In 2019, IDF estimates that:

1 in 11 adults (20-79 years) has diabetes
463 million people

1 in 2 adults with diabetes are undiagnosed
232 million people

Over 3 in 4 people with diabetes live in low- and middle-income countries

1 in 13 adults (20-79 years) has impaired glucose tolerance
374 million people

1 in 5 people with diabetes is above 65 years old
136 million people

10% of global health expenditure is spent on diabetes
USD 760 billion

1,110,100 children and adolescents below 20 years have type 1 diabetes.

1 in 6 live births (20 million) is affected by hyperglycaemia in pregnancy
84% of which is due to gestational diabetes
Highlights:

- **38 million** more adults with diabetes than in 2017
- **13 million** more adults above 65 years old with diabetes than in 2017
- **3,600 more children and adolescents** have type 1 diabetes than in 2017
- **22 million** more adults are at risk of developing diabetes than in 2017
- **Almost two-thirds (63%)** of people with diabetes are of working age (under 60 years)
- **20 million** more adults with diabetes are undiagnosed than in 2017
- **USD 33 billion** more is spent on diabetes than in 2017
All editions of the Atlas

First edition, 2000
Third edition, 2006
Fourth edition, 2009
Fifth edition, 2011
Sixth edition, 2013
Seventh edition, 2015
Eighth edition, 2017
Ninth edition, 2019
Estimations and projections of the number of people (20-79 years) with diabetes in different editions (millions)
Number of people (20-79 years) with diabetes, 2019
Number of people with diabetes by age and income group, 2019

- **High-income countries**
- **Middle-income countries**
- **Low-income countries**

Age groups (years):
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 55-59
- 60-64
- 65-69
- 70-74
- 75-79
Number of people with diabetes (20–79 years) living in urban and rural areas, 2019

![Bar chart showing the number of people with diabetes in urban and rural areas from 2019 to 2045.](chart.png)
Top 10 countries with diabetes (20-79 years) and their health expenditure, 2019
UNDIAGNOSED DIABETES

Number and proportion of adults (20-79 years) with undiagnosed diabetes per region, 2019
Prevalence of impaired glucose tolerance in adults (20–79 years), 2019*

*Age-adjusted comparative prevalence
Number of adults (20-79 years) with impaired glucose tolerance and diabetes (in millions) by IDF Region, 2019
Prevalence of hyperglycaemia in pregnancy in women (20-49 years) by IDF Region (%), 2019*

*Age-adjusted comparative prevalence
Number of deaths by age and sex (20-79 years), 2019

Deaths

Age groups (years)

0 100,000 200,000 300,000 400,000 500,000 600,000 700,000 800,000

20-29 30-39 40-49 50-59 60-69 70-79

Women

Men

International Diabetes Federation
Proportion of death before the age of 60 years in 2019
Total diabetes-related health expenditure for adults (20–79 years) with diabetes
Total diabetes-related and mean health expenditure per person and per income group, 2019
Percentage of total health spending allocated to diabetes per region, 2019

IDF Regions:
- AFR
- EUR
- MENA
- NAC
- SACA
- SEA
- WP

Percentage (%):
- AFR: 12
- EUR: 8
- MENA: 15
- NAC: 9
- SACA: 25
- SEA: 6
- WP: 11
Total diabetes-related health expenditure (USD billion) by age group

USD billion

Age groups (years)

20-29  30-39  40-49  50-59  60-69  75-79

2019
2030
2045
Age-sex standardised incidence rates (per 100,000 population per annum) of type 1 diabetes in children and adolescents aged 0–14 years, 2019
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