

Hypertension

Prevention and Wellness Practice Guideline



Overview of the Condition/Disease

Definition: Hypertension (HTN) or High Blood Pressure, is when the blood pressure, or force of the blood pushing against the walls of the blood vessels, is consistently too high. Hypertension is a common and dangerous condition.

Pathophysiology: Blood pressure is determined both by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries. The more blood your heart pumps and the narrower your arteries, the higher your blood pressure.

Types of Hypertension:

- Primary (essential): Blood pressure changes due to the sympathetic nervous system, the renin-angiotensin-aldosterone systems and the plasma volume in the body typically related to changes in the body's environment to maintain organ perfusion.
- Secondary: Medical conditions that increase blood pressure as a result of their disease process (eg. Kidney disease, obstructive sleep apnea, pheochromocytoma, Cushing's syndrome or other endocrine disorders.)
- White Coat: White-coat hypertension refers to a common phenomenon in which blood pressures are elevated during medical visits compared to blood pressures taken at home or other comfortable settings.
- Orthostatic hypotension: also known as postural hypotension, is a form of low blood pressure that happens when you stand up from sitting or lying down. Orthostatic hypotension can make a person feel dizzy or lightheaded and could cause one to faint.



Best Practice Standards for Prevention and Management

Education:

Blood Pressure guidelines have recently changed and require tighter control

- High blood pressure is now defined as >130/80
- Hypotension (low blood pressure): <90/60
- Normal: <120/80 mmHg
- Elevated: Systolic: 120-129 and Diastolic: <80
- Stage 1: Systolic: 130-139 or Diastolic: 80-89
- Stage 2: Systolic: >140 or Diastolic: >90
- Hypertensive Crisis: Systolic:>180 and/or Diastolic: >120

Hypertension

Prevention and Wellness Practice Guideline

Interventions:

- Lifestyle changes (see below) are recommended for all members with hypertension
- Medications may be prescribed based on blood pressure readings and risk factors

Lifestyle Changes:

- See a primary care provider or cardiologist every 6 months or as recommended
- Eat a healthy diet, low in salt and high in fresh fruits and vegetables
- Increase physical activity (i.e. walking, running, bicycling, swimming, tennis)
- Smoking cessation
- Consider weight loss
- Limit alcohol intake (<2 drinks per day for women, < 3 drinks per day for men)

Additional conditions that negatively impact the condition/disease:

• Overweight/obesity	• Tobacco Use
• Unhealthy diet	• Alcohol Use
• Physical inactivity	• Socioeconomic risk factors
• Diabetes	• Some medications
• Genetics (i.e. age, gender)	• Prolonged Stress

Anticipating, Recognizing, and Responding to Symptoms



Seek timely medical attention when current interventions and/or medications are not managing symptoms.

Potential symptoms:

- High Blood Pressure can be called the “silent killer” because it often has no warning signs or symptoms, and many people do not know then have it.
- Rarely, high blood pressure can cause symptoms of headaches, vomiting, or dizziness



Interventions to manage symptoms:

- A person’s blood pressure should be checked by a health care professional regardless of whether symptoms are present or not.
- If a person is diagnosed with high blood pressure, medications may be prescribed along with lifestyle modifications.

Hypertension

Prevention and Wellness Practice Guideline

Potential Consequences of High Blood Pressure:

• Stroke	• Heart Attack
• Heart Failure	• Kidney disease/failure
• Vision Loss	• Elevated cholesterol
• Peripheral artery disease	• Sexual dysfunction



Guidelines and Process for Interdisciplinary Team

- Teams should be monitoring members blood pressures during assessments and as needed at home visits.
- If a member's blood pressure is $>130/80$, the blood pressure should be rechecked in 5 minutes and if it remains above goal, the Primary Care Provider should be notified.
- If a member's blood pressure is $>180/120$ mmHg, a second blood pressure reading should be obtained in 5 minutes and if the second reading remains elevated the care team RN will encourage and/or coordinate a visit for the member to an urgent care or emergency department.
- Blood pressure values should be documented in MIDAS and TruCare.



Cultural Considerations

- In general, ethnic and cultural minority groups experience a disproportionate burden of disease, injury, premature death, and disability when compared to the Caucasian population
- Health disparities can mean lower life expectancy, decreased quality of life, and loss of economic opportunities
- Health disparities result in decreased productivity, increased health care costs, and social inequity
- Contributing factors to ethnic and cultural disparities:
 - Mistrust in the health care system (stemming from current and historical mistreatment and peripheral trauma. Ex: Tuskegee Study)
 - Experiences of discrimination
 - Health literacy
 - Provider prejudice
 - Provider unconscious bias
 - Lack of cultural competency and humility among health care providers
 - Discordance in patient-provider race
 - Lack of minority representation among health care providers (only 19% of RNs in the workforce are from racial or ethnic backgrounds)

All ethnicities and genders are at risk for hypertension, but research shows some are at higher risk. Please be considerate of members at higher risk and make sure to provide education when necessary.

Hypertension

Prevention and Wellness Practice Guideline

- African American men are specifically, disproportionately affected by HTN.
- Latinx communities have the highest rate of non-treatment for HTN



Quality Assurance Monitoring

Internal file reviews are completed by internal staff to monitor members blood pressure is being assessed every 6-months as part of the RN Assessment indicator.



Additional Resources

See Care Management Resource: Medications Used to Treat Hypertension & Common Side Effects

[Blood Pressure Zone Tool - English](#)

[Blood Pressure Zone Tool - Arabic](#)

[Blood Pressure Zone Tool - Chinese](#)

[Blood Pressure Zone Tool - Hmong](#)

[Blood Pressure Zone Tool - Lao](#)

[Blood Pressure Zone Tool - Russian](#)

[Blood Pressure Zone Tool - Serbian](#)

[Blood Pressure Zone Tool - Spanish](#)



References

American Heart Association. (2021, April). What is High Blood Pressure?.

<http://www.heart.org/en/health-topics/high-blood-pressure/the-facts-about-high-blood-pressure/what-is-high-blood-pressure>

Centers for Disease Control. (2020, October). High Blood Pressure.

<https://www.cdc.gov/bloodpressure/index.htm>

Mayo Clinic. (2021, April). High Blood Pressure (Hypertension).

<https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/symptoms-causes/syc-20373410>

Basile, MD, Jan; Bloch, MD, Michael. (2021). Overview of hypertension in adults. UptoDate.

Retrieved December 13, 2018 from https://www.uptodate.com/contents/overview-of-hypertension-in-adults?search=overview%20of%20hypertension%20&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1

Hypertension

Prevention and Wellness Practice Guideline

American College of Cardiology. (2017, November). New ACC/AHA High Blood Pressure Guidelines Lower Definition of Hypertension. <https://www.acc.org/latest-in-cardiology/articles/2017/11/08/11/47/mon-5pm-bp-guideline-aha-2017>

al Kibria, G. M. (2019). Racial/ethnic disparities in prevalence, treatment, and control of hypertension among US adults following application of the 2017 American College of Cardiology/American Heart Association guideline. *Preventive Medicine Reports*, 14, 100850. <https://doi.org/10.1016/j.pmedr.2019.100850>

Levine, D. A., Duncan, P. W., Nguyen-Huynh, M. N., & Ogedegbe, O. G. (2020). Interventions targeting racial/ethnic disparities in stroke prevention and treatment. *Stroke*, 51(11), 3425–3432. <https://doi.org/10.1161/strokeaha.120.030427>