

# **I CAN Prevent Diabetes!**

*Individuals and Communities Acting Now  
to Prevent Diabetes*

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**Site Recruitment Discussion  
Fall 2007 – Spring 2008**

# Partners

## Community Partners

### Healthcare

- Community Clinic

### Host Agency

- YMCA/ YWCA
- Parks & Recreation

### Local Public Health

## State Partners

### MDH

- Steps to a Healthier Minnesota

- Minnesota Diabetes Program

# The Diabetes Epidemic: US Minority Populations

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- ✧ **American Indians, African Americans, and Hispanics are about 2 times more likely than Whites to develop type 2 diabetes**
- ✧ **Asian Americans are also at increased risk**

# The Diabetes Epidemic: US

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**In the US, diabetes occurs in**

- \* 15 % of American Indians**
- \* 13 % of African American**
- \* 9 % of Hispanic/Latino**
- \* 8 % of non-Hispanic Whites**

**– Data on Asian Americans differs by state and region**

*CDC, National Diabetes Fact Sheet: US, 2005*

# The Diabetes Epidemic: MN

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## In Minnesota

- ✧ **One in 4 have diabetes or are at high risk for developing it**
- ✧ **323,000 have diabetes**
  - 96,000 of those do not know it
- ✧ **Greater than 1 million have Impaired Fasting Glucose (prediabetes)**

# What is Prediabetes?

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- ✧ **Blood glucose levels that are higher than normal, but not high enough to be called diabetes**
  - Often precedes the development of type 2 diabetes
  - Can begin long-term damage to
    - Heart and circulatory system
    - Eyes and kidneys

# Prediabetes

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- ✦ **Increases the risk of developing**
  - Type 2 diabetes
  - Heart disease
  - Stroke

# Prediabetes Risk Factors

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- Age
- Overweight or obese
- High blood pressure
- Abnormal lipid levels
- Family history of type 2 diabetes
- Ethnicity
- History of gestational diabetes or 9+ lb baby
- Inactivity

NDEP, *Small Steps Big Rewards Game Plan*, 2003

# Clinical Criteria for Prediabetes

Condition	Test	Results
Impaired Glucose Tolerance (IGT)	2-Hour Oral Glucose Tolerance Test	140–199 mg/dL
Impaired Fasting Glucose (IFG)	Fasting Plasma Glucose	100–125mg/dL <i>After 8-hour fast</i>

# Good News About Prediabetes!

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- ✧ **Progression to diabetes is not inevitable!**
- ✧ **Weight loss & increased physical activity can**
  - Prevent or delay diabetes
  - May even return blood glucose levels to normal

# The Basis for the I CAN Prevent Diabetes Program

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## \* Diabetes Primary Prevention (DPP)

- National, randomized, multisite study (published in 2002)
- Participants = 3,234 overweight persons with prediabetes

## \* Examined the effects of lifestyle change & pharmaceutical treatment on prediabetes

- Lifestyle changes = diet & physical activity
- Pharmaceutical = metformin\*

\*Prescription medication that lowers blood glucose

# Results from the DPP

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## \* DPP results showed\*

- Lifestyle intervention resulted in a 58% reduction in progression to diabetes
- Medication intervention resulted in a 31% reduction
- Findings were consistent across all ethnic groups, ages, and BMI subgroups

\* Diabetes Prevention Program Research Group. *Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin.* New England Journal of Medicine 2002;346:393-403.

# Program Pilot: Site Selection

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## ✦ Pilot sites

- **I CAN Prevent Diabetes is being offered in 3 Steps to a HealthierMN communities in 2008**
  - St. Paul
  - Willmar
  - Rochester

# Program Pilot: Training & Recruitment

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## \* Training

- Minnesota Diabetes Program provided facilitator training in December 2007
- Additional trainings will be offered as needed for future program sites

## \* Recruitment

- Community-based approach
  - Each site recruited partners & participants for their community

# Program Details

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## ✦ Participant objectives

- Attend all 16 weekly classes in designated community setting
- Change unhealthy lifestyle behaviors
  - Increase activity (self goals)
  - Improve food choices (keep diary)
  - Lose weight, if overweight (5-7% of body weight)

# Roles

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## ✧ Role for the individual

- Take action by getting screened, enrolling in classes and making lifestyle changes

## ✧ Role for communities

- Provide screening in community clinics
- Offer lifestyle change classes in fitness centers or clinic facilities
- Promote safe exercise options

# Next Steps: Community

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- ✦ **Form partnerships with**
  - Local clinic or healthcare center
  - YMCA/ YWCA or other fitness facility willing to host classes
  - Local public health
    - Contact Steps Community Coordinator in Minneapolis, Rochester, St. Paul or Willmar
    - Other local public health programs
- ✦ **Identify people at risk for prediabetes**
- ✦ **Refer them to clinic or primary care provider for clinical diagnosis**

# Next Steps: Clinic

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- ✦ **Clinics refer patients with prediabetes to I CAN Prevent Diabetes program**
- ✦ **Encourage patients to sign up and attend**
- ✦ **Provide follow-up care and encouragement**
- ✦ **Track progress of individuals**

# Follow-up Care & Monitoring

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- ✦ **Patients with prediabetes should be monitored for progression to diabetes every 6 months**
- ✦ **I CAN Prevent Diabetes will provide booster sessions and support groups after the core program is over**

# Site-Specific Decisions, Part 1

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- ✦ **How will patients be screened, identified, referred & tracked**
  - How will possible participants be identified & recruited
    - How will possible participants be referred to their clinic for diagnosis
    - How will clinics refer those with prediabetes into the program
- ✦ **How will partners be identified & recruited**

# Site-Specific Decisions, Part 2

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- ✦ **Who will be the Champion(s)**
  - Who will attend facilitator training
  - Who will be the main facilitator
  - Who will be part of support team
  - How will team communicate with and support facilitator

# Importance of Prevention

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## ✧ National estimates

- 41 million people have prediabetes
- Total cost of diabetes in US = \$132 billion/ year

## ✧ Minnesota estimates

- Total cost of diabetes in MN = \$2.3 billion/yr
- Diabetes prevalence has doubled in past 12 years
- Diabetes is the sixth leading cause of death in Minnesota

# Resources

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## Centers for Disease Control & Prevention

<http://www.cdc.gov/diabetes/faq/prediabetes.htm>

## Diabetes Prevention Program

[http://www.bsc.gwu.edu/dpp/lifestyle/dpp\\_part.html](http://www.bsc.gwu.edu/dpp/lifestyle/dpp_part.html)

## National Diabetes Education Program

<http://www.ndep.nih.gov/>

# Contact

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# Thank you!