



# Addressing the Challenges of Non-communicable Diseases: *Diabetes*

*“Non-communicable diseases have emerged as growing health problems for countries in every corner of the globe.”*  
- U.S. Secretary of Health and Human Services Kathleen Sebelius

## GLOBAL BURDEN

Non-communicable diseases (NCDs), including diabetes, represent an urgent and growing global public health emergency. NCDs, in addition to other chronic diseases such as stroke, are a critical challenge for countries all around the world and at every stage in development.

According to the most recent statistics, more than 346 million people worldwide have diabetes. In 2004, about 3.4 million people died from consequences of diabetes, but because diabetes is often underreported as the underlying cause of death, that figure is likely higher. Developing countries are least equipped to deal with diabetes-related challenges and face a disproportionate burden; in fact, at least 80% of diabetes deaths occur in low- and middle-income countries. WHO projects that diabetes deaths will double between 2005 and 2030 as the world’s population continues to engage in unhealthy habits. Diabetes is associated with long-term complications that can lead to blindness, heart and blood vessel disease, stroke, kidney failure, amputations, and nerve damage.

## WHAT IS DIABETES?

Diabetes is a chronic disease of metabolism. It occurs when the pancreas does not produce a sufficient amount of insulin – the hormone that regulates blood sugar in the body – and/or cells do not respond appropriately to the insulin produced. Chronic high blood sugar, or hyperglycemia, can seriously damage many of the body’s systems.

There are three major types of diabetes: type 1, type 2, and gestational. Over 90% of people with diabetes

### Major diabetes risk factors:

- Physical inactivity
- Excess weight
- Family history
- Ethnicity
- Gestational Diabetes

worldwide have type 2 diabetes, which is closely related to overweight and inactivity.

Some women develop gestational diabetes during pregnancy.

Although this form of diabetes often disappears after pregnancy, women who have had gestational diabetes have a 35-60% chance of developing type 2 diabetes within 10 to 20 years.

## RISK FACTORS

Both genetic and lifestyle factors contribute to diabetes. Family history of diabetes, inactivity, overweight, and older age are significant risk factors. Losing even a small amount of weight can decrease risk.

Tobacco usage can be especially harmful to people who already have diabetes because it can lead to additional complications such as blindness and heart disease.

## SCREENING AND TREATMENT

The symptoms of type 2 diabetes, which include increased thirst, weight change, and fatigue, tend to develop gradually. Moreover, many people do not experience symptoms. A variety of blood glucose tests can be used to diagnose diabetes and pre-diabetes.

Treatment for type 2 diabetes involves control of blood sugar, blood pressure, and cholesterol. Increased activity and a healthy diet can help control diabetes, but medication may be needed. To avoid serious complications, patients must make their treatment plan part of their daily routine. Successfully managing diabetes can also help prevent the onset of other NCDs such as heart disease and stroke.