

Comments on reported statistics

Commentaires sur les statistiques communiquées

Comentarios sobre las estadísticas comunicadas

COMMENTS ON REPORTED STATISTICS

1. The purpose of these comments is to facilitate the study of the statistical information on licitly manufactured psychotropic substances that is presented in the tables of reported statistics (see pages 97-227 below). The tables contain information submitted by Governments to the International Narcotics Control Board (INCB) pursuant to the provisions of article 16 of the Convention on Psychotropic Substances of 1971.

2. There are currently 115 substances listed in the four schedules of the 1971 Convention. Comments are provided on substances reported to have been used for licit purposes. With respect to substances in Schedules II and III of the 1971

Convention, the information on the five-year period 1996-2000 is presented in the statistical tables. With respect to substances in Schedule IV, information on the three-year period 1998-2000 is included in the statistical tables. Since only a few Governments have reported manufacture of substances in Schedule I and since international trade in those substances has been very limited, no statistical tables are presented on substances in that schedule. For the same reasons, no statistical tables are presented for the substances mecloqualone and phencyclidine, both included in Schedule II, and for lefetamine, included in Schedule IV. Statistics reported on substances in Schedule I and on mecloqualone, phencyclidine and lefetamine are, however, reflected in the comments.

Substances listed in Schedule I

3. There are currently 28 substances listed in Schedule I, including the substance 4-methylthioamphetamine (4-MTA), which was placed under international control in 2001. Pursuant to the provisions of article 7 of the 1971 Convention, the use of those substances should be prohibited except for scientific and very limited medical purposes by duly authorized persons in medical or scientific establishments which are directly under the control of or specifically approved by their Governments. This restriction results from the fact that all substances in Schedule I are hallucinogens and/or central nervous system stimulants with very limited or no medical use. The manufacture and stocks of and trade in those substances have, therefore, been very limited. Exceptions are noted below.

4. The 1971 Convention does not envisage any use of psychotropic substances in Schedule I in industry for the manufacture of non-psychotropic substances or products. The substance 2,5-dimethoxyamphetamine (DMA), however, has been used for that purpose in the United States of America, where it is utilized in the manufacture of special photographic films. The manufacture of DMA in that country was stable, averaging 8 tons annually in the period 1996-2000. At the end of 2000, 1.7 tons of DMA were held in stocks in the United States. There is reportedly no substitute for DMA in the above-mentioned manufacturing process. The use of DMA in the United States for that purpose is therefore expected to continue.¹

5. The United States reported for the first time in 1999 the manufacture of paramethoxyamphetamine (PMA) for the manufacture of a non-psychotropic substance to be used for medical and scientific purposes. Of the 31 kg of PMA manufactured, 29 kg were used for such manufacture and 2 kg were added to stocks. No manufacture was reported in 2000, when the stocks of PMA held in that country (2 kg) were reported to have been destroyed. As the 1971 Convention does not foresee any industrial use of psychotropic substances in Schedule I, the United States discontinued the manufacture of PMA.

6. Parties to the 1971 Convention may authorize limited use of substances listed in Schedule I for the manufacture of

psychotropic substances in other schedules. The isomers of tetrahydrocannabinol (THC) included in Schedule I, mainly *delta*-8-tetrahydrocannabinol, have been manufactured in the United States and used in the manufacture of *delta*-9-tetrahydrocannabinol (*delta*-9-THC), a psychotropic substance listed in Schedule II since 1991. In 1992, the United States reported the manufacture of 15 kg of isomers of THC included in Schedule I. The manufacture of those isomers of THC increased to a level of about 38 kg annually in 1995 and 1996. While no manufacture of those isomers was reported in 1997, manufacture was increasing from 61 kg in 1998, 147 kg in 1999 and 154 kg in 2000, representing a 10-fold increase compared with 1992. Stocks held in the United States, which have been decreasing regularly since 1998, amounted to 85 kg in 2000.

7. Twelve other substances listed in Schedule I were manufactured in the United States in small quantities for scientific purposes in the period 1996-2000. Those substances were DMT, eticyclidine, *N*-ethyl-tenamphetamine (*N*-ethyl-MDA), (+)-lysergide, MDMA, mescaline, methcathinone, psilocine, rolicyclidine, STP or DOM, tenamphetamine (MDA) and tenocyclidine. Only five other countries have reported the manufacture of substances in Schedule I since 1996. A few grams of substances in Schedule I have been manufactured in Australia (brolamfetamine, DMA, MDA, MDMA and mescaline), Israel ((+)-lysergide, *N*-ethyl-MDA, MDA, MDMA, tenocyclidine and THC), the Netherlands (*N*-ethyl-MDA and MDMA), Switzerland (DMT, mescaline, MDA and MDMA) and the United Kingdom of Great Britain and Northern Ireland ((+)-lysergide, MDMA, mescaline and THC).

8. Quantities of substances in Schedule I, ranging from a few grams to several hundred grams, were held in stocks at the end of 2000, mainly in the United States. Those substances were brolamfetamine, cathinone, DMT, *N*-ethyl-MDA, etryptamine, *N*-hydroxy-tenamphetamine (*N*-hydroxy-MDA), (+)-lysergide, MDA, MDMA, mescaline, methcathinone, 4-methylaminorex, psilocine, psilocybine and rolicyclidine. Stocks of most of those substances have been relatively stable in recent years. Stocks of DMA and THC are referred to in paragraphs 4-6 above.

9. Other countries reporting stocks of a few grams of substances in Schedule I at the end of 2000 were Denmark

¹See *Report of the International Narcotics Control Board for 1994* (United Nations publication, Sales No. E.95.XI.4), para. 75.

(THC), Israel (brolamfetamine, MDMA, PMA, tenocyclidine and THC), Italy (DMA), the Netherlands (mescaline), Switzerland (DMT, mescaline, MDA, MDMA and psilocybine) and the United Kingdom (4-methylaminorex, MDMA, mescaline and THC).

10. International trade in substances in Schedule I has always been restricted to occasional transactions of no more

than a few grams. In the period 1996-2000, in addition to the above-mentioned countries, small imports or exports of some of those substances were reported by Australia, Austria, Colombia, Cuba, Denmark, France, Germany, the Hong Kong Special Administrative Region of China, Ireland, Israel, the Netherlands, New Zealand, Norway, Singapore, Spain, Switzerland, the United Kingdom and the United States.

Substances listed in Schedule II

11. Fifteen substances whose liability to abuse constitutes a substantial risk to public health and which have little to moderate therapeutic usefulness are listed in Schedule II. The substances belong to the following groups: central nervous system stimulants; anti-emetics; hallucinogens; sedative-hypnotics and antitussives. In addition to their various applications in human and/or veterinary medicine, some of these substances are used in industry for the manufacture of other psychotropic substances or for conversion into non-psychotropic substances.

Central nervous system stimulants

Amphetamines

12. Both optical isomers of amphetamine (levamfetamine and dexamfetamine) and their racemic mixture (amfetamine), as well as both optical isomers of methamphetamine (levomethamphetamine and metamfetamine) and their racemic mixture (methamphetamine racemate), are listed in Schedule II. Statistical reports on amfetamine, dexamfetamine and metamfetamine have been received by INCB from Governments since the 1970s. Statistics for levamfetamine and levomethamphetamine have been available since 1986 and statistics for metamfetamine racemate since 1988, owing to the different dates on which those substances were brought under the control of the 1971 Convention.

13. Of the amphetamines in Schedule II that are manufactured worldwide, only a portion is used directly for medical purposes. Most of the quantities manufactured are first used in industry as intermediary products for the manufacture of other substances. Those new substances may be divided into two groups: other psychotropic substances, including those which are optical isomers of the original substance; and substances not controlled under the 1971 Convention. The demand for the final products is the factor determining the changes in the level of manufacture of most amphetamines.

Direct medical use

14. Amphetamines listed in Schedule II are used mainly for the treatment of attention deficit disorder (ADD) and narcolepsy. The extensive use of those substances for the treatment of obesity has been discontinued or significantly reduced in most countries. Since the late 1970s, the quantities of amphetamines used directly for medical purposes have been very low in almost all countries. The main exception is the United States, where the medical use of amfetamine and dexamfetamine has significantly increased during

the 1990s. An increase in the use of dexamfetamine also occurred during the same period in a few other countries, including Australia, Canada and the United Kingdom. The quantity of levomethamphetamine used in the United States for the manufacture of nasal inhalants applied as decongestants has remained relatively unchanged. In 2000, the quantity of amphetamines listed in Schedule II that were manufactured worldwide for direct medical use totalled around 8.3 tons (approximately 553 million defined daily doses (DDD)), of which more than 95 per cent was destined for use in the United States. The worldwide manufacture of amphetamines for direct medical use in 2000 was nearly two times as high as 1998 and more than eight times higher than in 1991.

