



## Webinar #4:

# Uncontrolled Hypertension: Data, Surveillance and Opportunities

Toll free: 1-877-989-1344

Participant code: 1488488

# Housekeeping Items

## □ **Ways to communicate with us:**

- *Phone Line* – your line is muted; press \*1 to request an open line at the appropriate time
- *Polls* – respond to questions by voting
- *Live Meeting Interactive Tools* – Q&A, raise your hand, and chat

## □ **Download or print resources:**

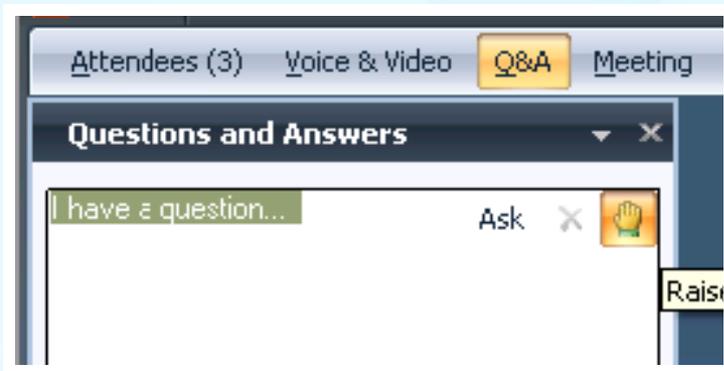
- *Presentations* – Today's slides are available for immediate download
- Resource list of articles

# Live Meeting Tools

- Q&A command



- Ask a question; raise your hand



## Live Meeting Tools

- Download presentations



- Print annotated slides



Question on screen

- Poll Choices:
- Choice 1
  - Choice 2
  - Choice 3

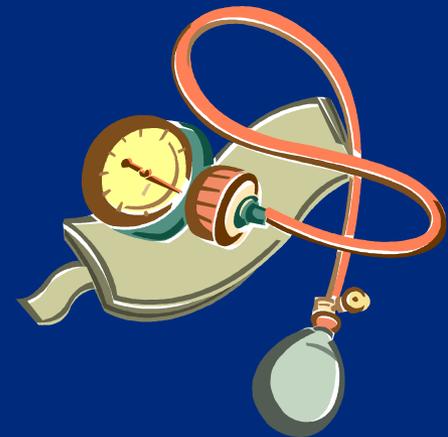
Results:

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# POLLING ACTIVITY

# Today's Agenda

- ❑ **Purpose of Webinar**
- ❑ **Presenters**
  - Data and Surveillance – Robert Merritt, MA
  - Getting Blood Pressure Under Control – Amy Valderrama, PhD, RN
- ❑ **Questions**
- ❑ **CVH Council Virtual Roundtable Update**
- ❑ **Evaluation**



**Epidemiology &  
Surveillance**

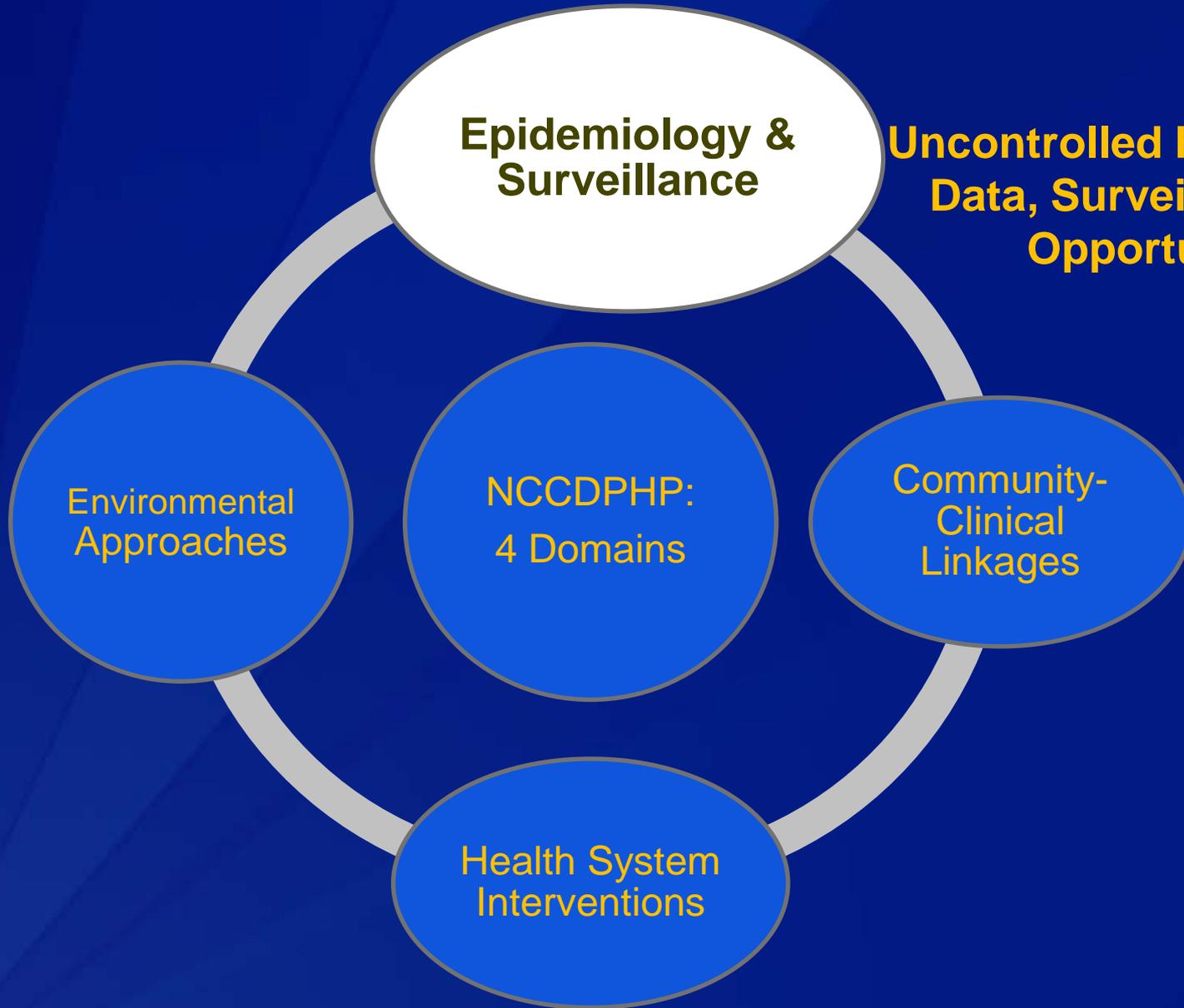
**Uncontrolled Hypertension  
Data, Surveillance, and  
Opportunities**

