

Diabetes

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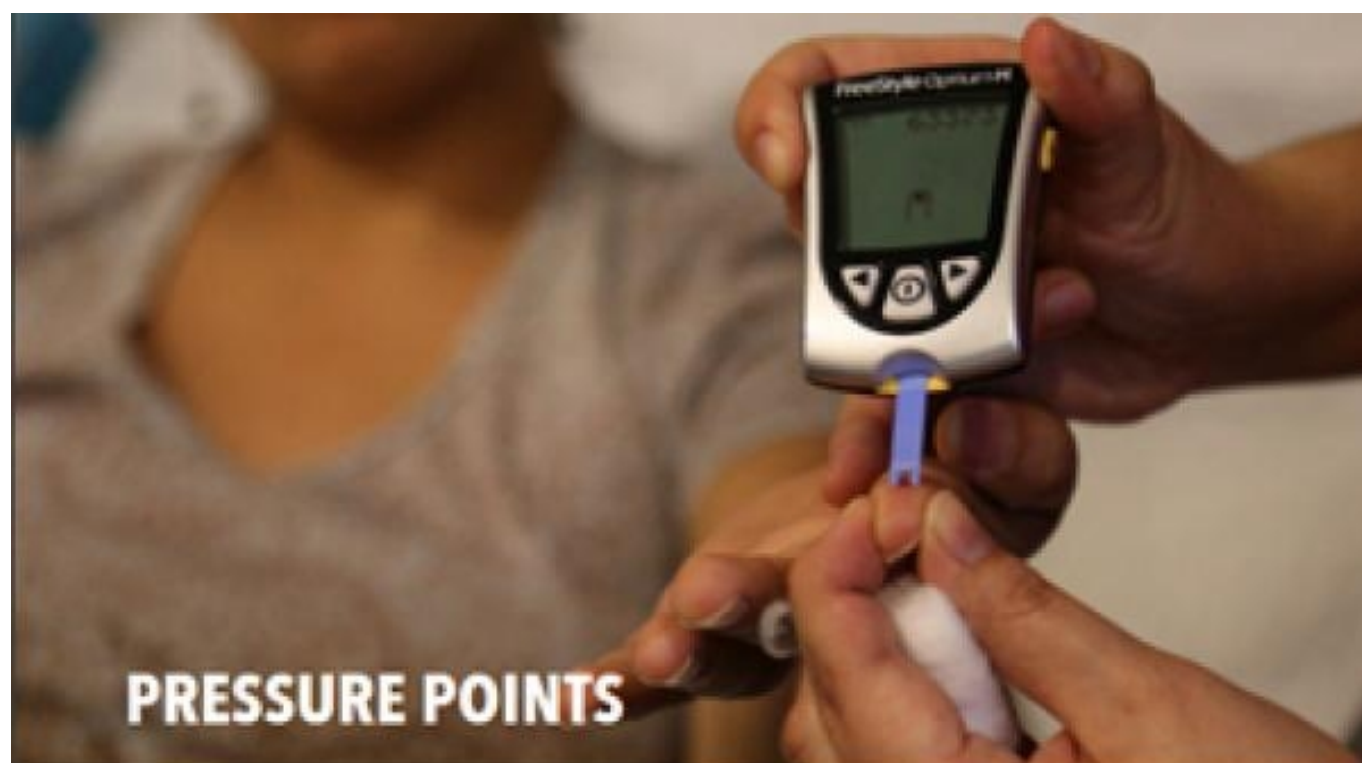
Diabetes



2015 Bagooduth Kallooa, Photoshare. A Diabetic Specialist Nurse in Port Louis, Mauritius, teaches a patient simple limb exercises.

Language English

Diabetes is one of the world's most common diseases and a leading cause of death. As diabetes rates increase year-on-year, access to treatment and care is a major global health challenge.



PRESSURE POINTS

Call for simultaneous **ACTION ON DIABETES AND HYPERTENSION** for more resilient health systems

Fast Facts

- Diabetes is a chronic disease that occurs when the pancreas is no longer able to make insulin, or when the body cannot make good use of the insulin it produces.
- Around one in 10 people live with diabetes around the world. This number is predicted to rise from 537 million adults to 643 million and 784 million adults by 2030 and 2045. The large majority of these people live in low- and middle-income countries.
- A century after its discovery, insulin and other life-saving supplies and medicines are not accessible to many of the people who need them. This must change.
- Diabetes is linked to a number of other serious health problems – including overweight and obesity, hypertension, cardiovascular disease and stroke.
- World Diabetes Day falls on 14 November every year. The focus of World Diabetes Day 2021-23 is Access to Diabetes Care. We are at a critical moment to take the steps needed.

