

# Million Hearts Past, Present and Future



NM Chronic Disease Prevention Council  
Million Hearts Workgroup

# Presentation Outline



- Cardiovascular disease Basics and Facts & Figures
- Million Hearts 1.0
- Million Hearts 2.0
- Self-Measured Blood Pressure Monitoring (SMBP)

# Cardiovascular Disease Basics and Facts & Figures

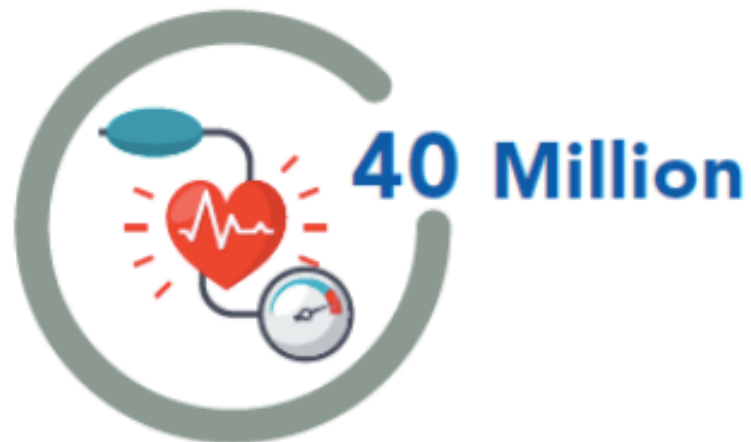


# Cardiovascular Disease (CVD)

- CVD, which includes heart disease and stroke, refers to several types of conditions that affect the heart and blood vessels.
- What are some risk factors for CVD?



People not taking aspirin as recommended.



People with uncontrolled blood pressure.



Adults not using statins (cholesterol-lowering medicines) when indicated.



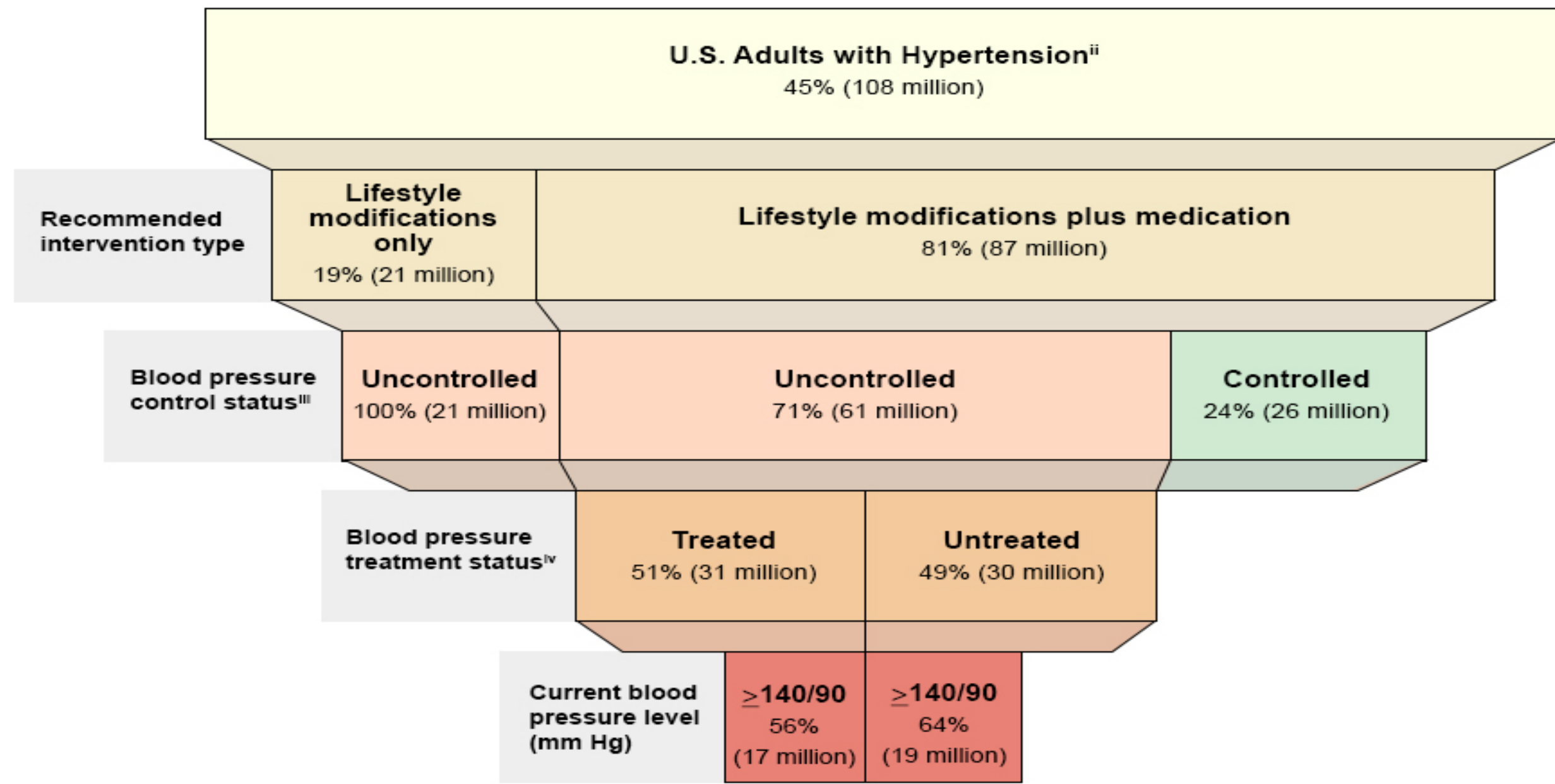
Adult smokers.