**Environmental  
Approaches**

**NCCDPHP:  
4 Domains**

**Community-  
Clinical  
Linkages**

**Health System  
Interventions**



**SPEAKER**  
**Division for Heart Disease and Stroke**

**Robert K. Merritt, MA**  
**Chief & Supervisory Health Scientist**  
**Epidemiology and Surveillance Branch**

**Amy L. Valderrama, PhD, RN, ACNP-BC**  
**Epidemiologist**  
**Epidemiology and Surveillance Branch**

**Moderator: April J. Taylor, MPH, Public Health Advisor**  
**Program Development and Services Branch**



# Uncontrolled Hypertension: Data, Surveillance and Opportunities

Robert K. Merritt, MA  
Chief & Supervisory Health Scientist  
Epidemiology and Surveillance Branch

# CDC's Five Public Health Priorities

- ***Strengthen surveillance and epidemiology***
- Support state, tribal, and local health departments
- Advance evidence-based health policies
- Prevent illness, injury, disability, and premature death
- Improve global health

# Repeated Calls for Improved National CVD Surveillance

Report

National Heart, Lung, and  
Blood Institute

Working Group on Heart Disease  
Epidemiology

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service  
National Institutes of Health



## Special Report

### Report of the National Heart, Lung, and Blood Institute Working Group on Outcomes Research in Cardiovascular Disease

Harlan M. Krumholz, MD, SM (Chair); Eric D. Peterson, MD, MPH (Co-chair);  
John Z. Ayanian, MD, MPP; Marshall H. Chin, MD, MPH; Robert F. DeBusk, MD;  
Lee Goldman, MD, MPH; Catarina I. Kiefe, PhD, MD; Neil R. Powe, MD, MPH, MBA;  
John S. Rumsfeld, MD, PhD; John A. Spertus, MD, MPH; William S. Weintraub, MD

# Circulation

JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Heart  
Association   
*Learn and Live.*

**Essential Features of a Surveillance System to Support the Prevention and Management of Heart Disease and Stroke: A Scientific Statement From the American Heart Association Councils on Epidemiology and Prevention, Stroke, and Cardiovascular Nursing and the Interdisciplinary Working Groups on Quality of Care and Outcomes Research and Atherosclerotic Peripheral Vascular Disease**

David C. Goff, Jr, Lawrence Brass, Lynne T. Braun, Janet B. Croft, Judd D. Fleisch, Francis G.R. Fowkes, Yuling Hong, Virginia Howard, Sara Huston, Stephen F. Jencks, Russell Luepker, Teri Manolio, Christopher O'Donnell, Rose Marie Robertson, Wayne Rosamond, John Rumsfeld, Stephen Sidney and Zia Jie Zheng  
*Circulation* 2007;115:127-155; originally published online Dec 18, 2006;  
DOI: 10.1161/CIRCULATIONAHA.106.179904

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A NATIONWIDE FRAMEWORK  
FOR SURVEILLANCE OF  
CARDIOVASCULAR AND  
CHRONIC LUNG DISEASES

INSTITUTE OF MEDICINE  
EXCELLENCE IN HEALTH CARE

## Imperative to Improve Surveillance Data

- No national system to quantify and track the incidence and recurrence of myocardial infarction or stroke.
- **No data on the prevalence and control of major risk factors, such as hypertension and hyperlipidemia, at the state level and among the most vulnerable populations.**
- Despite steady decline in CVD mortality since 1960's, little data exist to describe which prevention and treatment strategies are having the greatest impact.
- Some conditions are increasing or remain high – obesity, diabetes & chronic lung disease.

**Surveillance Products**  
MMWR Surv Summaries  
Atlases  
Manuscripts

**Data Trends & Maps**



**National Cardiovascular Disease  
Surveillance System**

**Clinical**  
HMORN  
Marketscan  
EMRs  
WISEWOMAN

**Registries**  
CARES  
Coverdell  
GWTG  
ACC

**Administrative**  
HCUP – NIS, NEDS  
Medicare  
EMS/NEMSIS

**Studies**  
REGARDS  
ARIC  
Framingham

**Surveys**  
NHANES  
BRFSS, YRFSS  
NHIS  
CVH Exam  
NAMCS  
MEPS

**State & Local data**  
Family Health Surveys  
HDSP Indicators  
CHIS  
IHS surveys

**Vital Records**  
Births  
Deaths

**Other Sources**  
NEPHTP  
InfoUSA  
BioSense  
Lab reporting

# Division Priorities

Aspirin use, Blood Pressure and Cholesterol Control, and  
Smoking (**ABCs**)

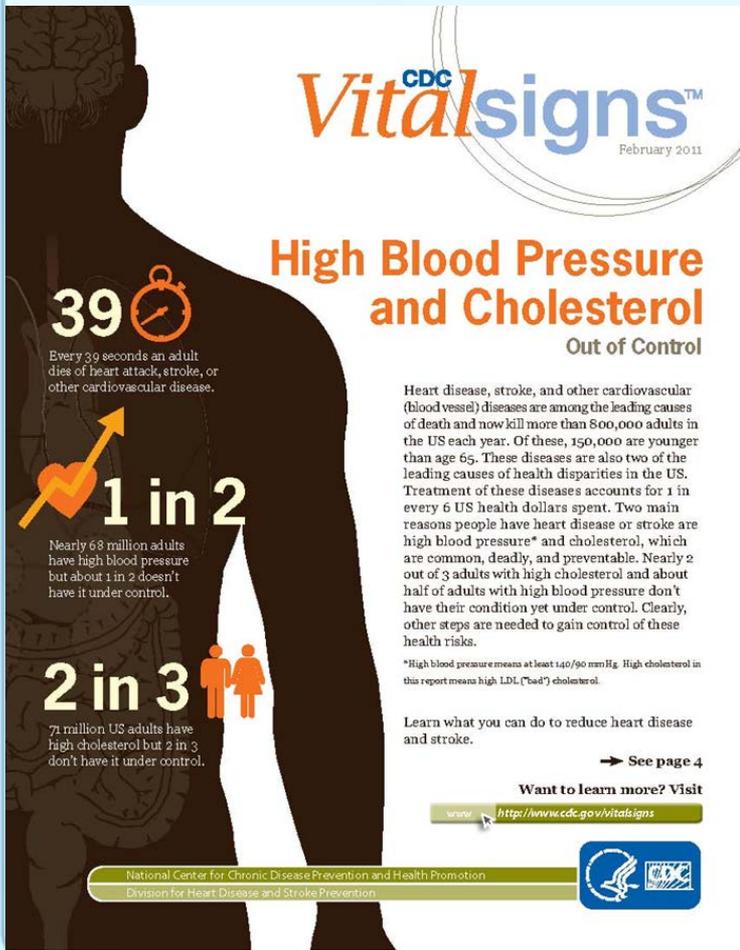
**Hypertension**

Sodium Consumption Reduction



**Surveillance**

# Hypertension and Cholesterol



**CDC**  
**Vitalsigns™**  
February 2011

## High Blood Pressure and Cholesterol Out of Control

**39**   
Every 39 seconds an adult dies of heart attack, stroke, or other cardiovascular disease.

**1 in 2**   
Nearly 68 million adults have high blood pressure but about 1 in 2 doesn't have it under control.

**2 in 3**   
71 million US adults have high cholesterol but 2 in 3 don't have it under control.

Heart disease, stroke, and other cardiovascular (blood vessel) diseases are among the leading causes of death and now kill more than 800,000 adults in the US each year. Of these, 150,000 are younger than age 65. These diseases are also two of the leading causes of health disparities in the US. Treatment of these diseases accounts for 1 in every 6 US health dollars spent. Two main reasons people have heart disease or stroke are high blood pressure\* and cholesterol, which are common, deadly, and preventable. Nearly 2 out of 3 adults with high cholesterol and about half of adults with high blood pressure don't have their condition yet under control. Clearly, other steps are needed to gain control of these health risks.

