

Clinical Practice Guideline: Hypertension (High Blood Pressure) Management

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GUIDELINES

In the context of American Specialty Health – Specialty (ASH) best practices, screening all adult patients for hypertension by measuring their blood pressure is considered necessary. Within this same context, providing a referral intervention (e.g., to their medical physician) and/or a direct intervention (e.g., lifestyle and/or dietary changes) commensurate with the practitioner’s expertise and scope, are recommended for adult patients with elevated blood pressure measurement during office blood pressure screening.

It is the practitioner’s responsibility to monitor any patient identified with hypertension, even if co-managed. In patients identified with hypertension, practitioners should check blood pressure at every visit. This is especially important if the patient is exercising in the clinic setting. It is imperative for the practitioner to monitor blood pressure response to exercise by checking it pre, post, and during exercise. All values should be documented within the medical record for that visit. Hypertension history, blood pressure levels, and any health care practitioner recommendations for exercise should be taken into account when developing home exercise programs.

INTRODUCTION

High blood pressure affects millions of Americans. Prevalence is higher among non-Hispanic black adults and the elderly. Frequently hypertension is also responsible for a significant percentage of serious health conditions such as myocardial infarctions, strokes, episodes of heart failure, and premature deaths in the U.S. The risk of stroke, myocardial infarction, heart failure, and peripheral vascular disease is two to four (2-4) times greater for those with hypertension than those with normal blood pressure (BP). End-stage renal disease, retinopathy, and aortic aneurysm are also complications related to hypertension.

According to the ACC/AHA (2025), The causes of hypertension are a mix of genetics, lifestyle choices, and chronic stress. People with a genetic predisposition toward high blood pressure can help treat and prevent hypertension with healthy lifestyle behaviors.

Hypertension (high blood pressure or high BP) has been defined by the Joint National Committee (JNC 7, 8) for adults as systolic blood pressure of 140 mm Hg or higher, or diastolic blood pressure of 90 mm Hg or higher. In patients 60years of age or older, a systolic blood pressure level of 150 or greater is used instead of 140. In November 2017, the American Heart Association (AHA) and American College of Cardiology (ACC) published hypertension guidelines that lowered blood pressure thresholds of previously accepted guidelines. These guidelines also provided specific steps on how to accurately measure and interpret blood pressure. This change resulted in more people being identified as “hypertensive.” In 2025, the ACC/AHA released an updated guideline for blood pressure levels.

The changes and comparison to other guidelines are shown in the table below:

AHA/ACC 2025 Hypertension Classifications		Previous Hypertension Classifications (JNC 7, 8)	
Category	Systolic/Diastolic BP	Category	Systolic/Diastolic BP
Normal	Less than 120/80 mm Hg	Normal	Less than 120/80 mm Hg
Elevated	120 - 129/less than 80 mm Hg	Pre-Hypertension	120 – 139/80 – 89 mm Hg
Hypertension - Stage 1	130 - 139/80 - 89 mm Hg	Hypertension - Stage 1	140 – 159/90 – 99 mg Hg
Hypertension - Stage 2	Greater than or equal to 140/90 mm Hg	Hypertension - Stage 2	Greater than 160/100 mm Hg
Critical	Greater than 180/120 mm Hg	Critical	Greater than 180/110 mm Hg

ASH will continue to closely monitor with internal and external experts any updated information regarding the guidelines.

SCREENING RECOMMENDATIONS

Population	Recommendation	Grade
Adults 18 years or older without known hypertension	The USPSTF recommends screening for hypertension in adults 18 years or older with office blood pressure measurement (OBPM). The USPSTF recommends obtaining blood pressure measurements outside of the clinical setting for diagnostic confirmation before starting treatment.	A
Asymptomatic pregnant persons	The USPSTF recommends screening for hypertensive disorders in pregnant persons with blood pressure measurements throughout pregnancy.	B
Children and adolescents	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for high blood pressure in children and adolescents	I

The USPSTF recommendation, published in 2021, is consistent with the previous 2015 recommendations. Although evidence on optimal screening intervals is limited, reasonable options include:

- Screening for hypertension every year in adults 40 years or older and in adults at increased risk for hypertension (e.g., Black persons, persons with high-normal blood pressure, or persons who have overweight or obesity)
- Screening less frequently (i.e., every 3 to 5 years) as appropriate for adults aged 18 to 39 years not at increased risk for hypertension and with a prior normal blood pressure reading.

