WHO issues its first-ever guidelines on type 1 diabetes in adults

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News

On World Diabetes Day, 14 November 2026, the World Health Organization (WHO) released its first-ever guidelines on diagnosing and managing type 1 diabetes in adults. They contain 14 recommendations – one strong and 13 conditional – and apply also to low-resource, emergency and humanitarian settings. The strong recommendation is for intensified insulin therapy: multiple daily injections with doses adjusted to blood-glucose levels. Human insulin is preferred because it costs less, with insulin analogues as options where needed; insulin pens may be considered over syringes (conditional). At home, patients may use finger-prick tests or continuous glucose monitors (CGMs); where blood testing is unavailable, urine glucose testing may be considered. When the diagnosis is uncertain, islet-cell autoantibody and C-peptide tests are advised; adults wrongly labelled as type 2 face delayed treatment and a higher risk of diabetic ketoacidosis (DKA). About 9.5 million people lived with type 1 diabetes worldwide in 2025, and about 5 lakh were newly diagnosed that year. WHO's target is that by 2030 everyone with type 1 diabetes has affordable insulin and glucose self-monitoring.

Key facts for the exam

Point	Details
Released	14 Nov 2026 – World Diabetes Day
Significance	WHO's first guidelines on type 1 diabetes in adults

Point	Details
Recommendations	14 – 1 strong, 13 conditional
Strong advice	Multiple daily insulin injections (intensified therapy)
Preferred insulin	Human insulin (lower cost); analogues if needed
Monitoring	Finger-prick / CGM; urine glucose if blood tests unavailable
Doubtful diagnosis	Islet-cell autoantibodies, C-peptide
Global burden	About 9.5 million in 2025 (~0.5 million new)
WHO target	Affordable insulin and self-monitoring for all by 2030

Background

- Science: In type 1 diabetes the immune system destroys the insulin-making cells of the pancreas, so insulin production almost stops and lifelong insulin injections are needed. In type 2, insulin is made but the body does not respond to it properly (insulin resistance). Insulin is a protein (peptide) hormone of 51 amino acids; taken by mouth it would be broken down by digestive enzymes, so it is injected.
- C-peptide & DKA: The pancreas splits 'proinsulin' and releases insulin and C-peptide in equal amounts, so C-peptide levels reveal the body's own insulin output. Without insulin the body burns fat for energy; ketones made in the liver acidify the blood – diabetic ketoacidosis (DKA), a life-threatening state. For most adults the new guidelines set an HbA1c target of 7% (53 mmol/mol) or below.
- Biotechnology: Insulin was once extracted from cattle and pig pancreases. Human insulin made by recombinant DNA technology was approved in the US in 1982 – the first medicine produced by that technology. Low-cost human insulin is on WHO's Essential Medicines List.
- WHO: Set up on 7 April 1948, headquartered in Geneva. The Global Diabetes Compact was launched in 2021. About 830 million people had diabetes in 2022, over 40% of them unaware of it (WHO). In November 2025 WHO also issued its first guidelines on diabetes in pregnancy.

Tamil Nadu link: Tamil Nadu is a model for the affordable access to medicines that WHO stresses – the Tamil Nadu Medical Services Corporation (TNMSC), set up in 1994, buys drugs for government hospitals through centralised, transparent procurement and supplies them under a 'passbook' system; Karnataka, Keralam, Rajasthan and others copied it. The diabetes clinic at Stanley Medical College, Chennai, was started in 1946 by Prof. K.C. Paul (the college calls it India's first); in 2016 it became an Institute of Diabetology – Centre of Excellence.

Frequently asked questions

What is this news about?

On World Diabetes Day, 14 November 2026, the World Health Organization (WHO) released its first-ever guidelines on diagnosing and managing type 1 diabetes in adults. They contain 14 recommendations – one strong and 13 conditional – and apply also to low-resource, emergency and humanitarian settings.

What are the key facts to remember for the exam?

Released: 14 Nov 2026 – World Diabetes Day; Significance: WHO's first guidelines on type 1 diabetes in adults; Recommendations: 14 – 1 strong, 13 conditional; Strong advice: Multiple daily insulin injections (intensified therapy).

What is the background to this news?

Science: In type 1 diabetes the immune system destroys the insulin-making cells of the pancreas, so insulin production almost stops and lifelong insulin injections are needed.

Practice questions (with answers)

1. Which test, advised by WHO when the diagnosis is uncertain, shows how much insulin the body itself is producing?

A) Troponin

B) Creatinine

C) Bilirubin

D) C-peptide

Answer: D – Explanation: C-peptide – released in equal amounts with insulin when proinsulin is split. Troponin – heart; creatinine – kidney.

2. Why is insulin injected instead of being swallowed as a tablet?

A) It is fat-soluble

B) It is water-insoluble

C) It causes ulcers

D) Protein – gets digested

Answer: D – Explanation: Insulin is a protein hormone of 51 amino acids; gut enzymes such as pepsin and trypsin would break it down.

3. Which was the first product of recombinant DNA technology to be approved for medical use?

A) Human insulin

B) Interferon

C) Hepatitis B vaccine

D) Penicillin

Answer: A – Explanation: Human insulin – approved in the US in 1982. Penicillin is a natural antibiotic from a mould (Fleming, 1928).

4. In diabetic ketoacidosis (DKA), caused by lack of insulin, ketone bodies are formed mainly from the breakdown of what?

A) Glycogen

B) Fatty acids

C) Nucleic acids

D) Dietary fibre

Answer: B – Explanation: Fatty acids – when cells cannot use glucose, the liver breaks them down into ketones, which make the blood acidic.

5. Which Tamil Nadu body, set up in 1994 for centralised purchase of medicines for government hospitals, became a model for other States?

A) TNHSP

B) TNMSC

C) TANSACS

D) TIDCO

Answer: B – Explanation: Tamil Nadu Medical Services Corporation – 'passbook' system, copied by Karnataka, Keralam and Rajasthan. TANSACS deals with AIDS control.

Sources: WHO news release, 14 Nov 2026 (who.int/news/item/14-11-2026-who-issues-first-guidelines-on-type-1-diabetes-for-adults); WHO guideline (who.int/publications/i/item/9789240126244); WHO – World Diabetes Day 2026; The South First (15 Nov 2026); Stanley Medical College (stanleymedicalcollege.ac.in/page/diabetology); IIM Bangalore Tejas (TNMSC). © Shanmugam IAS Academy.