What is diabetes?

Diabetes is a chronic disease that occurs when the pancreas is no longer able to make insulin, or when the body cannot make good use of the insulin it produces. Insulin is a hormone made by the pancreas, that acts like a key to let glucose from the food we eat pass from the blood stream into the cells in the body to produce energy.

There are three main types of diabetes:

- Type 1 diabetes can develop at any age, but occurs most often in [children](#) [1] and adolescents. At present, type 1 diabetes cannot be prevented.
- Type 2 diabetes tends to develop in adulthood and accounts for around 90% of all diabetes cases. Type 2 diabetes can often be managed or prevented with a healthy lifestyle, including increased [physical activity](#) [2] and [healthy diet](#). [3]
- Gestational diabetes (GDM) is a type of diabetes that consists of high blood glucose during pregnancy and is linked with complications to both mother and child.

Diabetes is now among the top 10 causes of death worldwide – deaths from diabetes have increased by 70% since 2000. Around one in ten people live with diabetes around the world. This number is predicted to rise from 537 million adults to 643 million and 784 million adults by 2030 and 2045. The large majority of these people live in low- and middle-income countries.

What are the risk factors for diabetes and how can it be prevented?

At present, type 1 diabetes cannot be prevented. While there are a number of factors that influence the development of type 2 diabetes, it is evident that the most influential are lifestyle behaviours commonly associated with urbanisation. These include consumption of unhealthy foods and inactive lifestyles with sedentary behaviour.

Taking a life course perspective is essential for preventing type 2 diabetes and its complications. Early in life, when eating and physical activity habits are established, there is an especially critical window to prevent the development of overweight and reduce the risk of type 2 diabetes. Diabetes risk is also affected by socio-economic status – groups with less income tend to have more diabetes. This is true within countries, and between them.

Diabetes co-morbidities

People with diabetes have an increased risk of developing a number of other serious health problems. At the time of their type 2 diabetes diagnosis, 75% of people had at least one additional chronic condition and 44% had at least two other conditions. This is because many chronic conditions share key risk factors with diabetes, like obesity, vascular inflammation, and high cholesterol.

These are some of the conditions that most often affect people who are also living with diabetes:

Cardiovascular disease [4]: Cardiovascular disease is the most common cause of death in people with diabetes. High blood pressure, high cholesterol, high blood glucose and other risk factors contribute to increasing the risk of cardiovascular complications. [Learn more about diabetes and CVD](#) [5].

Kidney disease (diabetic nephropathy): Kidney disease is much more common in people with diabetes than in those without diabetes. Maintaining near normal levels of blood glucose and blood pressure can greatly reduce the risk of kidney disease. [Learn more about diabetes and the kidneys](#) [6].

Nerve disease (diabetic neuropathy): Diabetes can cause damage to the nerves throughout the body when blood glucose and blood pressure are too high, in particular in the feet. This can lead to pain, tingling, and loss of feeling. People with diabetes carry a risk of amputation that may be more than 25 times greater than that of people without diabetes. People with diabetes should regularly examine their feet. [Learn more about the diabetic foot](#). [7]

Eye disease (diabetic retinopathy): Most people with diabetes will develop some form of eye disease (retinopathy) causing reduced vision or blindness. It can be managed through regular eye checks and keeping glucose and lipid levels at or close to normal. [Learn more about diabetes and the eye](#). [8]

Pregnancy complications: Women with any type of diabetes during pregnancy risk a number of complications if they do not carefully monitor and manage their condition. Children who are exposed for a long time to high blood glucose in the womb are at higher risk of developing diabetes in the future. [Learn more about diabetes in pregnancy](#) [9].

Oral complications: People living with diabetes have an increased risk of inflammation of the gums (periodontitis) if blood glucose is not properly managed. Periodontitis is a major cause of tooth loss and is associated with an increased risk of cardiovascular disease (CVD).

Diabetes Access in 2021: 100 years since the discovery of insulin

Insulin was developed 100 years ago – yet half of the people who need this life-saving medicine do not have access to it.

This challenge is more severe in low- and middle-income countries

- In Africa, 86% of people with type 2 diabetes are unable to access the insulin they need.
- 63% of households in low-income countries are unable to afford insulin, compared with 2.8% of households in high-income countries.
- 26.9% of households in low-income countries, and 0.7% of households in high-income countries, cannot afford the diabetes medication Metformin.

