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Introduction



Diabetes is a chronic (long-lasting) disease which affects how the body turns food into energy.

- There are three (3) main types of Diabetes:
 - Type 1
 - Type 2
 - Gestational Diabetes (Diabetes while pregnant)

Diabetes Statistics

In Pennsylvania:

- 89,179 people are diagnosed with diabetes every year
- 1,147,490 (11.1%) people have a diagnosis of diabetes
- An estimated 303,000 people have diabetes but don't know it
- 3,484,000 adult people (34.3%) have prediabetes
- In PA estimated costs for diabetes is \$12.9 billion/year

Nationally:

• Diabetes

- A total of 38.4 million people (all ages) have diabetes (11.6% of the US population)
- A total of 38.1 million (adults 18 years or older) have diabetes (14.7% of the US population)
- Undiagnosed: an estimated 8.7 million people do not know they have diabetes (22.8% of all US adults with diabetes)
- Diagnosed: an estimated 29.7 million people in the US (Including 29.4 million adults)

• Prediabetes

- A total of 97.6 million people aged 18 or older have prediabetes (38% of the adults US population)
- 48.8% aged 65 or older have prediabetes (27.2 million)



Types of Diabetes

Type 1

- Thought to be caused by an autoimmune reaction (the body attacking itself by mistake)
- Can be diagnosed at any age, and symptoms develop quickly.
- Requires insulin every day to survive.
- Approximately 5-10% people have type 1 diabetes

Type 2

- The body does not use insulin well and can't keep blood sugars at a normal range.
- It usually develops over many years and symptoms may not be noticed.
- Usually starts when you're an adult, though more and more children and teens are developing it.

Gestational Diabetes (Diabetes while pregnant)

- Usually goes away after you give birth. But increases the risk of developing type 2 diabetes later in life.

Complications associated with diabetes include heart disease, stroke, amputation, end-stage kidney disease, blindness—and death.

Symptoms of Diabetes

Symptoms that may include:

- Urinating (peeing) a lot, often at night
- Being very thirsty
- Losing weight without trying
- Being very hungry
- Having blurry vision
- Having numb or tingling hands or feet
- Feeling very tired
- Having very dry skin
- Having sores that heal slowly
- Having more infections than usual

Symptoms of *Type 1 Diabetes* (additional)

- Nausea, vomiting, or stomach pains

Symptoms of Type 2 Diabetes:

- May not be noticeable
- Can take several years to develop
 - *Know the risk factors and visit your doctor if you have any of them.*

Symptoms of *Gestational Diabetes*:

- Usually doesn't have any symptoms
- If you are pregnant, you should be tested for gestational diabetes between 24 and 28 weeks of pregnancy

Symptoms of Diabetes



feel very tired



very thirsty



very hungry



lose weight



high blood sugar



dizziness



blurred vision



urate a lot ,often at night



have sores that heal slowly



have numb or tingling hands or feet

Risk Factors and Impact

Type 1 Diabetes

- Family members (parent, brother, or sister) with type 1 diabetes.
- Age: usually occurs in children, teens, or young adults.

Type 2 Diabetes

- Have prediabetes.
- Overweight.
- 45 years or older.
- Family members (parent, brother, or sister) with type 2 diabetes.
- Are not physically active
- Have had gestational diabetes or gave birth to a baby > than 9 pounds.
- Non-alcoholic fatty liver disease
- African American, Hispanic or Latino, American Indian or Alaska Native are at higher risk.

Risk Factors and Impact

Gestational Diabetes

- Had gestational diabetes during a previous pregnancy.
- Have given birth to a baby who weighed over 9 pounds.
- Are overweight.
- Are more than 25 years old.
- Have a family history of type 2 diabetes.
- Have a hormone disorder called polycystic ovary syndrome (PCOS).
- African American, Hispanic or Latino, American Indian or Alaska Native are at higher risk.

Diabetes may impact the heart, kidneys, eyes, feet, and legs, including:

- High blood pressure (BP)
- Kidney disease/failure
- Vision Damage/Blindness caused by Diabetic Retinopathy
- Peripheral neuropathy

Tips for Taking Control:

- Lose extra weight (7% weight loss can reduce the risk of developing Diabetes)
- Being physically active can help you:
 - Loose weight, lower blood sugar, and boost insulin sensitivity.
 - Include exercises like:
 - Aerobic exercise 30 minutes or more (brisk walking, swimming, biking, or running).
 - Aim for at least 150 minutes a week.
 - Resistance exercise at least 2 -3 times/ week (weight-lifting, yoga, calisthenics).
 - Limit inactivity
 - Break up periods of sitting by taking a few minutes to stand, walk around or do some light activity every 30 minutes.

