
- Motor vehicle*
- Suicide*
- Drug-induced*
- Teen pregnancy*
- Binge drinking

Black

- Obesity
- Diabetes
- Hypertension
- Coronary Heart Dis*
- Asthma
- Smoking
- Preterm birth
- Infant mortality*
- Stroke*
- Homicide*
- HIV*

Hispanic

- Obesity
- Diabetes
- No health insurance
- No CRC screen
- HIV*
- Teen pregnancy*

*Population NOT adjusted to 2010 Census.
• AIAN rates likely even higher
• Hispanic rates likely somewhat lower
Race groups: single race only, non-Hispanic
AIAN: American Indian or Alaska Native

Washington High Risk Groups by Racial and Ethnic Grouping

NHOPI

- Obesity
- Hypertension
- Coronary Heart Dis*
- Homicide*
- Teen pregnancy*
- Preterm birth

White

- Suicide

2nd most frequent low risk group

Asian

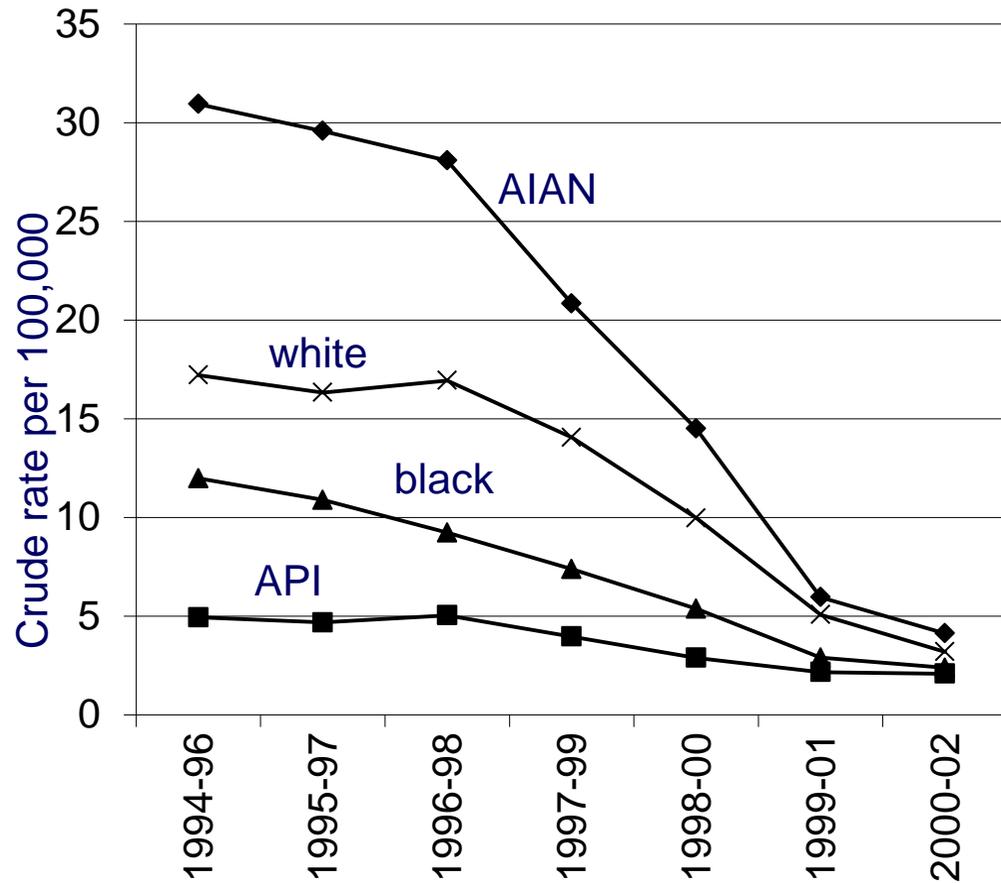
Most frequent low risk group

Not always reported due to small numbers

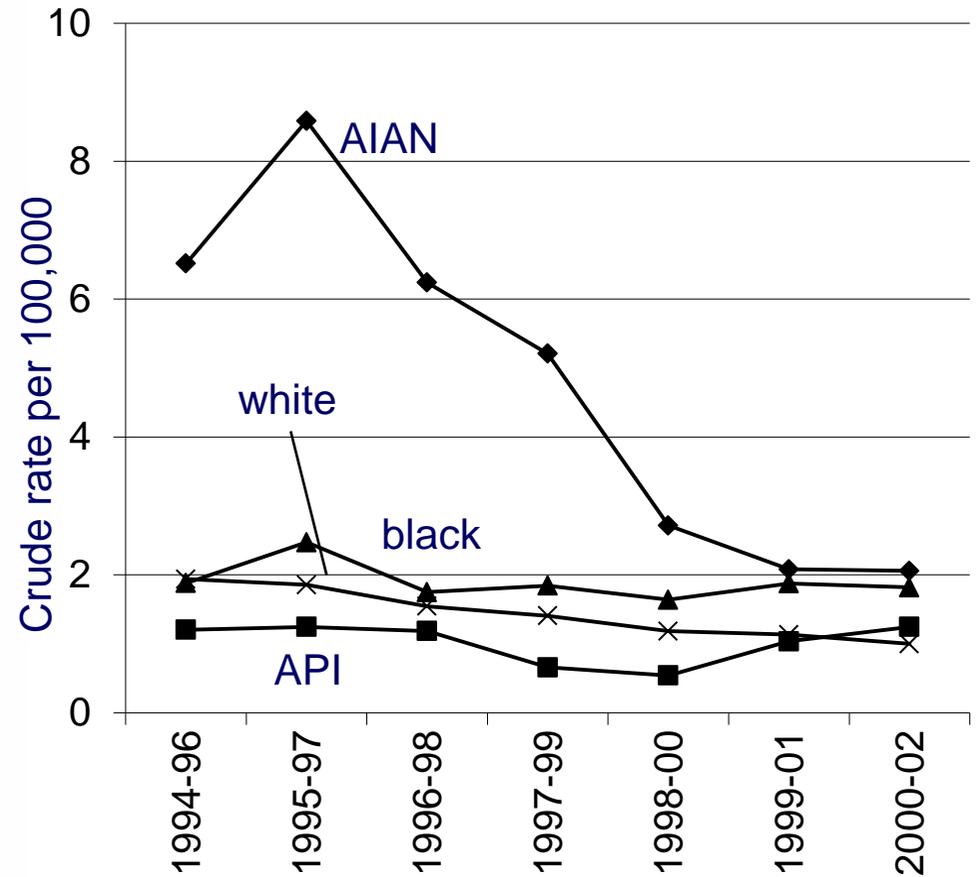
* Population NOT adjusted to 2010 Census.
• NHOPI rates likely somewhat lower
• Asian rates likely somewhat lower
Race groups: single race only, non-Hispanic
NHOPI: Native Hawaiian or other Pacific Islander

