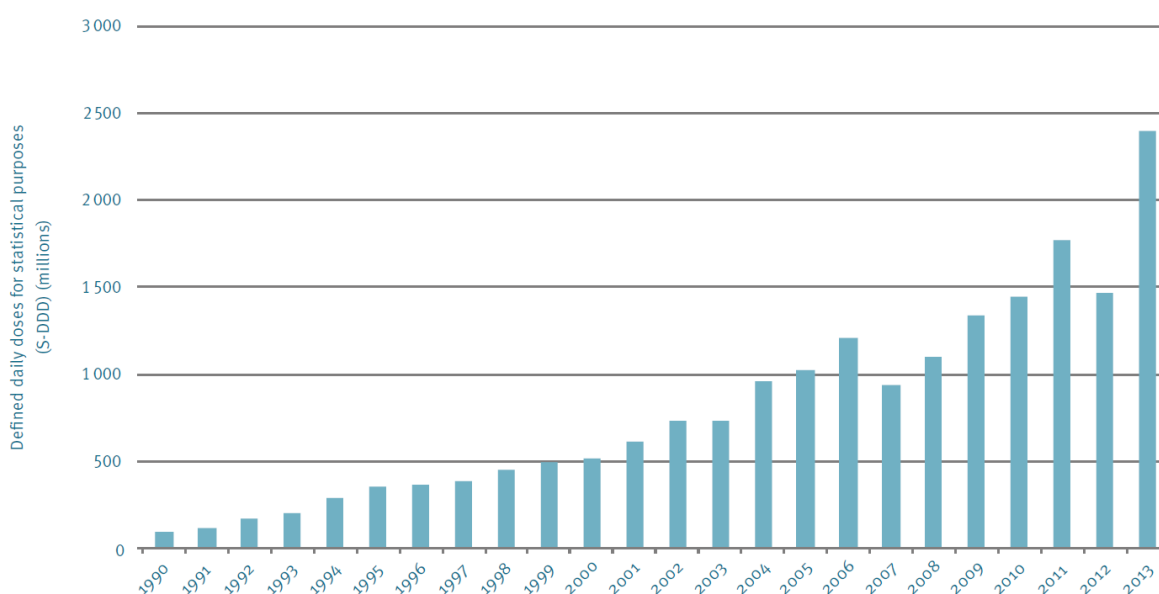


## From the **International Narcotics Control Board**

<http://www.incb.org/documents/Publications/AnnualReports/AR2014/English/methylphenidate.pdf>

Figure I. Global consumption of methylphenidate, 1990-2013



Source: Statistical data submitted by Governments in form P.

### 3. Use of methylphenidate

239. Methylphenidate, a central nervous stimulant listed in Schedule II of the 1971 Convention, is used for the treatment of various mental and behavioural disorders, in particular attention deficit and hyperactivity disorder (ADHD) and narcolepsy.

240. During the 1980s, use of methylphenidate was limited and at stable levels, but it started to increase noticeably at the beginning of the 1990s. In 1994, for example, global use amounted to more than five times the consumption level of the early 1980s. That development was mainly a result of increasing consumption in the United States, although increasing consumption levels were also observed in several other countries and parts of the world. Since then, growth of global consumption of methylphenidate has continued unabated. In 2013, a new

record of 71.8 tons (2.4 billion S-DDD) was attained, as can be seen in Figure I below. The growing medical consumption of methylphenidate can be attributed mainly to the increasing numbers of diagnoses of ADHD.

241. Since the mid-1990s, the Board, in its annual reports, has frequently brought to the attention of Governments the growing levels of consumption of methylphenidate and has expressed concern about diversion and abuse of the substance. In its report for 2009, the Board advised against promotional campaigns through various communication channels, including in advertisements directed at potential consumers, such as those prevalent in the United States, the main consumer of methylphenidate. In that same year, the Board called upon the Governments concerned to ensure that the control measures foreseen by the 1971 Convention were fully applied to methylphenidate and to take additional measures to prevent both the diversion from licit distribution channels and the abuse of preparations containing that substance. The Board also encouraged all Governments to promote the rational use of internationally controlled substances, in accordance with the pertinent recommendations of WHO.

