REQUIRED TOPIC 1: WHAT IS DIABETES?

STATEMENT OF THE PROBLEM

Diabetes is a rapidly growing health problem in the United States. Knowing the type of diabetes a person has, the common symptoms of it, and taking control of it to lower the risk of complications are key components in staying as healthy as possible.

KEY MESSAGES

1. You are the most important person in taking care of your diabetes
2. Over time, diabetes, especially uncontrolled diabetes, can lead to serious complications
3. Keeping blood sugars at normal to near normal levels will greatly reduce the chance of developing complications and/or lessen their severity
4. Setting goals and breaking them down into small, do-able pieces can be an effective way to make healthy lifestyle changes

BACKGROUND

Who has Diabetes? In 2011, the United States had an estimated 25.8 million people with diabetes, or more than 8 percent of the entire population. Of this number, an estimated 18.8 million people have been diagnosed and 7 million people have not been diagnosed.

There are four main types of diabetes. The most common are Type 1 and Type 2.

1. **Gestational diabetes** occurs in 2-10% of all pregnancies and usually disappears when a pregnancy is over. Women who develop this type of diabetes during pregnancy are at higher risk for type 2 diabetes later in life.
2. **Type 1** diabetes is more common among Caucasians compared to other ethnic groups, although it only accounts for about 5% of all forms of diabetes.
3. **Type 2** diabetes accounts for approximately 90-95% of all types of diabetes. It is more common in African Americans, Latinos/Hispanic Americans, Pacific Islanders and Alaska Natives and American Indians. The risk for type 2 diabetes increases as we age, regardless of our ethnic background. Almost 27% of Americans over the age of 65 have type 2 diabetes.
4. **Prediabetes** is a condition in which individuals have blood glucose or A1c levels higher than normal but not high enough to be classified as diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease, and stroke. In 2005–2008, approximately 35% of U.S. adults aged 20 years or older, or 79 million, had prediabetes. Approximately 50% of adults aged 65 years or older have prediabetes.

These materials were adapted from *Type 2 Diabetes: A Curriculum for Patients and Health Professionals,* American Diabetes Association, 2002.

TYPE 2 DIABETES WITHIN SPECIFIC ETHNIC GROUPS

Group	Age Group	% of Ethnic-Specific Population
African Americans	Ages 20 and older	12.6%
Latino/Hispanic Americans	Ages 20 and older	11.8%
Cuban Americans	Ages 20 and older	7.6%
Mexican Americans	Ages 20 and older	13.3%
American Indians	Ages 20 and older	13.8%
American Indians/Alaska Natives	Ages 20 and older	14.2%

Source: Center for Disease Control and Prevention, National Diabetes Facts Sheet, 2011

WHAT IS DIABETES?

All types of diabetes result in too much glucose (sugar) in the blood. To further understand diabetes, it helps to understand how the body uses glucose.

Most of the food we eat is turned into glucose. The glucose leaves the gastrointestinal tract and enters the bloodstream, where it travels to all the cells of our body. Our cells use the glucose for energy. Insulin, a hormone made by the pancreas, helps move the glucose from the bloodstream to the cells, where it is used as energy.

When a person has diabetes, the body either does not produce enough insulin or is unable to use its own insulin very well. Glucose builds up in the blood and causes a condition that, if not controlled, can lead to serious health complications.

Type 1 Diabetes: People with type 1 diabetes) make little or no insulin. They must take insulin shots in order to live. Usually type 1 diabetes occurs during childhood, but may occur up to early adulthood. It often presents suddenly and people experience severe symptoms.

Type 2 Diabetes: People with type 2 diabetes produce insulin, but for some reason the cells in their bodies do not use it properly. This is called insulin resistance and insulin can't open the cells to let the sugar in and it begins to build up in the blood stream. At first, the pancreas makes extra insulin to make up for this. But over time it isn't able to keep up and can't make enough insulin to keep blood glucose at normal levels and high blood sugar is the result. Over time, if diabetes is untreated, the pancreas does not make enough insulin

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Type 2 diabetes most often occurs in adulthood, although it is becoming more common young adults and even adolescents. Unlike type 1 diabetes, it does not appear to come on suddenly. Instead, people may have no noticeable symptoms or only mild symptoms for years before their diabetes is detected.

Certain risk factors make people more likely to get type 2 diabetes. Some of these risk factors include:

- A family history of diabetes
- Lack of exercise or physical activity
- Being overweight or obese
- Having prediabetes
- Older age
- Being of African American, American Indian, Alaska Native, Hispanic/Latino, or Asian/Pacific Islander

What happens in the body when the blood sugar is too high?
People with high blood sugar can experience symptoms that often include:

- Being very thirsty
- Frequent urination
- Extreme hunger
- Sudden vision changes or blurred vision
- Feeling tired most of the time for no apparent reason
- Cuts that don't heal
- Very dry and itchy skin

What happens if diabetes goes untreated or is not well controlled?
Diabetes is a major cause of heart disease and stroke. Approximately 67% of U.S. adults who report having diabetes also report having high blood pressure. For people with diabetes, high blood pressure levels, high cholesterol levels, and smoking increase the risk of heart disease and stroke. This risk can be reduced by controlling blood pressure and cholesterol levels and stopping smoking.