Screening for hypertension in the office setting can be done with automated or manual sphygmomanometry using an appropriately sized arm cuff. The patient is to be in a seated position with their arm at the level of the right atrium for the most accurate reading. The mean of two blood pressure measurements should be used. It is recommended that the patient be in the office for at least five minutes before the blood pressure is measured.

Blood pressure readings can be influenced by multiple common factors, such as emotional status, stress, pain, physical activity, caffeine use, tobacco use, time of day and medications. High blood pressure that only occurs in a medical setting and/or in the presence of medical personnel may occur in 15-30% of the population. People with this

‘white coat hypertension’ may have lower blood pressure outside of the office. If blood pressure is only measured in an office setting, diagnostic accuracy may be affected by procedural errors, the limited number of measurements that can be easily taken over time with multiple visits, and the possible presence of white coat hypertension.

According to the 2025 ACC/AHA guidelines, the risk of cardiovascular disease (CVD) associated with white coat hypertension may only be increased among older adults who have a high baseline CVD risk. Therefore, it is reasonable to exclude white coat hypertension using out-of-office BP monitoring in adults with high office BP (i.e., SBP/DBP \geq 130/80 mm Hg). One caveat is that adults with office SBP/DBP \geq 160/100 mm Hg should be promptly treated, with antihypertensive medication doses titrated as necessary to control BP. The prevalence of white coat hypertension is low among those with office BP levels in this range. Compared with individuals who have sustained normotension, a higher proportion of individuals with white coat hypertension or masked hypertension develop sustained hypertension during follow-up. An additional study demonstrated that, compared with individuals with sustained normotension, a higher proportion of individuals with white coat hypertension had high out-of-office BP during follow-up. Therefore, it is reasonable to conduct out-of-office BP monitoring to exclude sustained hypertension among those initially identified with white coat hypertension or masked hypertension.

Ambulatory and home blood pressure monitoring can be used to confirm a diagnosis of hypertension after initial screening. The USPSTF reports that evidence supports ambulatory home blood pressure monitoring as the best method for diagnosing hypertension. During this procedure the patient wears a small portable device that can measure blood pressure at 20–30-minute intervals. Good quality evidence supports that home blood pressure monitoring may also be acceptable for diagnosing hypertension especially when ambulatory blood pressure monitoring is not available. Blood pressure readings that are more significantly elevated may require more immediate intervention during the current clinical encounter without waiting for ambulatory monitoring results.

Home blood pressure monitoring with in-clinic measurements is important. At this time, cuffless devices such as smartwatches have not demonstrated appropriate accuracy and should not be used for blood pressure monitoring.

ASH recommends the following guidelines for a patient with an elevated blood pressure reading during the practitioner’s examination:

- Blood pressure within 140/90 to 159/99 range: needs follow up blood pressure measurement with practitioner or referral to physician
- Blood pressure within 160/100 to 179/109 range: refer the patient to their physician for follow up.

- Blood pressure within 180/110 to 199/119 range: discuss the severity of this reading with the patient and recommend immediate follow up with their physician (if possible, contact the patient's physician to discuss how to proceed regarding the blood pressure reading)
- Blood pressure at or above 200/120: contact emergency services (e.g., call 911) for immediate care for the patient

INTERVENTIONS

Effective interventions to reduce hypertension can be pharmacological or nonpharmacological.

Pharmacological

Pharmacotherapy has been found to be effective compared to placebo in numerous trials in reducing cardiovascular events by lowering blood pressure. Over two-thirds of people with hypertension will require more than one antihypertensive medication to adequately control their blood pressure. The 2025 ACC/AHA recommendations include starting appropriate people with hypertension on two medications from the outset, especially in a combination pill for improved adherence. Multiple classes of antihypertensives are available including diuretics, angiotensin receptor blockers (ARBs), angiotensin converting enzyme inhibitors (ACEIs), beta blockers (BBs), alpha blockers, and calcium channel blockers (CCBs).

