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# Safety Alert: Type 1 Diabetes

### What is Type 1 Diabetes?

Type 1 Diabetes is when your body does not make insulin. The body's immune system attacks and destroys the cells in the pancreas that make insulin. Type 1 diabetes (previously known as Juvenile Diabetes) is typically diagnosed in children and young adults, although can appear at any age. People with this type of diabetes need to take insulin every day.

Various factors may contribute to type 1 diabetes, including genetics and exposure to certain viruses. Type 1 diabetes has no cure, but with proper treatment, people with type 1 diabetes can expect to live a long, healthy life.



## Signs and Symptoms of Type 1 Diabetes

Signs and symptoms of Type 1 diabetes mirror signs and symptoms of type 2 diabetes. These can appear quickly and include:

- Increased thirst
- Frequent urination
- Bedwetting in children who previously didn't wet the bed during the night
- Extreme hunger



- Unintended weight loss
- Irritability and other mood changes
- Fatigue and weakness
- Blurred vision

# **Risk Factors of Type 1 Diabetes**

Although the exact cause for type 1 diabetes is unknown, there are some known risk factors to include:

- Family history- there is a slight increase in risk of developing the condition for anyone with a parent or sibling who has type 1 diabetes
- Genetics- Certain genes indicates an increased risk of developing type 1 diabetes
- Geography- The incidence of type 1 diabetes tends to increase as you travel away from the equator.
- Age- Type 1 diabetes can appear at any age, with two noticeable peaks. The first peak occurs in children ages 4 to 7 years old, and the second peak occurs in children between 10 and 14 years old.

## **Complications of Type 1 Diabetes**

Type 1 and Type 2 Diabetes have similar risk of complications. Diabetes can affect many major organs, including your heart, blood vessels, nerves, eyes and kidneys.

- <u>Heart and blood vessel disease</u>- Having diabetes can increase the risk of various cardiovascular problems, such as coronary artery disease with chest pain (angina), heart attack, stroke, narrowing of arteries (atherosclerosis), and high blood pressure
- <u>Nerve damage (Neuropathy)</u>- The walls of the tiny blood vessels (capillaries) that nourish your nerves can be injured with excess sugar in your blood, especially in the legs. This can cause tingling, numbress, burning or pain that usually begins at the tips of the toes or fingers and gradually spreads.
- <u>Kidney damage (Nephropathy)</u>- Diabetes can cause damage to the millions of tiny blood vessel clusters that filter waste from your blood. Severe damage can lead to kidney failure or irreversible end-stage kidney disease. This could eventually require dialysis or a kidney transplant.
- <u>Eye Damage</u>- Diabetes can cause diabetic retinopathy (damage to the blood vessels of the retina), which could potentially lead to blindness. Diabetes also increases the risk of other serious vision conditions, such as cataracts and glaucoma.



- <u>Foot Damage</u>- Nerve damage in the feet or poor blood flow to the feet increases the risk of various foot complications. Cuts and blisters can become serious infections, which may heal poorly. Severe damage may require amputation of toe, foot, or leg.
- Hearing Impairment
- <u>Skin Conditions</u>

# Managing Type 1 Diabetes

There are several elements to focus on when caring for your Type 1 Diabetes, and those include, blood glucose control and insulin management, exercise, nutrition, and support.

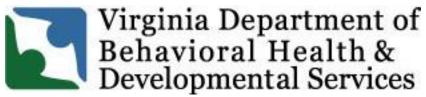
- <u>Blood Glucose Control and Insulin Management</u>- Receiving the diagnosis of type 1 diabetes means your pancreas is no longer capable of producing insulin. With that, you must monitor your blood glucose levels and appropriately administer your insulin, via multiple daily injections with insulin pens or syringes.
- <u>Exercise</u>- Daily activity and exercise is very important in management of type 1 diabetes. The body responds to daily activities and exercise with more stable blood glucose levels, along with all the other benefits you receive from being active.
- <u>Nutrition</u>- A proper understanding of a proper diet is very important when managing type 1 diabetes. Different foods have different effects on your blood glucose, and developing a meal plan suitable to your body's needs is a crucial aspect of care.
- <u>Support</u>- It is important to surround yourself with a supportive community when managing type 1 diabetes. Utilizing resources, such as <u>https://community.diabetes.org/home</u>, can allow you to connect to others in the diabetic community. There you can share ideas on how to effectively develop a proper diet or new ways to maintain your activity levels, for example.

## **Insulin Administration**

Insulin is a HIGH RISK, HIGH ALERT medication. This means that this medication has a heightened risk of causing significant harm. If you are administering insulin, you must have completed medication aide certification. It is important to remember that when administering insulin products you have proper equipment along with the correct type of insulin per Doctor's order.

## **Recommendations**

Awareness of risk is important. Be alert to symptoms of changes in a person's health status and seek guidance from a health professional for any changes. With a change in any person's health status, that results in acute care through an ED visit, Urgent Care visit, or hospitalization, be sure



to follow up on any recommended changes from the PCP or licensed provider. You should also consider including the following in the individuals care plan:

- Attend regular appointments with a health care provider including specialists, as recommended.
- Attend a diabetic education class or program at your local hospital or health care facility
- Consult with a Dietitian or Nutritionist (as prescribed by a health care provider) for meal planning. They can often help you establish or modify your existing menus to meet the person's needs and wants.
- Consult with a Physical or Recreational therapist under Therapeutic Consultation to assist in developing a plan for regular physical activity after discussing with health care provider.
- Maintain a proper schedule for checking blood sugars, drinking water and other fluids, eating meals and snacks and taking medications to help control blood sugar levels.
- Follow all protocols and guidance from health professionals.
- Assure competency of the staff for implementing all recommendations made by health care providers.

## **Resources**

https://www.cornerstones4care.com

http://www.diabetes.org/