\*High blood pressure means at least 140/90 mm Hg. High cholesterol in this report means high LDL ("bad") cholesterol.

Learn what you can do to reduce heart disease and stroke.

→ See page 4

Want to learn more? Visit <http://www.cdc.gov/vitalsigns>

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention



Centers for Disease Control and Prevention  
**MMWR**

Morbidity and Mortality Weekly Report

Early Release / Vol. 60

February 1, 2011

## Vital Signs: Prevalence, Treatment, and Control of Hypertension — United States, 1999–2002 and 2005–2008

### ABSTRACT

**Background:** Hypertension is a modifiable risk factor for cardiovascular disease. It affects one in three adults in the United States and contributes to one out of every seven deaths and nearly half of all cardiovascular disease-related deaths in the United States.

**Methods:** CDC analyzed data from the National Health and Nutrition Examination Survey (NHANES) on the

Early Release

## Vital Signs: Prevalence, Treatment, and Control of High Levels of Low-Density Lipoprotein Cholesterol — United States, 1999–2002 and 2005–2008

### ABSTRACT

**Background:** High levels of low-density lipoprotein cholesterol (LDL-C), a major risk factor for coronary heart disease (CHD), can be treated effectively.

**Methods:** CDC analyzed data from 1999–2002 and 2005–2008 to examine the prevalence, treatment, and control of high LDL-C among U.S. adults aged ≥20 years. Values were determined from blood specimens obtained from persons participating in the National Health and Nutrition Examination Survey (NHANES), a nationally representative cross-sectional, stratified, multistage probability sample survey of the U.S. civilian, noninstitutionalized population. The National Cholesterol Education Program Adult Treatment Panel-III guidelines set LDL-C goal levels of <100 mg/dL, <130 mg/dL, and <160 mg/dL for persons with high, intermediate, and

# Sodium

**Vital signs™**  
February 2012

**Where's the sodium?**  
There's too much in many common foods.

**9 in 10**  
Almost 90% of Americans aged 18 years or older eat too much sodium.

**44%** **10 foods**  
44% of the sodium we eat comes from only 10 types of foods.

**\$20B**  
Reducing the sodium Americans eat by cutting per capita consumption could save up to \$20 billion a year in medical costs.

About 90% of Americans eat more sodium than is recommended for a healthy diet.\*  
Too much sodium increases a person's risk for high blood pressure. High blood pressure often leads to heart disease and stroke. More than 400,000 people die each year from heart disease, stroke and other vascular diseases, costing the nation \$167 billion health care dollars in 2009. Most of the sodium we eat comes from processed foods and foods prepared in restaurants. Sodium is already part of processed foods and cannot be removed. However, manufacturers and restaurants can produce foods with less sodium. In addition, you can select lower sodium foods when possible and you can cook more foods yourself, to better control how much sodium you eat.  
\*The 2010 Dietary Guidelines for Americans recommend a daily sodium intake of less than 2,300 milligrams for most people.

To learn more about how to reduce sodium → See page 4.

[www.cdc.gov/mmwr](http://www.cdc.gov/mmwr)

National Center for Chronic Disease Prevention and Health Promotion  
Division of Heart Disease and Stroke Prevention

Centers for Disease Control and Prevention

**MMWR**

Early Release / Vol. 61

Morbidity and Mortality Weekly Report

February 7, 2012

## Vital Signs: Food Categories Contributing the Most to Sodium Consumption — United States, 2007–2008

### Abstract

**Background:** Most of the U.S. population consumes sodium in excess of daily guidelines (<2,300 mg overall and 1,500 mg for specific populations). Excessive sodium consumption raises blood pressure, which is a major risk factor for heart disease and stroke, the nation's first and fourth leading causes of death. Identifying food categories contributing the most

# Uncontrolled Hypertension

**Vital**<sup>CDC</sup>**signs**<sup>TM</sup>  
September 2012

## Getting Blood Pressure Under Control

Many missed opportunities to prevent heart disease and stroke

High blood pressure is a major risk factor for heart disease and stroke, both of which are leading causes of death in the US. Nearly one-third of all American adults have high blood pressure and more than half of them don't have it under control.\* Many with uncontrolled high blood pressure don't know they have it. Millions are taking blood pressure medicines, but their blood pressure is still not under control. There are many missed opportunities for people with high blood pressure to gain control. Doctors, nurses and others in health care systems should identify and treat high blood pressure at every visit.

\*Blood pressure control means having a systolic blood pressure less than 140 mmHg and a diastolic blood pressure less than 90 mmHg, among people with high blood pressure.

Learn what you can do to get control of high blood pressure.

→ See page 4

Want to learn more? Visit

[www.cdc.gov/vitalsigns](http://www.cdc.gov/vitalsigns)



National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention

**1 in 3** 

Nearly 1 in 3 adults (about 67 million) have high blood pressure.

**36M** 

About 36 million adults with high blood pressure don't have it under control.

**1,000** 

High blood pressure contributes to nearly 1,000 deaths a day.

