

# Cardiovascular Disease and Diabetes

Heart Disease and Stroke Prevention Program

December 7, 2018

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# Outline

- Cardiovascular Disease Basics and Facts & Figures
- Cardiovascular Disease and Diabetes: Making the Connection
- What are we doing at the New Mexico Department of Health?
- Paths to Health NM



# 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.

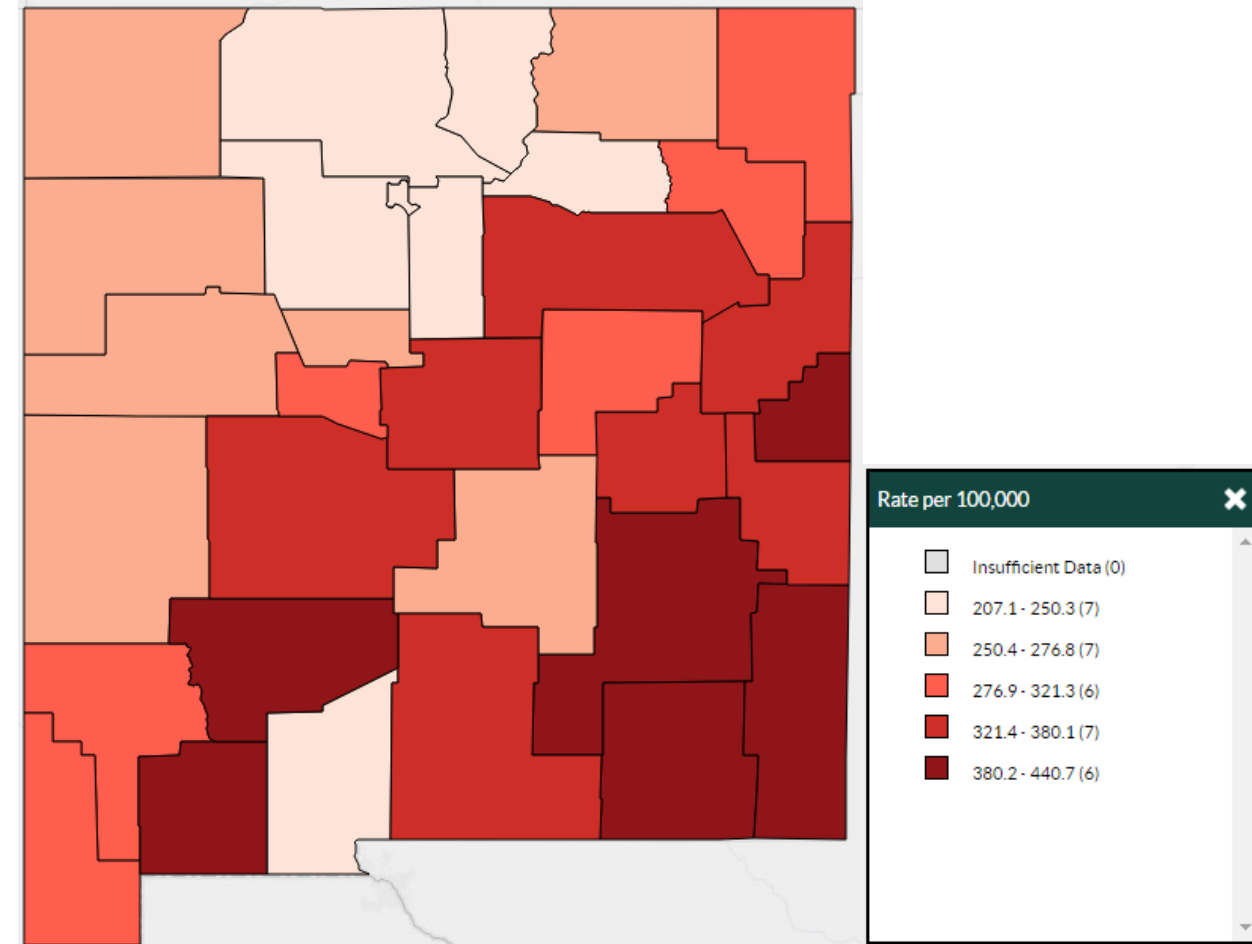
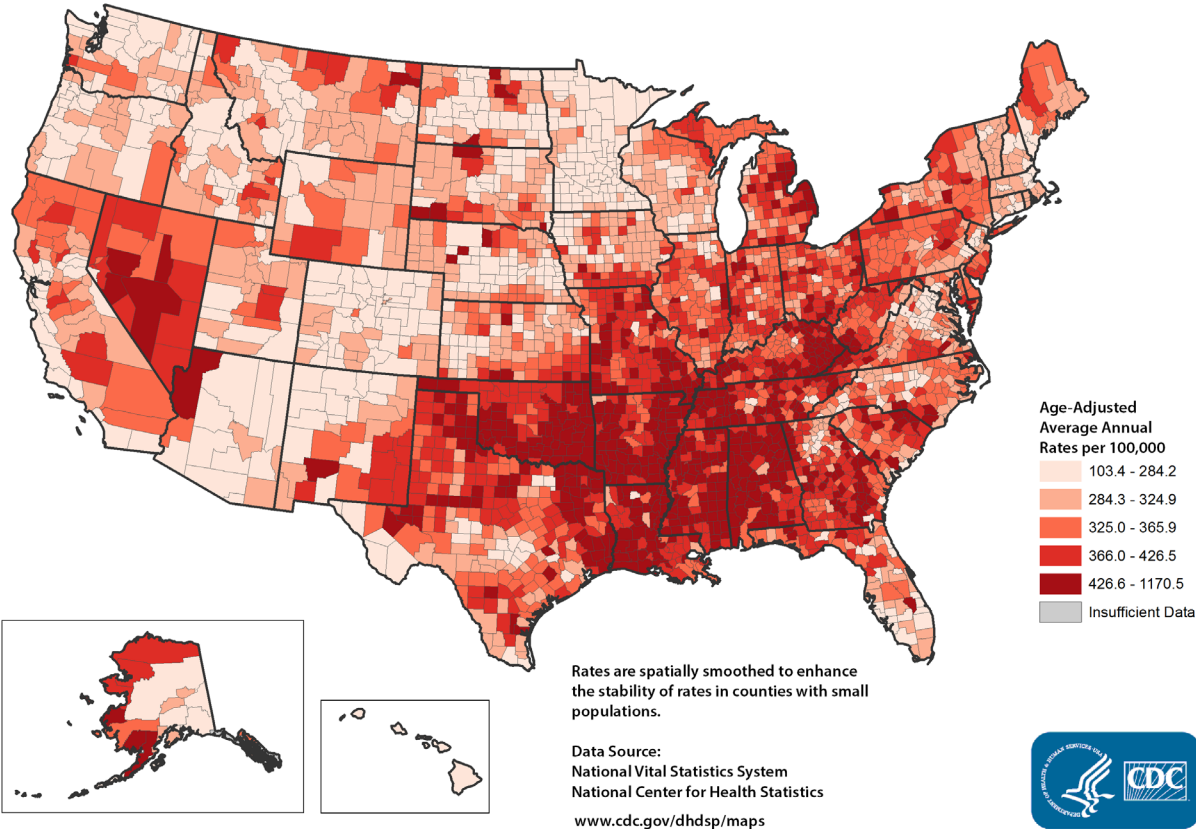


