

# SAMHS INFO BULLETIN



Compiled by Corporate Communication

## WORLD DIABETES DAY 14 NOVEMBER 2012

Diabetes is a chronic disease that arises when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. Insulin is a hormone made by the pancreas that enables cells to take in glucose from the blood and use it for energy. Failure to produce insulin, or of insulin to act properly, or both, leads to raised glucose (sugar) levels in the blood (hyperglycemia). This is associated with long-term damage to the body and failure of various organs and tissues.

### **There are three main types of diabetes:**

**Type 1 diabetes** is sometimes called insulin-dependent, immune-mediated or juvenile-onset diabetes. It is caused by an auto-immune reaction where the body's defence system attacks the insulin-producing cells. The reason why this occurs is not fully understood. People with type 1 diabetes produce very little or no insulin. The disease can affect people of any age, but usually occurs in children or young adults. People with this form of diabetes need injections of insulin every day in order to control the levels of glucose in their blood. If people with type 1 diabetes do not have access to insulin, they will die.

**Type 2 diabetes** is sometimes called non-insulin dependent diabetes or adult-onset diabetes, and accounts for at least 90% of all cases of diabetes. It is characterised by insulin resistance and relative insulin deficiency, either of which may be present at the time that diabetes becomes clinically manifest. The diagnosis of type 2 diabetes usually occurs after the age of 40 but can occur earlier, especially in populations

with high diabetes prevalence. Type 2 diabetes can remain undetected for many years and the diagnosis is often made from associated complications or incidentally through an abnormal blood or urine glucose test. It is often, but not always, associated with obesity, which itself can cause insulin resistance and lead to elevated blood glucose levels.

**Gestational diabetes (GDM)** is a form of diabetes consisting of high blood glucose levels during pregnancy. It develops in one in 25 pregnancies worldwide and is associated with complications in the period immediately before and after birth. GDM usually disappears after pregnancy but women with GDM and their offspring are at an increased risk of developing type 2 diabetes later in life. Approximately half of women with a history of GDM go on to develop type 2 diabetes within five to ten years after delivery.

## **WARNING SIGNS OF DIABETES**

Individuals can experience different warning signs, and sometimes there may be no obvious warning, but some of the signs of diabetes are commonly experienced:

- Frequent urination
- Excessive thirst
- Increased hunger
- Weight loss
- Tiredness
- Lack of interest and concentration
- Vomiting and stomach pain (often mistaken as the flu)
- A tingling sensation or numbness in the hands or feet
- Blurred vision
- Frequent infections
- Slow-healing wounds

The onset of type 1 diabetes is usually sudden and dramatic while the symptoms can often be mild or absent in people with type 2 diabetes, making this type of diabetes gradual in onset and hard to detect.

If you show these signs, consult a health professional.

## **Prevention**

At present, type 1 diabetes cannot be prevented. The environmental triggers that are thought to generate the process that results in the destruction of the body's insulin-producing cells are still under investigation. Type 2 diabetes, however, can be prevented in many cases by maintaining a healthy weight and being physically active at least three times per week.

IDF recommends that all people at high risk of developing type 2 diabetes be identified through opportunistic self-screening. People at high risk can be easily identified through a simple questionnaire to assess risk factors such as age, waist circumference, family history, cardiovascular history and gestational history.

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