



# Diabetes Prevention

Iowa Department of Public Health

*Protecting and Improving the Health of Iowans*





# Introduction

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- Started this position June 2017
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# National Diabetes Prevention Program (NDPP)

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# NATIONAL DIABETES PREVENTION PROGRAM

WORKING  
TOGETHER  
TO PREVENT  
TYPE 2 DIABETES



## THE GROWING THREAT OF PREDIABETES

Prediabetes is identified when your blood sugar level is higher than normal but not high enough yet to be diagnosed as type 2 diabetes

**84.1** MILLION  
adults have  
prediabetes



**9** OUT OF **10** people with prediabetes  
don't know they have it



Without weight loss  
and moderate  
physical activity

15–30% of people with  
prediabetes will  
develop type 2 diabetes  
within 5 years



# REDUCING THE IMPACT OF DIABETES



Congress authorized CDC to establish the NATIONAL DIABETES PREVENTION PROGRAM (National DPP)—a public-private initiative to offer evidence-based, cost-effective interventions in communities across the United States to prevent type 2 diabetes

It brings together:



to achieve a greater impact on reducing type 2 diabetes

Research shows structured lifestyle interventions can cut the risk of type 2 diabetes in

HALF



## Groups in the National Diabetes Prevention Program are working to:



Build a workforce that can implement the lifestyle change program effectively



Ensure quality and standardized reporting



Deliver the lifestyle change program through organizations nationwide



Increase referrals to and participation in the lifestyle change program

A key part of the National DPP is a lifestyle change program that provides:



A TRAINED LIFESTYLE COACH



CDC-APPROVED CURRICULUM



GROUP SUPPORT OVER THE COURSE OF A YEAR

# JOIN IN THIS NATIONAL EFFORT

Everyone can play a part in preventing type 2 diabetes



RAISE  
AWARENESS  
of prediabetes



SHARE  
INFORMATION  
about the  
National DPP



ENCOURAGE  
PARTICIPATION  
in a local lifestyle  
change program



PROMOTE  
the National DPP  
as a covered  
health benefit

Find out how to get involved  
with the National Diabetes  
Prevention Program

[www.cdc.gov/diabetes/prevention](http://www.cdc.gov/diabetes/prevention)

CDC'S DIVISION OF DIABETES TRANSLATION WORKS TOWARD A WORLD FREE OF THE DEVASTATION OF DIABETES

[https://www.cdc.gov/diabetes/prevention/pdf/ndpp\\_infographic.pdf](https://www.cdc.gov/diabetes/prevention/pdf/ndpp_infographic.pdf)



# Evidence-Based Program

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## DPP Clinical Trial Study Design and Findings

- 3,243 individuals with prediabetes were divided into three groups

Lifestyle Change

Received training and coaching on diet, physical activity and behavior modification

Metformin

Took 850 mg twice a day, and received information about diet and exercise with no coaching

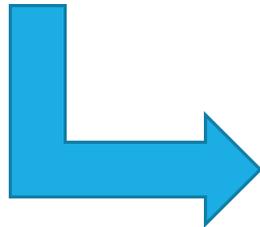
Placebo

Took placebo pills twice a day and received diet and exercise information with no coaching

# Evidence-Based Program

## Lifestyle Change

Received training and coaching on diet, physical activity and behavior modification



Participants in the lifestyle change group reduced their risk of developing diabetes by 58% compared to a 31% reduction for the metformin group <sup>1</sup>

Only 5% of the lifestyle change group developed diabetes <sup>1</sup>

Participants in the lifestyle change group age 60 and older reduced their risk by 71% <sup>1</sup>

Lasting Impact of the Lifestyle Change Intervention  
10 years later, those who participated in the lifestyle change group were still 33% less likely to develop diabetes <sup>2</sup>

1. [https://www.niddk.nih.gov/about-niddk/research-areas/diabetes/diabetes-prevention-program-dpp/Documents/DPP\\_508.pdf](https://www.niddk.nih.gov/about-niddk/research-areas/diabetes/diabetes-prevention-program-dpp/Documents/DPP_508.pdf)

2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3135022/>

# Structure of the National DPP

Program Goal: Assist participants to making long-term behavior changes to their diet and activity levels as well as improve their problem solving-skills.