Adults who are physically inactive.

# Estimated Hypertension Prevalence, Treatment, and Control Among U.S. Adults<sup>i</sup>

Applying the Criteria From the American College of Cardiology and American Heart Association's (ACC/AHA) 2017 Hypertension Clinical Practice Guideline—NHANES 2013–2016

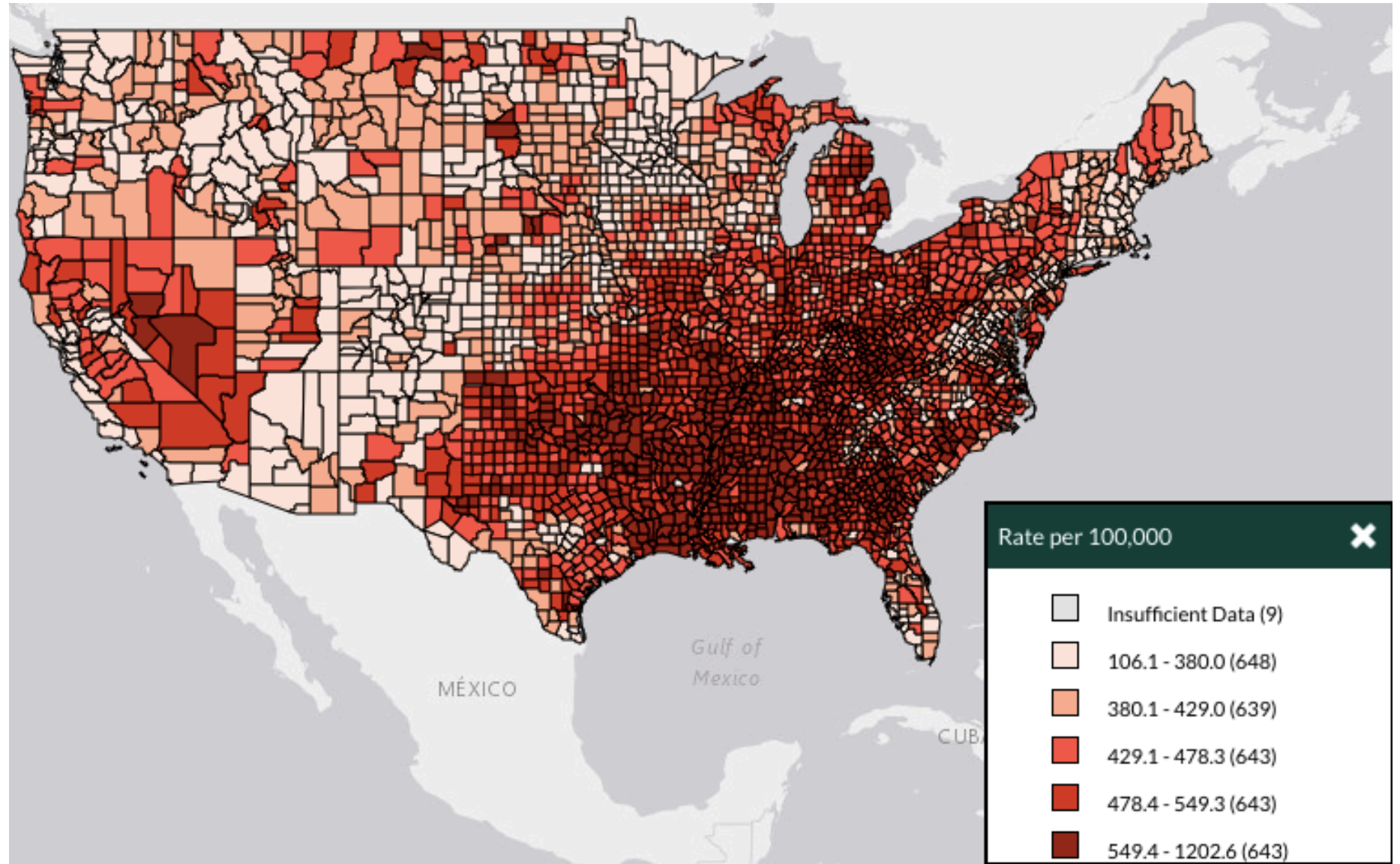
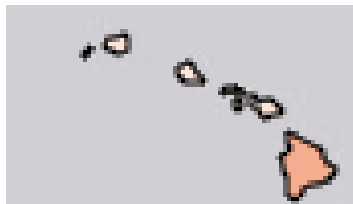
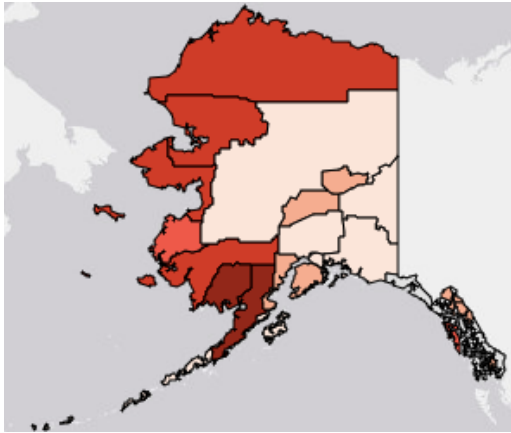




# What does CVD look like in New Mexico?

- Heart disease was the **#1 leading cause of death** in New Mexico in 2017, accounting for over 20% of all deaths.
- Stroke was the #5 leading cause of death in NM in 2017.
- Over the last 10 years, heart disease has been responsible for an average of **3,895 deaths per year** in NM.