It is KEY that national essential healthcare packages include diabetes treatment to avoid pushing the poor further into poverty by being forced to pay medical expenses out-of-pocket:

Diabetes in global health

Diabetes-related health costs are now estimated to account for 11.5% of the total global healthcare budget. As 784 million people (1 in 8) are projected to have diabetes by 2045, it is essential that more efforts are made to implement type 2 diabetes prevention plans and to introduce more cost-effective ways to manage the different types of diabetes.

Every US \$1 invested in NCD prevention and control in low- and middle-income countries (LMICs) will yield a return of US \$7 by 2030, while the costs of inaction are far higher – and must in the future reflect the learnings from the COVID-19 pandemic, and the costs of inaction on NCDs in terms of population and health system vulnerability to future health threats. Catalytic development assistance funding will be vital to support governments in LMICs to provide these essential services and strengthen integrated health systems.

Policy measures to reduce the burden of diabetes

These are the top measures for helping populations choose healthier diets.

Marketing bans: Unhealthy food marketing takes advantage of the vulnerabilities of children and adolescents, and cutting this kind of advertising out has been shown to make a big difference in countries including Canada, Chile, the UK, Sweden, South Korea, Taiwan, and Mexico.

Front-of-pack nutrition labels: These labels clearly warn of high content of unhealthy ingredients like fats, sugar, and salt. Front-of-pack labelling systems have now been implemented in more than 30 countries (where governments have led and supported their development), and systems are under development in many other countries.

Taxes on sugar-sweetened beverages and subsidies on fruit and vegetables: Over 50 countries have introduced sugar-sweetened beverage taxes and robust evidence confirms a drop in consumption following the tax's introduction. A similar concept has been applied successfully to fruits and vegetables, but in this case, they are made more affordable through subsidies.

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Product reformulations: Lowering the unhealthy ingredients in foods – sugar, salt, saturated and trans fats – without reducing healthy nutrients, can make a big difference to health. England, the Netherlands, Australia have all seen successes thanks to reformulations.

Page Sources:

- [IDF Diabetes Atlas \[Accessed November 2021\]](#) [10]
- ['About Diabetes' International Diabetes Federation \[Accessed November 2021\]](#) [11]
- ['Diabetes Factsheet' World Health Organization \[Accessed November 2021\]](#) [12]
- ['Pressure Points: Action on Diabetes and Hypertension' NCD Alliance \[Accessed November 2021\]](#) [13]

Date of last review: November 2021

Related Resource: [Pressure Points: Call for simultaneous action on diabetes and hypertension for more resilient health systems](#) [14]

Related Content: [New WHO report highlights the alarming state of global access to insulin and diabetes care](#) [15]

[diabetes](#) [16]

[World Diabetes Day](#) [17]

Panel Image

Link: <https://ncdalliance.org/resources/pressure-points-call-for-simultaneous-action-on-diabetes-and-hypertension-for-more-resilient-health-systems>

Panel Image Link Text: Action on Diabetes and Hypertension

Search Keywords: Diabetes, NCDs

Tag feed: [World Diabetes Day](#) [17]

Source URL: <https://old.ncdalliance.org/why-ncds/ncds/diabetes>

Links

[1] <https://ncdalliance.org/why-ncds/ncds-and-sustainable-human-development/children-and-youth>

[2] <https://ncdalliance.org/why-ncds/risk-factors-prevention/physical-activity>

[3] <https://ncdalliance.org/why-ncds/ncd-prevention/unhealthy-diets-malnutrition>

[4] <https://ncdalliance.org/why-ncds/ncds/cardiovascular-diseases>

[5] <https://www.idf.org/our-activities/care-prevention/cardiovascular-disease.html>

[6] <https://www.idf.org/our-activities/care-prevention/diabetes-and-the-kidney.html>

[7] <https://www.idf.org/our-activities/care-prevention/diabetic-foot.html>

[8] <https://www.idf.org/our-activities/care-prevention/eye-health.html>

[9] <https://www.idf.org/our-activities/care-prevention/gdm.html>

[10] <https://diabetesatlas.org/>

[11] <https://idf.org/aboutdiabetes/what-is-diabetes.html>

[12] <https://www.who.int/news-room/fact-sheets/detail/diabetes>

[13] <https://ncdalliance.org/resources/pressure-points-call-for-simultaneous-action-on-diabetes-and-hypertension-for-more-resilient-health-systems>

[14] <https://old.ncdalliance.org/resources/pressure-points-call-for-simultaneous-action-on-diabetes-and-hypertension-for-more-resilient-health-systems>

[15] <https://old.ncdalliance.org/news-events/news/new-who-report-highlights-the-alarming-state-of-global-access-to-insulin-and-diabetes-care>

[16] <https://old.ncdalliance.org/category/tags/diabetes>

[17] <https://old.ncdalliance.org/taxonomy/term/288>