Diabetes can also lead to other complications, such as nerve damage, vision loss, kidney disease or failure, and amputations of toes, feet, or legs. Effective glucose control, as measured by A1c levels, and blood pressure control can prevent or delay these complications.

Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower their risk of complications. Keeping the blood sugar at or near "normal" levels can significantly reduce the risk of complications of diabetes.

DIABETES MYTHS AND FACTS

(American Diabetes Association. http://www.diabetes.org)

Myth: Diabetes is not that serious of a disease
Fact: If you take care of your diabetes you can prevent or delay complications. However, diabetes causes more deaths a year than breast cancer and AIDS combined. Two out of three people with diabetes die from heart disease or stroke.

Myth: If you are overweight or obese, you will eventually develop type 2 diabetes.

Fact: Being overweight is a risk factor for developing this disease, but other risk factors such as family history, ethnicity and age also play a role. Most overweight people never develop type 2 diabetes, and many people with type 2 diabetes are at a normal weight or only moderately overweight.

Myth: Eating too much sugar causes diabetes.

Fact: The answer is not so simple. Type 1 diabetes is caused by genetics and unknown factors that trigger the onset of the disease; type 2 diabetes is caused by genetics and lifestyle factors. Being overweight does increase your risk for developing type 2 diabetes, and a diet high in calories from any source contributes to weight gain. Research has shown that drinking sugary drinks is linked to type 2 diabetes.

Myth: People with diabetes are more likely to get colds and other illnesses.

Fact: You are no more likely to get a cold or another illness if you have diabetes. However, people with diabetes are advised to get flu shots. This is because any illness can make diabetes more difficult to control, and people with diabetes who do get the flu are more likely than others to go on to develop serious complications.

Myth: If you have type 2 diabetes and your doctor says you need to start using insulin, it means you're failing to take care of your diabetes properly.

Fact: For most people, type 2 diabetes is a progressive disease. When first diagnosed, many people with type 2 diabetes can keep their blood glucose at a healthy level with oral medications. But over time, the body gradually produces less and less of its own insulin and eventually oral medications may not be enough to keep blood glucose levels normal. Using insulin to get blood glucose levels to a healthy level is a good thing, not a bad one.

TAKING CARE OF DIABETES

Staying healthy and managing diabetes takes a lot of hard work. Self-management behaviors include:

- Eating healthfully
- Being physically active
- Taking your medications
- Monitoring your blood sugar to keep track of how you are doing
- Reducing other health risks by quitting smoking (if you smoke), and getting regular dental, eye, and foot care
- Learning problem-solving and coping skills

Your health care provider and team can assist you with these tasks. But, most of diabetes care depends on you. Learning more about how to take care of your diabetes is an important first step to living well with diabetes.

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PATIENT OUTCOMES/GOALS

By the end of the educational session, the client with diabetes will be able to:

- Define diabetes as too much sugar in the blood.
- State what is happening in their bodies when they have diabetes
- State that keeping their blood sugar close to the normal range over time may help them to prevent long-term complications associated with diabetes.
- Identify self-management behaviors and skills that they need to learn and practice.

CHW ACTIONS	PARTICIPANT ACTIONS
• Ask the participant what he/she knows about diabetes and what type of diabetes they have • Ask "what are your concerns about diabetes?" • Ask what he/she understands about the possible complications of diabetes and which causes the most concern. • Ask what types of behaviors they need to do every day to take care of their diabetes	• Identify what you know or have been taught about diabetes • Identify what concerns you the most or is the most difficult thing about living with diabetes • Read the handouts given to you about diabetes. • Write down questions to discuss with your health care provider at the next visit.

TOOLS/TEACHING AIDES

AIDES:

- None

HANDOUTS

1. **Module 1 Coversheet** ..... English | Spanish

2. **What is Diabetes?** ..... English | Spanish
   Source: Cass, Tiernan, A Diabetes –Self Management Program, Community Health Access Program (CHAP), Galveston County Health District, 11/2004.

3. **When You Find Out You Have Diabetes** ..... English | Spanish
   Source: Public Health – Seattle & King County

4. **Where do I begin? Living with Type 2 Diabetes** ..... English | Spanish
   Source: American Diabetes Association

5. **What am I ready to do?** ..... English | Spanish
   Source: Public Health – Seattle & King County

These materials were adapted from *Type 2 Diabetes: A Curriculum for Patients and Health Professionals,* American Diabetes Association, 2002.

6. **Action Plan**.....English | Spanish
   Source: Public Health – Seattle & King County

REFERENCES

Type 2 Diabetes: A Curriculum for Patients and Health Professionals, American Diabetes Association, 2002.

Living a Healthy Life with Chronic Conditions: Self-Management of Heart Disease, Arthritis, Diabetes, Asthma, Bronchitis, Emphysema and others. Lorig, K. et al. Bull Publishing Co. Palo Alto, California, 2000.

American Diabetes Association, www.diabetes.org

American Association of Diabetes Educators, www.diabeteseducator.org

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