Centers for Disease Control and Prevention  
**MMWR**

Early Release / Vol. 61

Morbidity and Mortality Weekly Report

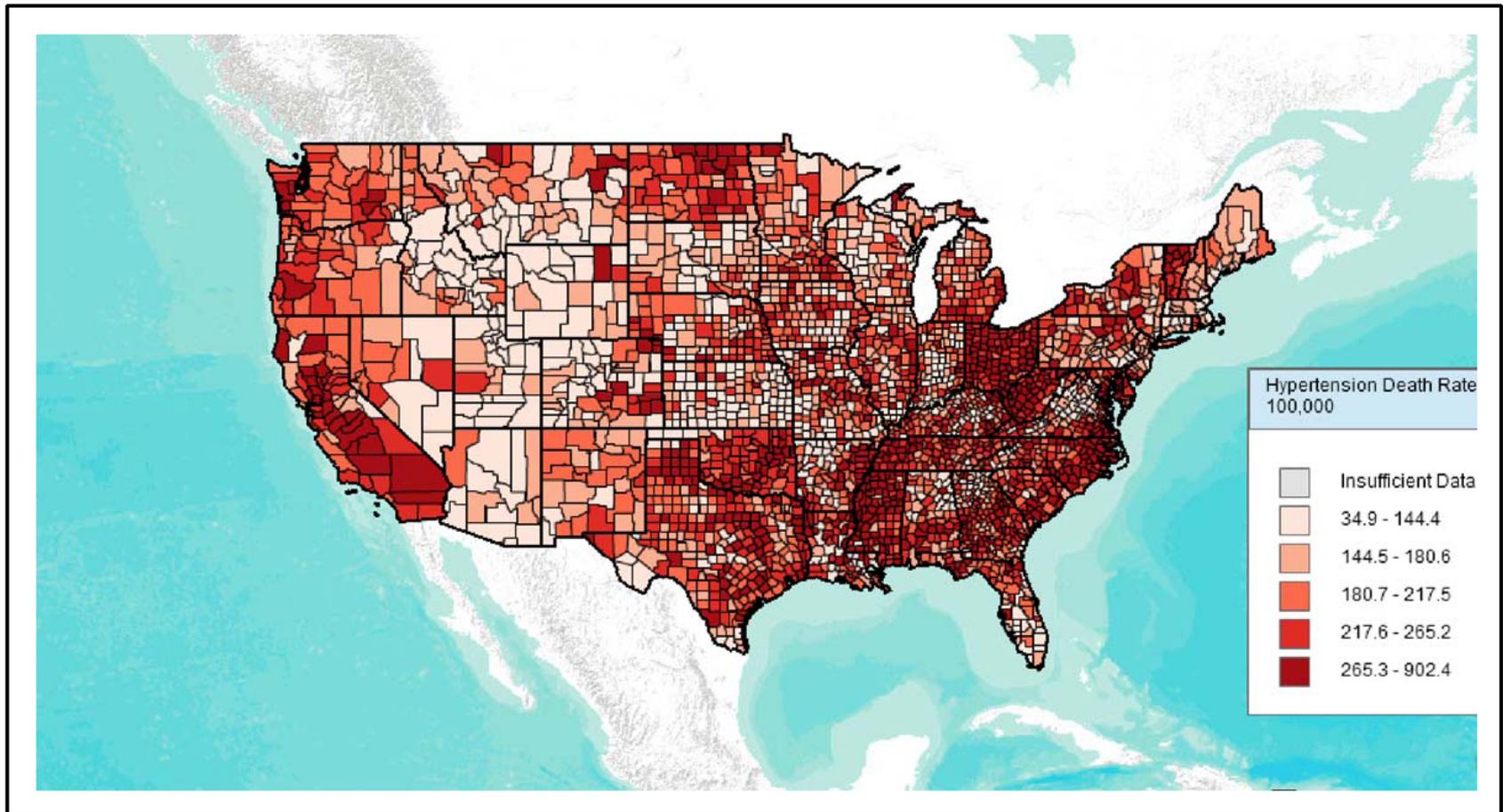
September 4, 2012

## Vital Signs: Awareness and Treatment of Uncontrolled Hypertension Among Adults — United States, 2003–2010

### Abstract

**Background:** Hypertension is a leading risk factor for cardiovascular disease and a significant cause of morbidity and mortality. This report uses data from the National Health and Nutrition Examination Survey (NHANES) to examine awareness and pharmacologic treatment of uncontrolled hypertension among U.S. adults with hypertension and focuses

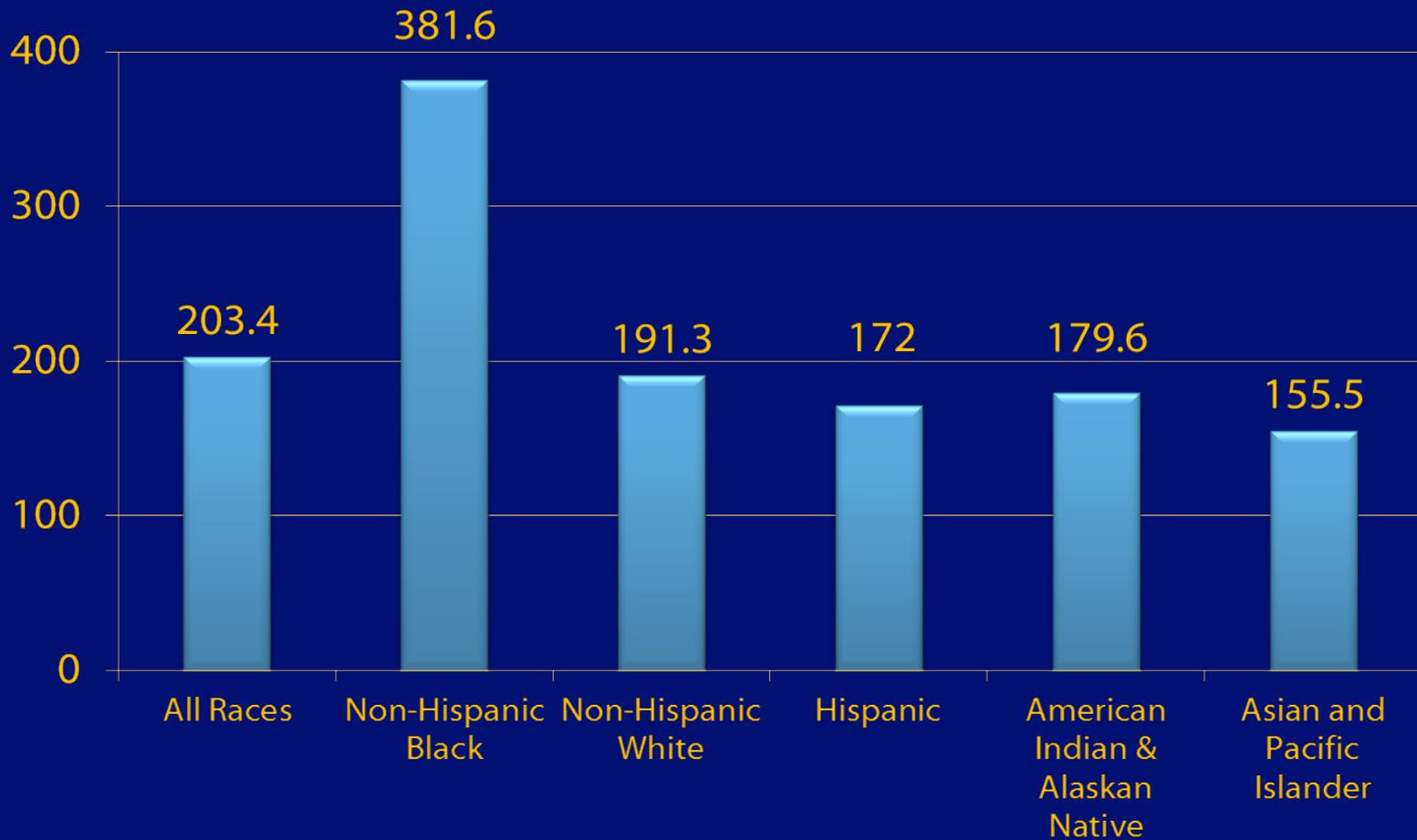
## Hypertension Death Rate per 100,000, 35+, All Race, All Gender, 2007-2009



This map was created using the Interactive Atlas of Heart Disease and Stroke, a website developed by the Centers for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention.