15. The significant increase in the manufacture of amphetamines during the previous three years can be attributed almost exclusively to the rapid increase in the medical use of amfetamine and dexamfetamine in the United States. The medical use of those substances has increased significantly since 1998, when products combining both amfetamine and dexamfetamine started to be used mostly for the treatment of ADD (called attention-deficit/hyperactivity disorder (ADHD) in the United States). The manufacture of amfetamine, which during the 1980s was stable at a level below 50 kg annually, began to rise sharply after 1994, amounting to around 6.8 tons annually during the period 1995-1997. During that period, the trend in the manufacture of amfetamine in the United States mainly reflected changes in the demand for dexamfetamine, into which the amfetamine was converted. Since 1998, however, amfetamine itself has also been directly used in large quantities for medical purposes. In 2000, about 2.6 tons of amfetamine were required for such use in the United States, while only about 20 kg of the substance were needed for direct medical use in 1996. At present such significant use of amfetamine for medical purposes has been reported only in the United States. The amfetamine consumed in the United States is obtained almost exclusively from domestic manufacture. The other countries using the substance cover their needs mostly through imports. In 2000, the main importer of amfetamine was Germany (22 kg), followed by Chile (15 kg) and Sweden (7 kg).

16. The United States is also the main consumer of dexamfetamine, but significant medical use of that substance has also been reported in a number of other countries. In the United States, the medical needs for dexamfetamine are covered by domestic manufacture. While the manufacture of dexamfetamine during the 1980s was stable at a level of approximately 350 kg annually, it began to rise sharply after 1991 and amounted to almost 1.7 tons in 1995. The manufacture of that substance remained at that level in 1996 and 1997

and increased in 1999 to a record level of 7.3 tons. Of the 5 tons manufactured in 2000, more than 4.6 tons were used for the manufacture of pharmaceutical products and 430 kg were added to stocks, which rose from 2.9 tons in 1999 to 3.3 tons in 2000. Exports of dexamfetamine from the United States in 2000 were small (106 kg). Like amfetamine, dexamfetamine is prescribed for the treatment of ADD in the United States. The substance is used, to a much lesser extent, for the treatment of obesity and narcolepsy.

17. Australia and Canada import dexamfetamine to meet their medical needs. Dexamfetamine imports by Australia rose from only 6 kg in 1991 to 61 kg in 1995 and then continued to increase sharply to an annual average of 145 kg in the period 1999-2000. Dexamfetamine imports reported by Canada rose from 7 kg in 1991 to 106 kg in 2000. Dexamfetamine is also imported into the United Kingdom. Those imports averaged about 45 kg annually in the period 1996-2000.

18. The medical use of metamfetamine in the United States is low (around 35 kg annually). Most of the metamfetamine manufactured is used for industrial purposes (see para. 29 below). Metamfetamine consumed in the United States is obtained almost exclusively from domestic manufacture. All other countries using metamfetamine for medical purposes cover their needs mostly through imports. The main importer of metamfetamine in 2000 was Chile (5.5 kg).

19. In recent years, about 400 kg of levomethamphetamine have been used annually in the United States for the manufacture of nasal inhalants for domestic use, which are exempted in that country from certain control measures in accordance with article 3 of the 1971 Convention. In 2000, only 37 kg of levomethamphetamine were used for that purpose.

20. The countries with the highest levels of medical use of amphetamines, calculated on the basis of statistics provided for the years 1996, 1998 and 2000² and expressed in DDD per 1,000 inhabitants per day,³ are listed by the highest consumption for the year 2000 in table 1.

Table 1. Medical use of amphetamines, 1996, 1998 and 2000

Country	DDD per 1,000 inhabitants per day		
	1996	1998	2000
United States of America	1.22	2.83	5.43
Australia	1.05	1.15	1.37
Canada	0.27	0.16	0.83
Chile	0.38	0.50	0.31
Iceland	0.00	0.36	0.25
Belgium	0.25	0.20	0.19
Sweden	0.10	0.11	0.18
Norway	0.00	0.02	0.15
United Kingdom of Great Britain and Northern Ireland	0.34	0.07	0.14
New Zealand	0.00	0.11	0.14

²The method of calculating levels of consumption of psychotropic substances is explained in table IV of the present publication.

³The list of defined daily doses (DDD) used in these calculations is presented in table III of the present publication.

Use as intermediary products

21. Most of the amphetamine manufactured worldwide is used in industry as intermediary products, for the manufacture of other substances. In recent years, amphetamines have mainly been converted to substances used as anorectics (benzfetamine, clobenzorex, fenproporex and levopropylhexedrine) and antiparkinsonian drugs (selegiline). The quantity of amphetamines converted into anorectics worldwide totalled about 4.5 tons in 2000. About 2.5 tons of amphetamines were used for conversion into selegiline in 2000. Occasionally, small quantities of amphetamines are also converted into other substances, such as famprofazone (an analgesic) and amfetaminil (a psychostimulant). Benzfetamine and fenproporex are included in Schedule IV of the 1971 Convention, whereas amfetaminil, clobenzorex, famprofazone, levopropylhexedrine and selegiline are not under international control.

22. In the 1990s, bulk manufacture of amphetamines has mainly occurred in five countries: France, Germany, Hungary, Switzerland and United States. The conversion of amphetamines into other substances has taken place in all five of those countries, as well as in Ireland and Israel, which have imported significant quantities of amphetamines for that purpose.

23. In France, the manufacture of amfetamine averaged approximately 12 tons annually in the period 1991-1995. The manufacture of that substance dropped to less than 5.3 tons in 1999 and increased again to 7.8 tons in 2000. Amfetamine has been used in France for conversion into either dexamfetamine or fenproporex. Dexamfetamine has been converted further into clobenzorex or has been exported. Levamfetamine obtained during the process of separating dexamfetamine from amfetamine has been used again for the manufacture of amfetamine by racemization.

24. The quantity of amfetamine used in France for the manufacture of fenproporex declined from around 3 tons annually in the period 1991-1994 to about 1.3 tons annually in the period 1995-1999. In 2000, however, while the use of anorectics diminished in France, no amfetamine was used as an anorectic.

25. The quantity of amfetamine used in France for the manufacture of dexamfetamine averaged about 9 tons annually in the period 1991-1995. That figure dropped to 3 tons in 1996 but rose again to almost 10 tons annually in 1997 and 1998. In 2000, 7.2 tons of amfetamine were used for that purpose. The quantity of dexamfetamine obtained through that process averaged about 2.5 tons annually between 1991 and 1995. Dexamfetamine manufacture declined to 1.4 tons in 1999 and increased slightly to 1.9 tons in 2000. Until 1995, approximately 2 tons of dexamfetamine had been used annually in France for conversion into clobenzorex. Only 800 kg of dexamfetamine were converted into clobenzorex in 1996, while the quantity of dexamfetamine used for that purpose averaged more than 2 tons annually in the period 1997-2000. Exports of dexamfetamine from France declined from an annual average of 875 kg in the period 1991-1993 to an annual average of about 200 kg in the period 1998-2000.

26. A total of 13.8 tons of metamfetamine racemate was manufactured in France in the period 1996-2000. The manufacture of that substance has been very irregular, reaching a record level of more than 6 tons in 1996, dropping to zero

in 1997 and amounting to 4.2 tons in 2000. The substance has mainly been exported (a total of more than 9 tons since 1996) or divided into levomethamphetamine and metamfetamine. Levomethamphetamine has mainly been used for export (a total of 1.9 tons in the period 1996-2000) and has also been converted, in smaller quantities, into selegiline. Metamfetamine obtained during the process of separating levomethamphetamine has been added to stocks, which averaged 3 tons annually in the period 1996-1999 and increased to 3.8 tons in 2000.

27. Germany started to manufacture levomethamphetamine in 1993 (377 kg). The substance has been used in that country almost entirely for conversion into selegiline. The total quantity manufactured in the period 1997-1998 was 7.7 tons, of which 4.3 tons were converted into selegiline and the rest was added to stocks. No manufacture of levomethamphetamine or selegiline was reported in the period 1999-2000. In 1995 and 1996, Germany reported the manufacture of substantial amounts of metamfetamine (a total of 6.6 tons). All of the metamfetamine manufactured was converted into levopropylhexedrine. No manufacture of metamfetamine took place in 1997, whereas a total of almost 4.5 tons of the substance was manufactured in the period 1998-1999 and 1.5 tons were manufactured in 2000, all of which was converted into levopropylhexedrine.

