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 member states in 2011, and is a 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, 2011).

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 member states, or 30 million people, had diabetes in 2011, with 42% of diabetic adults aged less than 60 years (IDF, 2011; Whiting *et al.*, 2011). If left unchecked, the number of people with diabetes in EU member states will reach more than 35 million in less than 20 years.

Less than 5% of adults aged 20-79 years in Belgium, Iceland, Luxembourg, Norway and Sweden have diabetes, according to the International Diabetes Federation. This contrasts with Portugal, Cyprus and Poland, where 9% or more of the population of the same age have the disease (Figure 1.14.1). In Europe, abnormal glucose tolerance shows little association with affluence, except in a few countries.

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, Norway and Sweden) (Figure 1.14.2). Bulgaria, Croatia and Switzerland 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 in EU member states in 2011 to treat and prevent diabetes and its complications was estimated at USD 110 billion (IDF, 2011). 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.

In April 2012, the European Diabetes Leadership Forum brought together a wide range of stakeholders to produce the Copenhagen Roadmap, outlining initiatives to improve diabetes prevention, early detection and intervention as well as management and control (European Diabetes Leadership Forum, 2012).

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 2.7 "Overweight and obesity among adults").

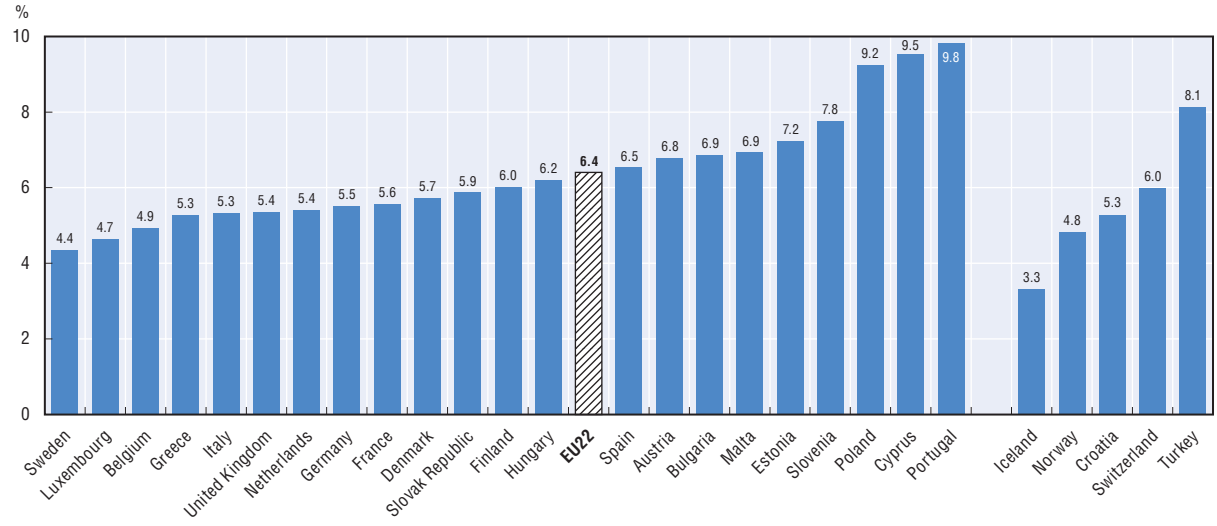
Definition and comparability

The sources and methods used by the International Diabetes Federation for publishing national prevalence estimates of diabetes are outlined in their *Diabetes Atlas*, 5th edition (IDF, 2011; Guariguata *et al.*, 2011). Country-level data were derived from studies published up to April 2011, and were only included if they met several criteria for reliability.

Countries without national data sources are excluded. Studies from several European countries only provided self-reported data on diabetes. Studies only reporting known diabetes were adjusted to account for undiagnosed diabetes, based on sources with available data.

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

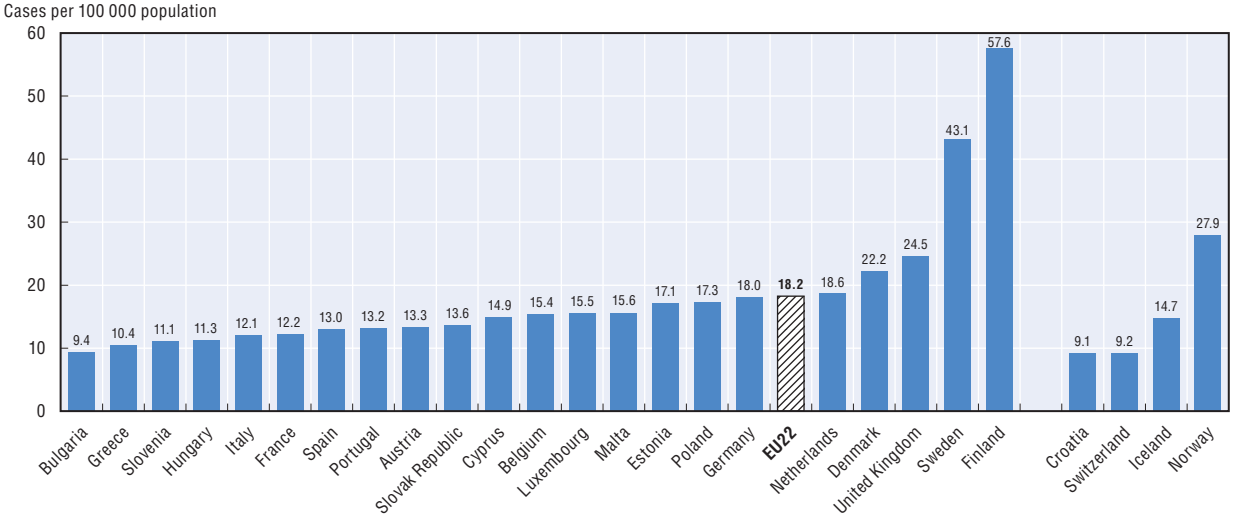
1.14.1. Prevalence estimates of diabetes, adults aged 20-79 years, 2011



Note: The data are age-standardised to the World Standard Population.
Source: IDF (2011).

StatLink http://dx.doi.org/10.1787/888932703620

1.14.2. Incidence estimates of Type 1 diabetes, children aged 0-14 years, 2011



Source: IDF (2011).

StatLink http://dx.doi.org/10.1787/888932703639