# What does CVD look like in New Mexico?

- Heart disease was the **#1 leading cause of death** in New Mexico in 2017, accounting for 21% 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 **3,406 deaths per year** in NM.\*

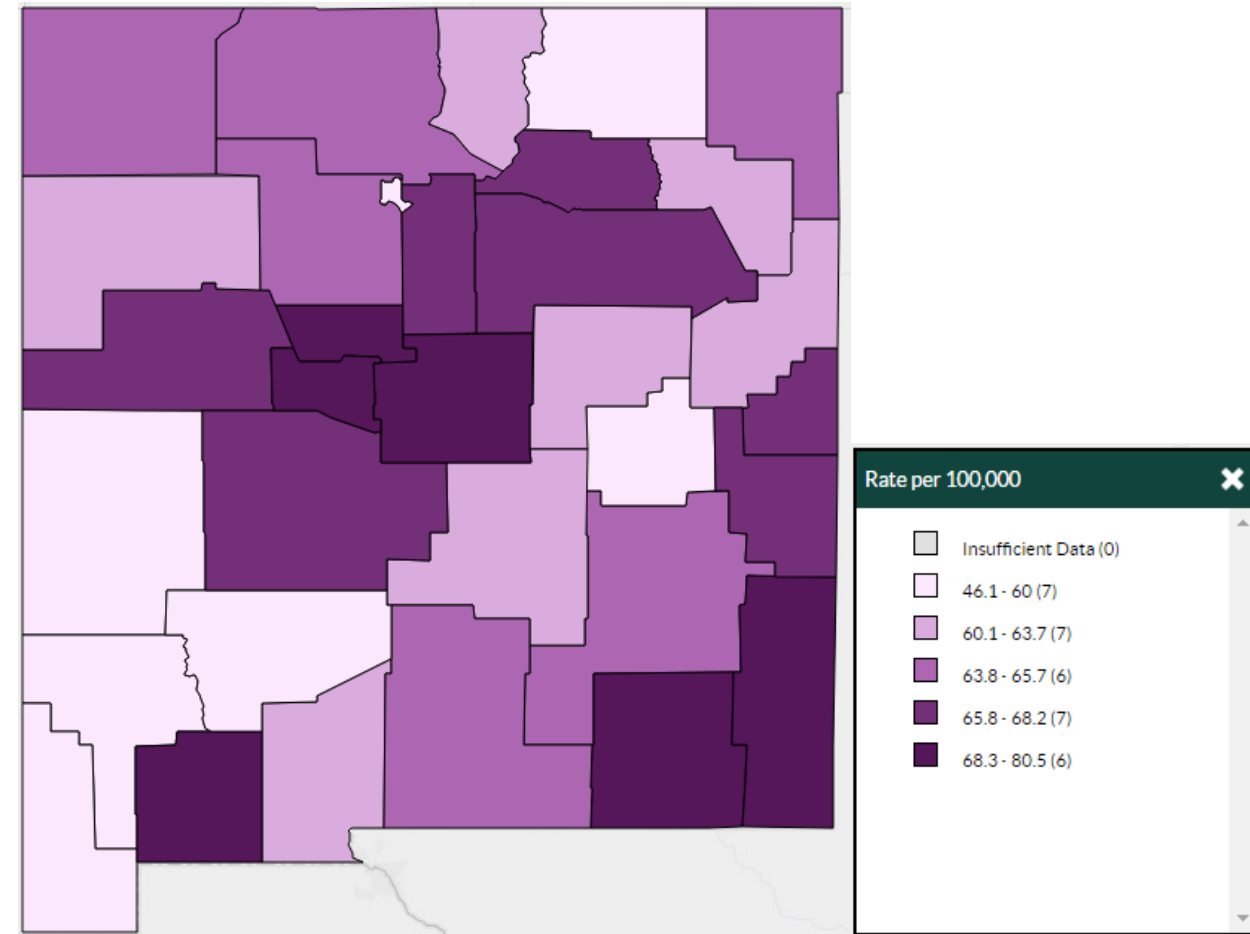
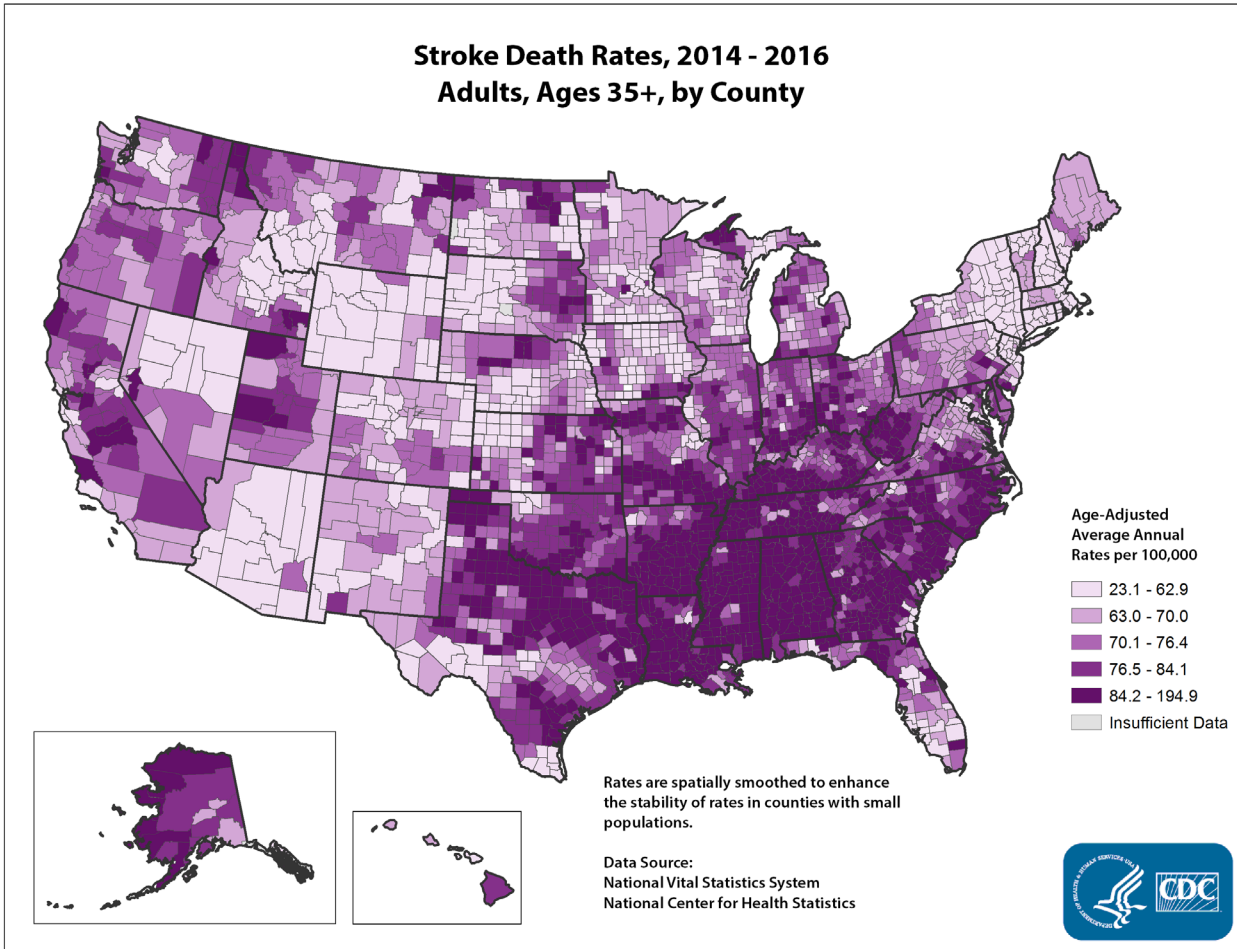
# Heart Disease Death Rates Ages 35+, 2014-2016

