Diabetes is a chronic metabolic disease, characterised by high levels of glucose in the blood. It occurs either because the pancreas stops producing the hormone insulin (type 1 diabetes), or through a combination of the pancreas having reduced ability to produce insulin alongside the body being resistant to its action (type 2 diabetes). People with diabetes are at a greater risk of developing cardiovascular diseases such as heart attack and stroke if the disease is left undiagnosed or poorly controlled. They also have elevated risks for sight loss, foot and leg amputation due to damage to the nerves and blood vessels, and renal failure requiring dialysis or transplantation.

Diabetes was the principal cause of death of more than 100 000 persons in EU countries in 2008, and is the fourth or fifth leading cause of death in most developed countries. However, only a minority of persons with diabetes die from diseases uniquely related to the condition – in addition, about 50% of persons with diabetes die of cardiovascular disease, and 10-20% of renal failure (IDF, 2006).

Diabetes is increasing rapidly in every part of the world, to the extent that it has now assumed epidemic proportions. Estimates suggest that more than 6% of the population aged 20-79 years in EU countries, or 33 million people, have diabetes in 2010. Almost half of diabetic adults are aged less than 60 years. If left unchecked, the number of people with diabetes in EU countries will reach more than 37 million in less than 20 years (IDF, 2006).

Less than 5% of adults aged 20-79 years in Iceland, Norway and the United Kingdom have diabetes, according to the International Diabetes Federation. This contrasts with Cyprus, Germany and Turkey, where 8% or more of the population of the same age have the disease (Figure 1.14.1). Among EU countries, abnormal glucose tolerance shows little association with affluence, and there was little evidence of an urban/rural divide in prevalence, except in a few countries (IDF, 2009).

Type 1 diabetes accounts for only 10-15% of all diabetes cases. It is the predominant form of the disease in younger age groups in most developed countries. Based on disease registers and recent studies, the annual number of new cases of type 1 diabetes in children aged under 15 years is high at 25 or more per 100 000 population in Nordic countries (Finland, Sweden and Norway) (Figure 1.14.2). Turkey, Italy, Bulgaria and Greece have less than ten new cases per 100 000 population. Alarmingly, there is evidence that type 1 diabetes is developing at an earlier age among children.

The economic impact of diabetes is substantial. Health expenditure to treat and prevent diabetes and its complications is estimated to total USD 93 billion, or approximately 10% of total health expenditure in EU countries in 2010 (IDF, 2009). Around one-quarter of medical expenditure is spent on controlling elevated blood glucose, another quarter on treating long-term complication of diabetes, and the remainder on additional general medical care. Increasing costs reinforce the need to provide quality care for the management of diabetes and its complications.

Type 2 diabetes is largely preventable. A number of risk factors, such as overweight and obesity and physical inactivity are modifiable, and can also help reduce the complications that are associated with diabetes. But in most countries, the prevalence of overweight and obesity also continues to increase (see Indicator 2.8).

