

# Heart Disease and Stroke Facts: Hypertension



## What is hypertension?

Hypertension is another term for high blood pressure (BP). Newly updated in 2017, it means having systolic blood pressure (SBP)  $\geq 130$  mmHg or diastolic blood pressure (DBP)  $\geq 80$  mmHg.<sup>1</sup>

$\geq 130$   
 $\geq 80$  ♥

2017 BP Category <sup>1</sup>	Systolic (mmHg)		Diastolic (mmHg)
Normal	less than 120	and	less than 80
Prehypertension	120 - 129	and	less than 80-89
Stage 1 Hypertension	130 - 139	or	80-89
Stage 2 Hypertension	140 or higher	or	90 or higher

## What are the risk factors?<sup>2</sup>

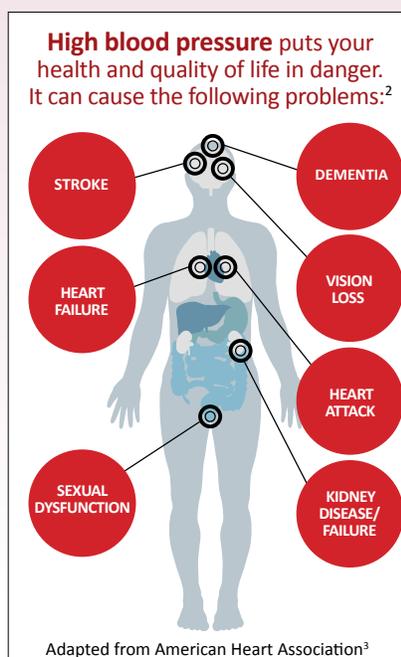
- ♥ older age
- ♥ certain races/ethnicities
- ♥ family history of hypertension
- ♥ diabetes
- ♥ high cholesterol
- ♥ low socioeconomic status
- ♥ psychological stressors
- ♥ sleep apnea
- ♥ kidney disease
- ♥ overweight or obese
- ♥ physical inactivity
- ♥ tobacco use
- ♥ diets high in sodium
- ♥ diets low in potassium
- ♥ heavy alcohol use

## What are the health consequences?

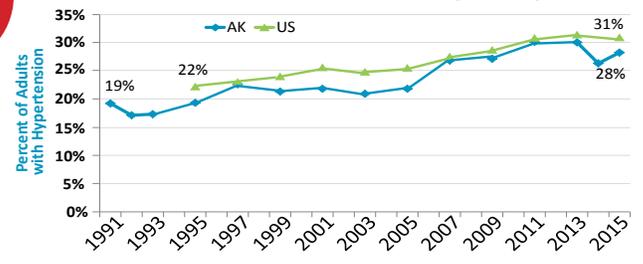
Hypertension is known as the **silent killer** because it often has no symptoms. Without screening and follow-up, hypertension can be missed. Sixteen percent of U.S. adults with hypertension are not aware they have it.<sup>2</sup>

People with hypertension developed cardiovascular disease five years earlier than those without hypertension.<sup>4</sup>

Each 20 mmHg higher SBP and 10 mmHg higher DBP is associated with a **doubling** in the risk of death caused by stroke, heart disease, or other vascular diseases.<sup>5</sup>



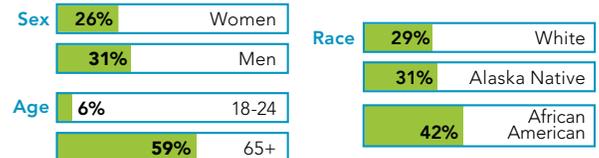
## Hypertension on the Rise Among Adults in Alaska and US, 1991-2015 (BRFSS)



## What do we know about hypertension in Alaska?

- ♥ The prevalence of hypertension among adults has increased over the past 25 years in Alaska, mirroring the trend in the United States.
- ♥ In 2015, 28% of Alaska adults reported having hypertension.

## Hypertension Prevalence Among Adults: Alaska, Select Groups, 2015 (BRFSS)

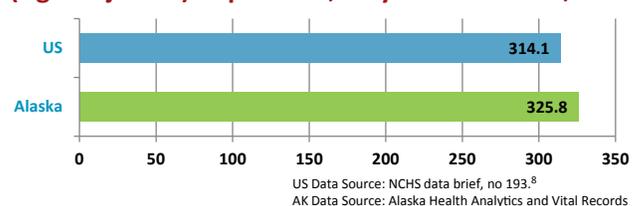


- ♥ Hypertension is significantly associated with age; 59% of Alaskans ages 65 and older report hypertension, compared to only 6% of those ages 18 to 24.
- ♥ African American adults are more likely to report having hypertension (42%) than other race groups (29% to 31%).
- ♥ Unlike the national trend, hypertension prevalence does not differ significantly by poverty level, but rather is seen across all socioeconomic groups in Alaska.

## How many hospitalizations and deaths in Alaska are related to hypertension?

- ♥ In 2015, there were 238.4 per 10,000 inpatient discharges from hospitals that were related to hypertension.<sup>6\*</sup>
- ♥ In 2013, there were 567 deaths in Alaska identified as hypertension related.<sup>7\*\*</sup>

## Deaths Related to Hypertension per 100,000 (Age-Adjusted) Population, 45 years and older, 2013



## What can we do about hypertension?

# Heart Disease and Stroke Facts: Hypertension

### Healthcare providers:



- ♥ Promote healthy lifestyles for all patients.
- ♥ Optimize treatment for risk factors, including diabetes, high cholesterol, chronic kidney disease, heart failure, obesity, depression, and tobacco use.<sup>2</sup>
- ♥ Train direct care staff on taking accurate blood pressure measurement.
- ♥ Promote blood pressure self-monitoring and provide education and support.