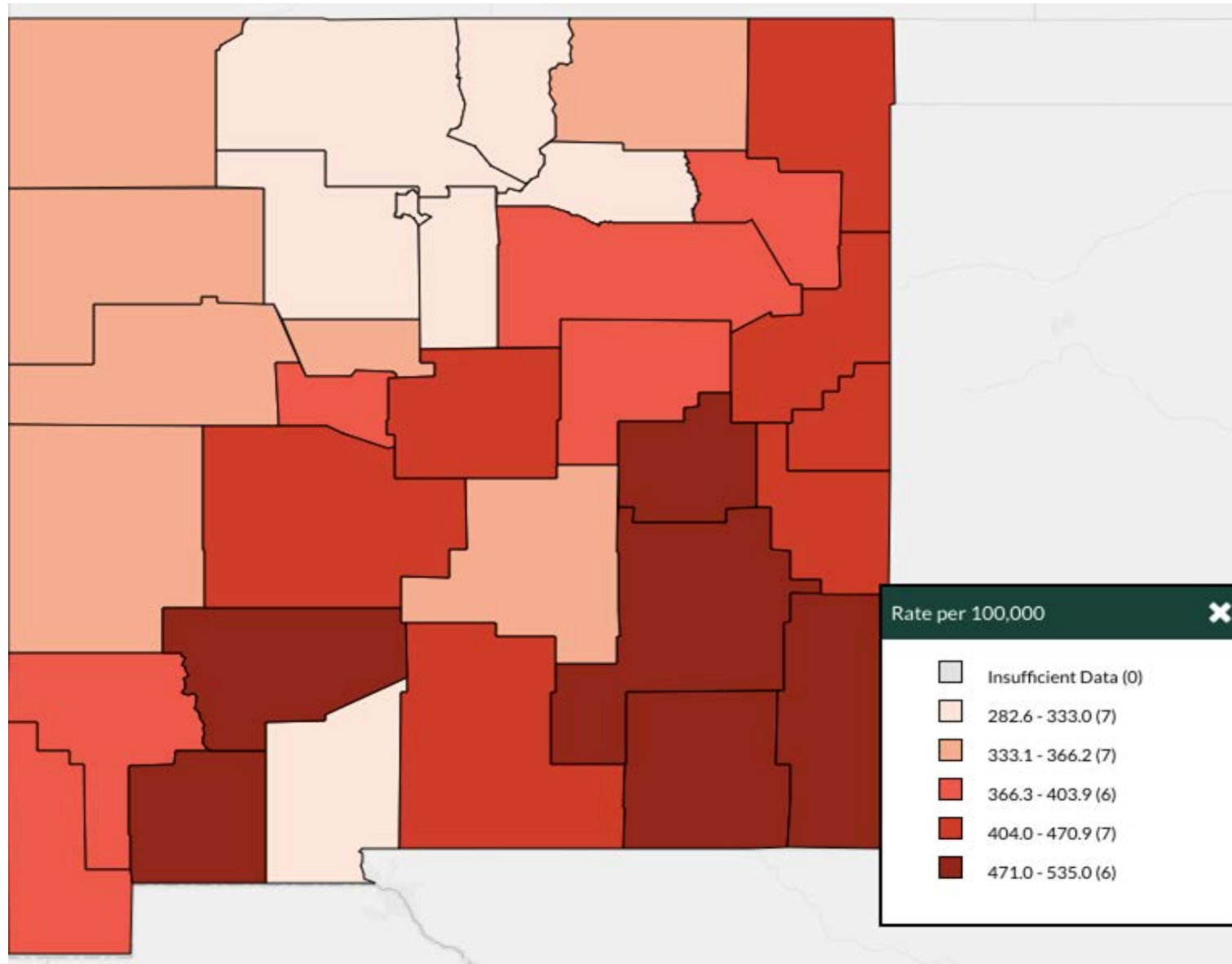
# Total U.S. Cardiovascular Disease Death Rates Ages 35+ 2014-2016



[http://www.cdc.gov/dhds/maps/national\\_maps/hd\\_all.htm](http://www.cdc.gov/dhds/maps/national_maps/hd_all.htm)  
<http://nccd.cdc.gov/DHDSAtlas/Default.aspx?state=NM>



# Total Cardiovascular Disease Death Rates Ages 35+ 2014-2016



Bridged-Race Postcensal Population Estimates from National Center for Health Statistics.

Centers for Medicare and Medicaid Services Medicare Provider Analysis and Review (MEDPAR) file, Part A.

