

## HIGH BLOOD PRESSURE PREVENTION AND SCREENING (ADULT)

### I. DEFINITION:

- A. High blood pressure is both a disease and a risk factor. High Blood Pressure is a progressive involvement of the arterial and venous vessels with a blood vessel restriction and rigidity.
- B. High blood pressure is defined as systolic blood pressure (SBP) of 140 mm Hg or greater, diastolic blood pressure (DBP) of 90 mm Hg or greater or taking anti-hypertensive medication.
- C. The following chart classifies adult blood pressure for the purpose of identifying high-risk individuals and to provide guidelines for follow-up and treatment.

CLASSIFICATION TABLE<sup>‡</sup>

Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal	<120	And	< 80
Pre High Blood Pressure	120-139	or	80-89
Stage 1 High Blood Pressure	140-159	or	90-99
Stage 2 High Blood Pressure	≥160	or	≥100

<sup>‡</sup>Based on the average of two or more readings taken at each of two or more visits after an initial screening.

### II. CLINICAL FEATURES:

- A. Subjective:
  - 1. Frequently asymptomatic
  - 2. Tinnitus
  - 3. Dizziness
  - 4. Fainting
  - 5. Nosebleed
  - 6. Headache, especially on awakening

- B. Objective

Elevated blood pressure readings above 140/90 mm Hg. See classification table.

### III. MANAGEMENT PLAN:

- A. Screen client. Use following table for classification and follow-up.

B. BLOOD PRESSURE CLASSIFICATION AND FOLLOW-UP CRITERIA

DIASTOLIC (mm Hg)		SYSTOLIC (mm Hg)			
	Less than 120	120-139	140-159	≥160	200 or Greater
Less than 80 (No risk factors)	Recheck in two years	Recheck in one year <sup>††</sup>	Recheck in one month	Recheck in one month	Refer Immediately
80-89	Recheck in one year	Recheck in one month and refer if levels continue*	Recheck in one month and refer if levels continue*	Recheck in one month and refer if levels continue*	Refer Immediately
90-99	Recheck in one month and refer if levels continue*	Recheck in one month and refer if levels continue*	Recheck in one month and refer if levels continue*	Recheck in one month and refer if levels continue*	Refer Immediately
100 and greater	Refer Immediately	Refer Immediately	Refer Immediately	Refer Immediately	Refer Immediately

\* All individuals with abnormal levels should be screened three (3) times before a written referral is made, except emergency levels. The re-screening should be two (2) consecutive daily measurements and then a third measurement in one month. The measurements should then be averaged for referral determination.

If abnormal is found during a mass-screening event, the individual should be issued a written referral to the local County Health Department for re-screening (two (2) consecutive daily measurements and then a third measurement in one month, after which the measurements should then be averaged for referral determination) or referred to their private healthcare provider for further screening and follow-up.

† According to the American Diabetes Association, a goal systolic blood pressure of <130 mmHg is appropriate for most patients. Patients with diabetes should be treated to a diastolic blood pressure of <80 mmHg. Patients with diabetes will benefit from treatment of blood pressure to less than 130/80 mm Hg.

C. Client Education:

To prevent high blood pressure, clients should be counseled in the following areas.

1. Reduce dietary intake of processed foods for sodium (less than 2,300 mg daily; no more than 1,500 mg daily for persons 51 and older and those of any age who are African American or have hypertension, diabetes, or chronic kidney disease) and fat (20%-35% of total calories for adults 19 and older; 25-35% of total calories for 18 year-olds). Do not add salt to the preparation of foods.
2. Increase fruit and vegetable serving to 9 servings daily and reduce the amount of grains in diet.
3. Eat foods high in potassium.
4. Be physically active with moderate exercise for 150 minutes per week.
5. Stress management.
6. Avoidance of tobacco - If person smokes, refer to the Oklahoma Tobacco Helpline at 1-800-QUIT NOW or 1-800-784-8669.
7. Weight Control - Persons who are overweight or obese should be counseled to lose 5% of overall weight – losing fewer than 8 lbs and increasing physical activity can lower blood pressure by 4 mmHg.
8. Moderation of alcohol intake (24 ounces of beer, 10 ounces of wine, 2 ounces of hard liquor daily for most men and no more than 1 drink per day for women and lighter weight persons).

D. Consultation and Referral:

Referral to physician should be written on ODH Form No. 399. Clients may be referred to the health department nutritionist for diet consultation. If indicated, referral may also be made for stress management consultation.

E. Follow-up:

Determine tracking priority utilizing professional judgment.

F. Mass Screen:

1. If participating in a mass-screening event, utilize the Group Screening Record (ODH Form No. 398).
2. Each client should complete the Consent for Service (ODH Form No. 303C) form.
3. If results are abnormal, open a limited visit record and utilize the Referral Form (ODH Form No. 399).

REFERENCES:

- Roger VL, Go AS, Lloyd-Jones DM, et al. Heart disease and stroke statistics—2012 update: a report from the American Heart Association. *Circulation*. 2012;125:e2-e220.
- The Seventh Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. The National High Blood Pressure Education Program, National Heart, Lung, and Blood Institute, National Institutes of Health, U.S. Department of Health and Human Services, 2003.
- Primary Prevention of High Blood Pressure, An Advisory Group's Recommendations. The National High Blood Pressure Education Program, National Heart, Lung, and Blood Institute, National Institutes of Health, U.S. Department of Health and Human Services, 2002.
- U.S. Preventive Services Task Force. Screening for high blood pressure: U.S. Preventive Services Task Force recommendation statement. 2007;147:783-786.
- Pickering TG, Hall JE, Appel LJ, et al. Recommendations for blood pressure measurement in humans and experimental animals: part 1: blood pressure measurement in humans: a statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. , *Hypertension*. 2005;45:142-161.
- American Diabetes Association. Standards of medical care in diabetes —2012. *Diabetes Care*. 2012;35:S11-63.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary guidelines for Americans*, 2010. 7<sup>th</sup> ed. Washington DC:U.S. Government Printing Office, December 2010. Available at <http://www.dietaryguidelines.gov>.