28. Between 1991 and 1998, the annual manufacture of amfetamine in Switzerland fluctuated between 1.4 tons (in 1993) and nearly 2.5 tons (in 1996). No manufacture of that substance took place in 1997. Manufacture of that substance then increased sharply from 1.6 tons in 1998 to 8.3 tons in 1999. In 2000, no manufacture of amfetamine was reported in Switzerland. Amfetamine was used almost entirely for conversion into fenproporex. Until 1994, fenproporex was also manufactured from dexamfetamine imported from France (400 kg in 1994). Occasionally, metamfetamine was used for conversion into fenproporex. In 1995, 1.2 tons of metamfetamine were manufactured and converted into fenproporex. Also in 1995, 200 kg of metamfetamine racemate were imported and used for the manufacture of famprofazone.

29. In the 1990s, the trend in the manufacture of amfetamine in the United States mainly reflected changes in the demand for dexamfetamine, into which it was converted. Since 1998, however, amfetamine itself has also been directly used in large quantities for medical purposes (see para. 15 above). The manufacture of amfetamine averaged 6.8 tons annually in the period 1995-1997. During the period 1998-1999, the manufacture of that substance increased to an annual level of around 13 tons. In 2000, the manufacture of amfetamine reached a record level of nearly 19 tons. Stocks of amfetamine rose from only about 800 kg in 1997 to 6.3 tons in 1998 and amounted to 2.7 tons in 2000. Dexamfetamine has been used almost entirely for medical purposes (see para. 16 above). In 1995, 100 kg of dexamfetamine and 152 kg of levamfetamine were converted into norselegiline. Since 1992, metamfetamine racemate has been imported by the United States from France in large quantities (an annual average of 1.4 tons in the period 1995-1999 and 2 tons in 2000). The substance has been divided into levomethamphetamine and metamfetamine. Levomethamphetamine has mainly been used for medical purposes (see para. 19 above) or has been exported (800 kg in 1996). Before 1998, about 700 kg of metamfetamine had been converted into benzfetamine each year. In 2000, 1 ton

of metamfetamine was used in the manufacture of non-psychoactive substances; in addition, metamfetamine was used, to a limited extent, directly for medical purposes (see para. 18 above).

30. In 1997, Hungary reported for the first time the manufacture of metamfetamine (2.3 tons) and used the substance for conversion into selegiline. In 1999, Hungary reported the manufacture of almost 6 tons of metamfetamine. No manufacture of the substance was reported for 1998 and 2000. The quantity of the substance converted into selegiline totalled 3.5 tons in 1998 and 5.2 tons in 1999. In Ireland and Israel, selegiline has been manufactured from levomethamphetamine imported from other countries. Ireland imported a total of 1.4 tons of levomethamphetamine in the period 1995-1997 and used it for that purpose. In 2000, 480 kg of levomethamphetamine were imported for conversion into selegiline. Israel last reported a significant import of levomethamphetamine in 1996 (200 kg). Ireland imported 100 kg of amfetamine in 1997 for conversion into amfetaminil.

Fenetylline

31. Fenetylline was brought under international control in 1986. The manufacture of the substance was last reported in 1987. Worldwide stocks of fenetylline, which amounted to nearly 4 tons in 1987, were significantly reduced as a result of the voluntary destruction of all stocks of the substance in Switzerland in 1991 and 50 per cent of the stocks in Germany in 1992. Those stocks were destroyed in order to put an end to attempts by drug traffickers to divert fenetylline into illicit channels by using falsified import authorizations.⁴ Currently, Germany is the only country holding important stocks of fenetylline (573 kg at the end of 2000), while Israel and the Netherlands have reported only small quantities of stocks (11 kg and 3 kg respectively). In recent years, Belgium, Germany and Israel have been the only countries using fenetylline for medical purposes in quantities of several kilograms annually. The Netherlands imports the substance mainly for re-export. The substance is prescribed for the treatment of ADD and narcolepsy and as a psycho-stimulant. The amount of fenetylline imported each year by Belgium has been stable, averaging less than 45 kg in the period 1996-2000. The consumption of fenetylline in Germany was about 25 kg annually during the period 1996-1999, but increased to nearly 50 kg in 2000.

Methylphenidate

32. The use of methylphenidate for medical purposes increased significantly in the 1990s. This large increase was mainly a result of developments in the United States, where the substance is heavily advertised, including direct advertisement to potential consumers. It is frequently prescribed for the treatment of ADD (called ADHD in that country), primarily in children. The use of methylphenidate for the treatment of ADD has also risen sharply in many other countries, although the prescription level in most of those countries is still low compared with the level in the United States. Methylphenidate is primarily used for the treatment of ADD, but the substance is also prescribed for the treatment of narcolepsy.

⁴See *Report of the International Narcotics Control Board for 1999* (United Nations publication, Sales No. E.00.XI.1), para. 85.

33. Global manufacture of methylphenidate rose very rapidly in the first half of the 1990s, from 2.8 tons in 1990 to 12.8 tons in 1995. It reached a record level of 19.1 tons in 1999 and dropped to 16 tons in 2000 (see figure 1). This decrease may have been caused by the rapidly increasing use of other amphetamines for the treatment of ADD in the United States, the country which is also the major consumer of methylphenidate in the treatment of ADD. The United States has been the leading manufacturer of methylphenidate, increasing its manufacture of that substance from 1.8 tons in 1990 to 10 tons in 1995 and then gradually increasing it further to a record level of almost 15 tons in 1999. In 2000, the United States reported the manufacture of 12.6 tons of the substance. Almost all of the methylphenidate manufactured in the United States has been for domestic use; only 193 kg were exported in 2000. Stocks of methylphenidate in the United States increased significantly from 500 kg in 1992 to 12.6 tons in 2000. Serious concerns have been raised in the United States about the possible overdiagnosing of ADD and overprescribing of methylphenidate. Cases involving diversion of the substance for illicit use have been identified.⁵

34. The medical requirements for methylphenidate outside the United States are mainly covered by imports from Switzerland and, to a lesser extent, from Spain, the main countries supplying that substance on the world market. In the 1980s, methylphenidate exports from Switzerland stagnated at a level of less than 400 kg annually. After 1991, Swiss exports of methylphenidate gradually increased to 1.4 tons in 1996 and reached a record level of more than 2.6 tons in 2000. Until 1996, exports of the substance from Switzerland were drawn from local manufacture of the raw material. Since 1997, imports of methylphenidate from the United

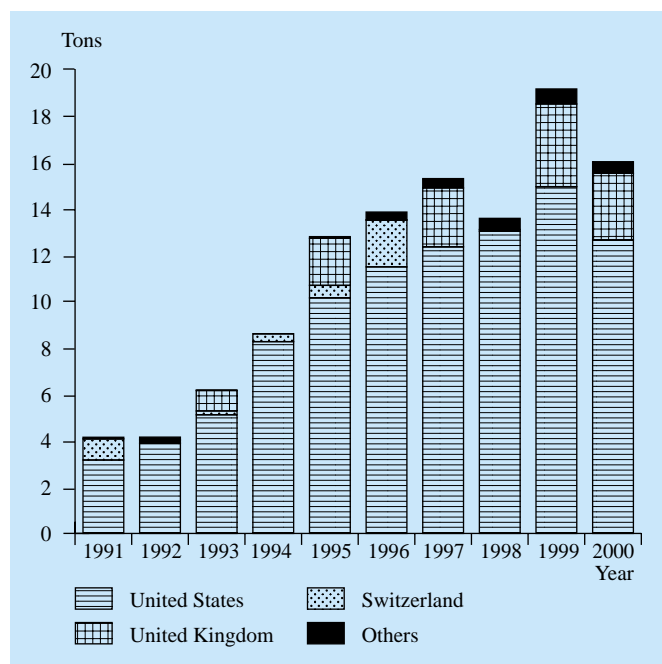
Kingdom have supplied the raw material for the manufacture of preparations. In 2000, the methylphenidate raw material manufactured in the United Kingdom amounted to 2.9 tons, of which 2.7 tons were exported to Switzerland. Exports of methylphenidate from Spain, which are based on local manufacture, increased from 26 kg in 1995 to 413 kg in 2000.