Adverse effects of antihypertensives have been found to be very common, varying from 40-89% of participants, depending on the study and the particular medication. These effects include headache, upper respiratory infection, nasopharyngitis, ankle edema, constipation, facial flushing, hyperkalemia, dizziness, and erectile dysfunction. Serious adverse effects were found to be less common (4-11% of participants, depending on the study and the medication).

Practitioners should also be aware that patients may not be adhering to their medication regimens as prescribed. Practitioners should follow the above recommended guidelines for blood pressure ranges and encourage follow up with the prescribing physician as indicated for management of blood pressure and/or medication adherence issues.

Nonpharmacological

There is fair to good evidence for a reduction in cardiovascular events from the use of certain nonpharmacological interventions for patients with hypertension. These interventions include weight reduction in patients with overweight/obesity, tobacco cessation, increased physical activity, dietary sodium reduction, increased dietary potassium, decreased or no alcohol intake, and stress management. Reductions in systolic blood pressure ranged from 3-15 mm Hg, depending on the study and the intervention.

1 PRACTITIONER SCOPE AND TRAINING

2 Practitioners should practice only in the areas in which they are competent based on their
3 education, training, and experience. Levels of education, experience, and proficiency may
4 vary among individual practitioners. It is ethically and legally incumbent on a practitioner
5 to determine where they have the knowledge and skills necessary to perform such services
6 and whether the services are within their scope of practice.

8 It is best practice for the practitioner to appropriately render services to a patient only if
9 they are trained to competency, equally skilled, and adequately competent to deliver a
10 service compared to others trained to perform the same procedure. If the service would be
11 most competently delivered by another health care practitioner who has more skill and
12 training, it would be best practice to refer the patient to the more expert practitioner.

14 Best practice can be defined as a clinical, scientific, or professional technique, method, or
15 process that is typically evidence-based and consensus driven and is recognized by a
16 majority of professionals in a particular field as more effective at delivering a particular
17 outcome than any other practice (Joint Commission International Accreditation Standards
18 for Hospitals, 2020).

20 Depending on the practitioner's scope of practice, training, and experience, a patient's
21 condition and/or symptoms during examination or the course of treatment may indicate the
22 need for referral to another practitioner or even emergency care. In such cases it is essential
23 for the practitioner to refer the patient for appropriate co-management (e.g., to their primary
24 care physician) or if immediate emergency care is warranted, to contact 911 as appropriate.
25 See the *Managing Medical Emergencies (CPG 159 – S)* clinical practice guideline for
26 information.

28 PRACTITIONER RESOURCES

29 Publicly available resources can be found at:

- 30 • NHLBI (National Heart, Lung, and Blood Institute) Publications and Resources
31 <https://www.nhlbi.nih.gov/health/high-blood-pressure>

33 SPANISH LANGUAGE RESOURCES

- 34 • Materials for the Hispanic/Latino Population (National Heart Lung and Blood
35 Institute): <https://www.nhlbi.nih.gov/health/educational/healthdisp/health-education-materials/hispanic-latino.htm>

38 MEMBER RESOURCES

39 Publicly available resources can be found at:

- 40 • Blood Pressure Toolkit <https://www.heart.org/en/health-topics/high-blood-pressure/high-blood-pressure-toolkit-resources>