### Community partners:



- ♥ Offer screenings outside an office, such as in fire stations or pharmacies.
- ♥ Support walking groups, physical activities, farmers markets, community gardens.

### Pharmacists:



- ♥ Provide patients with education and health coaching.
- ♥ Provide comprehensive medication management by working with providers.

### Individuals:



- ♥ Know Your Numbers: Keep blood pressure lower than 130/80 with a sustained goal of lower than 120/80.
- ♥ Take medications every day as prescribed for treating hypertension.
- ♥ Monitor blood pressure at home and regularly report readings to your health care provider.<sup>9</sup>
- ♥ Move! Get regular physical activity.
- ♥ Eat healthy meals with smaller portion sizes.
- ♥ Reduce salt.
- ♥ Lose weight. Just 10 pounds makes a big difference.
- ♥ Don't smoke.
- ♥ Manage stress.
- ♥ Sleep well.

### Resources:



#### Learn more about Heart Disease and Stroke Prevention Program efforts in Alaska:

[www.dhss.alaska.gov/dph/Chronic/Pages/Cardiovascular](http://www.dhss.alaska.gov/dph/Chronic/Pages/Cardiovascular)

#### National Resources Online:

- Million Hearts: [millionhearts.hhs.gov/data-reports/reports.html](http://millionhearts.hhs.gov/data-reports/reports.html)
- American Heart Association: [www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure-or-Hypertension\\_UCM\\_002020\\_SubHomePage.jsp](http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure-or-Hypertension_UCM_002020_SubHomePage.jsp)
- CDC: [www.cdc.gov/bloodpressure](http://www.cdc.gov/bloodpressure)

### References

- <sup>1</sup> Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. Hypertension. 2017. <https://doi.org/10.1161/HYP.000000000000065>.
- <sup>2</sup> Benjamin EJ, Blaha MJ, Chiuve SE, Cushman M, Das SR, Deo R, et al. Heart disease and stroke statistics—2017 update: a report from the American Heart Association. *Circulation*. 2017; doi:10.1161/CIR.0000000000000485.
- <sup>3</sup> Adapted from American Heart Association Health Threats From High Blood Pressure, available: [http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/LearnHowHBP HarmsYourHealth/Health-Threats-From-High-Blood-Pressure\\_UCM\\_002051\\_Article.jsp#.WZ4gDjaovGh](http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/LearnHowHBP HarmsYourHealth/Health-Threats-From-High-Blood-Pressure_UCM_002051_Article.jsp#.WZ4gDjaovGh).
- <sup>4</sup> Rapsomaniki E, Timmis A, George J, Pujades-Rodriguez M, Shah AD, Denaxas S, White IR, Caulfield MJ, Deanfield JE, Smeeth L, Williams B, Hingorani A, Hemingway H. Blood pressure and incidence of twelve cardiovascular diseases: lifetime risks, healthy life-years lost, and age-specific associations in 1.25 million people. *Lancet*. 2014;383:1899–1911. doi:10.1016/S0140-6736(14)60685-1.
- <sup>5</sup> Lewington S, Clarke R, Qizilbash N, Peto R, Collins R; Prospective Studies Collaboration. Age-specific relevance of usual blood pressure to vascular mortality: a meta-analysis of individual data for one million adults in 61 prospective studies [published correction appears in *Lancet*. 2003;361:1060]. *Lancet*. 2002;360:1903–1913.
- <sup>6</sup> Alaska Health Facilities Data Reporting Program. <http://dhss.alaska.gov/dph/VitalStats/Pages/HFDR/default.aspx>
- <sup>7</sup> Alaska Health Analytics and Vital Records.
- <sup>8</sup> Kung HC, Xu JQ. Hypertension-related mortality in the United States, 2000–2013. NCHS data brief, no. 193. Hyattsville, MD: National Center for Health Statistics. 2015.
- <sup>9</sup> Washington State Department of Health. Improving the screening, prevention, and management of hypertension—an implementation tool for clinic practice teams. August 2013. [https://www.healthit.gov/sites/default/files/13\\_bptoolkit\\_e13l.pdf](https://www.healthit.gov/sites/default/files/13_bptoolkit_e13l.pdf)

\* Essential hypertension (ICD9/10: 401, 401.1, 401.9; I10) or hypertensive diseases (ICD9/10: 402, 402.01, 402.1, 402.11, 402.9, 402.91, 403, 403.01, 403.1, 403.11, 403.9, 403.91, 404, 404.01, 404.02, 404.03, 404.10, 404.11, 404.12, 404.90, 404.91, 404.92, 404.93, 405, 405.01, 405.09, 405.11, 405.19, 405.91, 405.99; I11, I11.9, I12, I12.9, I13, I13.1, I13.11, I13.2, I15, I15.1, I15.2, I15.8, I15.9) listed as primary or secondary diagnosis.

\*\*Defined as deaths with an underlying or contributory cause recorded using ICD-10 codes I10-I13, I15.

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