35. The number of countries and territories importing methylphenidate for domestic consumption has been growing. Since 1995, 110 Governments have reported such imports. Canada, the country with the second highest consumption of methylphenidate, increased its imports of that substance from 110 kg in 1990 to a record level of 874 kg in 1996. Methylphenidate imports in Canada then declined slightly to an average annual level of 732 kg in 1998 and 1999. After this consolidation period, the highest imports ever of methylphenidate were reported by Canada (1.3 tons) in 2000. From 1990 to 2000, methylphenidate imports rose in Australia from 12 kg to 204 kg, in Germany from 17 kg to 574 kg, in the Netherlands from 6 kg to 147 kg and in Mexico from nil to 152 kg. In Japan, where methylphenidate is used almost exclusively for the treatment of narcolepsy, imports of that substance increased from 69 kg in 1990 to 139 kg in 1999. In addition to the above-mentioned countries, 16 other countries imported more than 10 kg of methylphenidate in 1999.

36. The United States accounted for about 73 per cent of the worldwide medical use of methylphenidate in 2000 (see figure 2). The countries with the highest level of medical use of methylphenidate, calculated on the basis of statistics provided for the years 1996, 1998 and 2000² and expressed in DDD per 1,000 inhabitants per day,³ are listed by the highest consumption for the year 2000 in table 2.

37. In 1999, a total of 175 kg of methylphenidate was manufactured in Japan for conversion into a non-psycho-tropic substance. The substance is used in that country for research purposes by the pharmaceutical industry.

Figure 1. Manufacture of methylphenidate, 1991-2000



⁵See *Report of the International Narcotics Control Board for 1996* (United Nations publication, Sales No. E.97.XI.3), paras. 90-95; *Report of the International Narcotics Control Board for 1997* (United Nations publication, Sales No. E.98.XI.1), paras. 151-154; and *Report of the International Narcotics Control Board for 1998* (United Nations publication, Sales No. E.99.XI.1), paras. 148-151.

Figure 2. Calculated consumption of methylphenidate, 1991-2000

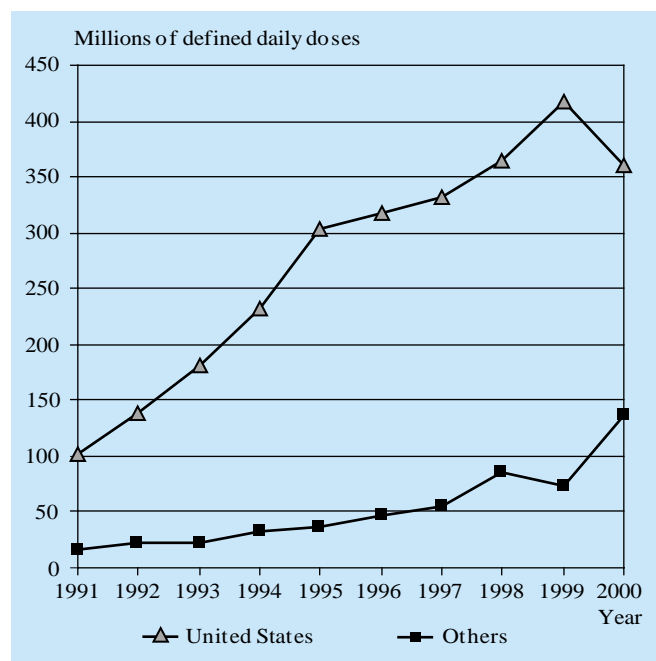


Table 2. Medical use of methylphenidate, 1996, 1998 and 2000

Country	DDD per 1,000 inhabitants per day		
	1996	1998	2000
Canada	1.91	2.62	4.50
United States of America	3.44	3.69	3.66
Switzerland	0.00	1.91	2.79
Iceland	0.43	0.78	2.29
New Zealand	0.52	0.98	1.72
Australia	0.66	0.79	0.99
Netherlands	0.22	0.48	0.99
United Kingdom of Great Britain and Northern Ireland	0.08	0.64	0.99
Norway	0.24	0.58	0.75
Israel	0.57	0.36	0.58
Germany	0.11	0.20	0.56
Belgium	0.15	0.29	0.47
Spain	0.16	0.28	0.24
Denmark	0.08	0.11	0.19
Chile	0.19	0.15	0.15

Phenmetrazine

38. The medical use of phenmetrazine has been discontinued in all countries. Small stocks of the substance held in the Czech Republic and Germany were exhausted in 1996.

Anti-emetics

Delta-9-tetrahydrocannabinol and its stereochemical variants

39. The substance *delta*-9-THC was originally included in Schedule I but was transferred to Schedule II in 1991 in view of the use of one of its stereochemical variants (dronabinol) for the relief of nausea associated with cancer chemotherapy. The substance is also used to stimulate appetite in patients with acquired immunodeficiency syndrome (AIDS). The United States is the only country that has reported the manufacture of *delta*-9-THC in significant quantities. The annual manufacture of *delta*-9-THC in that country was relatively stable, averaging 66 kg in the period 1995-1999. However, manufactured quantities in 2000 increased to 145 kg, representing an increase of more than 100 per cent with respect to the preceding period. In the past, Israel and the United Kingdom have reported the occasional manufacture of a few grams of the substance but the United Kingdom reported the manufacture of more than 1 kg of the substance in 2000. Almost all of the *delta*-9-THC manufactured in the United States was used domestically. Exports of the substance from the United States reached 2.8 kg in 2000. The largest imports of the substance were reported by Canada (1,021 grams), followed by Germany (815 grams) and the United Kingdom (723 grams).

Hallucinogens

Phencyclidine

40. Phencyclidine has been primarily used as an anaesthetic agent in veterinary medicine. The manufacture of small quantities of the substance has been reported in the past by France, Israel, the United Kingdom and the United

States (a total of 183 grams in the period 1995-1998). However, no manufacture of that substance was reported in 2000. In the United States, the country that has held the highest level of stocks of the substance, stocks have been rapidly decreasing. In 2000, stocks of phencyclidine in the United States were reported to amount to 260 grams, which represents 10 per cent of the stocks held in 1999. Other countries holding stocks of that substance were France (210 grams), followed by (in decreasing order) the United Kingdom, Denmark and Switzerland. International trade in phencyclidine has been limited to occasional transactions of only a few grams.

Sedative-hypnotics

Mecloqualone

41. Mecloqualone has not been manufactured since 1980. No stocks of the substance are held by any country.

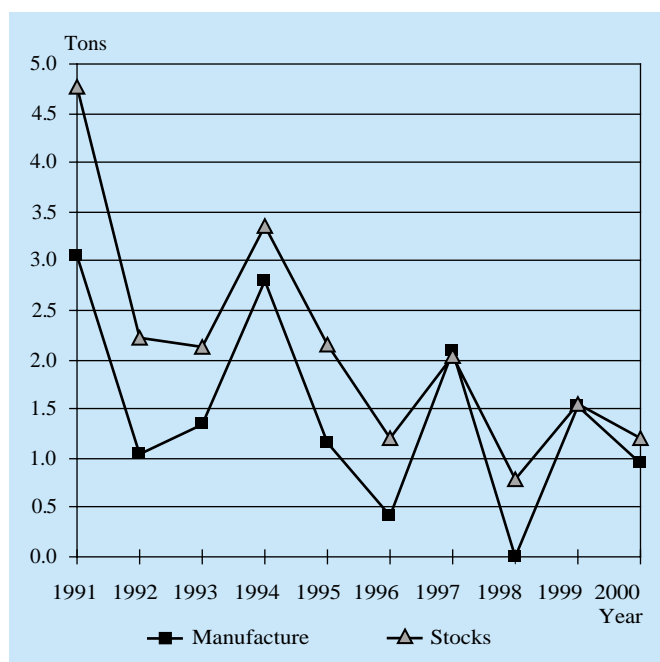
Methaqualone

42. In the early 1980s, the reported manufacture of methaqualone peaked at a level of more than 50 tons annually. A significant portion of that was diverted for non-medical use. The diversion of methaqualone has been gradually eliminated as a result of control measures adopted by Governments pursuant to recommendations by INCB and the close cooperation of national authorities with the Board in the identification of diversion attempts.⁴ The medical use of methaqualone has been discontinued in most countries. In recent years, Belgium and Switzerland have been the only countries using the substance in significant quantities for medical purposes. In Belgium, where more than 800 kg of methaqualone were used annually in 1991 and 1992, the consumption of the substance has dropped to zero in the last two years. In recent years (1997), manufacture of the substance was reported by the Czech Republic and Switzerland. No manufacture has been reported since then. In Switzerland, 340 kg of methaqualone were manufactured in 1997, exclusively for domestic use, as annual requirements for methaqualone are estimated by the authorities to be around 300 kg. The quantities needed for medical purposes have been obtained from the stocks held in that country. At the end of 2000, 1.2 tons of methaqualone were held in stocks in Switzerland. Other countries that reported stocks held at the end of 2000 were the United States (685 grams) and the United Kingdom (153 grams).