Prevention

Tips for Taking Control (cont.):

- Eat healthy plant foods
 - Eat a variety of healthy, fiber-rich foods including:
 - Fruits (tomatoes, peppers, and fruit from trees)
 - Non-starchy vegetables (leafy greens, broccoli, and cauliflower)
 - Legumes (beans, chickpeas, and lentils)
 - Whole grains (whole-wheat pasta / bread, whole-grain rice, whole oats, and quinoa)
- Eat healthy fats
 - Unsaturated fats (monounsaturated and polyunsaturated) promote healthy cholesterol and good heart/vascular health:
 - Olive, sunflower, safflower, cottonseed, and canola oils
 - Nuts and seeds, such as almonds, peanuts, flaxseed, and pumpkin seeds
 - Fatty fish, such as salmon, mackerel, sardines, tuna, and cod
- Skip fad diets and make healthier choices
 - For good food choices and smart portion sizes divide your plate into three parts:
 - One-half: fruit and non-starchy vegetables
 - One-quarter: whole grains
 - One-quarter: protein rich foods, such as legumes, fish, or lean meats

(Mayo Clinic, 2023)

Building healthy habits is key to living well, aging well, and managing long-term health conditions.

- Three steps to succeed:
 - Make a plan
 - Define why
 - Decide a long-term goal
 - Choose an action that is **SMART**:
 - S-specific
 - M-measurable
 - A-achievable
 - R-relevant
 - T-time bound

- Three steps to succeed (Cont.):
 - Be accountable
 - Track you progress to figure out what's working/not working
 - Social support to stay on track (walking partner, gym buddy, etc.)
 - Become part of support programs:
 - PHW Diabetes Disease Management
 - Diabetes self-management education and support (DSMES)
 - National Diabetes Prevention Program (National DPP)
 - Recognize your success
 - Find rewards to celebrate success and support your health goals
 - Know it is okay if things don't go as planned.

'Sometimes the biggest success to celebrate is picking yourself up and not giving up.'

Managing Diabetes

Partner with Your Healthcare Provider:

- Routine screening for diabetes for:
 - All adults ages 45 or older
 - People younger than 45 who are overweight/obese with 1 or more risk factors
 - People who have had gestational diabetes
 - People who have been diagnosed with prediabetes
 - Children who are overweight/obese with a family history of type 2 diabetes or other risk factors
- Regular visits to a physician for monitoring/management of diabetes, including:
 - Blood tests: Glycated hemoglobin (A1C) test shows the average blood sugar level for the past 2-3 months. **Goal is a A1C less than 8.0%**

(American Diabetes Association, 2023)



Managing Diabetes

Partner with Your Healthcare Provider (cont.):

- Ongoing monitoring of the heart, kidneys, eyes, feet, and legs by:
 - **Heart:**
 - Blood pressure (BP) is controlled (less than 140/90 mmHg)
 - High cholesterol management through diet and if needed a Statin medication
 - Quitting smoking helps to reduce your heart rate and risk of stroke
 - **Kidney:**
 - Yearly screening for kidney disease through blood and urine tests such as: Estimated glomerular filtration rate (eGFR) and Urine albumin-to-creatinine ratio (UACR)
 - **Eyes:**
 - See an eye doctor each year for a retinal eye exam.
 - **Legs/Feet**
 - Diabetes increases the risk of developing infections or ulcers of the feet. Inspect your feet for any sores or wounds to prevent ulcers

(American Diabetes Association, 2023)

- PHW Diabetes Disease Management provides telephonic outreach, education, and support services to optimize:
 - Blood glucose
 - Blood pressure
 - Lipid (cholesterol) control
 - Nutrition
 - Self-management skills
- To learn more about participant Diabetes Incentives and ‘Myhealthpays’ programs or make a referral:
 - Visit PAHealthWellness.com
 - Call participant services: 1-844-626-6813 (TTY:711)
 - Email: phwcasemanagement@pahealthwellness.com

Diabetes Management Resources



- **American Diabetes Association:**

- Website: <https://diabetes.org>
- Phone: **1-800-DIABETES (800-342-2383)**
- Email: askada@diabetes.org

- **Center for Disease Control (CDC), Diabetes:**

- Weblink: <https://www.cdc.gov/diabetes/index.html>
- Risk Factors Link: <https://www.cdc.gov/diabetes/basics/risk-factors.html>
- Learn More About Diabetes Link:
<https://www.cdc.gov/diabetes/basics/diabetes.html>
- Programs:
 - *Diabetes Self-Management Education and Support (DSMES)*
 - ❖ Weblink: [DSMES for People With Diabetes | Diabetes | CDC](#)
 - *National Diabetes Prevention Program*
 - ❖ Weblink: [National Diabetes Prevention Program | Diabetes | CDC](#)

Diabetes Management Resources



- **National Institute of Diabetes and Digestive and Kidney Diseases:**
 - Weblink: <https://www.niddk.nih.gov>
- **National Kidney Foundation:**
 - Weblink: <https://www.kidney.org>
 - Phone: **855-NKF-CARES (855-653-2273)**
- **Pennsylvania Department of Health, Diabetes:**
 - Weblink: <https://www.health.pa.gov>
 - Diabetes programs hyperlinks:
 - CDC's Diabetes Prevention Program
 - ❖ Weblink: <https://www.cdc.gov>
 - Find a Diabetes Prevention Program in PA, go to:
 - ❖ Weblink: <http://www.health.state.pa.us/diabetes map>
 - Then search by county

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