**Heart Disease Death Rates, 2014-2016**  
**Adults, Ages 35 +, by County**



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

# Stroke Death Rates Ages 35+, 2014-2016



[http://www.cdc.gov/dhdsp/maps/national\\_maps/stroke\\_all.htm](http://www.cdc.gov/dhdsp/maps/national_maps/stroke_all.htm)

<http://nccd.cdc.gov/DHDSPAtlas/Default.aspx?state=NM>



# What does CVD Cost New Mexico?

- 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**

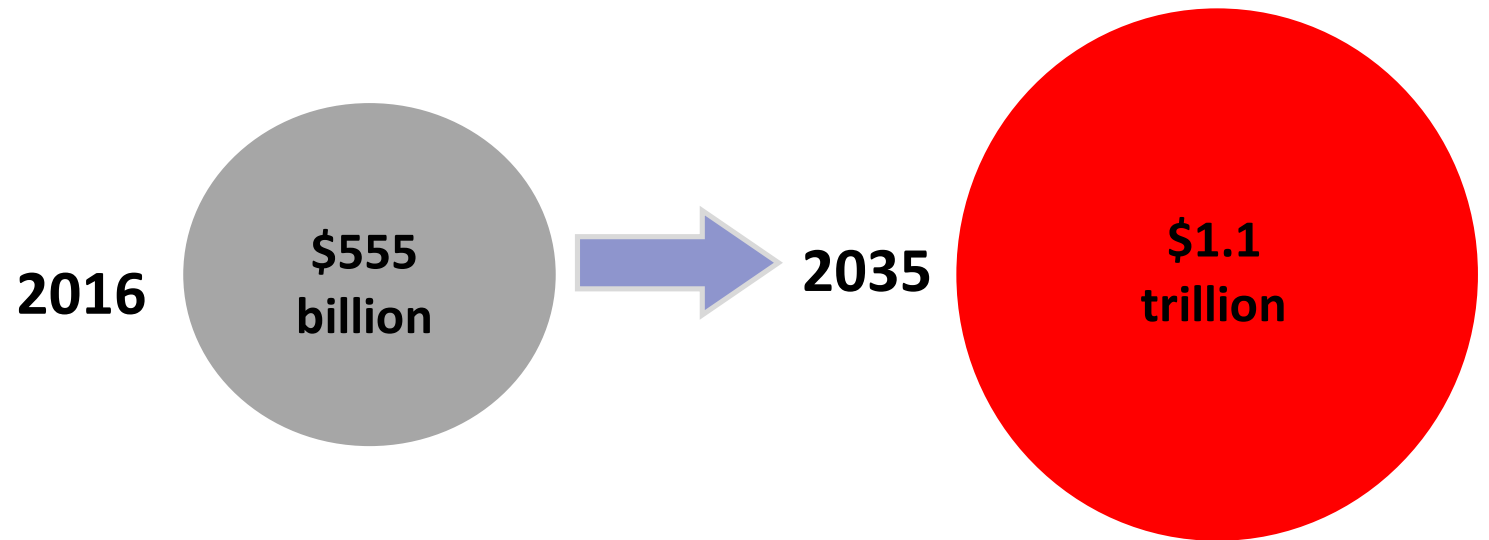
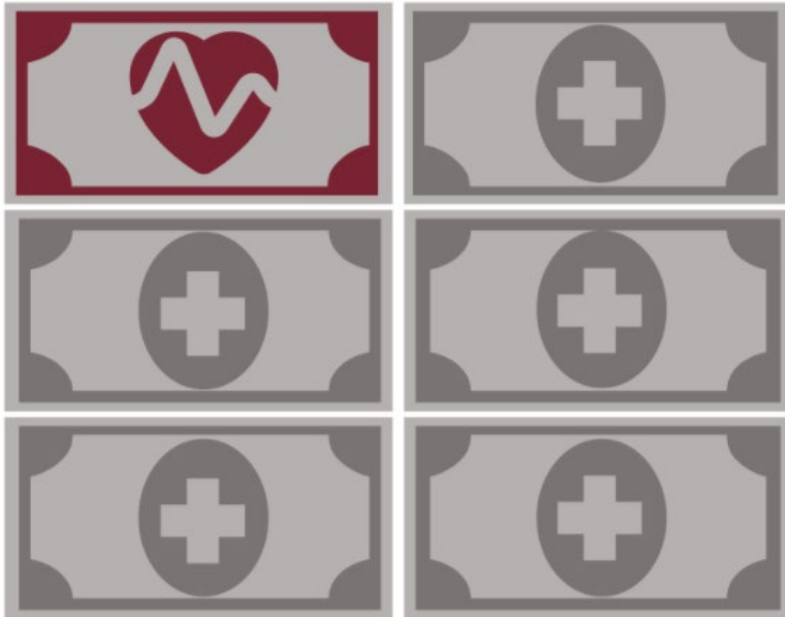