## Months 1 – 6

- Weekly sessions with a minimum of 16

## Months 7 – 12

- Monthly sessions with a minimum of 6

During the program participants are coached in a range of healthy behavior core classes

## Example Curriculum

Strategies for Healthy Eating Out  
Managing Stress  
Eating Less  
Making Active Choices  
Staying Motivated  
Dietary Fats  
More Volume, Fewer Calories  
Preventing Relapse

Participant Goal: Lose 5 – 7% of body weight



# Iowa's Landscape

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# Prediabetes in Iowa

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**35% OF ADULTS  
IN IOWA  
HAVE PREDIABETES.**

**KNOW WHERE YOU STAND**

[DoIHavePrediabetes.org](http://DoIHavePrediabetes.org)

- Approximately 838,611 adults in Iowa have prediabetes – more than 1 in 3.
- This is concerning because left untreated:
  - 15-30% of people with prediabetes will develop type 2 diabetes within 5 years.



# Prediabetes in Iowa – 2016 BRFSS

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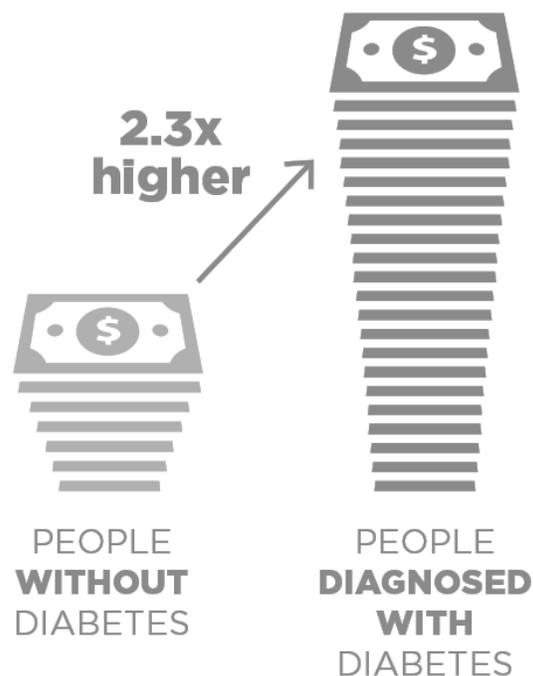
Total – 7.8%	55-64 – 11%	\$25,000-34,999 – 9.3%
Male – 8.2%	<b>65-74 – 13.5%</b>	\$35,000-49,999 – 9.2%
Female – 7.4%	75+ – 11.3%	\$50,000-74,999 – 8.9%
White/Non-Hispanic – 8%	Less than H.S. – 7.1%	\$75,000+ – 6.4%
Non-White or Hispanic – 5.8%	H.S. or G.E.D. – 8.1%	
18-24 – 1.6%	Some Post H.S. – 8.8%	
25-34 – 4.4%	College Graduate – 6.1%	
35-44 – 5.8%	<b>Less than \$15,000 – 10.3%</b>	
45-55 – 9.9%	\$15,000 -24,999 – 5.3%	

BRFSS. (2017). 2016 data provided by the Iowa Department of Public Health. IDPH Bureau of Vital Statistics.



# Healthcare Expenses

## Average medical expenditures



Less than \$15,000 – 10.3%

65-74 – 13.5%

- Diabetes costs on average \$13,700 annually.
  - 2.3 times more than someone with out diabetes.
- The total costs of treating diabetes in the United States has increased to 245 billion.
  - That is up 41 percent from the previous five years.

# WHY ACT NOW?

Compared to people without diabetes, those with diabetes are:

**100%**  
more likely to  
develop  
**hypertension**<sup>1</sup>

**80%**  
more likely to  
be hospitalized  
for **heart attack**<sup>2</sup>

**50%**  
more likely to  
be hospitalized  
for **a stroke**<sup>2</sup>

**70%**  
more likely to  
die from **heart  
disease or stroke**<sup>2</sup>

By referring patients to the National DPP, a lifestyle change program, you can help them lower their risk of developing type 2 diabetes as well as reduce the likelihood of:

ILLNESS



MEDICATION

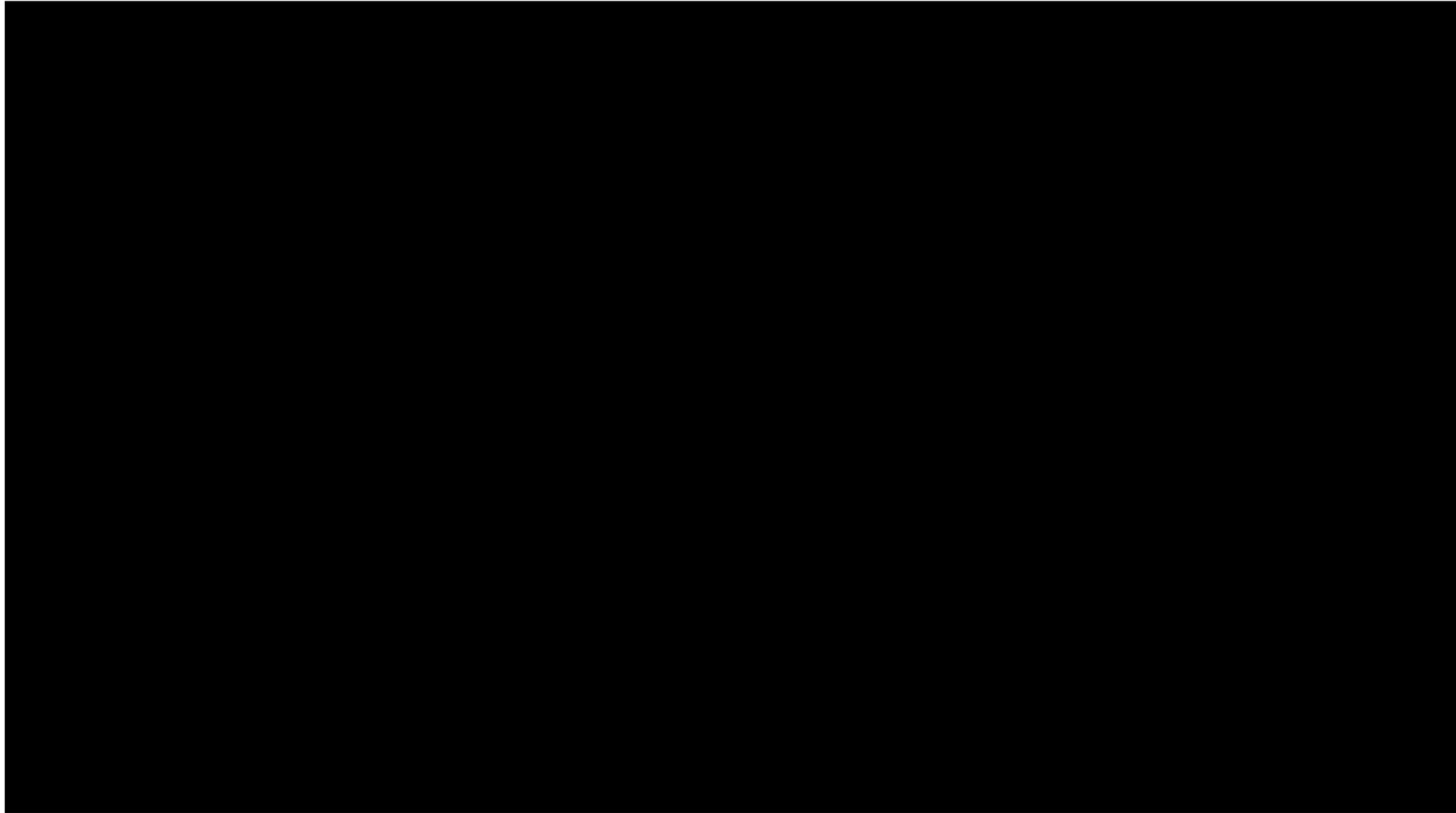


EXPENSE



1. Gillespie CD, Hurvitz KA; Centers for Disease Control and Prevention (CDC). Prevalence of hypertension and controlled hypertension - United States, 2007-2010. *MMWR Suppl.* 2013;62(3):144-8.

2. Centers for Disease Control and Prevention. National Diabetes Statistics Report: *Estimates of Diabetes and Its Burden in the United States, 2014.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2014.