Secobarbital

43. The manufacture of secobarbital, a substance that in the past was frequently diverted from licit manufacture and trade into the illicit traffic, has declined substantially since its transfer from Schedule III to Schedule II in 1988. More than 11 tons were reported to have been manufactured worldwide in 1988. In 1989, however, 35.5 tons of the substance were manufactured by only one country: Federal Republic of Germany. The total dropped to 2.6 tons in 1990 and declined further to an annual average of 1.8 tons in the period 1993-1995. Since then, the quantity manufactured has further declined (see figure 3). Although the manufacture of secobarbital reached 1.5 tons in 1999, it dropped to nearly 1 ton (955 kg) (9.5 million DDD) in 2000.

Figure 3. Secobarbital: total reported stocks and manufacture, 1991-2000



44. Until 2000, Denmark was the leading manufacturer of secobarbital, using the substance exclusively for exports. The manufacture of secobarbital in that country dropped from 7 tons in 1988 to 2.6 tons in 1990. In the period 1991-1995, the manufacture of that substance in Denmark averaged about 1.2 tons annually. No manufacture of secobarbital took place in Denmark in 1996 and 1998, whereas 1.6 tons were manufactured in 1997; that figure decreased to 729 kg in 1999 and to 276 kg in 2000. In the 1990s, only two other countries, namely Japan and the United States,

manufactured secobarbital regularly, almost exclusively for domestic use. In 2000, Germany also reported the manufacture of secobarbital (679 kg) for domestic use and exports. The manufacture of the substance in Japan has been stable at around 3 kg annually. In the United States, secobarbital manufacture gradually declined from 1,100 kg in 1991 to 244 kg in 1995 but rose again to an annual average of around 350 kg in the period 1996-2000. Stocks in the United States in 2000 decreased by 50 per cent compared with the previous year, and they were used mostly for internal consumption. In several other countries, the medical needs for secobarbital have been covered by imports. The major importers of the substance have been Belgium, Canada, the Netherlands, Spain, Sweden and the United Kingdom. Imports of the substance by Ireland and Switzerland were mainly for re-export.

Antitussives

Zipeprol

45. Zipeprol was brought under international control in 1995. Statistics on the substance have been available only since that year. The manufacture of zipeprol has been reported by only France (1.3 tons in 1996) and the Republic of Korea (a total of almost 1.3 tons in the period 1996-2000). Switzerland held the highest level of stocks of zipeprol (almost 1.5 tons in 1999), representing 75 per cent of the world's stocks of that substance. At the end of 2000, the level of zipeprol stocks held by Mexico were similar to the level of stocks of that substance held by Switzerland. Switzerland was also the leading exporter of the substance in 1999 (1.3 tons) and in 2000 (812 kg). In 2000, the main countries importing zipeprol were the Republic of Korea (462 kg), Mexico (367 kg) and Greece (67 kg).

Substances listed in Schedule III

46. Nine substances are listed in Schedule III. One belongs to the group of central nervous system stimulants, six to the group of sedative hypnotics and two to the group of analgesics.

Central nervous system stimulants

Cathine

47. Cathine, a substance used as an anorectic, has been listed in Schedule III since 1986. In recent years, the total quantity of cathine manufactured has been fluctuating and there has been a sharp downward overall trend: world manufacture of the substance declined from over 6 tons in 1996 to 428 kg in 2000, while no manufacture of the substance was reported in 1998. The same pattern could be observed with respect to the total stocks of cathine, which stood at 2.7 tons in 2000. Historically, Germany has been the largest manufacturer of cathine. Since 1996, Germany has been the world's only manufacturer of cathine every year, except in 1997 when Switzerland manufactured 475 kg of the substance.

48. Total imports of cathine increased from 3.5 tons in 1996 to 5.6 tons in 1997 and then declined to an average of 4.9 tons annually in the period 1998-2000. The world's biggest importers of the substance during the last five years were Germany, Italy, Mexico, South Africa and Switzerland. South Africa has reported that its imports of cathine increased from an annual average of 1.6 tons per year during the period 1996-1998 to almost 2 tons in 1999 and 1.8 tons in 2000. Mexico reported that its imports of the substance increased from zero in 1996 to 1.2 tons in 1997, then declined for two years before increasing again to 972 kg in 2000. Italy imported an average of 966 kg of cathine annually during the period 1996-2000, most of which (88 per cent) was for re-export. Similarly, cathine imports by Switzerland, which have averaged 476 kg annually in the last three years, have been almost entirely for re-export. Germany, the world's biggest exporter of cathine, supplemented its domestic manufacture of the substance by importing an average of almost 600 kg annually during the period 1996-2000. Germany's exports of the substance averaged 3.3 tons annually during that five-year period, ranging from a low of 2.5 tons in 1998 to a high of 3.9 tons in 2000.

Sedative-hypnotics

Barbiturates

49. Four barbiturates are listed in Schedule III: amobarbital (since 1971), butalbital (since 1987), cyclobarbital (since 1971) and pentobarbital (since 1971). In the period 1996-1997, total reported manufacture of those substances, recalculated in DDD, averaged 1 billion DDD. Then, after peaking at almost 1.4 billion DDD in 1998, total world manufacture of the substances gradually declined to about 900 million DDD in 2000. While averaging 54 per cent in the last five years, the share of butalbital in the total manufacture of the four substances declined to 22 per cent in 2000. At the same time, the share of pentobarbital, averaging 26 per cent during the period 1996-2000, increased steadily from 22 per cent in 1996 to 48 per cent in 2000. Similarly, while the share of amobarbital increased from 4 per cent in 1997 to 30 per cent in 2000, the share of cyclobarbital decreased from 4.5 per cent in 1998 to 0.3 per cent in 2000 (see figure 4).

50. Global manufacture of butalbital averaged about 45 tons per year during the period 1996-1999 before it suddenly fell to less than 25 tons in 2000. The total stocks of the substance followed suit, falling from an annual average of 18.7 tons during the period 1997-1999 to 12 tons in 2000. According to reported statistics, this is the result of the manufacture of butalbital in the United States declining sharply from an average of 31 tons per year during the period 1996-1999 to a little over 9 tons in 2000. Butalbital has been used for the manufacture of a number of preparations exempted in the United States from certain control measures, in accordance with article 3 of the 1971 Convention. In the period 1996-1999, the United States was the major manufacturer of butalbital, averaging 69 per cent of global manufacture of the substance; the amount manufactured in that country gradually declined from 37.4 tons in 1997 to 26.9 tons in 1999. The only other manufacturer of butalbital during that period was Denmark; the amount manufactured

in that country steadily increased from 12.3 tons in 1996 to 15.7 tons in 1999 before falling slightly to 14.5 tons in 2000 (see figure 5). In 2000, Germany reported for the first time the manufacture of butalbital (410 kg).

51. Although 10 countries have reported exports of butalbital during the last five years, Denmark has accounted for as much as 98 per cent (in 1999) of global exports of the substance. In the period 1996-2000, Denmark exported, on average, a little over 14 tons of the substance per year, with significant fluctuations: after averaging 12.2 tons during the period 1996-1998, its exports increased sharply to 18.5 tons in 1999 and then fell to 15.2 tons in 2000. The exports of butalbital by the United States almost doubled, from 1.1 tons to 2 tons, between 1996 and 1997 and then fell to 125 kg in 1998 and 50 kg in 1999; for 2000, no exports of the substance were reported by that country. Italy and Switzerland were among the smaller exporters of the substance during the period 1996-2000, when their annual averages amounted to 254 kg and 213 kg respectively.

52. Among 21 countries that have imported butalbital in recent years, the United States, Italy and Canada were the most important, their combined share averaging 96.1 per cent of total imports of the substance during the period 1996-2000. While no imports of butalbital were reported for 1997, imports of the substance by the United States increased from 7 tons in 1996 to 9.1 tons in 1998 and 11.6 tons in 1999 before falling sharply to 4.3 tons in 2000. Imports of the substance by Italy, which averaged 5.1 tons per year during the period 1996-2000, also decreased gradually from 6.5 tons in 1997 to 3.6 tons in 2000, declining on average 15 per cent per year. Similarly, imports of butalbital by Canada averaged 1.6 tons per year in the period 1996-2000, falling gradually from 2 tons in 1997 to less than 1.2 tons in 2000. On the other hand, imports of Switzerland have picked up in recent years, increasing from 88 kg in 1998 to 328 kg in 2000.