\*CDC Chronic Disease Cost calculator projected 2018 costs using MEPS 2004-2008 estimates for treated population and costs adjusted to 2010 dollars

# What does CVD Cost Nationally?

About **1 in every 6 health care dollars** is spent on cardiovascular disease.

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



\*Provided by AHA report: [http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm\\_491543.pdf](http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_491543.pdf)

# Cardiovascular Disease and Diabetes: Making the Connection

# Diabetes and CVD



- The American Heart Association (AHA) considers diabetes to be one of the seven major risk factors for cardiovascular disease
- There is a strong correlation between diabetes and CVD\*:
  - At least **68%** of people age 65+ with diabetes will die from a form of heart disease; **16%** for stroke
  - Adults with diabetes are **two to four times more likely** to die from heart disease than those without diabetes

\*Provided by AHA: <http://www.heart.org/en/health-topics/diabetes/why-diabetes-matters/cardiovascular-disease--diabetes>

# AT THE HEART OF DIABETES

Diabetes &  
Heart Disease  
By The #s

## U.S. DIABETES PATIENTS HAVE:



**2-3x**

increased risk  
for heart disease



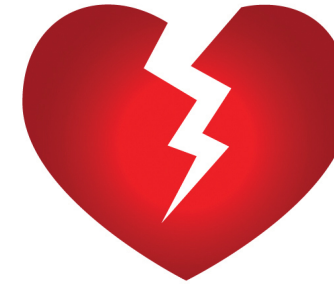
**30%**

of coronary stents  
implanted in 2011



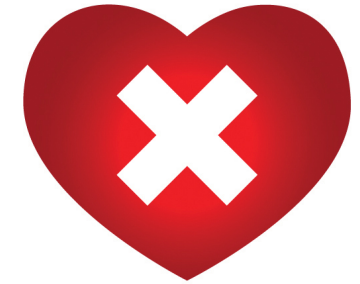
**280,000**

heart attacks  
annually



**2-4x**

higher heart disease  
morbidity and mortality rates



**60%**

chance of dying  
from heart disease

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<http://newsroom.medtronic.com/phoenix.zhtml?c=251324&p=irol-mediakit&ID=CoronaryArteryDisease>

# Risk Factors for Diabetes and CVD

If an individual has diabetes, there are other factors that increase their risk of developing CVD, including:

- Smoking
- High blood pressure
- Abnormal cholesterol levels
- Obesity
- Lack of physical activity
- Genetics

Underlying social and economic determinants of both diabetes and CVD:

- Income
- Education Level
- Health Insurance Status
- Ability to work

# Preventing CVD

- There are many ways individuals with diabetes can reduce their risk of developing CVD, including:
  - Developing or maintaining healthy lifestyle habits
  - Learning to manage stress
  - Medication
  - Talk to a healthcare professional
  - Follow the ABCS







\*<https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/heart-disease-stroke>

# CVD Follows the ABCS...

Talk to your health care team about the

# ABCS

			
<b>Aspirin</b> when appropriate	<b>Blood</b> pressure control	<b>Cholesterol</b> management	<b>Smoking</b> cessation



# And so does Diabetes...

- A person with diabetes can reduce their risk of heart disease or stroke by following their **ABCs**:
  - **A**<sub>1c</sub>
  - **B**lood pressure
  - **C**holesterol
  - **S**top smoking



# What are we doing at the New Mexico Department of Health?



# 1305 Cooperative Agreement

- The Heart Disease and Stroke Prevention Program (HDSP) & the Diabetes Prevention and Control Program (DPCP) have been working on collaborative initiatives because of the overlap in risk factors and prevention strategies of these conditions, as well as funding.
- 1305
  - Shared staff
  - Shared resources
  - Sharing partners
  - Priority populations
- Our successes...

