



World Diabetes Day 2024

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Abstract

World Diabetes Day (WDD) is the main global awareness campaign dedicated to diabetes mellitus, held annually on [November 14](https://www.worlddiabetesday.org/)[1]

World Diabetes Day, initiated by the International Diabetes Federation (IDF) and WHO, is a testament to our ongoing commitment to the fight against diabetes. Each World Diabetes Day focuses on a diabetes-related theme. Type 2 diabetes, a non-communicable disease rapidly increasing in numbers worldwide, can be prevented. Type 1 diabetes, unfortunately, is not preventable but can be managed with [insulin injections](https://www.worlddiabetesday.org/) [2]. The day also includes discussions on human rights, NCDs and lifestyle, obesity, diabetes in the LMIC and the vulnerable, and diabetes in children and adolescents. The campaigns, which run year-round, ensure that we are constantly engaged in the fight against diabetes, not just on November 14, but every day of the year. The day marks the birthday of Frederick Banting, who, along with Charles Best, first conceived the idea that led to [insulin's discovery](https://www.worlddiabetesday.org/) in 1922[3]

History



Figure 1: World Diabetes Day on 14th Nov 2024 at Vimla Group, Kanpur

[Himeji Castle](https://www.worlddiabetesday.org/) lit up for WDD on World Diabetes Day on 14 November 2008

World Diabetes Day, a global initiative started in 1991 by the [International Diabetes Federation](https://www.idf.org/) and the [World Health Organization](https://www.who.int/) (WHO), was a response to the alarming rise in diabetes cases worldwide. This initiative has since united people from all corners of the globe, fostering a sense of global unity in the fight against [diabetes](https://www.worlddiabetesday.org/).

The General Assembly's resolution, adopted at the UN on 20 December 2006 A/61/L.39/Rev.1 / Add.1, was a significant step in the endorsement of World Diabetes Day. This resolution, numbered 61/225, officially established World Diabetes Day, [further highlighting the global concern about the rapid increase in diabetes cases](#). It's important to be aware of these global initiatives and resolutions to understand the severity of the issue. By 2016, over 230 IDF Member Associations in more than 160 countries and [territories](#) actively participated in World Diabetes Day. This global movement is a testament to the widespread support for the cause, with diverse participants, from international organizations and companies to healthcare professionals, politicians, celebrities, and, most importantly, people with diabetes and their loved ones.

1. Physical Fitness/well-being; 2. Societal fitness/well-being; 3. Mental Fitness/well-being

- 2021–2023: Access to Diabetes Care/Facilities.
- 2020: The Nurse and Diabetes/ HCPS.
- 2018–2019: The Family and Diabetes – diabetes concerns every family/ near and dear
- 2017: Women and diabetes/ our right to a healthy future/Societies
- 2016: Eyes on Diabetes.
- 2015: Healthy Eating.
- 2014: Go Blue for [Breakfast](#).
- 2013: Protect our Future: Diabetes [Education](#) and Prevention



Around the world, **536.66 million** adults were living with diabetes in 2021, Which will be 592 million by 2035, which was 108 million in 1980. The global prevalence of diabetes has twice risen from 4.7% to 8.5% in the adult population, which indicates increased risk factors; overweight, obesity, and other risk factors for NCDs. Over the past two decades, diabetes prevalence growth has been twice that of low- and middle-income countries compared to high-income nations.

Diabetes major complications of blindness, kidney failure, heart attack, stroke, and lower limb amputation are well recognized. A healthy diet low in carbohydrates, physical activity, and avoiding tobacco consumption can help prevent or delay type 2 diabetes. Moreover, diabetes can be treated, and its complications may be delayed or delayed with medication, regular screening, and treatment for complications.

The General Assembly adopted resolution [61-225](#) in 2007, fixing 14 November as WDD World Diabetes Day. The statement recognized "the immediate need to follow multilateral efforts to prevent, promote, and protect human health and provide access to treatment and healthcare education."