Figure 4. Barbiturates listed in Schedule III: total reported manufacture, 1991-2000

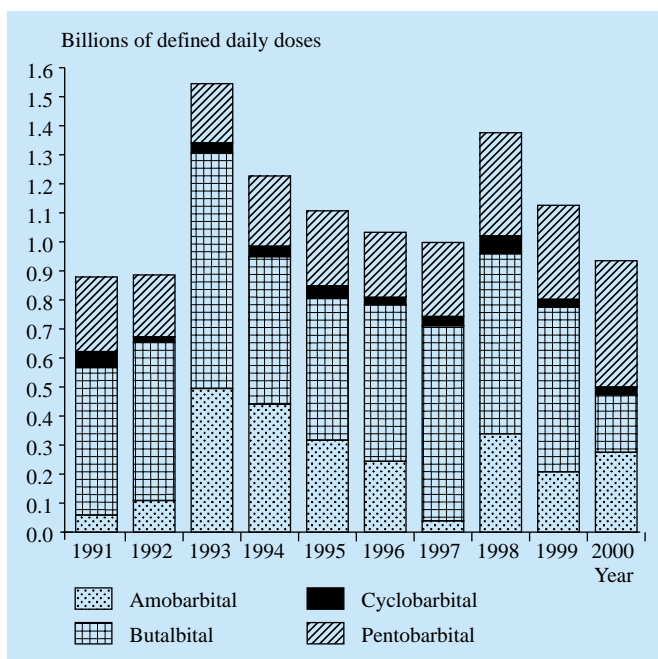
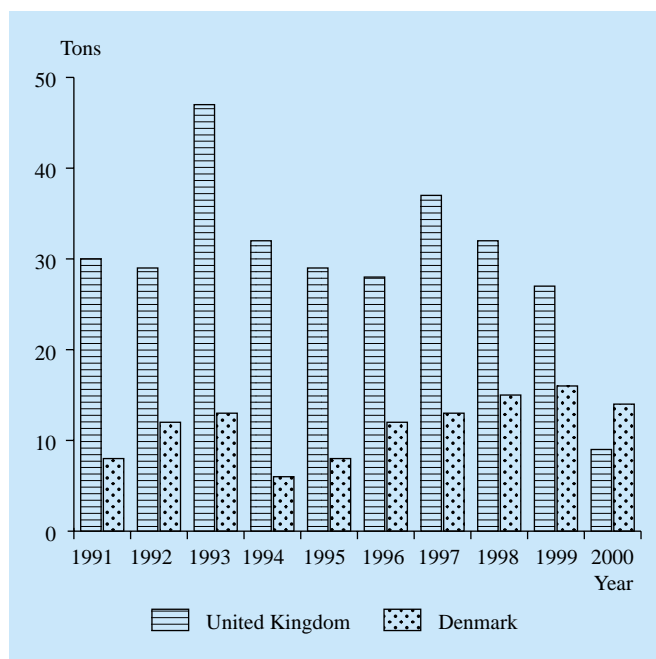


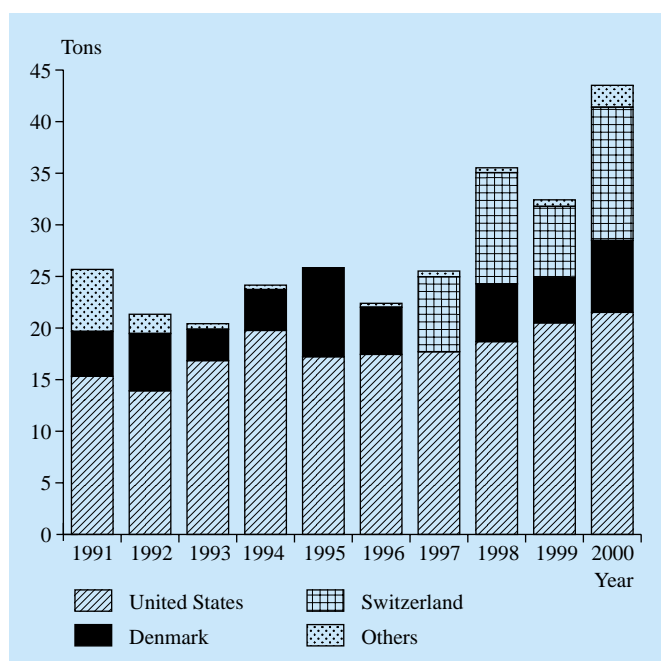
Figure 5. Butalbital: total reported manufacture, 1991-2000



53. In recent years, total reported manufacture of pentobarbital has increased steadily, averaging 31.9 tons annually during the period 1996-2000. The leading manufacturers of pentobarbital have been, in decreasing order, the United States, Switzerland and Denmark, which together accounted for 97.6 per cent of global manufacture of that substance in the period 1996-2000 (see figure 6). The manufacture of pentobarbital in the United States gradually increased from 17.4 tons in 1996 to 21.5 tons in 2000. Since 1997, the manufacture of pentobarbital in Switzerland has been fluctuating significantly, averaging 9.5 tons per year; it has ranged from 6.9 tons in 1999 to 12.9 tons in 2000. In Denmark, the average annual manufacture of pentobarbital during the period 1996-1999 (excluding the year 1997, for which no manufacture was reported), amounted to 4.8 tons; that figure increased sharply to almost 7 tons in 2000. The remaining 2.4 per cent of total manufacture of pentobarbital in the period 1996-2000 was accounted for by Japan and Germany, whose shares were almost equal. In Japan, average annual manufacture of pentobarbital has been stable at about 420 kg per year, while the figure for Germany increased from 259 kg in 1999 to 939 kg in 2000.

54. Of the 19 countries exporting pentobarbital in the last five years, the biggest exporter of the substance has been Switzerland, followed by the United States, Canada and Denmark. Together they accounted for over 90 per cent of global exports of the substance in the period 1996-2000. The annual exports of the substance by Switzerland averaged almost 10 tons during the period 1997-2000. There was a slight downward trend: Swiss exports of the substance decreased from 10.5 tons in 1998 to 9.1 tons in 2000. On average, the United States exported a little over 5 tons of pentobarbital per year during the period 1996-2000. Both Canada and Denmark exported an average of 4 tons of pentobarbital annually during the period 1996-2000. Canada's exports of the substance, after averaging about 3.8 tons per year in the period 1996-1998, fell to 3.1 tons in 1999 and then increased to 5.3 tons in 2000. Denmark's exports of pentobarbital increased steadily from 2.5 tons in 1997 to 5.6 tons in 2000.

Figure 6. Pentobarbital: total reported manufacture, 1991-2000

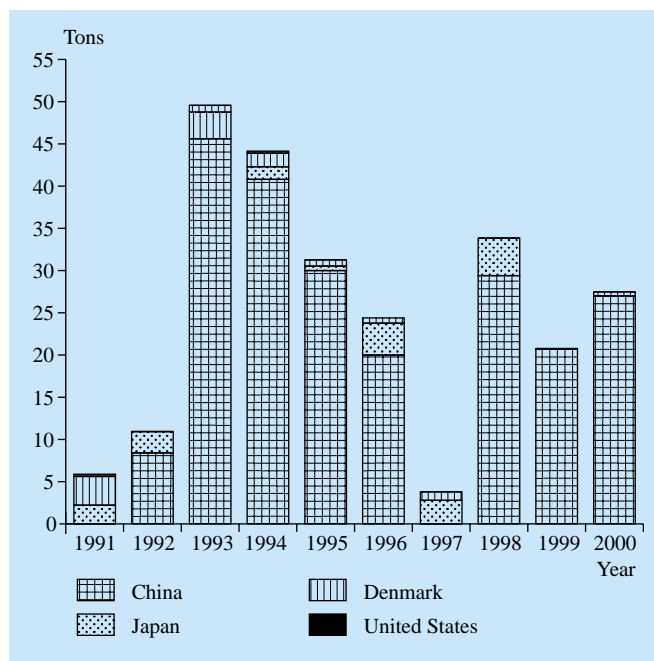


55. According to the reported statistics, 63 countries imported pentobarbital during the period 1996-2000. Total imports of the substance increased steadily from nearly 17 tons in 1996 to almost 27 tons in 2000. The major importers of the substance in 2000 were Canada (6.7 tons), the United States (4.5 tons), France (4.2 tons), the United Kingdom (3.2 tons), Australia (1.8 tons) and Germany (1.8 tons). The shares of France and the United States have increased in recent years.

56. In recent years, the manufacture of amobarbital has occurred only in China, Denmark, Japan and the United States (see figure 7). China is by far the dominant manufacturer of the substance, averaging 26 tons during the period 1998-2000, compared with 20 tons in 1996; it did not report any manufacture of amobarbital for 1997. About 80 per cent of the amobarbital produced in China is destined for domestic use. Denmark manufactured 1.1 tons of amobarbital in 1997 and 473 kg in 2000. Japan reported having manufactured 3.7 tons of amobarbital on average during the period 1996-1998, but has not reported having manufactured the substance since then. In the period 1996-2000, amobarbital was reported to have been manufactured in the United States only in 1996 (634 kg), and the country's stocks of the substance gradually decreased from 413 kg in 1996 to 133 kg in 2000.