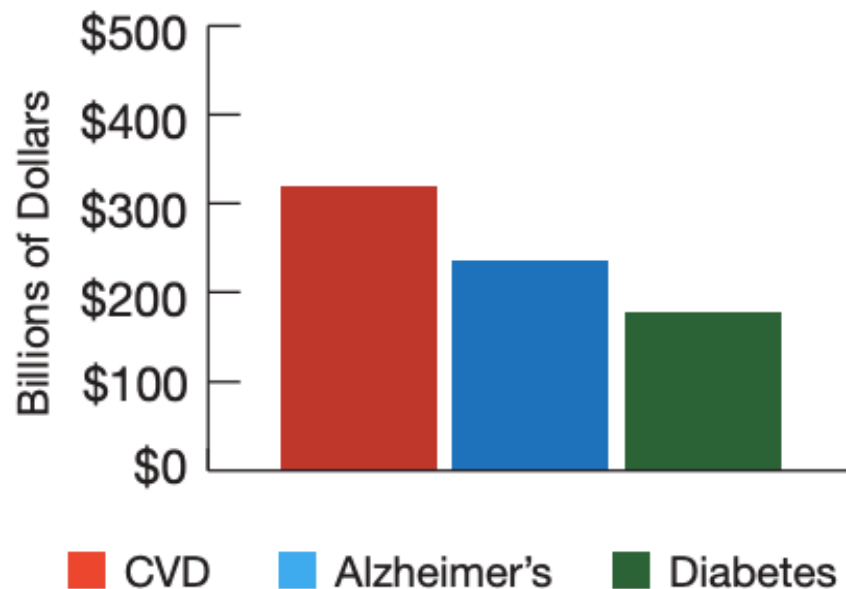
# What does CVD Cost?

- According to the CDC chronic disease cost calculator\*...
  - CVD annually cost New Mexico in direct medical care costs  
**\$1.816 billion dollars**
  - Annual costs related to absenteeism due to CVD in New Mexico is estimated at about **\$80 million dollars**

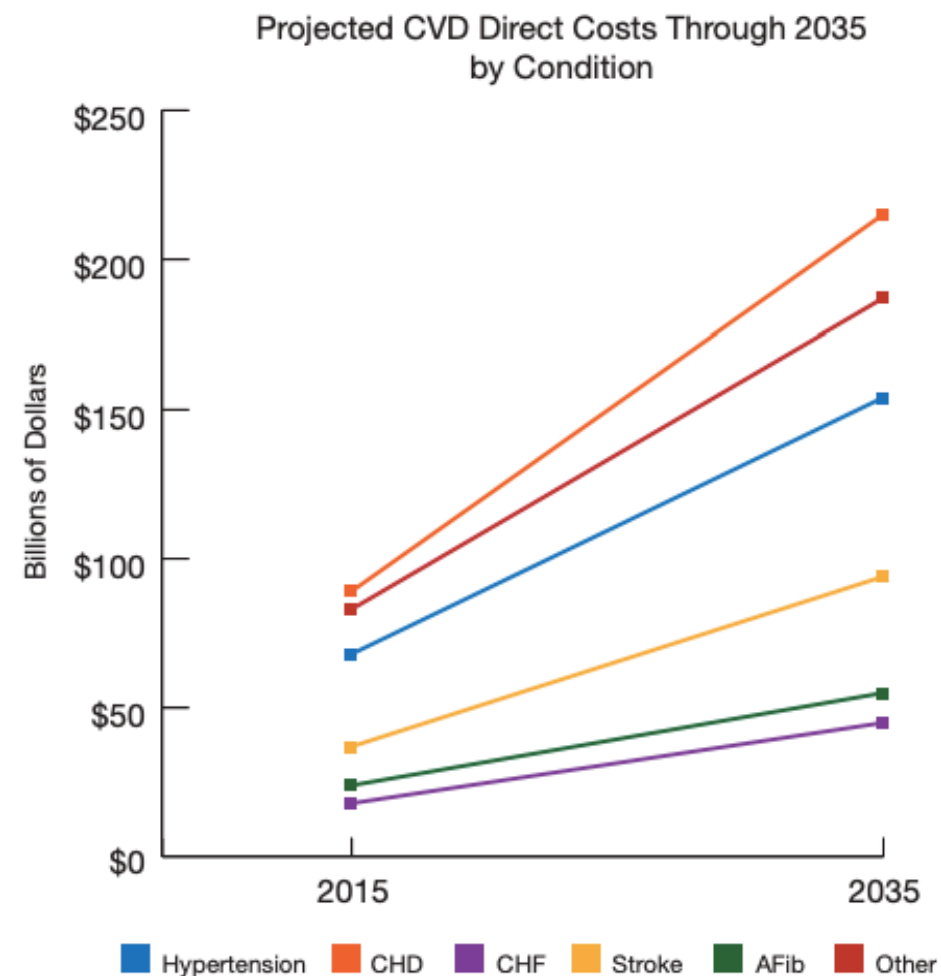
\*CDC chronic disease cost calculator uses rates from 2004-2008 with rates adjusted for inflation to 2010

# What does CVD Cost Nationally?

***“In 2016, CVD cost America \$555 billion. By 2035, the cost will skyrocket to \$1.1 trillion.”***



***“By 2035, across all conditions, total CVD costs will more than triple among those age 80+ and more than double among those age 65-79.”***





# Evidence-based approaches to preventing and managing CVD

- Clinical decision support programs
- Interventions engaging community health workers
- Reducing out-of-pocket costs for CVD preventive services for patients with high blood pressure (BP)
- Team-based care to improve BP control
- Self-measured BP monitoring interventions for improved BP control
- Interactive digital interventions for blood pressure that provide self-management information and support to patients who have high blood pressure

Evidence-Base as of November 2017 according to the Community Guide Task Force

<https://www.thecommunityguide.org/topic/cardiovascular-disease>



# Million Hearts 1.0

**Mission: *To prevent 1 million heart attacks and strokes nationwide by 2017***



## Million Hearts Phase 1 (2012-2016)

- To prevent 1 million heart attacks and strokes by 2017

### Keeping People Healthy

Reduce Sodium Intake

Decrease Tobacco Use

Eliminate trans fat intake



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### Optimizing Care

Improve ABCS\*

Increase use of  
Health Information  
Technology

Innovations in care  
delivery



## Did we prevent 1 million heart attacks and strokes?

- Million Hearts estimates that up to **half a million events** may have been prevented from 2012 to 2016; successfully prevented one million heart attacks by 2017
- Target to reduce tobacco use by **23.6 percent** was surpassed by the end of 2017
- Million Hearts Hypertension Control Challenge and Million Hearts Cardiovascular Disease Risk Reduction Model are two specific models recognized for achieving blood pressure control rates at or above 70 percent for more than **13.8 million patients**