The resolution also motivates Nations and states to develop national health policies for the prevention/control, treatment, and health management of diabetes in line with the [sustainable development](#) SDGs of their healthcare systems.

Diabetes and well-being

Diabetes and well-being are the theme for World Diabetes Day 2024-26.

With appropriate access to diabetes care and support for their well-being, everyone with diabetes can live well. Millions of people with diabetes face daily challenges managing their condition at home, work, and school. They must be resilient, organized, and responsible, which impacts their physical and mental well-being. Diabetes care often focuses only on blood sugar, leaving many overwhelmed. This World Diabetes Day, 14 November, let's put well-being at the heart of diabetes care and start the change for a better diabetes life.

Background

Diabetes is an NCD/chronic disease that occurs when insulin resistance develops, the pancreas does not produce enough insulin, or the body does not effectively use it. This leads to an increased glucose concentration in the blood (hyperglycaemia).

Type 1 diabetes/ previously known as IDDM insulin-dependent or childhood-onset diabetes, is due to a lack of insulin secretion.

Type 2 diabetes/formerly called NIDDM, non-insulin-dependent, or adult-onset diabetes) is caused by the body's dysfunctional utilization of insulin. It results from increased body weight and physical inactivity.

Gestational diabetes is hyperglycaemia that is first recognized during pregnancy.

[Global Diabetes Walk](#) from World Diabetes Foundation

As per IDF atlas 2021 With over **537 million adults living with diabetes worldwide**, a number predicted to rise to 783 million by 2045, it's more important than ever to spread awareness about this disease.

Diabetes affects people from all walks of life. However, it is particularly prevalent in low- and middle-income countries (LMICs) where more than 75% of people living with diabetes reside, and where access to healthcare and health education may be limited.

The Global Diabetes Walk is organised by [World Diabetes Foundation](#), a leading funder of diabetes prevention and care projects in LMICs, in line with its [Primary Prevention](#) intervention area.

The Walk is a contribution to the annual International Diabetes Federation campaign for World Diabetes Day, on 14 November.

In 2024, we celebrate 20 years of raising awareness together.

Since 2004, **more than 6 million people have joined the Walk**, making it a powerful force for change in the fight against diabetes. Our mission is to inspire people around the world to act and get walking for diabetes awareness.

We believe that everyone has a role to play. Whether you are an individual, a family, a community, or an organisation, you can make a difference by getting involved in the Global Diabetes Walk.



Figure 2 The theme for World Diabetes Day 2024-2026 is [Diabetes and well-being](#). As a result, the Walk campaign this year will highlight the benefits of exercise for the physical, societal and mental well-being of people at risk or living with diabetes [4]

Key facts

- **The number of people with diabetes increased from 108 million in 1980 to 536.66 million in 2022. Prevalence has increased many times more rapidly in low- and middle-income countries than in high-income countries in developed economies.**
- **Diabetes complications of blindness, kidney failure, heart attacks, stroke, and lower limb amputation are major health problems.**
- **Between 2000 and 2021, a 3% increase in diabetes death rates by age.**
- **In 2019, diabetes and CKD kidney disease due to diabetes resulted in an estimated 2 million deaths.**
- **A healthy diet, regular physical activity, maintaining normal weight, and avoiding tobacco use can delay or prevent the start of type 2 diabetes.**
- **Diabetes can be managed, and its complications avoided or delayed with a healthy diet, physical activity, holistic treatment, and regular screening and treatment for complications.**

Overview

Diabetes is a chronic NCD condition that occurs when the pancreas does not produce enough insulin, or the body cannot effectively use it. Insulin is a hormone that regulates blood glucose in the body. Hyperglycaemia, also called raised blood glucose or high blood sugar, is a usual effect of uncontrolled blood glucose and, over time, can damage many of the body's organs, including the nervous system.

By 2014, 8.5% of adults aged 18 years and higher had diabetes. By 2019, diabetes resulted in the direct cause of 1.5 million deaths, out of which 48% of all causes of mortality due to diabetes occurred before the age of 70 years. Around 460,000 Chronic kidney disease deaths were caused by diabetes, and high blood glucose causes around 20% of cardiovascular deaths (1).

