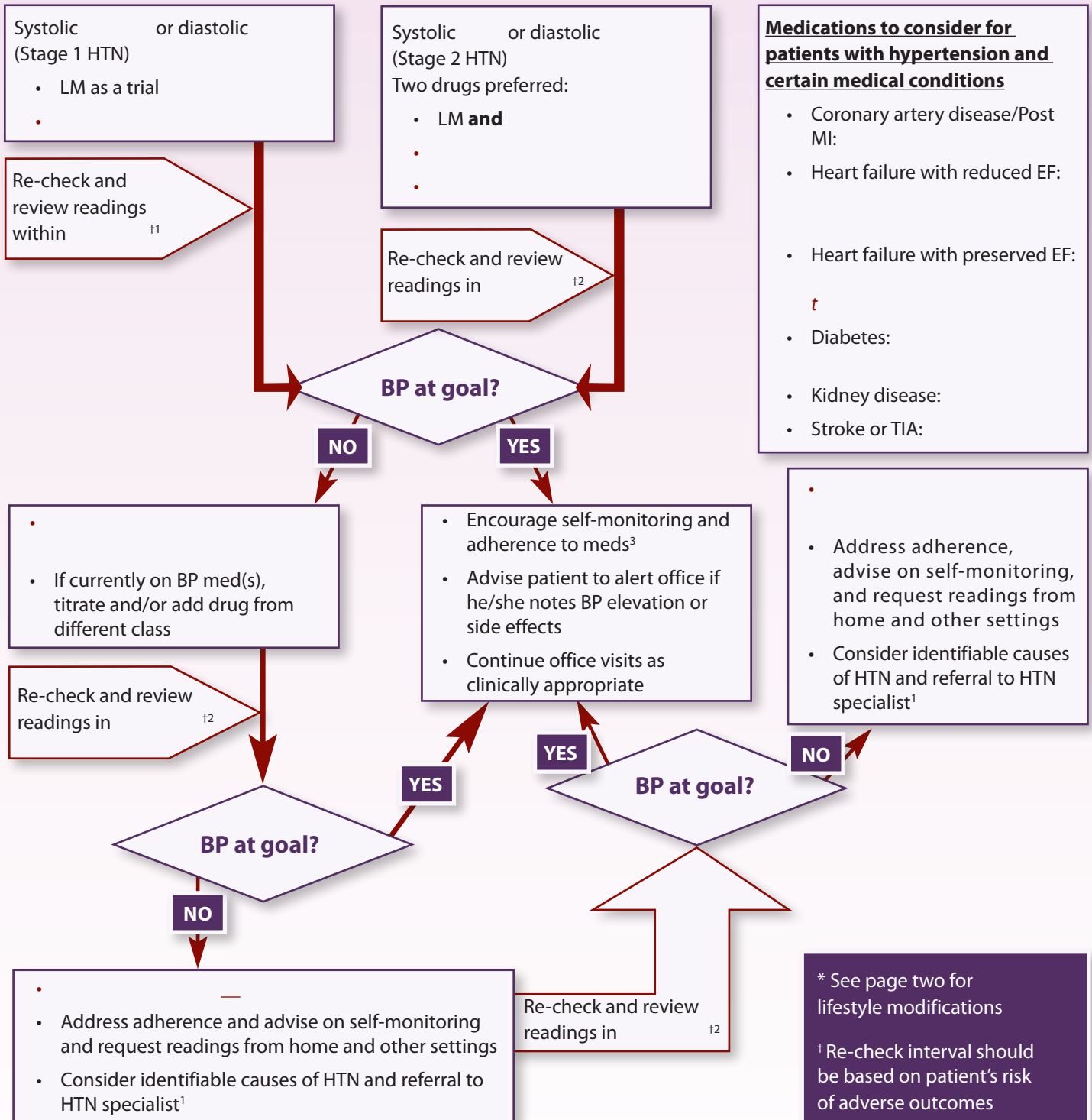


# Protocol for Controlling Hypertension in Adults<sup>1</sup>

The blood pressure (BP) goal is set by a combination of factors including scientific evidence, clinical judgment, and patient tolerance. For most people, the goal is <140 and <90; however some individuals may be better served by other BP goals. Lifestyle modifications (LM)\* should be initiated in all patients with hypertension (HTN) and patients should be assessed for target organ damage and existing cardiovascular disease. Self-monitoring is encouraged for most patients throughout their care and requesting and reviewing readings from home and community settings can help in achieving and maintaining good control. For patients with hypertension and certain medical conditions, specific medications should be considered, as listed in the box on the right below.