# Million Hearts® Accomplishments\*

## Changing the Environment

**Reduce Smoking**



More than 7 million fewer cigarette smokers<sup>†</sup>

**Reduce Sodium Intake**



**Accomplished:** FDA issued draft Voluntary Sodium Guidance to Industry. 6/1/16

**Eliminate Trans Fat Intake**



**Accomplished:** FDA issued the final determination on artificial trans fat<sup>§</sup>

\*Note this is a select set of notable accomplishments and the product of many partners & people

† National Health Interview Survey, comparing 2011 to 2015 data

<https://www.fda.gov/forconsumers/consumerupdates/ucm372915.htm#top>

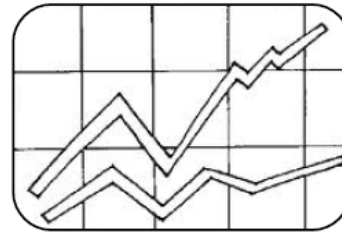




# Million Hearts® Accomplishments

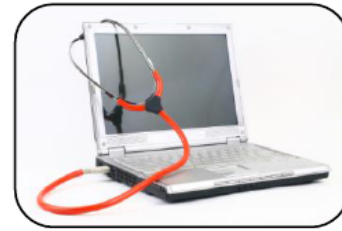
## Optimizing Care in the Clinical Setting

### Focus on the ABCS



Millions of Americans are covered by health care systems that are recognizing or rewarding performance in the ABCS<sup>\*\*</sup>

### Health Tools and Technology



Over half a million patients have been identified as potentially having hypertension using health IT tools<sup>††</sup>

### Innovations in Care Delivery



Millions of dollars in public and private funds have been leveraged to focus on improving the ABCS<sup>‡‡</sup>

<sup>\*\*</sup> CMS Physician Compare and HRSA Uniform Data Set

<sup>††</sup> Unpublished data from AMGA/MUPD and NACHC HIPS project

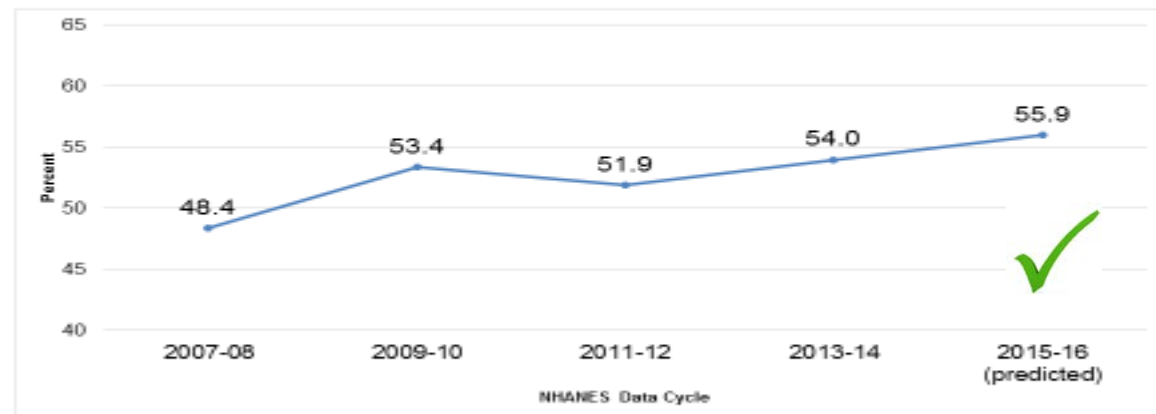
<sup>‡‡</sup> CMS Million Hearts Risk Reduction Model, AHRQ EvidenceNOW, AHA Southwest Affiliate HTN project