<http://www.cdc.gov/dhdsp/maps>

# Hypertension Mortality Rates



## The Magnitude of the Problem

- ❑ Hypertension is the single largest risk factor for cardiovascular disease mortality, accounting for 45% of all CVD deaths<sup>1</sup>
- ❑ INTERSTROKE Study concluded that hypertension provides 34.6% of the population-attributable risk (PAR) for stroke<sup>2</sup>, while INTERHEART found it provides 17.9% of the PAR for myocardial infarction<sup>3</sup>
  - The PAR is the reduction in incidence that would be observed if the population were entirely unexposed (did not have hypertension).

1. IOM (Institute of Medicine). 2010. *A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension*.

2. O'Donnell MJ, Xavier D, Liu L et al. Risk factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case-control study. *The Lancet* 2010; 376:112–23

3. Salim Yusuf, Steven Hawken, Stephanie Ôunpuu, Tony Dans, Alvaro Avezum, Fernando Lanas, Matthew McQueen, Andrzej Budaj, Prem Pais, John Varigos, Liu Lisheng, on behalf of the INTERHEART Study Investigators, Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study, *The Lancet*, 2004: 9438, 11–17.

## The Magnitude of the Problem

- ❑ **Approximately 68 million U.S. adults (1 in 3) have hypertension**
- ❑ **Only 46% of adults with hypertension had adequately controlled blood pressure. The Million Hearts™ initiative has set a goal of 65% control by 2017 overall, and 70% in the clinical setting**

# Special Populations

## ❑ Minorities

- Blacks have an increased rate of conversion from pre-hypertension to hypertension
  - Median age-adjusted conversion time when 50% of patients converted from pre-hypertension to hypertension was  $\approx 2.7$  years in whites and  $\approx 1.7$  years in blacks

## ❑ Over age 80

- Significant benefits from treatment
- May be more sensitive to medication side effects or drug interactions due to an increased number of medications taken

## Meaningful Use and Pay-for-Performance

- **PQRS Measure #317: Preventive Care and Screening: Screening for High Blood Pressure**
  - Percentage of patients aged 18 and older who are screened for high blood pressure.
  
- **PQRS Measure #236 (NQF 0018): Hypertension: Controlling High Blood Pressure**
  - Percentage of patients aged 18 through 85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/<90) during the measurement year.

# Getting Blood Pressure Under Control

## Opportunities to prevent heart disease and stroke

**Amy L. Valderrama, PhD, RN**

Epidemiologist

Division for Heart Disease and Stroke Prevention  
National Center for Chronic Disease Prevention  
and Health Promotion



# Overview

- Why is blood pressure control important?
- Why is blood pressure control challenging?
- How many U.S. adults have uncontrolled hypertension?
- What can be done to improve blood pressure control?

**Vital Signs**<sup>™</sup>  
CDC  
September 2012

## Getting Blood Pressure Under Control

Many missed opportunities to prevent heart disease and stroke

**1 in 3**   
Nearly 1 in 3 adults (about 67 million) have high blood pressure.

**36M**   
About 36 million adults with high blood pressure don't have it under control.

**1,000**   
High blood pressure contributes to nearly 1,000 deaths a day.

→ See page 4

Want to learn more? Visit <http://www.cdc.gov/vitalsigns>

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention

High blood pressure is a major risk factor for heart disease and stroke, both of which are leading causes of death in the US. Nearly one-third of all American adults have high blood pressure and more than half of them don't have it under control.\* Many with uncontrolled high blood pressure don't know they have it. Millions are taking blood pressure medicines, but their blood pressure is still not under control. There are many missed opportunities for people with high blood pressure to gain control. Doctors, nurses and others in health care systems should identify and treat high blood pressure at every visit.

\*Blood pressure control means having a systolic blood pressure less than 140 mmHg and a diastolic blood pressure less than 90 mmHg, among people with high blood pressure.

Learn what you can do to get control of high blood pressure.

Centers for Disease Control and Prevention  
**MMWR**  
Early Release / Vol. 61

Morbidity and Mortality Weekly Report  
September 4, 2012

## Vital Signs: Awareness and Treatment of Uncontrolled Hypertension Among Adults — United States, 2003–2010

### Abstract

**Background:** Hypertension is a leading risk factor for cardiovascular disease and a significant cause of morbidity and mortality. This report uses data from the National Health and Nutrition Examination Survey (NHANES) to examine awareness and pharmacologic treatment of uncontrolled hypertension among U.S. adults with hypertension and focuses

# Why is blood pressure control important?

- ❑ Hypertension (high blood pressure) is a major risk factor for heart disease and stroke
- ❑ Costs \$131 billion annually in direct health care costs
- ❑ Contributing cause of nearly 1,000 deaths each day
- ❑ Even modest elevations in blood pressure increase risk
- ❑ Adequate hypertension control can reduce the incidence of heart attacks and strokes, heart failure, kidney disease and save lives
  - 46,000 deaths might be averted each year if all patients with high blood pressure were treated according to current guidelines



# Why is blood pressure control challenging?

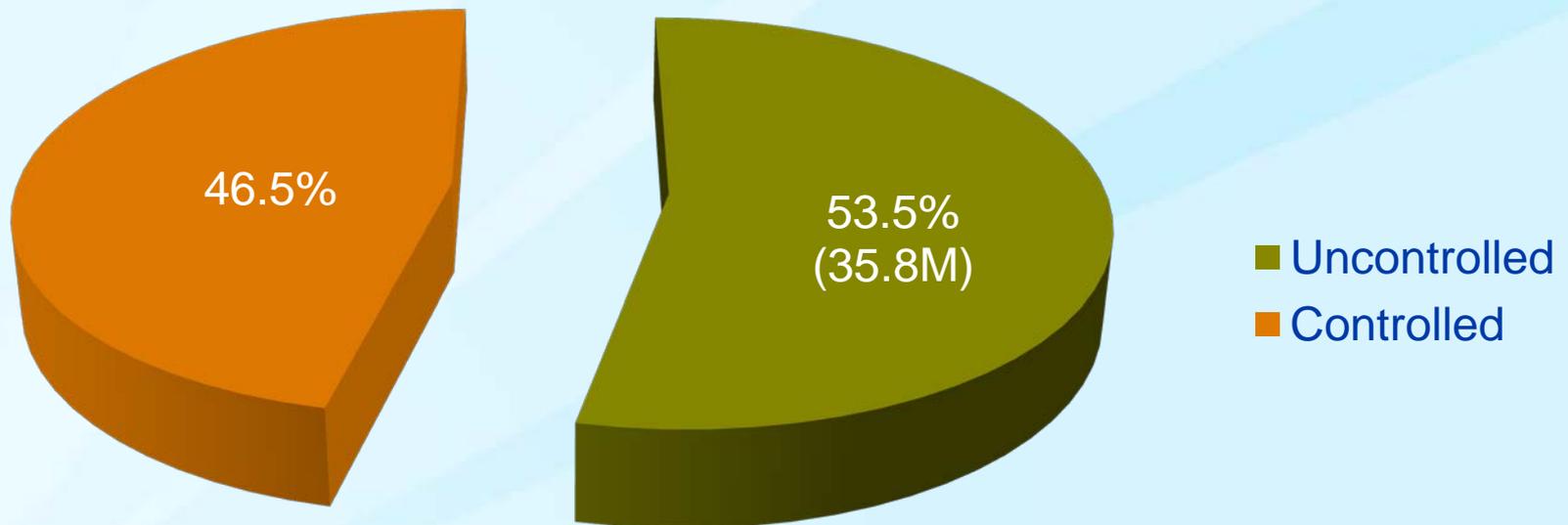
- ❑ **Silent nature of hypertension**
- ❑ **Many barriers to hypertension control**
  - Patients – unhealthy lifestyles, may not adhere to medications
  - Health care providers – may not have the resources for a team approach, challenges for providing optimal medical management
  - Health care systems – systems may not be in place to provide clinical decision support or notify providers when patient has been seen by another provider
- ❑ **Resistant hypertension – hypertension not controlled using a combination of 3 antihypertensive drug classes**