# Heart Disease and Stroke Prevention Program Successes

- 33 of 36 identified health systems in NM were assessed for policies & systems that support high quality care for their adult patients with respect to electronic health record (EHR) and health information technology (HIT) use and quality reporting
- 3 federally-qualified health centers (FQHCs) implemented practices to improve team-based care & blood pressure control using EHR data
- Lovelace Health System in Albuquerque used their EHR to identify 500 patients with potentially undiagnosed hypertension

# Heart Disease and Stroke Prevention Program Successes

- Supported and participated in the planning of the American Heart Association's 5<sup>th</sup> annual *Go Red for Native Women Health Heart Summit*
- 10 clinical or community groups received presentations about the Million Hearts Initiative

# Diabetes Prevention and Control Program Successes

- Statewide engagement meeting June 2017
  - Collaboration with statewide partners to scale and sustain prevention programs statewide
  - Development of 2-year action plan focused on 4 priority areas
- Expanded partnerships through increased funding:
  - HealthInsight New Mexico (5-year CDC funding)
  - American Association of Diabetes Educators (funding efforts in underserved areas in NM)
- Integrated Referral Systems

# 1815 Cooperative Agreement

- HDSP and DPCP jointly applied for a CDC 5-year funding opportunity and received funding on October 1, 2018.
  - A five year cooperative agreement titled “**Improving the Health of Americans Through Prevention and Management of Diabetes and Heart Disease and Stroke**”
  - Will support state investments in implementing and evaluating evidence-based strategies to prevent and manage CVD and diabetes in high-burden populations/communities

# 1815 Shared Strategies

- Team-based care
  - HDSP: Support engagement of non-physician team members in hypertension and cholesterol management in clinical settings.
  - DPCP: Increase engagement of pharmacists in the provision of medication management or DSMES for people with diabetes.
- Community health workers (CHWs), community health representatives (CHRs) & promotoras
  - HDSP: Develop a statewide infrastructure to promote sustainability for CHWs/CHRs to promote management of hypertension and HBC in clinical settings.
  - DPCP: Develop a statewide infrastructure to promote long-term sustainability/reimbursement for CHWs/CHRs as a means to establish or expand their use in 1) CDC-recognized lifestyle change programs for type 2 diabetes prevention and/or 2) ADA-recognized/AADE-accredited DSMES programs for diabetes management.



# Shared Activities

- Promote team-based care for the effective management of adults with high blood pressure and diabetes
- Educate health systems and providers about the value of CHWs as members of the healthcare team
- Increase CHW skills to effectively support patients in the management of prediabetes, diabetes and high blood pressure.
- Develop and conduct CHW and pharmacist/pharmacy assessments
- Improve practices in health systems for identification, referral and management of adults with diabetes and hypertension

# Paths to Health NM



**Paths to Health** NM  
Tools for *Healthier* Living



**Caminos de Salud** NM  
Técnicas para Vivir *Mejor*

# Paths to Health NM

## Tools for Healthier Living

- Group of evidence-based programs proven to work in preventing or managing a variety of health conditions.
- Designed to help adults gain the confidence and skills they need to prevent or better manage chronic health conditions or injuries.
- Delivered around the state by trained individuals in community and clinical settings.
- Multi-cultural programs are adaptable to communities
- Many programs are FREE to eligible New Mexicans.