PRELIMINARY DATA

Not for Distribution

## Blood Pressure Control

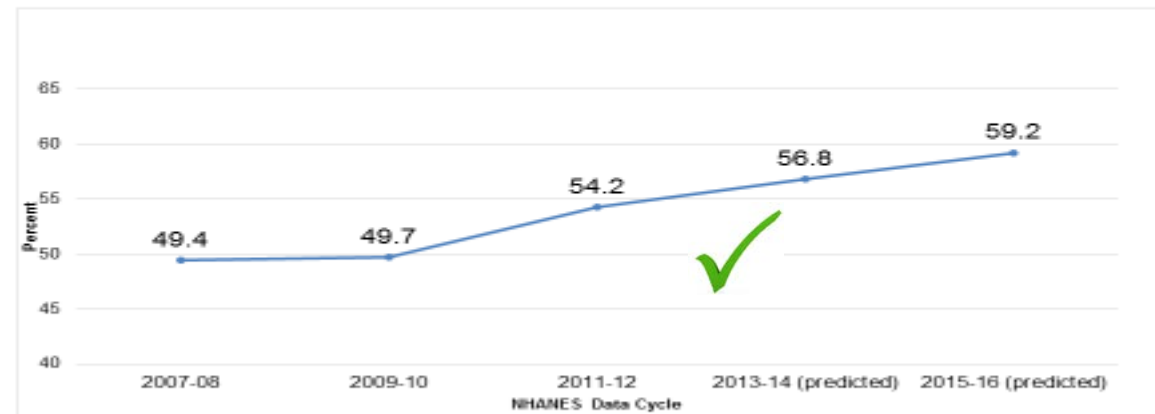


Data source: National Health and Nutrition examination Survey

PRELIMINARY DATA

Not for Distribution

## Statin Use Among Those Eligible

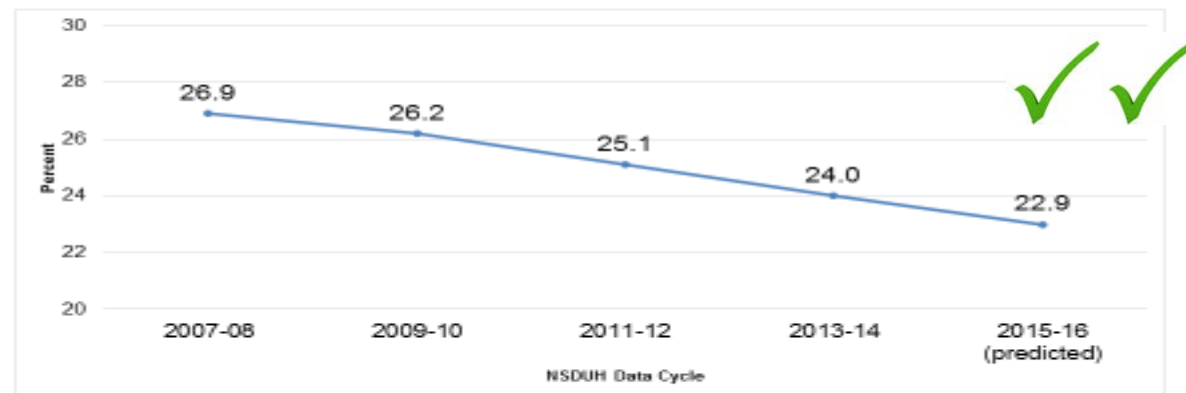


Data source: National Health and Nutrition Examination Survey

PRELIMINARY DATA

Not for Distribution

## Smoking Prevalence

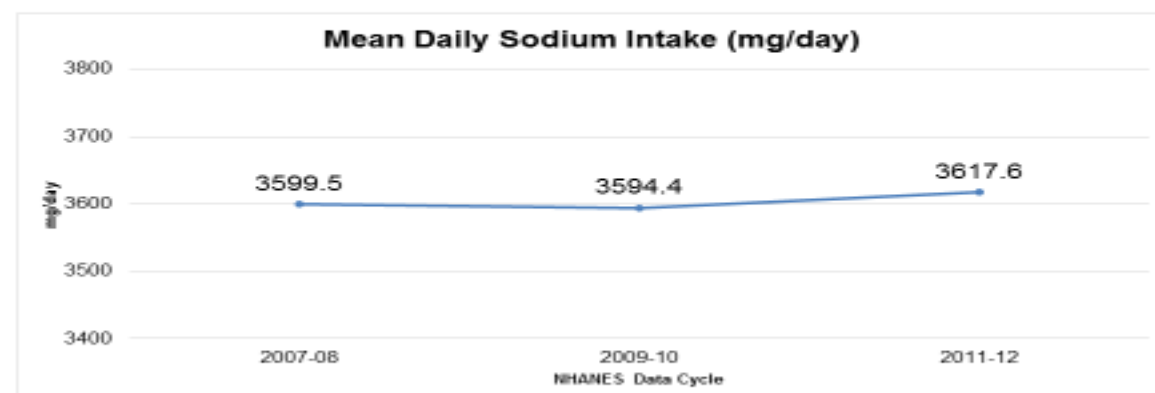


Data source: National Survey on Drug Use and Health

PRELIMINARY DATA

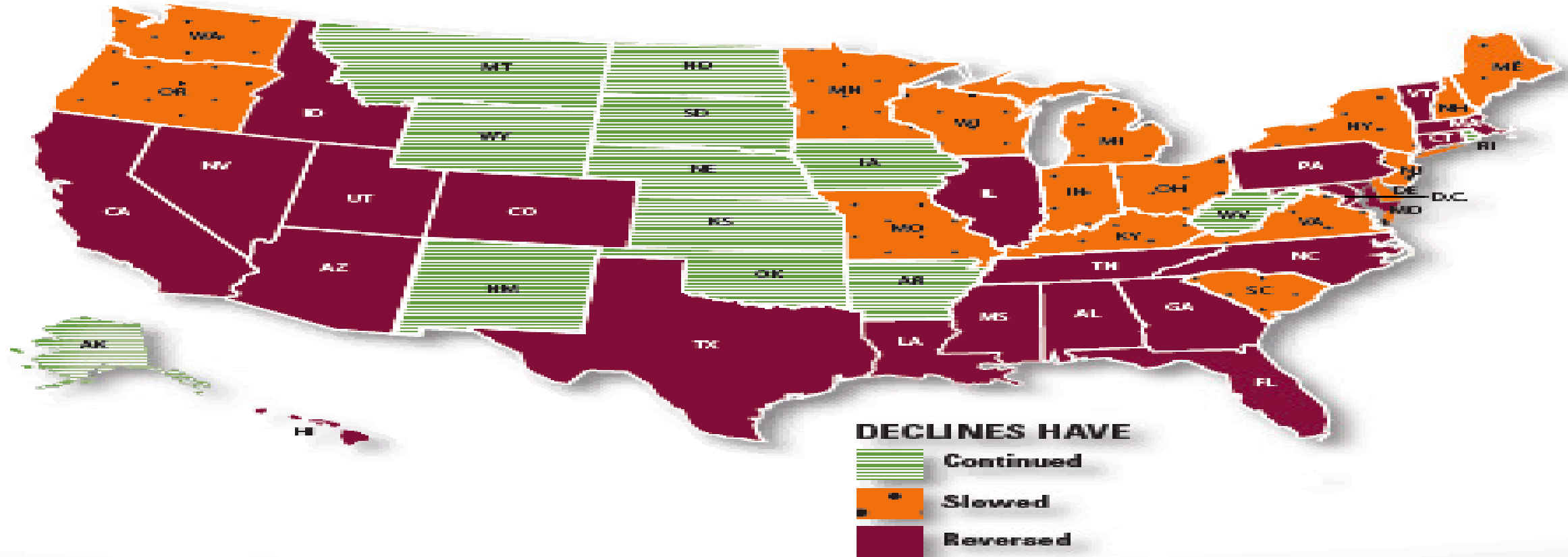
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## Sodium Reduction