1 REFERENCES

- 2 Casey, D. E., Jr, Thomas, R. J., Bhalla, V., Commodore-Mensah, Y., Heidenreich, P. A.,
3 Kolte, D., Muntner, P., Smith, S. C., Jr, Spertus, J. A., Windle, J. R., Wozniak, G. D.,
4 & Ziaeian, B. (2019). 2019 AHA/ACC Clinical Performance and Quality Measures for
5 Adults With High Blood Pressure: A Report of the American College of
6 Cardiology/American Heart Association Task Force on Performance
7 Measures. *Journal of the American College of Cardiology*, 74(21), 2661–2706.
8 <https://doi.org/10.1016/j.jacc.2019.10.001>
9
- 10 Chobanian, A. V., Bakris, G. L., Black, H. R., Cushman, W. C., Green, L. A., Izzo, J. L.,
11 Jr, Jones, D. W., Materson, B. J., Oparil, S., Wright, J. T., Jr, Roccella, E. J., Joint
12 National Committee on Prevention, Detection, Evaluation, and Treatment of High
13 Blood Pressure. National Heart, Lung, and Blood Institute, & National High Blood
14 Pressure Education Program Coordinating Committee (2003). Seventh report of the
15 Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High
16 Blood Pressure. *Hypertension (Dallas, Tex.: 1979)*, 42(6), 1206–1252.
17 <https://doi.org/10.1161/01.HYP.0000107251.49515.c2>
18
- 19 Guirguis-Blake, J. M., Evans, C. V., Webber, E. M., Coppola, E. L., Perdue, L. A., &
20 Weyrich, M. S. (2021). Screening for Hypertension in Adults: Updated Evidence
21 Report and Systematic Review for the US Preventive Services Task
22 Force. *JAMA*, 325(16), 1657–1669. <https://doi.org/10.1001/jama.2020.21669>
23
- 24 Hauk L. Pharmacologic Treatment of Hypertension: ACP and AAFP Release
25 Recommendations for Adults 60 Years and Older. *Am Fam Physician*. 2017;95(9):588-
26 589
27
- 28 James, P. A., Oparil, S., Carter, B. L., Cushman, W. C., Dennison-Himmelfarb, C.,
29 Handler, J., Lackland, D. T., LeFevre, M. L., MacKenzie, T. D., Ogedegbe, O., Smith,
30 S. C., Jr, Svetkey, L. P., Taler, S. J., Townsend, R. R., Wright, J. T., Jr, Narva, A. S.,
31 & Ortiz, E. (2014). 2014 evidence-based guideline for the management of high blood
32 pressure in adults: report from the panel members appointed to the Eighth Joint
33 National Committee (JNC 8). *JAMA*, 311(5), 507–520.
34 <https://doi.org/10.1001/jama.2013.284427>
35
- 36 Joint Commission International. (2020). Joint Commission International Accreditation
37 Standards for Hospitals (7th Edition): Joint Commission Resources
38
- 39 Jones, D. W., Ferdinand, K. C., Taler, S. J., Johnson, H. M., Shimbo, D., Abdalla, M.,
40 Altieri, M. M., Bansal, N., Bello, N. A., Bress, A. P., Carter, J., Cohen, J. B., Collins,
41 K. J., Commodore-Mensah, Y., Davis, L. L., Egan, B., Khan, S. S., Lloyd-Jones, D.
42 M., Melnyk, B. M., Williamson, J. D. (2025). 2025

- 1 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGI
 2 M Guideline for the Prevention, Detection, Evaluation and Management of High Blood
 3 Pressure in Adults: A Report of the American College of Cardiology/American Heart
 4 Association Joint Committee on Clinical Practice Guidelines. *Hypertension (Dallas,*
 5 *Tex. : 1979)*, 82(10), e212–e316. <https://doi.org/10.1161/HYP.0000000000000249>
 6
- 7 McAlister, F. A., & Straus, S. E. (2001). Evidence based treatment of hypertension.
 8 Measurement of blood pressure: an evidence based review. *BMJ (Clinical research*
 9 *ed.)*, 322(7291), 908–911. <https://doi.org/10.1136/bmj.322.7291.908>
 10
- 11 Reeves R. A. (1995). The rational clinical examination. Does this patient have
 12 hypertension? How to measure blood pressure. *JAMA*, 273(15), 1211–1218
 13
- 14 Samson, M. (2024). Hypertension Treatment & Management. Medscape. Retrieved
 15 October 6, 2025 from <http://emedicine.medscape.com/article/241381-treatment>
 16
- 17 Shimbo, D., Artinian, N. T., Basile, J. N., Krakoff, L. R., Margolis, K. L., Rakotz, M. K.,
 18 Wozniak, G., & American Heart Association and the American Medical Association
 19 (2020). Self-Measured Blood Pressure Monitoring at Home: A Joint Policy Statement
 20 From the American Heart Association and American Medical
 21 Association. *Circulation*, 142(4), e42–e63
 22
- 23 U.S. Department of Health and Human Services, National Institutes of Health, National
 24 Heart, Lung, and Blood Institute, (2006). *Your Guide to Lowering Your Blood*
 25 *Pressure with DASH (NIH Publication No. 06-4082)*. Bethesda, MD. Retrieved
 26 October 6, 2025 from https://www.nhlbi.nih.gov/files/docs/public/heart/new_dash.pdf
 27
- 28 U.S. Department of Health and Human Services, National Institutes of Health, National
 29 Heart, Lung, and Blood Institute, & the National High Blood Pressure Education
 30 Program. (2003). *JNC 7 Express: The Seventh Report of the Joint National*
 31
- 32 U.S. Department of Health and Human Services. The Surgeon General’s Call to Action to
 33 Control Hypertension. Washington, DC: U.S. Department of Health and Human
 34 Services, Office of the Surgeon General; 2020
 35
- 36 US Preventive Services Task Force, Barry, M. J., Nicholson, W. K., Silverstein, M.,
 37 Cabana, M. D., Chelmow, D., Coker, T. R., Davis, E. M., Donahue, K. E., Jaén, C. R.,
 38 Li, L., Ogedegbe, G., Rao, G., Ruiz, J. M., Stevermer, J., Tsevat, J., Underwood, S. M.,
 39 & Wong, J. B. (2023). Screening for Hypertensive Disorders of Pregnancy: US
 40 Preventive Services Task Force Final Recommendation Statement. *JAMA*, 330(11),
 41 1074–1082. <https://doi.org/10.1001/jama.2023.16991>

