International Diabetes Federation Europe

WHAT SHAPES OUR RISK?

DIABETES STARTS BEFORE DIAGNOSIS

Our health is shaped by more than individual choices

Diabetes is shaped by a combination of individual health factors and external influences (the exposome). It is a lifelong, complex condition. Its development, as well as quality of life and health outcomes, is shaped by these determinants, actions and decisions taken throughout life, and health system factors.

> **Our health reflects the interaction between our biology and the environments in which we live, grow, work and age.**

THREE INTERCONNECTED AREAS INFLUENCE DIABETES RISK

A healthier today can prevent diabetes tomorrow.

THE ENVIRONMENT

The places where we live, work and age can increase or reduce diabetes risk.

- Air quality & pollution
- Food environments & affordability
- Opportunities for physical activity
- Housing conditions & public spaces
- Climate conditions

Healthier environments could prevent almost 1/4 of global disease burden.

Chronic exposure to fine air pollution has been linked to 1 in 5 global type 2 diabetes (T2D) cases.

INDIVIDUAL HEALTH FACTORS

Our biology, characteristics and life experiences influence risk.

- Genetics & family history
- Age, sex & ethnicity
- Pregnancy & early life
- Mental health & learning disabilities

Hyperglycaemia in pregnancy can increase the child's risk of obesity, early-onset T2D and cardiovascular disease (CVD) later in life.

INTEGRATED, EQUITABLE HEALTH SYSTEMS

The way healthcare is organised and delivered also shapes risk and outcomes.

- Access to prevention & care
- Screening & early detection
- Access to medicines, technology & supplies
- Investment in research & innovation

Stronger, more integrated and equitable health systems can prevent T2D and support early diagnosis and improve outcomes for all types of diabetes.

DIFFERENT TYPES OF DIABETES - DIFFERENT TRIGGERS, DIFFERENT PATHWAYS

Different origins. A common outcome.

TYPE 1 DIABETES (T1D)

An autoimmune condition

Genetic predisposition → **Unknown trigger** (in some cases a viral infection may play a role) → **Immune system** attacks insulin-producing beta cells in the pancreas → **Little or no insulin production**

Currently lifelong **insulin therapy required**, but can now be **delayed when acting at the right time.**

TYPE 2 DIABETES (T2D)

The most common form of diabetes

Genetic predisposition → **Influence of environmental & lifestyle factors** → **Insulin resistance** → **Reduced insulin production over time**

In many cases **preventable, delayed** or now **potentially reversed,** especially with early and targeted interventions.

Higher blood glucose levels

Over time, this can lead to life-altering complications.

WHAT NEEDS TO BE DONE?

Turning insight into action for a healthier, fairer Europe.

1 ADDRESS THE MAIN DRIVERS OF POPULATION HEALTH

- Improve environmental health.
- Address the fundamental determinants of health (e.g. healthy places, healthy food, education, decent work and social conditions).
- Support health and digital literacy across the life course.

2 RAISE AWARENESS & ADDRESS MODIFIABLE RISK FACTORS

- Raise awareness from an early age (including in schools).
- Act at community and primary care levels.
- Address stigma and discrimination through evidence-based and respectful communication for institutions, physicians and the public.

3 TRANSFORM HEALTHCARE DELIVERY THROUGH A LIFE COURSE APPROACH & ACT EARLY

- Map and share best prevention practices.
- Define effective screening criteria and systems for people at high risk and for other chronic conditions.
- Explore targeted support & adapted interventions at different life stages.
- Promote access to quality, comparable data across the EU.

4 ENCOURAGE INNOVATION AND RESEARCH INTO UNMET HEALTH NEEDS

- Increase and better target funding for basic science into the mechanisms of diabetes.
- Develop more targeted treatments.
- Invest in translational science & real-world evidence.
- Support innovation in prevention, screening, diagnosis & digital solutions.