57. The major exporter of amobarbital in the last five years has been China, followed by the Netherlands, Denmark and Germany; in 2000, their combined exports (11.3 tons) accounted for over 98 per cent of total reported exports of the substance. Since 1997, the Netherlands has exported an average of 4 tons of amobarbital per year; its exports of the substance have ranged from 2.3 tons in 1998 to 5 tons in 1999. The Netherlands reported no exports of the substance for 1996. China's exports of amobarbital have followed a clear upward trend in recent years: its reported exports of the substance increased from zero in 1996 to 850 kg in 1997, 2.6 tons in 1998 and 5 tons in 1999. The upward trend continued in 2000, when over 5.8 tons of amobarbital were

Figure 7. Amobarbital: total reported manufacture, 1991-2000



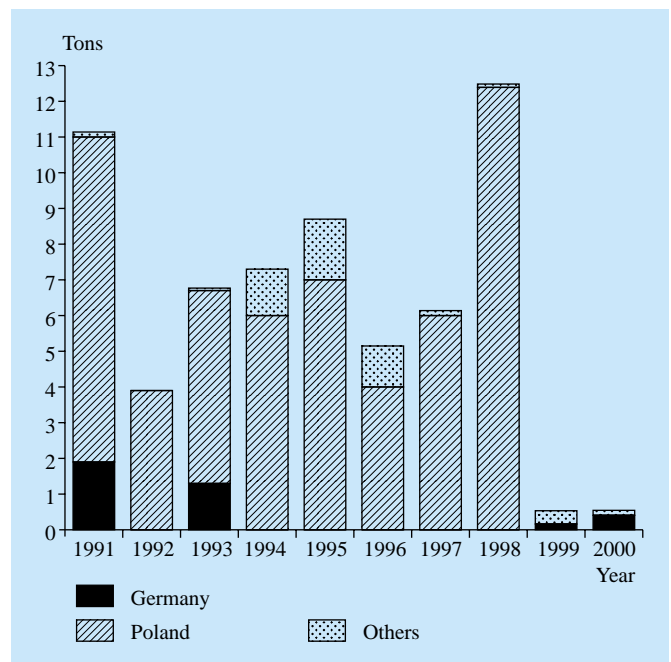
exported. Denmark's exports of the substance, which had increased from 852 kg in 1996 to over 1,000 kg in 1997, decreased to an average of 548 kg during the period 1998-2000. Similarly, Germany's exports fell from a high of 955 kg in 1998 to a low of 350 kg in 2000, averaging 632 kg per year in the period 1996-2000.

58. The world's biggest importer of amobarbital in recent years was the Netherlands, followed by Ireland, Hungary and Romania. Their combined share of global imports of the substance increased from over 76 per cent in 1997 to more than 92 per cent in 2000. Almost all of the amobarbital imports of the Netherlands were re-exported. The imports of the Netherlands increased drastically from a negligible amount in 1996 to an average of 4 tons per year during the period 1997-2000, ranging from 2.3 tons (in 1998) and 5 tons (in 1999). Romania accounted for over 35 per cent of total reported imports of amobarbital in 1997 (4 tons) and 1998 (2.4 tons); however, no trade transactions involving amobarbital were reported by Romania in 1996, 1999 and 2000. Ireland reported having imported on average 413 kg of amobarbital per year in the period 1996-2000; its imports of that substance increased gradually from 155 kg in 1996 to 688 kg in 2000, except in 1999, when they dropped to 284 kg. Imports of amobarbital by Hungary, though fluctuating, have followed a slight upward trend: average annual imports of the substance increased from 166 kg during the period 1996-1998 to 350 kg in the period 1999-2000.

59. Cyclobarbital is a substance used mainly in some countries in central and eastern Europe. Total reported manufacture of cyclobarbital fluctuated significantly in the period 1996-2000, increasing from an annual average of 5.8 tons in the period 1996-1997 to 12.5 tons in 1998 before falling sharply to an annual average of 540 kg in the period 1999-2000 (see figure 8). Until 1998, Poland was the world's leading manufacturer of cyclobarbital, accounting for up to 99 per cent of the world total. The amount of cyclobarbital manufactured in Poland increased from 4 tons in 1996 to 6.3 tons in 1997 and 12.4 tons in 1998, mostly for export; however, no manufacture of the substance was reported by Poland for 1999 and 2000. In Latvia, the manufacture of cyclobarbital fell from 502 kg in 1996 to an annual average of 116 kg in the period 1997-1998, only to increase to 372 kg in 1999 and fall again to 139 kg in 2000. The other occasional manufacturers of cyclobarbital in recent years were Belgium, which reported having manufactured 646 kg in 1996 for export, Germany, which increased its manufacture of the substance from 162 kg in 1999 to 406 kg in 2000, and Japan, which manufactured 1 kg of the substance in 1998.

60. Poland was the major exporter of cyclobarbital in the period 1996-2000, when its exports of the substance averaged 2.5 tons per year, ranging from a little over 1 ton (in 1999) to almost 5 tons (in 1997). Poland accounted for on average 70 per cent of total annual exports of cyclobarbital during that period. The other major exporters of the substance were Switzerland, followed by Germany and Latvia. During the period 1998-2000, Switzerland exported, on average, 395 kg of cyclobarbital annually, none of which had been manufactured in that country. Thus, Switzerland accounted for up to 27 per cent of total annual exports (2.2 tons) of that substance during that period. In Germany and Latvia, exports of cyclobarbital during the period 1996-2000 fluctuated around the average level of 240 kg per

Figure 8. Cyclobarbital: total reported manufacture, 1991-2000

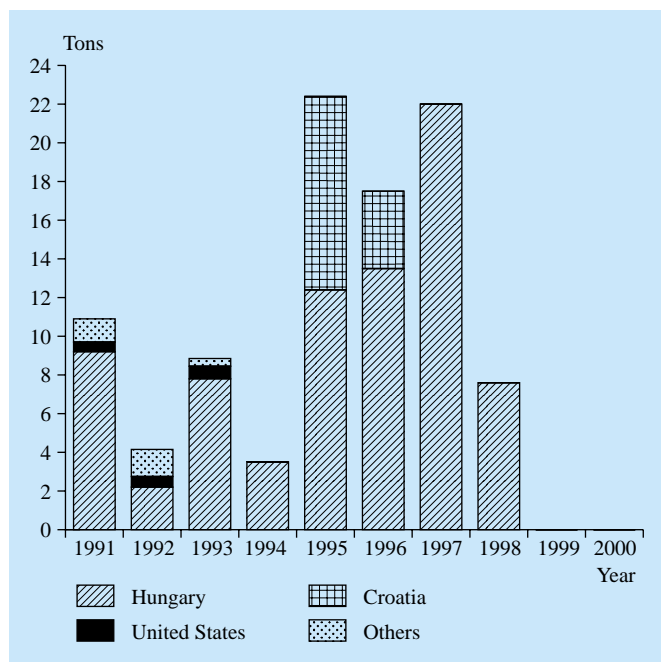


year. The Russian Federation, having no domestic manufacture of cyclobarbital, has been the biggest importer of the substance in recent years; during the period 1996-1999, its imports of the substance averaged almost 3 tons per year. Russian imports of cyclobarbital, after initially increasing from 2.7 tons in 1996 to 4.1 tons in 1997 (when they accounted for 80 per cent of total reported imports of the substance) and almost 4 tons in 1998, fell sharply to 1.2 tons in 1999. Switzerland and Bulgaria are becoming significant importers of cyclobarbital. Swiss imports of cyclobarbital (all of which were re-exported) increased from 167 kg in 1998 to 599 kg in 1999 and 419 kg in 2000 (when they accounted for 43 per cent of total reported imports of the substance). Bulgaria accounted for almost 30 per cent of total reported imports of cyclobarbital in 2000, gradually increasing its imports of the substance from 1 kg in 1997 to 284 kg in 2000.