Between 2000 and 2019, age-standardized mortality rates from diabetes rose by 3%. In lower-middle-income countries, the mortality rate due to diabetes increased by 13%. In contrast, the chances of death from any one of the 4 main noncommunicable diseases (NCDs)—cardiovascular diseases (CVD), cancer, CRD, chronic respiratory diseases, and diabetes—between the ages of 30 and 70 decreased by 22% globally between 2000 and 2019.

Symptoms

Symptoms of diabetes occur suddenly/ In type 2 diabetes, the symptoms can be mild to moderate or may take years to be noticed.

The main Symptoms of diabetes DM include:

- feeling of thirsty
- Increased frequency and needing to urinate more than usual
- blurring of vision
- feeling of tired
- losing weight constantly

With time, diabetes may damage blood vessels around the heart, eyes, and nerves.

People with diabetes have a higher risk of heart attack, stroke, and kidney disease.

Diabetes can cause vision loss by affecting vessels in the eyes.

Many people with diabetes develop complications with their feet from nerve damage and restricted blood flow, which can cause foot ulcers and may lead to amputation.

Type 1 diabetes

Type 1 diabetes IDDM/previously known as insulin-dependent, juvenile, or childhood) is characterized by a lack of insulin secretion and requires routine insulin administration. In 2018, there were 10 million people with type 1 diabetes; the majority of them live in HIC high-income countries.

****Type 2 Diabetes**** Type 2 diabetes affects how your body uses sugar (glucose) for energy. If not treated, it impairs the body's ability to use insulin effectively, leading to high blood sugar levels. Over time, type 2 diabetes can cause serious damage to the body, particularly to nerves and blood vessels. Type 2 diabetes is often preventable. Factors that contribute to the development of type 2 diabetes include being overweight, insufficient exercise, and genetic predisposition. Early diagnosis is crucial for preventing severe effects associated with this condition. The best way to detect diabetes early is through regular check-ups and blood tests with a healthcare provider. Symptoms of type 2 diabetes can be mild and may take several years to become noticeable. They may resemble those of type 1 diabetes but are often less pronounced, which can result in a delayed diagnosis, sometimes until complications have already developed. More than 95% of people with diabetes have type 2 diabetes, which was formerly referred to as non-insulin-dependent or adult-onset diabetes. While it was previously seen mainly in adults, it is also increasingly diagnosed in children.

****Gestational Diabetes**** Gestational diabetes is started by elevated blood glucose values that are above normal but not high enough to be classified as diabetes. It occurs during Women's pregnancy. Women with GDM gestational diabetes have a higher risk of complications during pregnancy and delivery. Additionally, both these women and their children may encounter increased risks of developing type 2 diabetes later on. Gestational diabetes is diagnosed through prenatal screening rather than blood glucose and symptoms.

****Impaired Glucose Tolerance IGT and Impaired Fasting Glycemia IFG**** Impaired glucose tolerance (IGT) and impaired fasting glycemia (IFG) lie between normal glucose metabolism and diabetes. Individuals with IGT or IFG are at raised risk of conversion to type 2 diabetes, although this progression is not guaranteed.

****Prevention**** Lifestyle changes are the most effective procedure to prevent or control the onset of type 2 diabetes. To help prevent type 2 diabetes and its complications, individuals must achieve and maintain a healthy body weight. - To stay physically active, moderate exercise at least 30-45 minutes daily. - Follow a healthy diet, avoiding excessive carbohydrates and saturated fats. - Refrain from smoking tobacco. ****Diagnosis and Treatment**** Early diagnosis can be facilitated through inexpensive blood glucose testing. Individuals with type 1 diabetes require insulin injections for survival. A very important main strategy for managing diabetes is maintaining a healthy lifestyle. Some individuals with type 2 diabetes may need medications to help manage their dysglycemia sugar levels. These can include insulin injections or other drugs, such as: - Metformin - Sulfonylureas - Sodium-glucose co-transporters type 2 (SGLT-2) inhibitors. In addition to medications aimed at lowering blood sugar, individuals with diabetes often require medications to manage blood pressure and statins to reduce the risk of complications. Additional medical care may be necessary to address the effects of diabetes, which can include: - Foot care to treat ulcers - Screening and treatment for kidney disease - Eye exams to check for retinopathy, which can cause blindness