Data source: National Health and Nutrition Examination Survey

# Stroke death declines have **STALLED** in **3** out of every **4** states.



**CONTINUED** = death rates continued to decrease steadily from 2000-2015 in adults 35 years and older

**SLOWED** = the decrease in death rates slowed down over time

**REVERSED** = the death rates reversed from decreasing to increasing

# Million Hearts 2.0

**Mission: *To prevent 1 million heart attacks and strokes nationwide by 2022***



## About Million Hearts 2022

- Million Hearts® 2022 is a national initiative co-led by the Centers for Disease Control and Prevention (CDC) and the [Centers for Medicare & Medicaid Services \(CMS\)](#)[external icon](#) to prevent 1 million heart attacks and strokes within 5 years. It focuses on a small set of priorities selected for their ability to reduce heart disease, stroke, and related conditions.
- CDC's [Division for Heart Disease and Stroke Prevention](#) provides leadership and support for the Million Hearts® initiative, which began in 2012. The agency collaborates extensively with CMS, sets priorities, and leads the communications, partnership development, research, translation, and evaluation efforts for the initiative.



Benjamin EJ, Muntner P, Alonso A, et al. [Heart disease and stroke statistics—2019 update: a report from the American Heart Association](#)[external icon](#). *Circulation*. 2019;139:e1–e473.

Vaughan AS, Ritchey MD, Hannan J, Kramer MR, Casper M. [Widespread recent increases in county-level heart disease mortality across age groups](#)[external icon](#). *Ann Epidemiol*. 2017;27:796–800.

## Million Hearts 2.0

### Keeping People Healthy

Reduce Sodium Intake

Decrease Tobacco Use

Increase Physical Activity

### Optimizing Care

Improve ABCS\*

Increase Use of Cardiac Rehab

Engaging Patients in Heart-healthy Behaviors

### Improving Outcomes for Priority Populations

Blacks/African-Americans

35-64 year olds

People who have had a heart attack or stroke

People with mental illness or substance use disorders

Others



Smoke Sense

# New Resources from Million Hearts 2.0

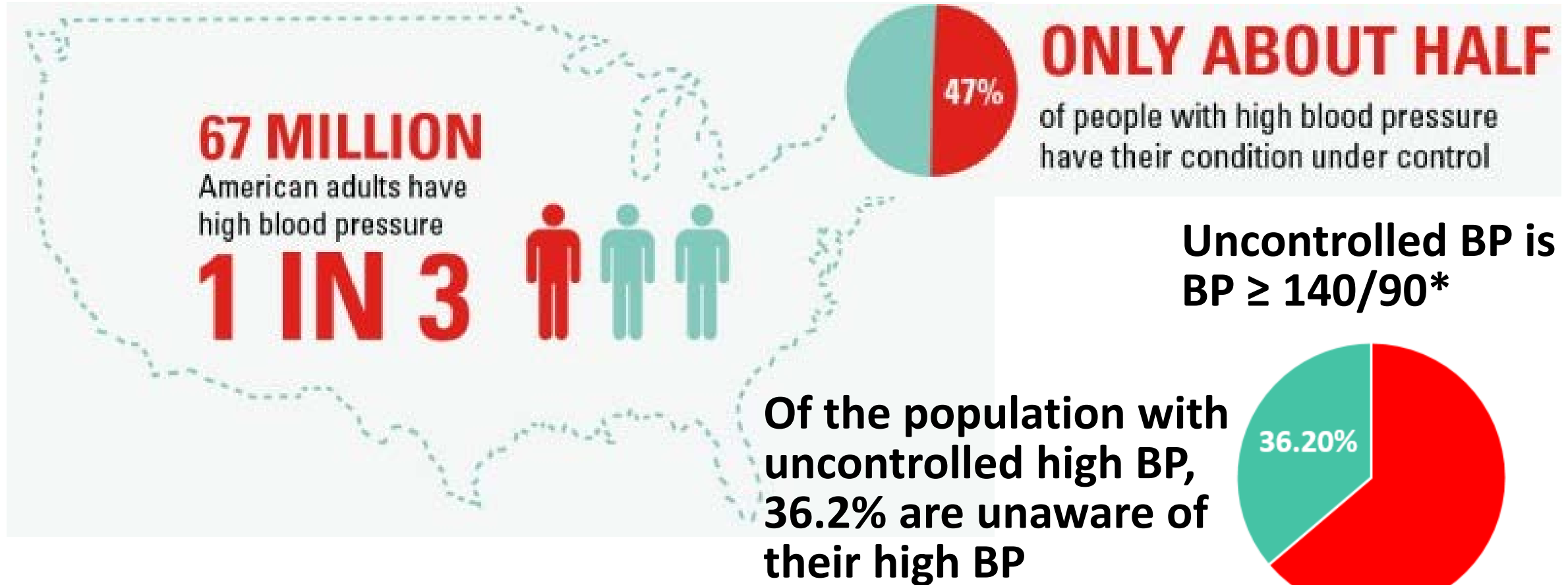
- Million Hearts® 2022 web content
  - Particle Pollution: <https://millionhearts.hhs.gov/tools-protocols/tools/particle-pollution.html>
  - Physical Activity: <https://millionhearts.hhs.gov/tools-protocols/tools/physical-activity.html>
  - Tobacco Use: <https://millionhearts.hhs.gov/tools-protocols/tools/tobacco-use.html>
  - Partner Opportunities: <https://millionhearts.hhs.gov/partners-progress/partners/partner-opportunities.html>
  - Cardiac Rehab: <https://millionhearts.hhs.gov/tools-protocols/tools/cardiac-rehabilitation.html>
- EPA's citizen science mobile app: *Smoke Sense*
  - [epa.gov/air-research/smoke-sense](https://epa.gov/air-research/smoke-sense)