Sources: Wofford MR, Minor DS. *Curr Hypertens Rep* 2009;11:323-8;  
Persell SD. *Hypertension* 2011;57:1076-80.

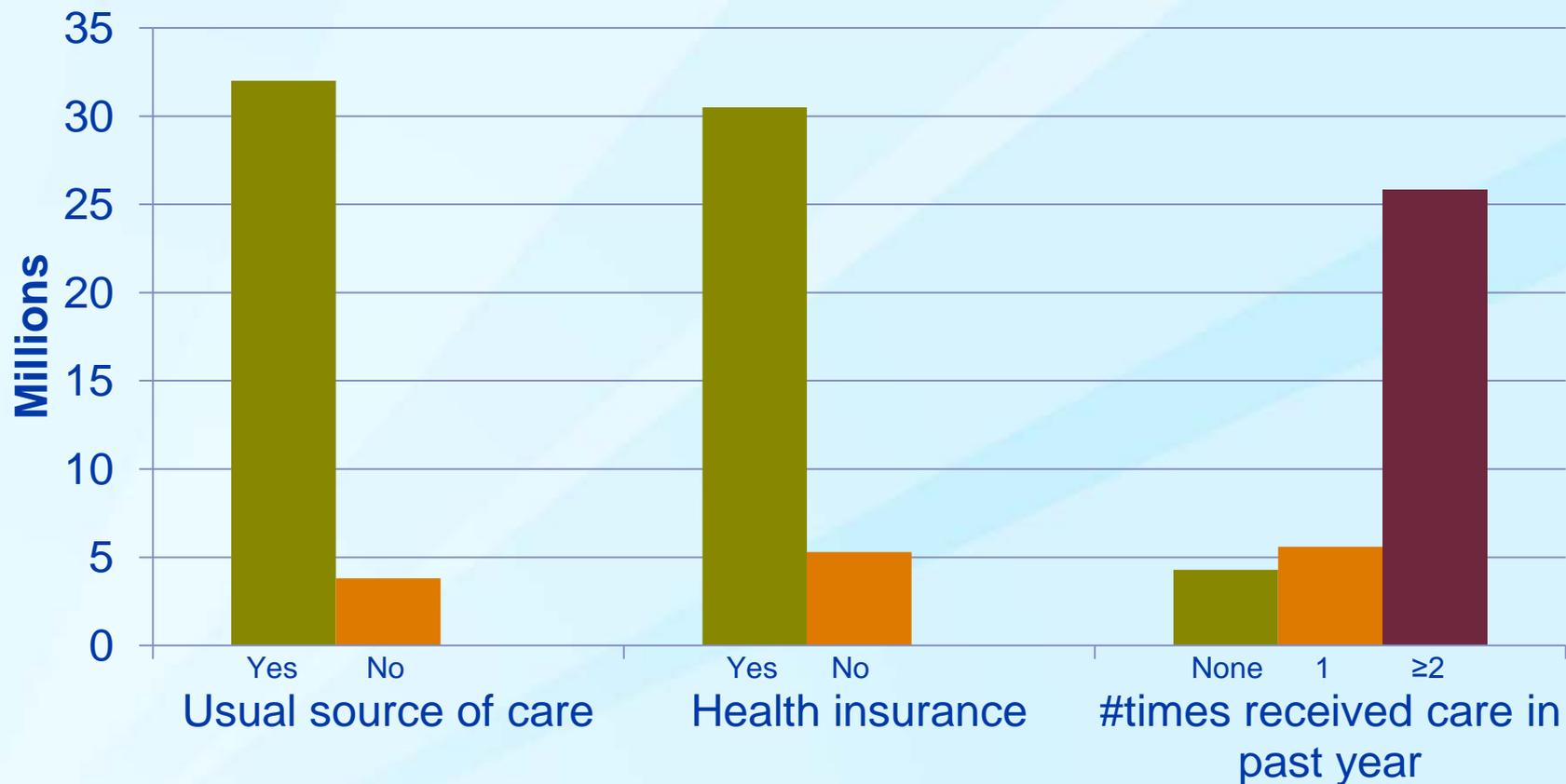
# Prevalence of hypertension control among US adults with hypertension

67 million adults with hypertension (30.4%)



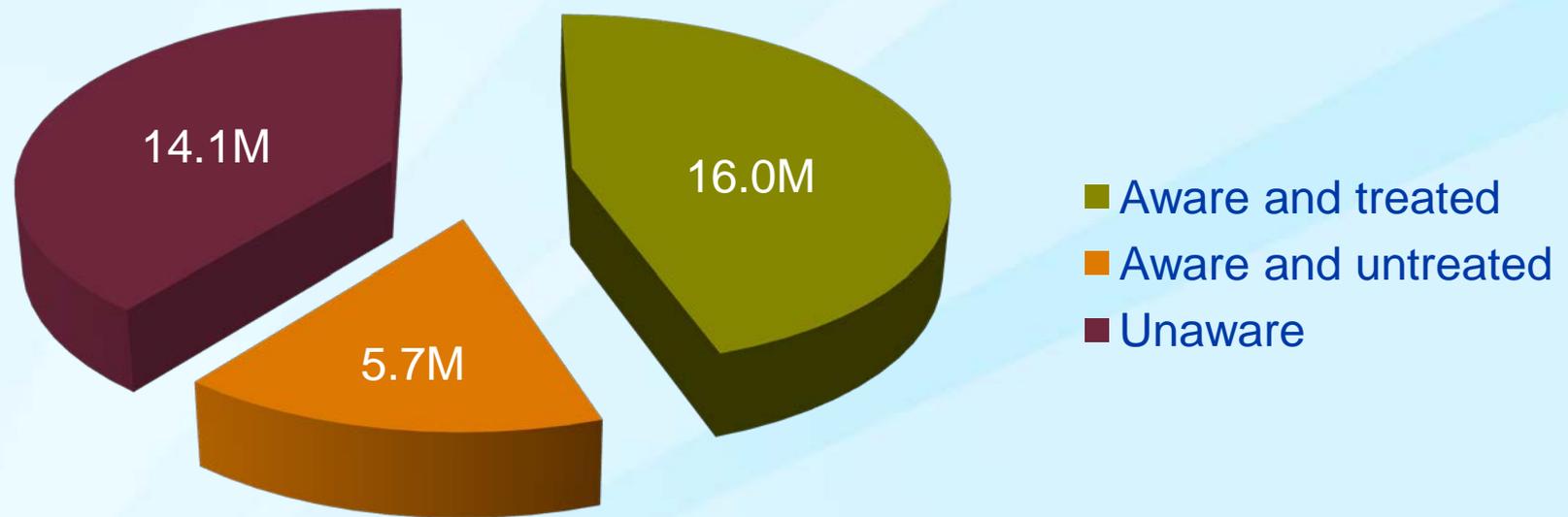
Source: CDC. MMWR;2012;61(Early Release):1-7.

