Influenza is a common infectious disease and affects people of all ages. WHO Europe reports that each year seasonal influenza affects between 5 to 15% of the population in the northern hemisphere. Most people with the illness recover quickly, but elderly people and those with chronic medical conditions are at higher risk of complications and even death. In any particular year, influenza can have a substantial impact on the health of the population and the health care system (Nicholson *et al.*, 2003; Simonsen *et al.*, 2000).

Vaccines have been used for more than 60 years, and provide a safe and effective means of preventing influenza, and reducing the impact of epidemics. Among the elderly, appropriate influenza vaccines will, in general, reduce the risk of serious complications or death by 70-85% (Ryan, 2006). In 2003, all World Health Assembly (WHA) countries, including all EU member states, committed to the goal of attaining vaccination coverage of the elderly population of at least 50% by 2006 and 75% by 2010 (WHA, 2003; Mereckiene *et al.*, 2008).

Figure 4.11.1 shows that around 2010, across 22 EU member states for which data was available, the average influenza vaccination rate for people aged 65 and over was 45.3%. Vaccination rates across Europe range from 1% in Estonia to 74% in the Netherlands. Whilst there is still some uncertainty about the reasons for the cross-national differences in vaccination rates, studies have highlighted that the lack of public health insurance coverage may be an important determinant in explaining low uptake in some countries (Mereckiene *et al.*, 2008; Kroneman *et al.*, 2003; Kunze *et al.*, 2007). Studies have also shown that personal contact with a doctor is a key determinant of uptake, and that better information through mass-media campaigns, patient and provider education initiatives, and recall and reminder systems can play an important role in improving vaccination rates (Kohlhammer *et al.*, 2007).

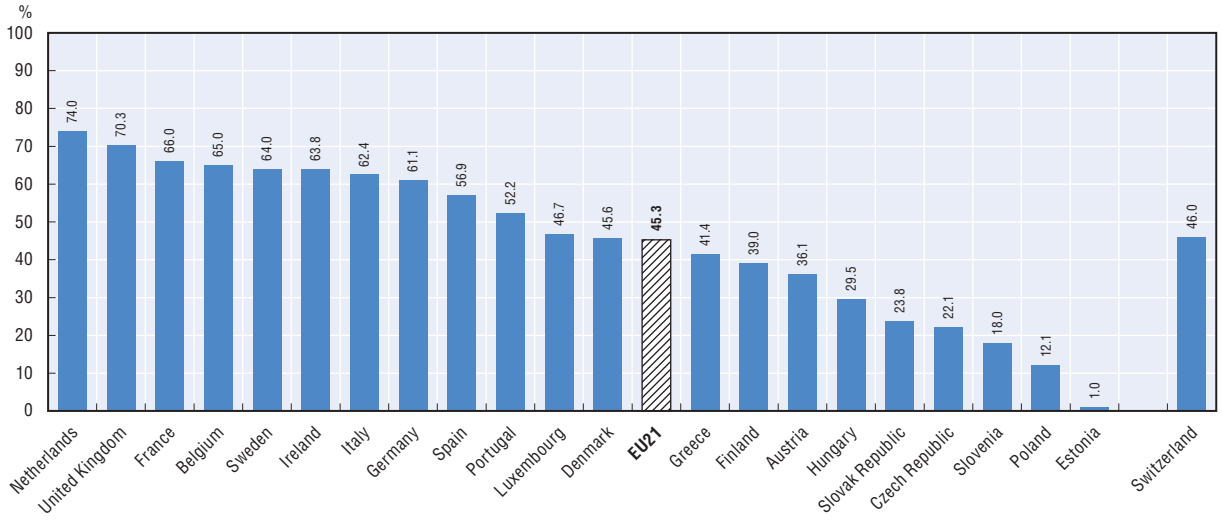
Figure 4.11.2 indicates that between 2000 and 2005, vaccination rates across the European Union increased from 45% to 54% of the elderly population but fell between 2005 and 2010. There appears to be no uniform trend across Europe. Some countries such as France and the Netherlands have maintained their vaccination rates over the decade, countries such as Belgium and Portugal have seen a rise in the rate, and a large number of countries witnessed their rates increase between 2000 and 2005 but then fall again in 2010. No country attained the 75% coverage target in 2010. In late 2009, the Health Ministers of the European Union adopted an EU Council Recommendation to reach the target of 75% vaccination coverage amongst the elderly as early as possible and preferably by the 2014-15 winter season. The recommendation also proposed that the target of 75% coverage should, if possible, be extended to people with chronic conditions.