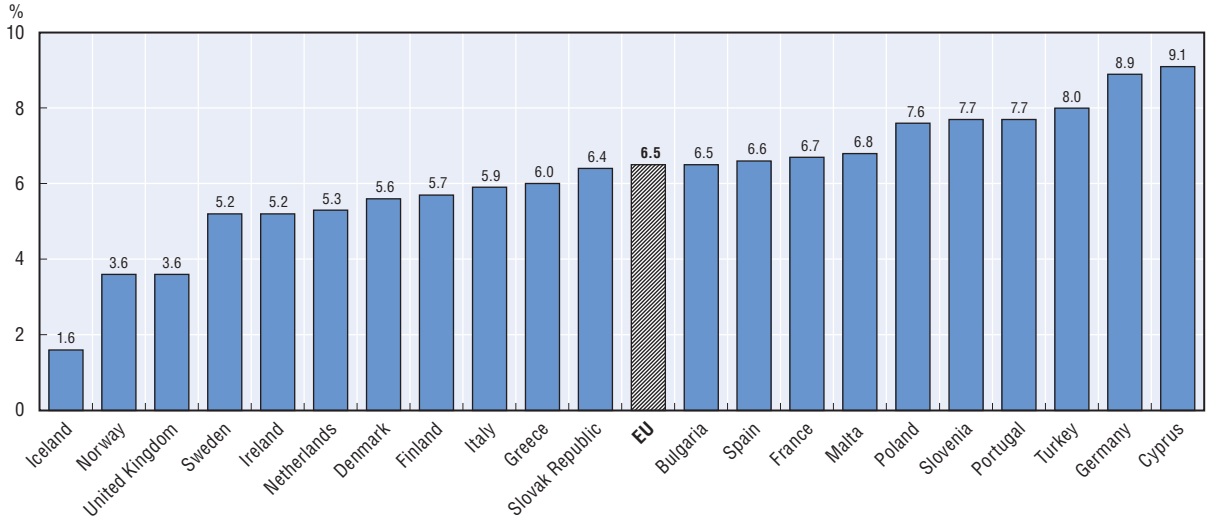
Definition and deviations

The sources and methods used by the International Diabetes Federation for publishing national prevalence estimates of diabetes are outlined in their *Diabetes Atlas*, 4th edition (IDF, 2009). Country data were derived from studies published between 1980 and February 2009, and were only included if they met several criteria for reliability.

Studies from several European countries – France, Italy, Netherlands, Norway, Slovenia and the United Kingdom – only provided self-reported data on diabetes. To account for undiagnosed diabetes, the prevalence of diabetes for the United Kingdom was multiplied by a factor of 1.5, in accordance with local recommendations, and doubled for other countries, based on data from a number of countries.

Prevalence rates were adjusted to the World Standard Population to facilitate cross-national comparisons.

1.14.1. Prevalence estimates of diabetes, adults aged 20-79 years, 2010

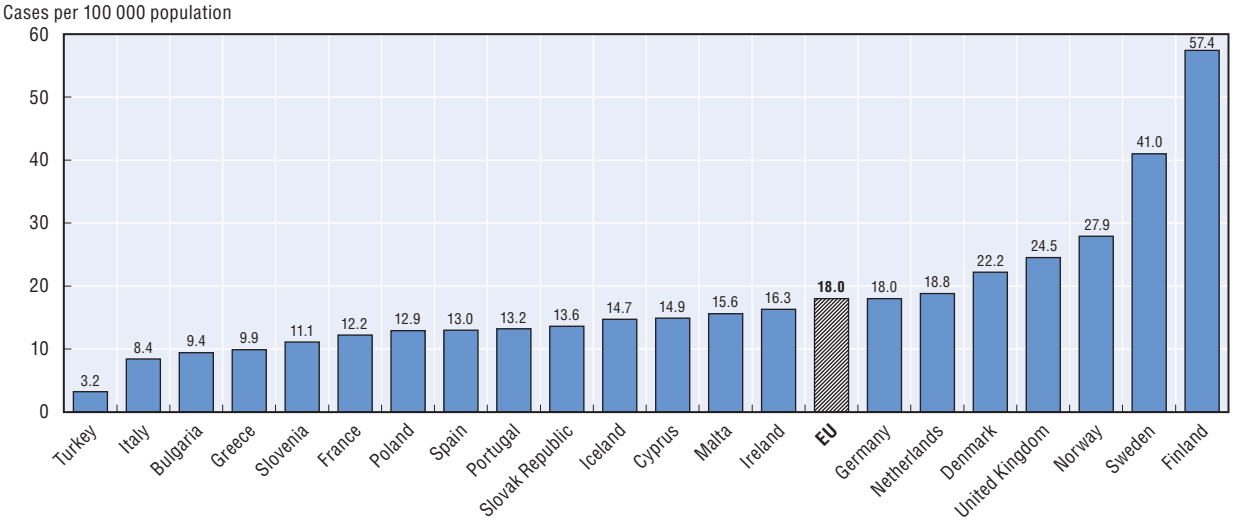


Note: The data are age-standardised to the World Standard Population.

Source: IDF (2009).

StatLink http://dx.doi.org/10.1787/888932336122

1.14.2. Incidence estimates of type 1 diabetes, children aged 0-14 years, 2010



Source: IDF (2009).

StatLink http://dx.doi.org/10.1787/888932336141

From:
Health at a Glance: Europe 2010

Access the complete publication at:
https://doi.org/10.1787/health_glance-2010-en

Please cite this chapter as:

OECD/European Union (2010), "Diabetes Prevalence and Incidence", in *Health at a Glance: Europe 2010*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/9789264090316-19-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.