Disparities

Hepatitis A



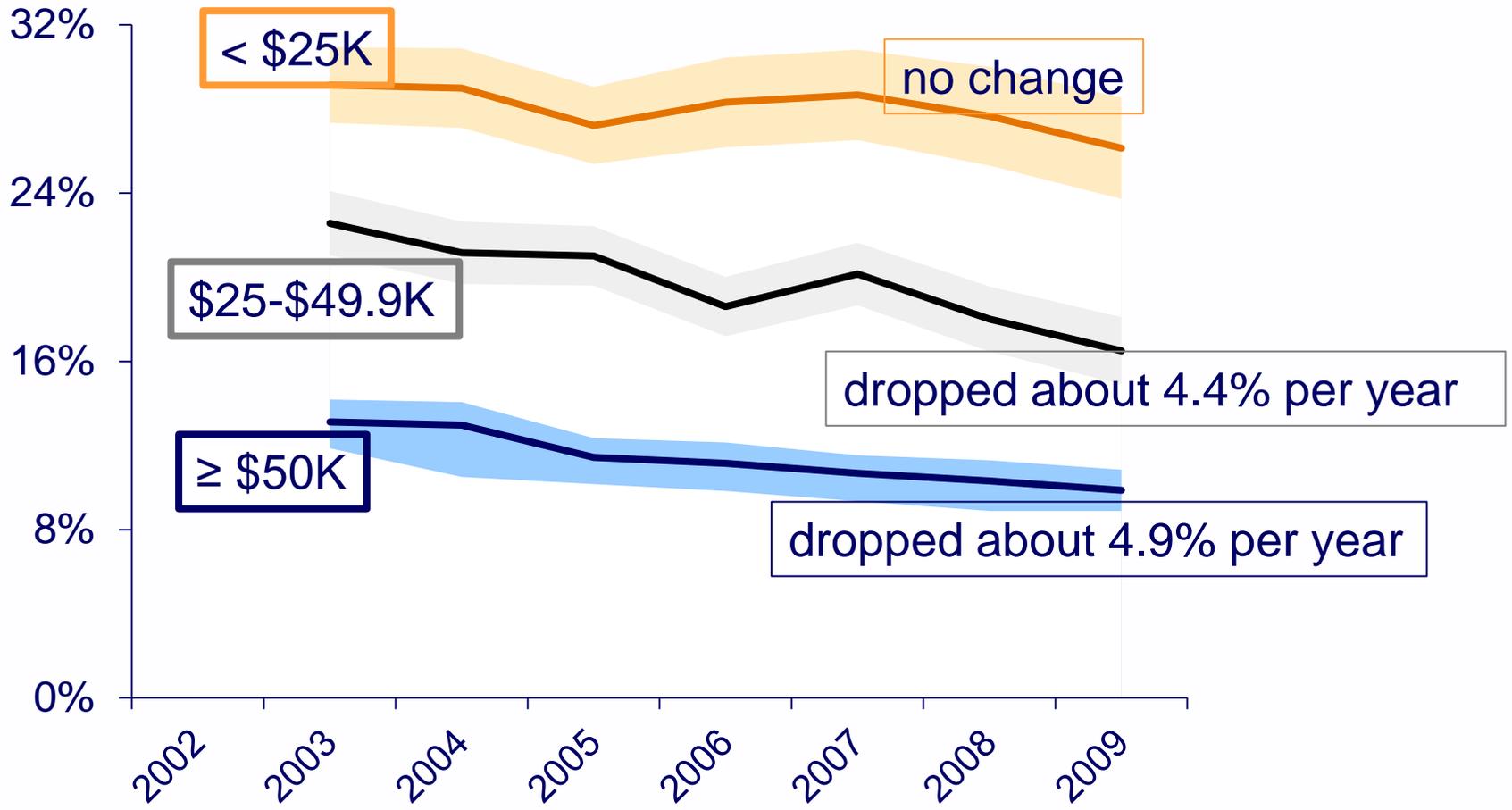
Meningococcal Disease



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Adult Current Smoking by Annual Household Income

(State rate dropped from 19% ($\pm 1\%$) in 2003 to 15% ($\pm 1\%$) in 2009, about 4.6% per year)



Data: Washington BRFSS; compiled by DOH-Tobacco Program

Grade 10 tobacco use in past 30 days

Progress leveled off after 2004 and use of other tobacco products began increasing