****WHO Response**** The World Health Organization (WHO) aims to promote and support effective methods for the surveillance, prevention, and control of diabetes and its complications, especially in low- and middle-income countries. To achieve this, WHO: - Provides scientific guidelines for preventing major NCDs and noncommunicable diseases, including diabetes. - Start methods, MS, and standards for diabetes diagnosis and care. - Raise awareness about the global diabetes epidemic, particularly on World Diabetes Day (14 November). - execute surveillance of diabetes and its risk factors. In April 2021, WHO Introduced the Global Diabetes Compact, an initiative focused on improving diabetes prevention and care in low- and middle-income countries. In May 2021, the WHA World Health Assembly endorsed a resolution to strengthen diabetes prevention and control efforts. By May 2022, the assembly endorsed five global targets for diabetes coverage and treatment to be reached by 2030.



New WHO draft recommendations and coverage targets for diabetes



On January 26 and 27, the 150th session of the [WHO Executive Board issued a report](#) by the DG Director General on the political declaration of the third high-level meeting of the General Assembly on preventing and controlling NCDs' noncommunicable Conditions[5]

This includes document recommendations for MS Member Nations States, international Collaborators, and WHO to strengthen and monitor diabetes responses within national NCD programs by enhancing national capacity, lowering prevention of risk factors, strengthening health systems through PHCs healthcare and Universal health coverage UHC, supporting for high-quality new research, and monitoring, control trends, determinants.

The Documents also cover a proposed set of diabetes people coverage Goals to be achieved by 2030:

80% of the population living with diabetes is diagnosed

80% of the population with screened, diagnosed diabetes have fairly good control of glycemia

80% of the population with screened, diagnosed diabetes have fairly good control of BP

60% of the population over >40 years with diabetes receive lipid-lowering drugs

100% of the population with type 1 diabetes have access to affordable insulin management and blood glucose self-monitoring

While these targets are not flawless, and the IDF would have liked to see a target of 100% diagnosis of children living with type 1 diabetes, we believe they provide a very strong direction for Member Nations States to act on diabetes in the present decade by a core area of the [WHO Global Diabetes Compact](#) [5.6]

These draft diabetes recommendations and targets will be voted upon at the 75th World Health Assembly (22-28 May 2022).

Figure 3: Second "Dialogue with IDF experts" held in Shanghai

05 September 2024



Building on the success of the event in Beijing on 1 June, the IDF School of Diabetes and the Beijing Medical and Health Foundation organized a second “Dialogue with IDF Experts” capacity-building session on 31 August in Shanghai, China. During the session, 120 healthcare professionals learned the latest research and developments on weekly insulin therapy.

Renowned experts, Professor Alice Cheng (Canada), Professor Weigang Zhao (China), Professor Julia Mader (Austria), and Professor Harpreet Bajaj (Canada), present at the event with their insightful presentations on insulin therapy, research advancements, scientific evidence, and the clinical application of once-weekly insulin.

Professor Tianpei Hong (China) chaired a dynamic panel discussion and an engaging Q & A session, create an atmosphere of active learning and knowledge exchange, where every participant felt engaged and part of the learning process.

The event received high praise from both attendees and speakers for its high-quality academic content and the engaging topics presented. The speakers were particularly impressed by the top-level organization and the enthusiastic engagement of the audience.

This session underscores the IDF International Diabetes Federation’s present involvement to developing diabetes healthcare globally through expert-led education and meaningful collaboration, providing the audience with a sense of reassurance and confidence in the future of diabetes care.

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