In June 2009, the WHO declared the first influenza pandemic since 1968-69 (WHO, 2009b). Within 23 weeks of the first diagnosis of the H1N1 influenza virus (also referred to as "swine flu"), there were over 53 000 confirmed cases across all EU member states, Iceland, Liechtenstein and Norway (ECDC, 2011). The estimated infection attack rates remained low in the overall population but were high amongst young people aged 5-19 years. Following the development, testing and production of a H1N1 vaccine, most EU member states included the 2009-10 seasonal influenza vaccine and the pandemic vaccine into their influenza vaccination programmes (Valenciano *et al.*, 2011). Despite the worldwide focus on H1N1, numerous studies have shown that vaccination rates against the virus were lower than expected in a large number of countries (Poland, 2011; Mereckiene *et al.*, 2012). In part, this may be due to the easing of concerns about the threat of H1N1 amongst the general population by the time the vaccine became available. The most important determinant for individuals to take-up H1N1 vaccine was previous exposure to seasonal flu vaccine, leading some researchers to argue that higher vaccination rates for seasonal flu may help uptake during potential future pandemics (Poland, 2011; Nguyen *et al.*, 2011; Bish *et al.*, 2011).

Definitions and comparability

Influenza vaccination rate refers to the number of people aged 65 and older who have received an annual influenza vaccination, divided by the total number of people over 65 years of age. The main limitation in terms of data comparability arises from the use of different data sources, whether survey or programme, which are susceptible to different types of errors and biases. For example, data from population surveys may reflect some variation due to recall errors and irregularity of administration.

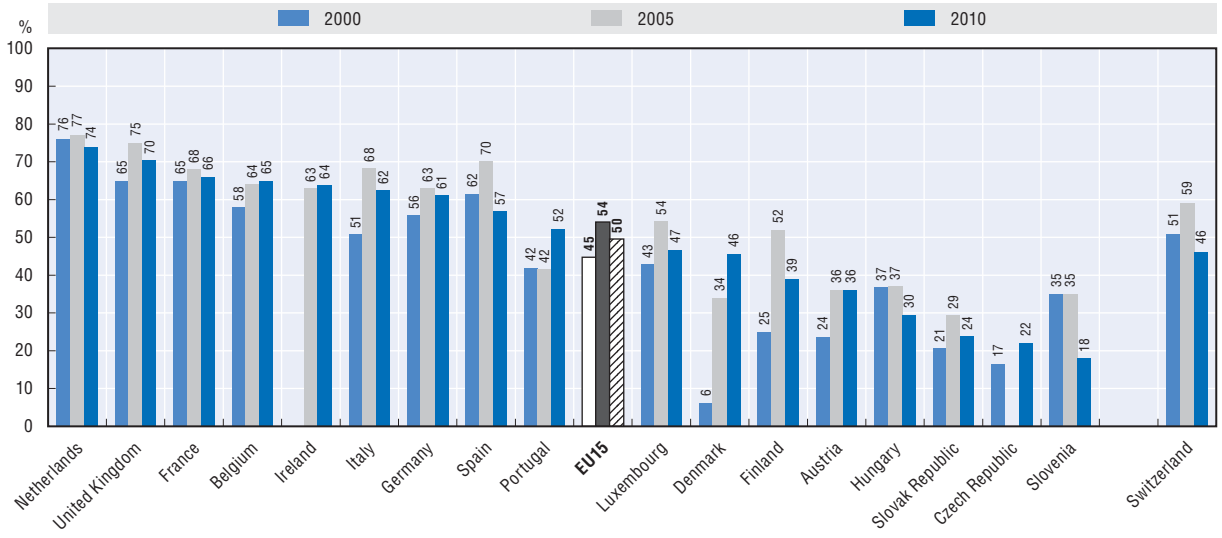
4.11.1. Vaccination rates for influenza, population aged 65 and over, 2010 (or nearest year)



Source: OECD Health Data 2012.

StatLink http://dx.doi.org/10.1787/888932705330

4.11.2. Trends in vaccination rates for influenza, population aged 65 and over, 2000-10 (or nearest year)



Source: OECD Health Data 2012.

StatLink http://dx.doi.org/10.1787/888932705349