

## **Hypertension Diagnosis and Management: A Coordinated Approach**

**Satellite Conference and Live Webcast  
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## **Faculty**

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## **Objectives**

- **Discuss the impact of HTN on the overall health of the state and nation**
- **Discuss the link between HTN and cardiovascular disease**
- **Discuss the role of early and accurate diagnosis of HTN**
- **Discuss the need for better BP outcomes as it relates to HTN**

## **Objectives**

- **Identify local and national agencies involved in increasing awareness about HTN**
- **Identify strategies to improve HTN outcomes**

## **Hypertension: An Overview**

- **Blood pressure is the force of blood against your artery walls as it circulates through your body**
- **Most common condition seen in Primary Care**
- **Deleterious effects on multiple organ systems**
- **A strong and independent risk factor for cardiovascular disease**

## **Hypertension: An overview**

- **Previously classified as pre hypertension, Stage 1 and Stage 2**
- **More recently simplified as BP >140/90 with specific treatment goals**
- **In 2009, better than 37% of Alabamians reported having high blood pressure**

### **Hypertension: An Overview**

- No single cause identified
- Strong indication for a genetic component
- Multiple Strong associations:
  - Obesity
  - Insulin resistance
  - Excessive alcohol intake

### **Hypertension: An Overview**

- High salt intake
- Aging
- Sedentary lifestyle
- Stress
- Low potassium intake
- Low calcium intake

### **Hypertension: An Independent Risk Factor for Cardiovascular Disease**

- Hypertension increases the risk of atherosclerosis

### **Hypertension: An Independent Risk Factor for Cardiovascular Disease**

- Individuals whose blood pressure is higher than 140/90 mm Hg often become patients treated for serious cardiovascular problems

### **Hypertension: An Independent Risk Factor for Cardiovascular Disease**

- A 20mm HG difference in usual SBP is associated with a fourfold difference in mortality from hypertensive heart disease and a two fold difference in mortality from CHF, aortic aneurysm, atherosclerosis, and sudden death
  - [http://dx.doi.org/10.1016/S0140-6736\(02\)11911-8](http://dx.doi.org/10.1016/S0140-6736(02)11911-8)

### **Hypertension: An Independent Risk Factor for Cardiovascular Disease**

- Elevated blood pressure is the largest contributing factor to all cause and CVD mortality
- The excess proportion of mortality attributable to elevated blood pressure is 40.6%

**Hypertension: An Independent Risk Factor for Cardiovascular Disease**

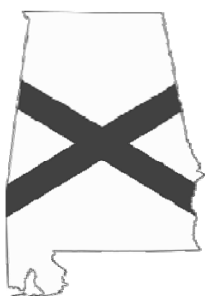
- In 2010 High BP was listed as a primary or contributing cause of death for more than 360,000 Americans

**Hypertension: An Independent Risk Factor for Cardiovascular Disease**



- 40.4% of Alabamians have been told they have high blood pressure
- The estimated morbidity percentage for adults aged 20 and over with hypertension is 32.5%

**Hypertension: An Independent Risk Factor for Cardiovascular Disease**



- Number one COD in Alabama in 2013 was heart disease
- Stroke was the fourth leading COD
- Primary (essential) Hypertension is number twelve

**Hypertension: An Independent Risk Factor for Cardiovascular Disease**

- Even though we know how to improve patients' blood pressure, only 54.1% of our patients with HBP are treated to goal
  - Achieving success in high blood pressure control has remained a major challenge at both the individual patient level and, even more importantly, the population level

**Hypertension: Reversing the Trend**

- Increased awareness
- Early detection / diagnosis
- Systematic approach to treatment
- Treat to goal

**Hypertension: Reversing the Trend Increased Awareness**



- The Bureau of Health Promotion and Chronic Disease manages programs related to chronic disease prevention, cancer prevention, disability prevention, communications and health marketing, health education, public information, risk communication, risk surveillance, worksite wellness, and video communications and distance learning

### **Hypertension: Reversing the Trend Increased Awareness**



- The Cardiovascular Health (CVH) Program's mission is to provide leadership in the state of Alabama to prevent death and disability from heart disease and stroke, eliminate disparities in health and health care, and work with its many partners to fully implement a plan focusing on policy and system changes in the worksite, healthcare, and community settings

### **Hypertension: Reversing the Trend Alabama Blood Pressure Task Force Work Group**



- **Goal: To provide statewide guidance on best practices, latest guidelines, algorithms, and blood pressure protocols**

### **Hypertension: Reversing the Trend Alabama Blood Pressure Task Force Work Group**

- Implement educational programs on reaching blood pressure control through evidence - based programs

### **Hypertension: Reversing the Trend Alabama Blood Pressure Task Force Work Group**

- Special focus should be at the community level for a multi-disciplinary group of professionals (nurses, pharmacists, community health workers, and health care providers) on early diagnosis, treatments, and appropriate management of blood pressure

### **Hypertension: Reversing the Trend Early Detection**

- Blood pressure measurement is one of the most valuable tools available to health care providers and patients

### **Hypertension: Reversing the Trend Early Detection**

- Provider visits
- Home monitoring
- Local pharmacies
- Community screening activities
- Health fairs
- Local fire departments

### **Hypertension: Reversing the Trend**

- Increased awareness
- Early detection / diagnosis
- Systematic approach to treatment
- Treat to goal

### **Hypertension: Reversing the Trend Hypertension Algorithm**

- Evidenced based
- Designed for a team based approach to care
- Easily reproducible and customizable
- Takes into account other co morbid conditions
- Emphasizes role of lifestyle modification in HTN treatment

### **Hypertension: Reversing the Trend A Systematic Approach**

- The WISEWOMAN program is administered through CDC's Division for Heart Disease and Stroke Prevention (DHDSP)

### **Hypertension: Reversing the Trend A Systematic Approach**

- The WISEWOMAN program provides low-income, under-insured or uninsured women with chronic disease risk factor screening, lifestyle programs, and referral services in an effort to prevent cardiovascular disease
- The priority age group is women aged 40-64 years

### **Hypertension: Reversing the Trend A Systematic Approach**

- Screens eligible participants for BP, DM, obesity and cholesterol
- Patients identified with HTN are referred to the NP for treatment
- Treatment is dictated by a HTN algorithm which was designed specifically for the program
- Piloted in 2 county health departments

### **Hypertension: Reversing the Trend**

- Increased awareness
- Early detection / diagnosis
- Systematic approach to treatment
- Treat to goal

**Hypertension: Reversing the Trend  
Treat to Goal**

- Age less than 60 with no DM or CKD
  - Goal less than 140/90
- Age greater than 60 with no DM or CKD
  - Goal less than 150/90
- Any age with either CKD or DM
  - Goal is less than 140/90

**Hypertension: Reversing the Trend  
Treat to Goal**

- Guidelines are meant to serve as a guide
- Individual treatment goals may be needed

**Hypertension: Reversing the Trend  
Treat to Goal**

- Patients and providers should work together to develop the treatment plan best suited to the individual patient's needs

**Conclusion**

- HTN is a strong independent risk factor for CVD
- HTN is a largely modifiable risk factor for CVD
- Alabama and the nation need to move more patients to control
- Multifaceted approaches to treatment and diagnosis are needed

**Conclusion**

- Use of BP algorithm promotes standardization of care and enhances patient care and outcomes