# High Blood Pressure among Kansas Adults





#### What is high blood pressure?

Blood pressure is the force exerted on artery walls as blood is pumped by the heart through the circulatory system. High blood pressure, also called hypertension, is a chronic health condition that requires the heart to work harder causing the heart muscle to weaken over time. High blood pressure among adults is defined as having systolic pressure of 140 mmHg or higher or diastolic pressure of 90 mmHg or higher. High blood pressure significantly increases risk for heart attack, stroke, kidney disease and diabetes complications. Approximately 75 million U.S. adults have high blood pressure and only about half (54%) have their condition under control. About 1 of 5 U.S. adults are not aware they have high blood pressure and are not being treated.

#### Classification of blood pressure for adults <sup>1,2</sup>

Blood Pressure Category	Systolic Blood Pressure (upper number)	1	Diastolic Blood Pressure (bottom number)
Normal	<120 mmHg	and	<80 mmHg
Prehypertension (At Risk)	120 to 139 mmHg	or	80 to 89 mmHg
Stage 1 Hypertension	140 to 159 mmHg	or	90 to 99 mmHg
Stage 2 Hypertension	≥160 mmHg	or	≥100 mmHg
Hypertensive Crisis (call 911 now)	>180 mmHg	or	>110 mmHg

The systolic pressure represents the pressure in the blood vessels when the heart contracts. The diastolic pressure represents the pressure in the blood vessels in between contractions or when the heart rests between beats.

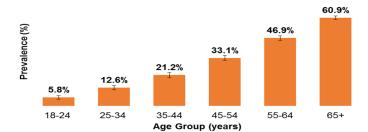
### Prevalence of high blood pressure among Kansas adults<sup>†</sup>

~692,000 of Kansas adults have ever been diagnosed with hypertension

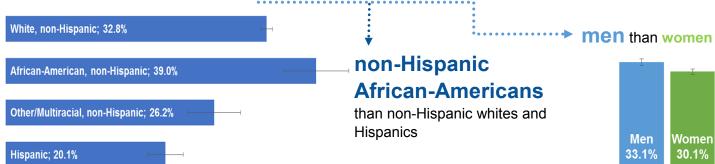


31.6% of Kansas adults

Prevalence of hypertension increases with age from 5.8% among adults aged 18 to 24 year to 60.9% among adults aged 65 years and older



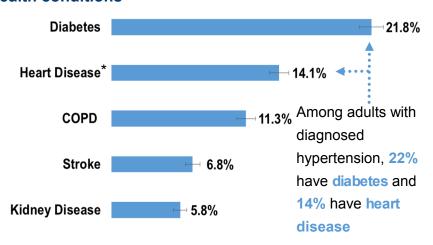
#### High blood pressure is more common among

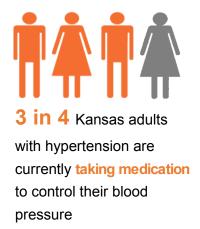


<sup>†</sup> Based on respondents who self-reported they had been told by a doctor they had high blood pressure, excluding females told only during pregnancy. Source: 2015 Kansas Behavioral Risk Factor Surveillance System, Kansas Department of Health and Environment, Bureau of Health Promotion.

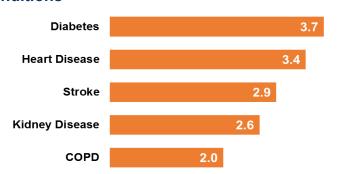
<sup>\*</sup> If systolic and diastolic blood pressure fall into different categories, the higher category is used to classify blood pressure

# High blood pressure is associated with other chronic health conditions



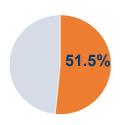


# Kansas adults who have high blood pressure have greater odds of having chronic health conditions



Adults who are diagnosed with hypertension have 3.7 greater odds of having diabetes and 3.4 greater odds of having heart disease

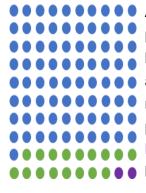
### Self-monitoring<sup>†</sup> blood pressure among Kansas adults with hypertension or prehypertension



1 in 2 Kansas adults with hypertension or prehypertension measure blood pressure at home.



Among adults with hypertension or prehypertension who measured blood pressure at home, only 20% measure daily.



Among adults with hypertension or prehypertension who measured blood pressure at home, 81% use an automated blood pressure machine, 17% use a manual blood pressure machine and 2% use a hybrid machine to self-monitored blood pressure.



Among adults with hypertension or prehypertension who measured blood pressure at home, only 5.3% transmit blood pressure readings to health care provider for feedback.

<sup>\*</sup> Heart disease includes adults who ever have coronary heart disease (angina) or heart attack (myocardial infarct).

<sup>\*\*</sup> The analysis is adjusted to remove the effect of age, race/ethnicity and gender.

<sup>†</sup>Based on respondents who had been told by a doctor they had high blood pressure, borderline high or pre-hypertensive, excluding females told only during pregnancy. Source: 2015 Kansas Behavioral Risk Factor Surveillance System, Kansas Department of Health and Environment, Bureau of Health Promotion.

#### **Blood Pressure Measurement Technique**



Use the right sized cuff on a bare arm



Place arm at heart level with palm of hand upright



Have back supported, legs uncrossed and feet supported



Avoid talking and movement while the blood pressure is being taken



Record exact numbers

### Recommendations to Prevent and Manage High Blood Pressure<sup>2-4</sup>



## Stay physically active and maintain healthy body weight

Regular aerobic physical activity such as brisk walking (at least 30 minutes per day 5 days per week or 150 minutes every week) is recommended.<sup>7</sup>



Take blood pressure medicine as prescribed



Avoid tobacco use and secondhand smoke.

Limit alcohol consumption to no more than 1 drink per day for women and 2 drinks per day for men.

\*\*Note: alcoholic drink equivalence<sup>5</sup>: 12 fl. oz. at 5% alcohol = 5 fl. oz. at 12% alcohol = 1.5 fl. oz. 80 proof distilled spirits

#### Maintain healthy dietary habits

- Read nutrition label
- □ Reduce salt (sodium) intake<sup>5</sup>
  - $\Rightarrow$  Less than 2,300 mg per day
  - ⇒ Limit intake to 1,500 mg per day for adults aged 51 years and older, African-Americans or adults who have high blood pressure, diabetes or chronic kidney disease.

### Nutrition Facts

Serving Size 1 cup (246g) Servings Per Container 2

Amount Per Serving
Calories 90

Total Fat 2g
Saturated Fat 0.5g
Cholesterol 25mg

Sodium 400 mg
Total Carbohydrate 11g

- □ Increase fruit and vegetable consumption
- Consume low-fat dairy products with less saturated and total fats



Manage stress and check blood pressure regularly.

#### References

- National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. About high blood pressure. Centers for Disease Control and Prevention website. July 2014. <a href="http://www.cdc.gov/bloodpressure/about.htm">http://www.cdc.gov/bloodpressure/about.htm</a>. Accessed March 14, 2017.
- 2. National High Blood Pressure Education Program, 2004. The seventh report of the Joint National Committee on prevention, detection, evaluation, and treatment of high blood pressure.
- 3. National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. About high blood pressure. Centers for Disease Control and Prevention website. Nov 2016. https://www.cdc.gov/bloodpressure/facts.htm. Accessed March 14, 2017.
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- 5. U.S. Department of Health and Human Services and U.S. Department of Agriculture. Dietary Guidelines for Americans: 2015-2020. 8th Edition. December 2015.