# Connecting with Paths to Health NM

For more information about promoting Paths to Health NM, referring someone to a Paths to Health NM program or getting trained and delivering a Paths to Health NM program, there are several ways to connect with Paths to Health NM:

Visit the website at: [pathstohealthnm.org](http://pathstohealthnm.org)

Or Call: (505) 850-0716  
(575) 703-2343

# Paths to Health NM Programs

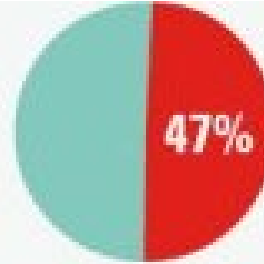
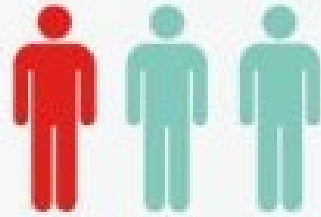
- A Matter of Balance: Managing Concerns About Falls
- Chronic Disease Self-management Education Programs
- Kitchen Creations
- National Diabetes Prevention Program
- Otago
- Tai Chi for Arthritis
- Tai Ji Quan: Moving for Better Balance
- Health Coaches for Hypertension Control – *Coming to NM Soon!*
- YMCA Blood Pressure Self-Monitoring Program – *Coming to NM Soon!*

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

**67 MILLION**

American adults have  
high blood pressure

**1 IN 3**

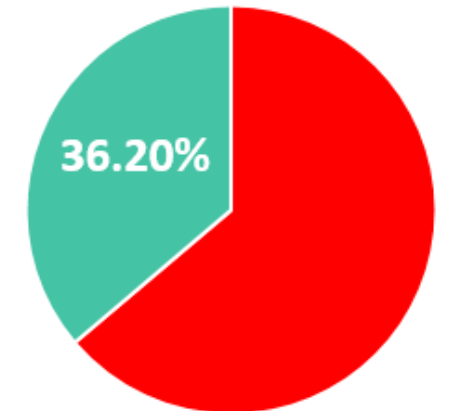


**ONLY ABOUT HALF**

of people with high blood pressure  
have their condition under control

**Uncontrolled BP is  
BP  $\geq$  140/90\***

**Of the population with  
uncontrolled high BP,  
36.2% are unaware of  
their high BP**



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

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

# We know very little on whether people self-monitoring

- There is lots of evidence showing the effectiveness of monitoring blood pressure at home, but...
- Both nationally and in NM, very little data has been collected on whether people with high blood pressure measure it at home or whether doctors recommend self-monitoring to their patients with high blood pressure

# That's about to change

- In New Mexico, the HDSP Program submitted a successful proposal to include the Home/Self-Measured Blood Pressure module in the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire.
  - Data collection will begin in January 2019 and continue through December
  - The 2019 data will be available for analysis some time in the summer of 2020



# What will be collected in the BRFSS module?

- Respondents who answered “yes” to ever having been told by a healthcare professional that they had high blood pressure, will be asked the following questions:
  - Has your doctor, nurse, or other healthcare professional recommended you check your blood pressure outside of the office or at home?
  - Do you regularly check your blood pressure outside of your healthcare professional’s office or at home?
  - Do you take it mostly at home or on a machine at a pharmacy, grocery or similar location?
  - How do you share your blood pressure numbers that you collected with your healthcare professional? Is it mostly by telephone or other methods, such as emails, internet portal, or fax, or in person?

# 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.



# New Hypertension (High Blood Pressure) 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

# Video Time!

# Self-Measured Blood Pressure Monitoring Training Video

\*Video from Target: BP website

<https://targetbp.org/blood-pressure-improvement-program/patient-measured-bp/implementing/smbp-training-patients/self-measured-blood-pressure-video-no-cc/>

# Impact of Incorrect Blood Pressure Measurement Technique

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

# 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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  - 505-841-5889
  - [ryan.sanchez@state.nm.us](mailto:ryan.sanchez@state.nm.us)



# Resources

- [http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm\\_491543.pdf](http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_491543.pdf)
- <http://www.heart.org/en/health-topics/diabetes/why-diabetes-matters/cardiovascular-disease--diabetes>
- <https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/heart-disease-stroke>
- <https://millionhearts.hhs.gov/learn-prevent/prevention.html>
- <http://www.diabetes.org/living-with-diabetes/complications/heart-disease/healthy-abcs.html>