# Prevalence of uncontrolled hypertension, by selected characteristics



Source: CDC. MMWR;2012;61(Early Release):1-7.

# Awareness and treatment among adults with uncontrolled hypertension



Source: CDC. MMWR;2012;61(Early Release):1-7.

# What can be done?

## Doctors, nurses and others who treat patients

### High blood pressure control improves when it's a priority:

- ◊ Focus on blood pressure and track your performance
- ◊ Use a team-based care approach
- ◊ Checking and addressing blood pressure at every visit
- ◊ Simplify treatment:
  - Once-a-day doses of medicine when possible
  - Fewer pills

## Health care systems

### High blood pressure control throughout health care systems improves by using electronic health records (EHRs) and patient registries to:

- ◊ Include quality measures for performance
- ◊ Identify and follow-up with patients who have high blood pressure
- ◊ Notify doctors about patients with high blood pressure readings

## Patients

### Blood pressure control improves when patients take action.

- ◊ Take medicines as prescribed
- ◊ Learn to measure blood pressure on your own
- ◊ Lower your risk by:
  - Eating a healthy, low sodium diet.
  - Exercising
  - Maintaining a healthy weight.
  - Limiting alcohol use.
  - Not smoking.

## What Can Be Done



### Federal government is

- ◊ Joining with the private sector in leading the national Million Hearts™ initiative to prevent a million heart attacks and strokes by 2017 (<http://millionhearts.hhs.gov>).
- ◊ Working with pharmacists on activities to provide education and counseling to patients with high blood pressure.
- ◊ Focusing on the importance of high blood pressure as a Leading Health Indicator. (<http://www.healthypeople.gov/2020/LHI/clinicalPreventive.aspx>).
- ◊ Measuring progress against the specific objectives in Healthy People 2020. (<http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicID=21>).



### Health care systems where patients are seen and treated can

- ◊ Start having doctors, nurses, and others review patient records, looking for patients who need more attention to control their high blood pressure.
- ◊ Create system-wide targets using Healthy People 2020 objectives to achieve blood pressure control.
- ◊ Update staff monthly on progress and give feedback on success measures.
- ◊ Make it easier for patients to stay on medicines:
  - Consider 90-day refills for prescriptions
  - Consider no or lower co-payments for medicines

[www.cdc.gov/vitalsigns](http://www.cdc.gov/vitalsigns)

[www.cdc.gov/mmwr](http://www.cdc.gov/mmwr)

For more information, please contact  
Telephone: 1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348  
E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)  
Web: [www.cdc.gov](http://www.cdc.gov)  
Centers for Disease Control and Prevention  
1600 Clifton Road NE, Atlanta, GA 30333  
Publication date: 09/04/2012

### Doctors, nurses and others who treat patients can



- ◊ Flag and monitor patients with high blood pressure or who are at-risk. Report progress on patients using National Quality Forum (NQF) 0018. (<http://www.qualityforum.org/MeasureDetails.aspx?actid=0&SubmissionId=1236#p=2&s=n&so=a>).
- ◊ Counsel patients to take their medicines and make lifestyle changes. Follow their progress.
- ◊ Regularly evaluate the blood pressure medicines they take to determine whether these need to be changed.
- ◊ Address every blood pressure reading that is high by talking with the patient about taking prescribed medicines, adjusting current medicines and/or encouraging lifestyle changes. Consider once-a-day doses of medicines when possible.

### Everyone can



- ◊ Take prescribed medicines each day and follow the directions on the bottle. If your blood pressure is still not under control or if you have side effects, talk with your doctor, nurse, or pharmacist about possibly changing your medicine.
- ◊ Work to maintain a healthy weight and meet the Physical Activity Guidelines for Americans. (<http://www.cdc.gov/physicalactivity/everyone/guidelines/>)
- ◊ Follow a heart healthy eating plan with foods lower in sodium.
- ◊ Get help to stop smoking. If you don't smoke, don't start.
- ◊ Measure and write down your blood pressure readings between doctor's visits. This can be done at home, at a grocery store or at the pharmacy.
- ◊ Keep your doctor, nurse, pharmacist or other health care provider informed of your blood pressure readings that you take at home.

**Goal:** Prevent 1 million heart attacks and strokes by 2017



<http://millionhearts.hhs.gov/>

❑ **Clinical prevention:**

- Focus on aspirin, blood pressure, cholesterol, and smoking (ABCS)
- Health Information Technology
- Team-based approaches to care

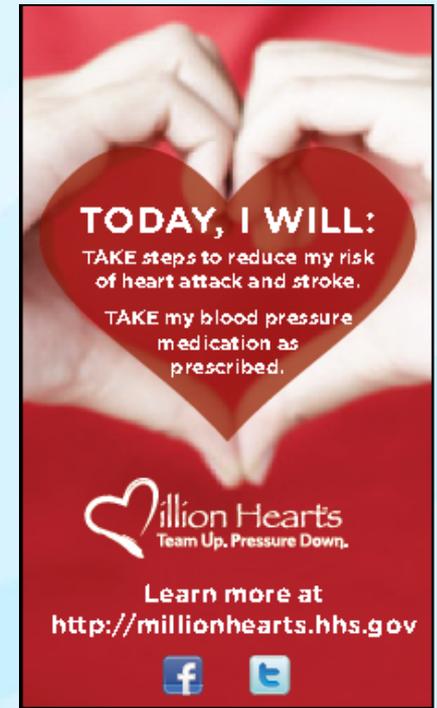
❑ **Community prevention:**

- Strengthen tobacco control and reduce smoking
- Improve nutrition through reduced intake of sodium and artificial trans fat consumption



❑ **Nationwide program that promotes team-based care to improve medication adherence and more effectively manage blood pressure**

- Resources to encourage and support pharmacists in providing advice and counseling to patients with high blood pressure
- Can be tailored for any pharmacy setting
- Patient education materials to help people take a more active role in self-management and to encourage increased interaction with their pharmacists