242. Traditionally, methylphenidate has been prescribed to people between the ages of 6 and 14 years, and predominantly for boys. As of 2011 in the United States, about 11 per cent of individuals aged between 4 and 17 years had been diagnosed with ADHD, according to the Centers for Disease Control. Furthermore, a growing number of younger children (as young as 2 and 3 years of age) were also being prescribed methylphenidate. In Australia, 2-year-old children are increasingly being prescribed medication containing methylphenidate, with more than 2,000 children under 6 receiving the treatment. In addition to the increasing number of children treated, the treatment period has been extended, in many cases to several years. Furthermore, there has been an increase not only in the number of young patients but also in the number of adult patients. In Iceland, most ADHD patients taking methylphenidate are over 20 years of age. In Germany, the number of diagnosed ADHD cases increased by 42 per cent in children and adolescents under the age of 19 between 2006 and 2011.

243. Although the United States continues to account

for more than 80 per cent of the calculated global consumption of methylphenidate, the use of that substance in other countries has also significantly increased during the past decade. The countries reporting such an increase include Iceland, which has had the highest per capita consumption of methylphenidate in the world for the past several years, as well as (in descending order by per capita consumption) Norway, Sweden, Australia, Belgium, Germany and Canada.

244. Increased consumption may be attributable to various causes such as: (a) an increase in the number of patients who are diagnosed with ADHD; (b) a widening of the age group of patients likely to be prescribed methylphenidate; (c) increased use among adults; (d) misdiagnosis of ADHD and random prescription of methylphenidate; (e) a lack of appropriate medical guidelines for the prescription of methylphenidate; (f) growing market supply in many countries; (g) influential commercial and/or aggressive marketing practices of the manufacturers of pharmaceutical preparations containing methylphenidate; and (h) public pressure, such as parents' associations lobbying for their children's right to access to ADHD medication.

245. Overmedication and overprescribing of medicines containing methylphenidate may fuel illegal activities such as "doctor shopping", trafficking and abuse, particularly in school settings. Students are misleadingly tempted, particularly during exam periods, to use the substance in order to improve their ability to concentrate and study longer, and thus improve their performance. Hence, this substance is abused by a growing number of teenagers and young adults. Prescription drugs containing methylphenidate are also often obtained from students who are under treatment for ADHD.

246. The Board notes that some Governments have already taken measures to limit the use of methylphenidate to actual medical needs, in conformity with sound medical practice. The authorities of Iceland, concerned about the high level of use of methylphenidate in their country, have taken specific measures aimed at curbing preparations that are less prone to misuse). Furthermore, new and more restrictive rules for the reimbursement of the costs of methylphenidate have been introduced, under which only specialists in psychiatry are allowed to

initiate treatment with methylphenidate and apply to the health insurance scheme for reimbursement, by submitting observations based on a detailed medical history of the patient, research and diagnosis, as well as a follow-up programme. In Finland, where overprescribing of methylphenidate had also been of concern, the following preventive measures were taken: (a) prohibition of the sale of methylphenidate in drugstores; (b) limitation of authorization to prescribe methylphenidate, so that only psychiatrists, including child psychiatrists, are allowed to prescribe it; (c) limitations on the formulation of pharmaceutical preparations containing methylphenidate to prohibit them from containing more than two dosages; (d) restriction on the procurement of methylphenidate by hospitals and clinics so that it can only be obtained from a central governmental office; and (e) inclusion of a standard drug information leaflet in all packages.

247. The Board wishes to encourage the Governments of all countries with high consumption rates of methylphenidate to identify the reasons for such elevated consumption and to take action to limit consumption to actual medical needs. Such actions could include adequate education of doctors and other health-care professionals on the rational use of psychoactive drugs. In particular, Governments must exercise vigilance to prevent possible misdiagnosis of ADHD and inappropriate prescribing of methylphenidate. Governments are encouraged to monitor developments in the diagnosis of ADHD, as well as other behavioural disorders, and the extent to which methylphenidate is prescribed for their treatment. The Board requests Governments to ensure that methylphenidate is prescribed in accordance with sound medical practice, as set forth in the 1971 Convention (article 9, paragraph 2). The Board will continue to carefully monitor future developments in countries with high consumption levels of methylphenidate and encourages Governments concerned to share with it and WHO information concerning the use of methylphenidate, prescription practices and misuse, as well as trafficking and abuse in their countries.