## Instructions for use of the template

### 1. Gather clinical staff to make consensus decisions about:

- Specific medications to be prescribed for most patients with hypertension
- Medications to consider for patients with hypertension and certain medical conditions
- Starting dosages and dosage increases with each titration
- Time intervals for follow-up and titration

### 2. Customize the template by accepting the variables in red or modifying them with other drug names, dosages, and titration

- As needed, develop separate protocols for subpopulations with different treatment goals

### 3. Adopt the protocol across the practice or system and revise it over time to meet the needs of patients and staff

<b>*Lifestyle Modifications<sup>1</sup> (LM)</b>		
<b>Modification</b>	<b>Recommendation</b>	<b>Approximate SBP** Reduction (Range)<sup>††</sup></b>
<b>Weight reduction</b>	Maintain normal body weight (body mass index 18.5–24.9 kg/m <sup>2</sup> )	5–20 mm Hg/10kg
<b>Adopt DASH<sup>†††</sup> eating plan</b>	Consume a diet rich in fruits, vegetables, and lowfat dairy products with a reduced content of saturated and total fat	8–14 mm Hg
<b>Dietary sodium reduction</b>	Reduce dietary sodium intake to no more than 100 mmol per day (2.4 g sodium or 6 g sodium chloride)	2–8 mm Hg
<b>Physical activity</b>	Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week which may be broken into shorter time intervals such as 10 minutes each of moderate or vigorous effort)	4–9 mm Hg
<b>Moderation of alcohol consumption</b>	Limit consumption to no more than 2 drinks (e.g. 24 oz. beer, 10 oz. wine, or 3 oz. 80-proof whiskey) per day in most men, and to no more than 1 drink per day in women and lighter weight persons	2–4 mm Hg

\*\*SBP – systolic blood pressure  
 †† The effects of implementing these modifications are dose and time dependent, and could be greater for some individuals  
 †††DASH – Dietary Approaches to Stop Hypertension

## Abbreviations

- ACEI – Angiotensin-Converting Enzyme Inhibitor
- ALDO – Aldosterone Antagonist
- ARB – Angiotensin II Receptor Blocker
- BB – Beta Blocker
- CCB – Calcium Channel Blocker
- EF – Ejection Fraction
- MI – Myocardial Infarction
- TIA – Transient Ischemic Attack

## References

- <sup>1</sup> National Heart, Lung and Blood Institute, National Institutes of Health. *The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure - Complete Report*. National Heart, Lung, and Blood Institute, National Institutes of Health. NIH Publication No. 04-5230, 2004.
- <sup>2</sup> Jaffe MG, Lee GA, Young JD, Sidney S, Go AS. Improved Blood Pressure Control Associated with a Large-Scale Hypertension Program. *JAMA*. 2013;310(7):699-705.
- <sup>3</sup> Centers for Disease Control and Prevention. *Self-Measured Blood Pressure Monitoring: Action Steps for Public Health Practitioners*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2013.

## Other Resources

Sacks FM, Svetkey LP, Vollmer WM, et al. Effects on blood pressure of reduced dietary sodium and the Dietary Approaches to Stop Hypertension (DASH) diet. DASH-Sodium Collaborative Research Group. *N Engl J Med*. 2001;344:3-10.

US Department of Health and Human Services. 2008 physical activity guidelines for Americans. 2008. <http://www.health.gov/PAGuidelines>. Accessed November 4, 2013.

## Suggested Citation

Centers for Disease Control and Prevention. *Protocol for Controlling Hypertension in Adults*. Atlanta, Georgia. 2013.