Tobacco use is the leading cause of preventable death in the world, imposing a large burden on societies. Smoking behaviour is typically established during adolescence. Most adult smokers have their first cigarette or were already addicted to nicotine by the age of 18. The duration of smoking and number of cigarettes required to establish nicotine addiction is lower for adolescents than for adults, so that addiction is established more quickly. Although studies have clearly shown the negative effects on health of tobacco use, adolescents typically remain attracted by it, perhaps because they perceive smoking as “adult” behaviour and have a strong desire to be perceived as adult by their peers.

Tobacco use is related to other types of risk behaviour and negative health outcomes in adolescents. It can therefore be considered a part of a broader pattern of unhealthy behavioural types that cluster in adolescence.

Positive relationships between parents and adolescents are generally negatively associated with adolescent tobacco use, but peer relationships may encourage it through, for example, providing access to tobacco products and helping to create norms to support their use. Peers have been suggested as agents in intervention programmes aiming to reduce tobacco use among adolescents precisely because they can have such a significant influence on behaviour.

This fact sheet summarizes findings from the report on the 2009/2010 survey of the Health Behaviour in School-aged Children (HBSC) study.1

**HBSC findings: an overview of adolescent smoking**

The findings show the age at which young people first start smoking and how often they smoke. They show that at age 15, on average, 17% of girls and 19% of boys smoke at least once a week. As duration influences smoking-related health problems, and as only a small number of adolescents who try to quit smoking succeed, a high burden on the health-care system may be predicted in countries with high prevalence.

---

Age
Findings demonstrate that adolescence is a key period of intervention. At the age of 11 there is a low prevalence of smoking but by age 15 there is a significant increase (see figures).

Cross-national differences
Smoking rates, although fairly similar at age 11 (less than 1%), differ dramatically across countries by age 15. For example, Austria and Lithuania show smoking rates of over 25% for 15-year-old boys and girls, whereas in Norway and Portugal the rate is around 10%, suggesting that the socioenvironmental context can be changed to benefit young people’s health.

Gender
Smoking is more prevalent among boys, and boys tend to start smoking at a younger age. The findings demonstrate that, in some countries, gender inequalities begin to emerge during this period. Gender differences are minimal at 11, but by age 15 there are significant differences in some countries (see figure).

While boys smoke more frequently than girls, the pattern is reversed in some countries, including the Czech Republic, England, Wales and Spain.

The changing gender differences may be explained by the fact that the smoking epidemic follows four stages that involve interactions between socioeconomic position and gender. While western European countries were previously at stage 3, in which smoking...
prevalence was declining among males while peaking among females, they are now moving towards stage 4, where both male and female smoking declines. Eastern European countries were generally at stage 1 or 2, characterized by high smoking rates among males, but are now mainly at stage 3.

**Family affluence**

In only a minority of countries is smoking more prevalent in poorer families. While the relationship between family affluence and smoking may be partially explained by parental modelling, more research is necessary to fully understand the underpinning mechanisms.

**How policy can help**

The WHO Framework Convention on Tobacco Control (WHO FCTC) is a powerful tool and provides the framework for building effective tobacco control legislation. It asserts the importance of strategies such as sales to and by minors, packaging and labelling, and protection from exposure to tobacco smoke (e.g. smoke free school premises). In addition, increasing the price of tobacco through higher taxes is considered to be the single most effective way of reducing consumption and encouraging tobacco users to quit.

Proper enforcement of national legislation is crucial to its success. The consequences of ineffective enforcement can be seen in the HBSC results, which show a significant proportion of adolescents beginning to smoke before they reach the minimum legal age for purchasing tobacco.

In some countries, girls have a higher prevalence than boys, a reversal of the pattern seen in the past. This alarming result can be partially attributed to the use of the cigarette pack itself to target young girls with a plethora of “feminine” brands, such as those resembling lipstick cases. Such tactics stress the importance of regulations on packaging and labelling so that the cigarette pack can no longer be used as a “walking billboard”.

Families with low scores on the HBSC Family Affluence Scale (FAS) and boys can be more likely to begin smoking early. While population-level interventions can, by their own nature, be effective in reducing inequities in health, it remains essential to target specific populations within the WHO FCTC measures.
For further information, contact:

Technical information:
Vivian Barnekow
Programme Manager, Child and Adolescent Health and Development
Division of Noncommunicable Diseases and Health Promotion
WHO Regional Office for Europe
Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark
Tel.: +45 3917 1410
E-mail: vbr@euro.who.int

Media enquiries:
Tina Kiær
Information Officer, Division of Noncommunicable Diseases and Health Promotion
WHO Regional Office for Europe
Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark
Tel.: +45 39 17 12 50, +45 40 87 48 76 (mobile)
E-mail: tk@euro.who.int