**Pharmacists, take the time to...**

<p><b>High blood pressure.</b> Give your patients the tools and resources to take control of their health and reduce their risk of heart attack and stroke.</p> <ul style="list-style-type: none"> <li>• Take time to provide your patients with the tools and resources they need to take control of their health and reduce their risk of heart attack and stroke.</li> </ul>	<p><b>Encourage your patients to take a more active role in self-management.</b> Encourage your patients to take a more active role in self-management and to encourage increased interaction with their pharmacists.</p> <ul style="list-style-type: none"> <li>• Encourage your patients to take a more active role in self-management and to encourage increased interaction with their pharmacists.</li> </ul>
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# Health care systems can

- ❑ **Use electronic health records and patient registries**
  - Automatically notify health care providers of patients with high blood pressure readings
- ❑ **Review patient records to identify patients who need more attention to blood pressure control**
- ❑ **Create system-wide targets for blood pressure control**
  - Use Healthy People 2020 objectives\*
  - Give providers feedback on measures of success
- ❑ **Make it easier for patients to stay on medicines**
  - Consider 90-day refills for prescriptions
  - Consider no or lower co-payments for medicines



\*<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=21>

## Health care providers can

- ❑ **Flag and monitor patients with high blood pressure**
  - Report progress on blood pressure control using NQF 0018\*
- ❑ **Counsel patients to take their blood pressure medicines and make healthy lifestyle changes**
- ❑ **Regularly evaluate a patient's blood pressure medications**
  - Simplify treatment with fewer pills and once-a-day dosing, when possible
- ❑ **Address every high blood pressure reading**
  - Talk about medication adherence
  - Adjust medications, as needed
  - Encourage lifestyle changes
- ❑ **Consider using a team-based approach**



\*<http://www.qualityforum.org/MeasureDetails.aspx?actid=0&SubmissionId=1236#k=0018>

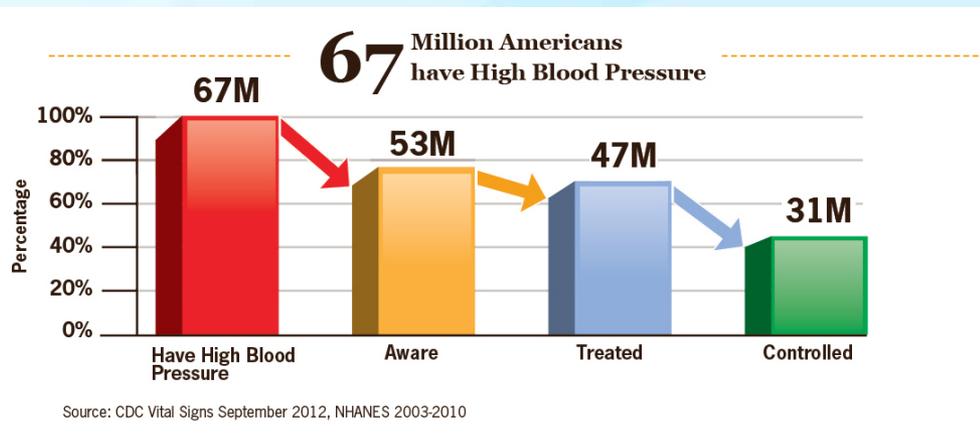
## Everyone can

- ❑ **Take prescribed medications**
- ❑ **Measure and record blood pressure readings**
  - Keep your health care provider informed of your blood pressure readings
- ❑ **Work to maintain a healthy weight and be physically active**
- ❑ **Follow a heart-healthy diet with lower sodium foods**
- ❑ **Stop smoking**



# Blood pressure control: Opportunities to prevent heart disease and stroke

- ❑ Nearly one in three U.S. adults has hypertension (67 million)
- ❑ More than half of these adults don't have their blood pressure under control (36 million)
- ❑ Blood pressure control should be a priority
- ❑ Will require a collaborative effort from individuals, health care providers, and health care systems



## **Other National and State Activities**

- ❑ **Get with the Guidelines Advantage (GWTG)**
- ❑ **Wisconsin Collaborative for Healthcare Quality (WCHQ)**
- ❑ **Developing collaboration between state Health Information Exchanges and State Health Departments (Maine)**
- ❑ **Other examples**

# Acknowledgements

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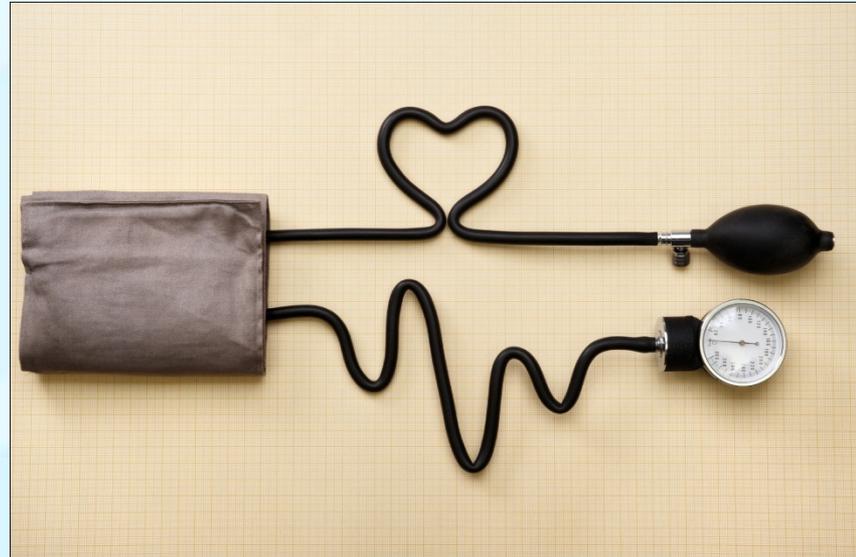
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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

# Question and Answer Period

**Press \*1 to un-mute your phone  
or  
click on Q&A at the top of your screen!**

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention  
September 17<sup>th</sup> Webinar

# Wrap Up

## Virtual Roundtables

- Sept 24<sup>th</sup> 3:00 - 4:00 p.m. Eastern Time
- Sept 26<sup>th</sup> 2:00 - 3:00 p.m. Eastern Time
- Sept 27<sup>th</sup> 11:00 - 12:00 p.m. Eastern Time

Telephone: 877-989-1344 Participant code: 1488488

Live meeting Link: to be sent to registered participants



## Discussion Questions for Roundtables

Who are the partners in your state you will want to work with to address uncontrolled hypertension?

How are you working with them? Do you have data sharing agreements?

How are you working with other state chronic disease programs on pharmacist-based initiatives?

**Next Webinar: November 5<sup>th</sup> at 3:00 – 4:30 Eastern time**

**Topic : Worksite Tools: Health Score Card**

**Thank You and Please Complete:  
Webinar Evaluation  
by Sept 28, 2012**



**Your feedback on the evaluation form at the link below will help us plan and improve future webinars. Thanks for taking the time to do this.**

**[http://www.surveymonkey.com/s/Evaluation for Sept 17 CDC Webinar on Uncontrolled Hypertension](http://www.surveymonkey.com/s/Evaluation_for_Sept_17_CDC_Webinar_on_Uncontrolled_Hypertension)**