# Self-Measured Blood Pressure Monitoring (SMBP)



# Why is it important to self-monitor your blood pressure?



Images from: <https://www.cdc.gov/bloodpressure/infographic.htm>

\*Numbers based on previous hypertension guidelines stating that uncontrolled BP is BP ≥ 140/90.

## New Hypertension Guidelines\*

- Stage 1 hypertension = **BP  $\geq$  130/80**
  - Recommendations at this stage: make lifestyle changes that can help reduce blood pressure (e.g. engaging in physical activity on most days of the week, losing weight, reducing salt, quitting smoking).
- Stage 2 hypertension = **BP  $\geq$  140/90**
  - Recommendations at this stage: prescription for two antihypertensive medications in addition to lifestyle change recommendations.



\*This guidance was released in November 2017



# How to Get Your Best Blood Pressure Reading

- Rest for approximately 5 minutes before taking blood pressure.
- Avoid talking
- Place feet flat on the floor with you back supported by the chair.
- Place the blood pressure cuff on bare skin.
- Rest arm on a table or desk at heart level.



## Impact of Incorrect Blood Pressure Measurement Technique

<b>Patient sitting without back support</b>	<b>+ 6 to + 10 mm Hg SBP</b>
<b>Recent use of tobacco/caffeine</b>	<b>+ 6 to + 11 mm Hg SBP + 5 mm Hg DSP</b>
<b>Legs crossed</b>	<b>+ 8 mm Hg SBP + 6 mm Hg DBP</b>
<b>Cuff too small</b>	<b>- 8 to + 10 mm Hg SBP +2 to + 8 mm Hg DBP</b>
<b>Arm unsupported</b>	<b>+ 1 to + 7mm Hg SBP + 5 to + 11 mm Hg DBP</b>
<b>Not using bare arm</b>	<b>+ 5 to + 50 mm Hg SBP</b>
<b>Talking</b>	<b>+ 7 mm Hg SBP + 8 mm Hg DBP</b>



## Other Factors to Consider When Taking a Blood Pressure

- Cold Exposure
  - Can increase BP 11/8 mm Hg
- Bowel/Bladder Distention
  - Can increase BP 27/22 mm Hg
- Physical Activity
  - Can decrease blood pressure 5-11/4-8 mm Hg



## Contact Information

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Community Events Coordinator
  - 505- 920-7763
  - [Apeksha@chronicdiseasenm.org](mailto:Apeksha@chronicdiseasenm.org)
- Ryan Sanchez, HDSP Acting Program Manager
  - - 505-841-5889
  - [ryan.sanchez@state.nm.us](mailto:ryan.sanchez@state.nm.us)



## Resources

- [Cardiology Magazine. "Million Hearts Celebrates Success, Sets New Goals for 2022." American College of Cardiology, 16 Aug. 2017, www.acc.org/latest-in-cardiology/articles/2017/08/16/10/42/million-hearts-celebrates-success-sets-new-goals-for-2022.](http://www.acc.org/latest-in-cardiology/articles/2017/08/16/10/42/million-hearts-celebrates-success-sets-new-goals-for-2022)
- [CDC's Division for Heart Disease and Stroke Prevention](#)
- [CDC Heart Disease](#)
- [CDC Stroke](#)
- Food and Drug Administration. FDA issues draft guidance to food industry for voluntarily reducing sodium in processed and commercially prepared food 2016 Jun 1 Available from: <https://www.fda.gov/newsevents/newsroom/pressannouncements/ucm503874.htm>.
- 5. Food and Drug Administration. FDA cuts trans fat in processed foods 2015 Jun 16 Available from: <https://www.fda.gov/forconsumers/consumerupdates/ucm372915.htm>
- Picture Accreditation
  - [Creative Commons Attribution-Share Alike 4.0 International](#) By LucasMartin2 is licensed under [CC-BY-SA-4.0](#)
- [Interactive Atlas for Heart Disease and Stroke](#)
- [Million Hearts®External](#)
- [millionhearts.hhs.gov](http://millionhearts.hhs.gov)
- [Smoking and Tobacco Use](#)



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