- 1 US Preventive Services Task Force, Grossman, D. C., Bibbins-Domingo, K., Curry, S. J.,
2 Barry, M. J., Davidson, K. W., Doubeni, C. A., Epling, J. W., Jr, Kemper, A. R., Krist,
3 A. H., Kurth, A. E., Landefeld, C. S., Mangione, C. M., Phipps, M. G., Silverstein, M.,
4 Simon, M. A., & Tseng, C. W. (2017). Screening for Obesity in Children and
5 Adolescents: US Preventive Services Task Force Recommendation
6 Statement. *JAMA*, 317(23), 2417–2426. <https://doi.org/10.1001/jama.2017.6803>
7
- 8 US Preventive Services Task Force, Krist, A. H., Davidson, K. W., Mangione, C. M.,
9 Cabana, M., Caughey, A. B., Davis, E. M., Donahue, K. E., Doubeni, C. A., Kubik,
10 M., Li, L., Ogedegbe, G., Pbert, L., Silverstein, M., Stevermer, J., Tseng, C. W., &
11 Wong, J. B. (2021). Screening for Hypertension in Adults: US Preventive Services
12 Task Force Reaffirmation Recommendation Statement. *JAMA*, 325(16), 1650–1656.
13 <https://doi.org/10.1001/jama.2021.4987>
14
- 15 Weber, M. A., Schiffrin, E. L., White, W. B., Mann, S., Lindholm, L. H., Kenerson, J. G.,
16 Flack, J. M., Carter, B. L., Materson, B. J., Ram, C. V., Cohen, D. L., Cadet, J. C.,
17 Jean-Charles, R. R., Taler, S., Kountz, D., Townsend, R. R., Chalmers, J., Ramirez, A.
18 J., Bakris, G. L., Wang, J., ... Harrap, S. B. (2014). Clinical practice guidelines for the
19 management of hypertension in the community: a statement by the American Society
20 of Hypertension and the International Society of Hypertension. *Journal of clinical*
21 *hypertension (Greenwich, Conn.)*, 16(1), 14–26. <https://doi.org/10.1111/jch.12237>
22
- 23 Whelton, P. K., He, J., Appel, L. J., Cutler, J. A., Havas, S., Kotchen, T. A., Roccella, E.
24 J., Stout, R., Vallbona, C., Winston, M. C., Karimbakas, J., & National High Blood
25 Pressure Education Program Coordinating Committee (2002). Primary prevention of
26 hypertension: clinical and public health advisory from The National High Blood
27 Pressure Education Program. *JAMA*, 288(15), 1882–1888.
28 <https://doi.org/10.1001/jama.288.15.1882>
29
- 30 Wolff, T., & Miller, T. (2007). Evidence for the reaffirmation of the U.S. Preventive
31 Services Task Force recommendation on screening for high blood pressure. *Annals of*
32 *internal medicine*, 147(11), 787–791. [https://doi.org/10.7326/0003-4819-147-11-](https://doi.org/10.7326/0003-4819-147-11-200712040-00010)
33 [200712040-00010](https://doi.org/10.7326/0003-4819-147-11-200712040-00010)