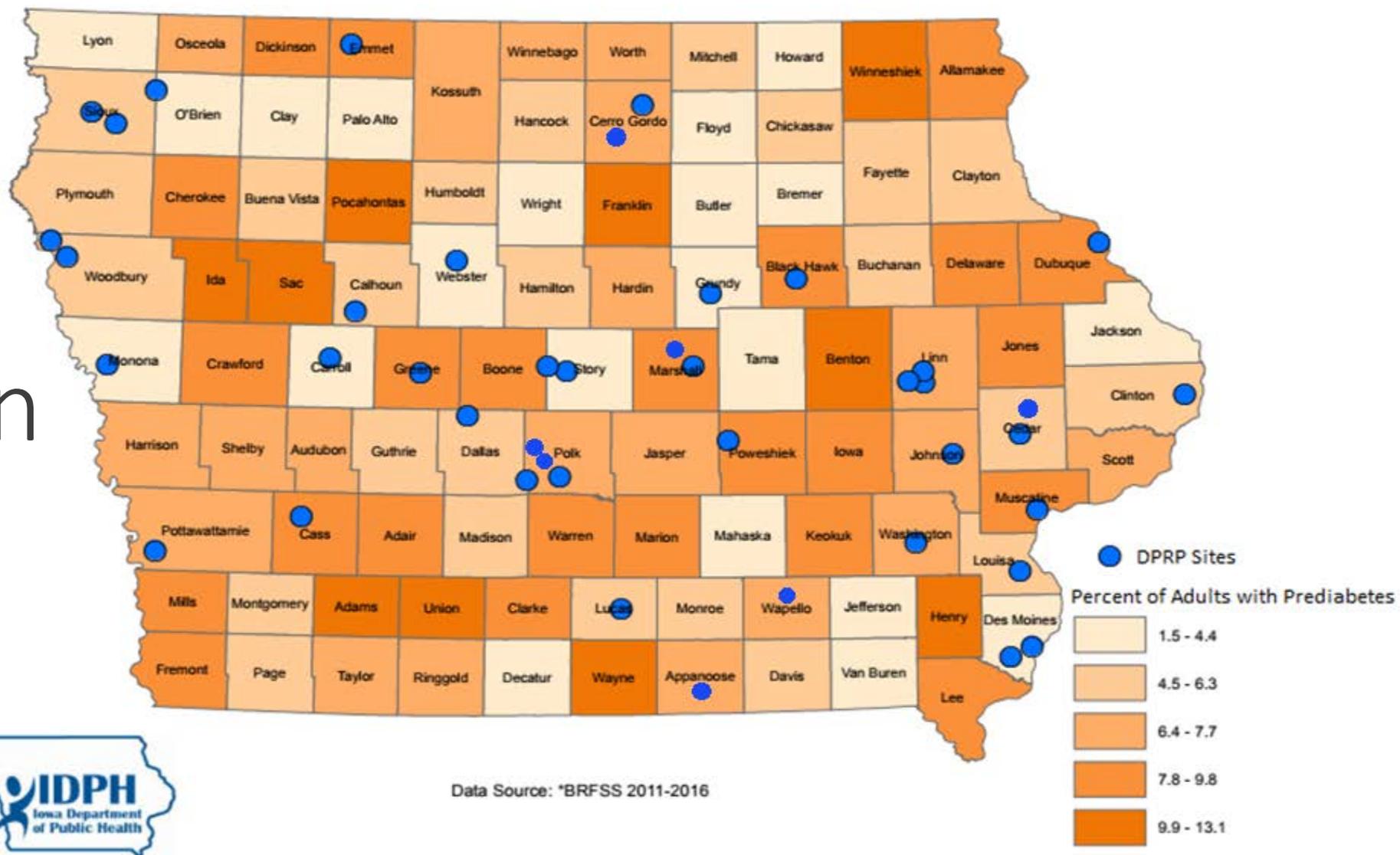


# Diabetes Prevention Sites in Iowa Early 2015





Percent of Iowa Adults with Prediabetes\* and DPRP Sites



Data Source: \*BRFSS 2011-2016

# Current Diabetes Prevention Sites



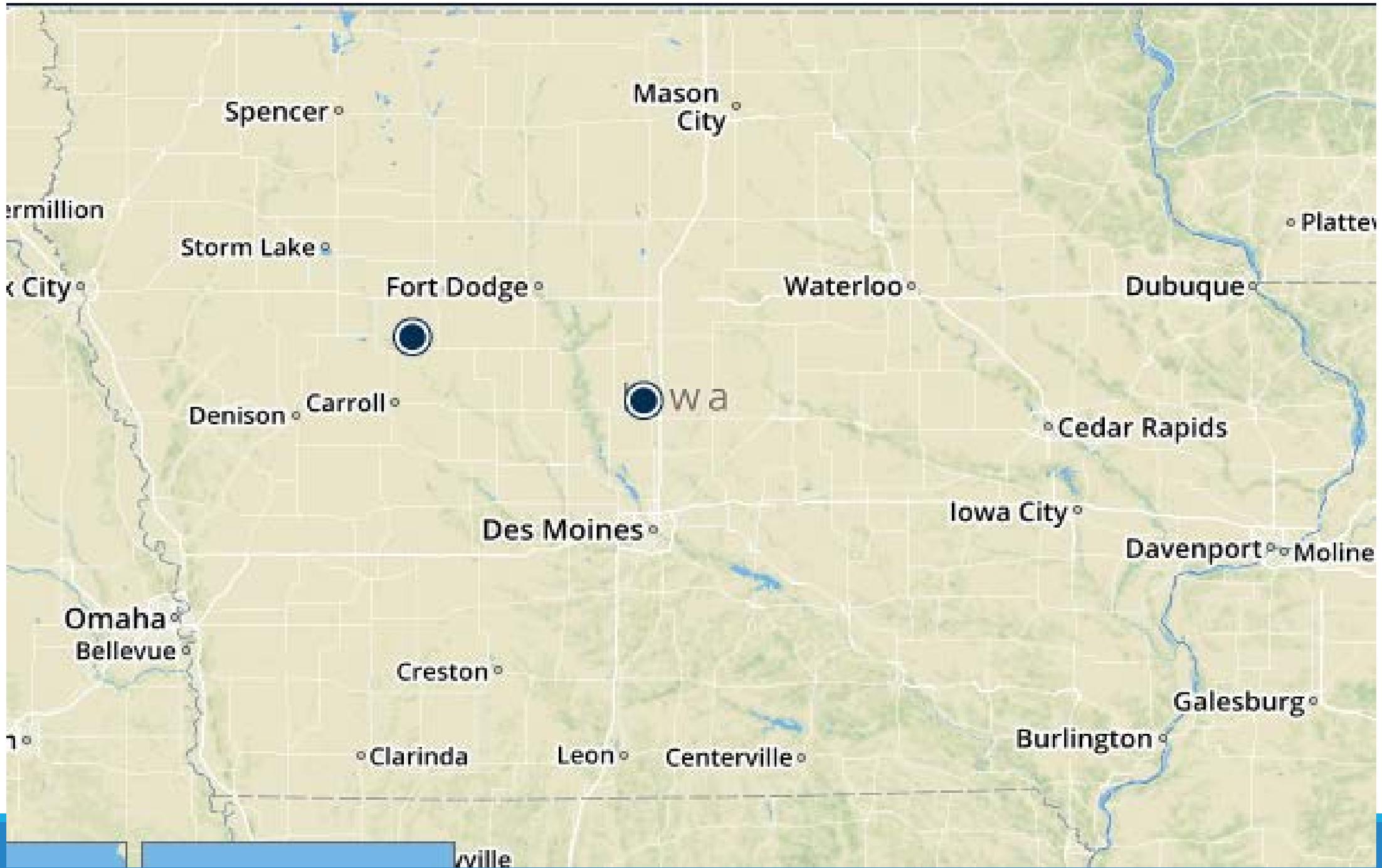


# Medicare Coverage

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- Nationally, Medicare has started implemented coverage for the NDPP.

April 1, 2018 was the start date of MDPP





# Iowa Diabetes Prevention Action Plan

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# Action Plan Objective

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**Decrease the new cases of diabetes among Iowans with prediabetes and those at highest risk, by increasing enrollment and completion of CDC-recognized diabetes prevention programs.**



# The Four Pillars

Pillar 1

Awareness

Pillar 2

Availability

Pillar 3

Screening, Testing and Referral

Pillar 4

Coverage



# CDC National Diabetes Prevention Program

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Do you have interest in having a Diabetes Prevention Program at your work place or providing one to the public? Check this site out below. But always feel free to contact me with any questions.

[www.cdc.gov/diabetes/prevention](http://www.cdc.gov/diabetes/prevention)

Questions or slides:

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# Disclaimer

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The information provided in this presentation is for informational purposes only and does not constitute legal advice.

The primary purpose of this presentation is to provide information about prediabetes, diabetes prevention programs and the Prevention Action Plan. There is no intent to reflect a view on specific legislation.

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