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

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Systolic Blood Pressure (upper number)</th>
<th>Diastolic Blood Pressure (bottom number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;120 mmHg and</td>
<td>&lt;80 mmHg</td>
</tr>
<tr>
<td>Prehypertension (At Risk)</td>
<td>120 to 139 mmHg or 80 to 89 mmHg</td>
<td></td>
</tr>
<tr>
<td>Stage 1 Hypertension</td>
<td>140 to 159 mmHg or 90 to 99 mmHg</td>
<td></td>
</tr>
<tr>
<td>Stage 2 Hypertension</td>
<td>≥160 mmHg or</td>
<td>≥100 mmHg</td>
</tr>
<tr>
<td>Hypertensive Crisis (call 911 now)</td>
<td>&gt;180 mmHg or</td>
<td>&gt;110 mmHg</td>
</tr>
</tbody>
</table>

* If systolic and diastolic blood pressure fall into different categories, the higher category is used to classify blood pressure.

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.

Prevalence of high blood pressure among Kansas adults†

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

31.6% of Kansas adults

High blood pressure is more common among men than women

High blood pressure is associated with other chronic health conditions

- **Diabetes**: 21.8%
- **Heart Disease***: 14.1%
- **COPD**: 11.3%
- **Stroke**: 6.8%
- **Kidney Disease**: 5.8%

Among adults with diagnosed hypertension, 22% have diabetes and 14% have heart disease.

3 in 4 Kansas adults with hypertension are currently taking medication to control their blood pressure.

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

- **Diabetes**: 3.7
- **Heart Disease**: 3.4
- **Stroke**: 2.9
- **Kidney Disease**: 2.6
- **COPD**: 2.0

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† 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, 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 20% measure daily.

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.

---

* Heart disease includes adults who ever have coronary heart disease (angina) or heart attack (myocardial infarct).
** The analysis is adjusted to remove the effect of age, race/ethnicity and gender.
† 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.
**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**

**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.

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

**Manage stress and check blood pressure regularly.**

**References**