Glutethimide

61. In the early 1980s, total reported manufacture of glutethimide peaked, reaching record levels of more than 90 tons annually, then gradually decreased to 8.4 tons in 1990 and less than 4 tons in 1994. Global manufacture of glutethimide has been highly unstable in recent years, increasing from 17.4 tons in 1996 to 22.2 tons in 1997 and then falling to 7.6 tons in 1998 (see figure 9). No manufacture of the substance has been reported since then. Total stocks of glutethimide mirrored the trend in total reported manufacture of the substance, increasing from 11.8 tons in 1996 to 18.7 tons in 1997, only to fall sharply from 14 tons in 1998 to 3 tons in 1999 and 582 kg in 2000. Hungary and Croatia were the only manufacturers of glutethimide in the period 1996-1998. Croatia manufactured a little less than 4 tons of glutethimide in 1996, accounting for 22.7 per cent of total reported manufacture of the substance. In 1997 and 1998, the substance was manufactured only in Hungary.

Figure 9. Glutethimide: total reported manufacture, 1991-2000



62. Total reported exports of glutethimide decreased drastically from an average of 14.4 tons per year during the period 1996-1998 to 1.4 tons per year during the period 1999-2000. Although 51 per cent (7.2 tons) of the total was accounted for by Croatia in 1996, since then that country has reported no trade transactions involving glutethimide. Thus, Hungary has replaced Croatia as the main exporter of the substance. Hungary's exports of glutethimide increased from 6.5 tons in 1996 to 14 tons in the period 1997-1998, accounting for about 96.6 per cent of total reported exports of that substance. Hungary exported only 650 kg of glutethimide in 1999 and 900 kg in 2000. Other exporters of glutethimide in recent years have been the Netherlands (450 kg in 1996) and the United States (200 kg in 1997 and 5 kg in 1998).

63. Switzerland and Bulgaria have been the main importers of glutethimide in recent years, a significant share of Swiss imports of the substance being destined for re-export. In Switzerland, large quantities of the substance have been converted into aminoglutethimide, a non-psychotropic substance used as an antineoplastic agent. Other importers of glutethimide in the period 1996-2000 were the Netherlands (450 kg in 1996, all of which was re-exported), Hungary (200 kg in 1997) and the United Kingdom (5 kg in 1998).

Flunitrazepam

64. Flunitrazepam was transferred from Schedule IV to Schedule III in 1995 (see also paras. 111-114 below). Since 1996, only Brazil, Italy and Switzerland have reported the manufacture of flunitrazepam. In 2000, flunitrazepam was the most manufactured benzodiazepine-type sedative-hypnotic. Switzerland manufactured nearly 1.2 tons of flunitrazepam in 2000, accounting for more than 85 per cent of total reported manufacture of that substance (1.4 tons). The only other country reporting having manufactured the substance in 2000 was Italy (196 kg). Other countries reporting having manufactured flunitrazepam in recent years have

been Brazil (223 kg in 1995 and 130 kg in 1996) and the Czech Republic (68 kg in 1994).

65. Switzerland, the leading exporter of flunitrazepam in recent years, exported 821 kg of the substance in 2000. Other countries reporting significant exports of the substance in 2000 were Italy (219 kg), Germany (16 kg), Ireland (20 kg) and the Czech Republic (12 kg). Japan, the main importer of flunitrazepam, steadily increased its imports of the substance from 220 kg in 1993 to 414 kg in 1999; however, Japan has not yet submitted a statistical report for 2000. The flunitrazepam imports of France averaged 230 kg annually in the period 1993-1995 and less than 170 kg annually in the period 1996-1998. In 1999 and 2000, France's imports of the substance dropped to only 88 kg. Other main importers of the substance in 2000 were Argentina (60 kg), Switzerland (60 kg), Germany (45 kg), the Czech Republic (43 kg) and Belgium (39 kg). Twenty other countries in all regions of the world imported flunitrazepam in 2000 in quantities exceeding 1 kg.

66. Flunitrazepam continues to be one of the most frequently abused benzodiazepines. The illicit market for flunitrazepam appears to be supplied mainly through diversion of the substance from domestic distribution channels and not through diversion from international trade. Preparations of flunitrazepam are frequently smuggled out of countries where the diversion has taken place and into other countries where there is an illicit market for such preparations. Several Governments, including major manufacturers and importers of the substance, have adopted strict control policies for flunitrazepam, in close cooperation with the pharmaceutical industry.

Analgesics

Buprenorphine

67. Buprenorphine, listed in Schedule III since 1989, is used as an analgesic and, in some countries, is used in detoxification and substitution treatment of heroin addicts. Total reported manufacture of the substance increased steadily from 303 kg in 1996 to 460 kg in 1998; it increased by more than twofold in 1999, reaching 978 kg, and was reported to be 1,056 kg in 2000. Total stocks of the substance also followed an upward trend, increasing from 115 kg in 1996 to 789 kg in 2000, sharp increases having taken place in 1999 and 2000. The United Kingdom has been the main manufacturer and user of buprenorphine, accounting for 93.4 per cent of total reported manufacture of the substance during the period 1996-2000. The level of manufacture of buprenorphine in the United Kingdom increased steadily from 274 kg in 1996 to 433 kg in 1998 and then rose sharply to 922 kg in 1999 and 996 kg in 2000. The level of manufacture of buprenorphine in India averaged 16.8 kg per year during the period 1996-2000, ranging from 8 kg in 1997 to 22 kg in 1999. The other manufacturers of the substance included Australia (10 kg in 1996, 15 kg in 1997 and 34 kg in 1999) and the Netherlands (5 kg in 1998 and 41 kg in 2000).

68. Nine countries reported exports of buprenorphine in the period 1996-2000. Total exports of the substance rose steadily from 100 kg in 1996 to 289 kg in 2000, an average annual increase of 47 per cent per year. That trend was driven by the rise in buprenorphine exports from the United

Kingdom, the major exporter of the substance. The United Kingdom accounted for on average 90 per cent of total exports of buprenorphine during the period 1996-2000. The level of annual exports of buprenorphine from the United Kingdom increased from 84 kg to 238 kg during the same period. In 2000, non-trivial amounts of buprenorphine were also exported by Australia (34 kg), Germany (8 kg) and the Netherlands (7 kg).

69. Of the 19 countries that provided statistics on imports of buprenorphine in the period 1996-2000, France was the dominant importer, with 164 kg in 2000; France's imports of the substance grew steadily from 68 kg in 1996 to 201 kg in 1999, increasing by 43 kg per year on average. The other two major importers of buprenorphine in 2000 were Germany (38 kg) and the United States (9 kg). Average annual imports of the substance during the period 1996-2000 amounted to 12.8 kg for Germany and 6.4 kg for the United States. The increasing use of buprenorphine in France and Germany is mostly the result of its being used for medical purposes, in the detoxification and substitution treatment of heroin addicts.

Pentazocine

70. Pentazocine was included in Schedule III in 1984. Total reported manufacture of that substance rose steadily from 1.3 tons in 1996 to 5.4 tons in 2000. Total stocks of pentazocine also increased drastically from an average of 814 kg during the period 1996-1997 to an average of 3,049 kg during the period 1998-2000. Italy, the United Kingdom and India have been the major manufacturers of pentazocine in recent years. On average, Italy accounted for nearly 50 per

cent of total annual manufacture of the substance during the period 1996-2000. Italy's manufacture of pentazocine increased from 540 kg in 1996 to about 2.2 tons in 1997, then fell to 1.5 tons in 1998 and increased to 2.4 tons in 1999 and 2.8 tons in 2000. During the same period, pentazocine manufacture in the United Kingdom fluctuated at 1.3 tons per year; no manufacture of that substance was reported by the United Kingdom in 1999. India, which had not reported pentazocine manufacture during the period 1996-1998, became one of the leading manufacturers of the substance, manufacturing 2.5 tons in 1999 and 1.4 tons in 2000. The other manufacturers of pentazocine include the United States, which manufactured a total of 268 kg of the substance in the period 1997-2000, and Slovenia, which manufactured 103 kg in 1998.

71. Of the 17 countries that have reported exports of pentazocine in recent years, Italy, the United Kingdom, Slovenia and the United States have been the leaders. Those four countries together accounted for nearly 90 per cent of total exports of the substance, averaging around 4 tons per year during the period 1996-2000. Italy's exports of pentazocine averaged 1.7 tons per year during that period, ranging from 600 kg in 1996 to 2.5 tons in 1999. Exports of that substance from the United Kingdom were stable at about 1,080 kg per year on average. Pentazocine exports from Slovenia and the United States fell gradually—from 908 kg in 1996 to 294 kg in 2000 in the case of Slovenia and from 740 kg to 226 kg in the case of the United States. There were 60 countries that reported imports of pentazocine in the period 1996-2000. Major importers of the substance in 2000 were the United States (1.5 tons), Slovenia (359 kg), Switzerland (295 kg), Canada (217 kg) and Portugal (169 kg).

Substances listed in Schedule IV

72. Sixty-two substances with various applications in medicine are listed in Schedule IV. Substances included in this Schedule belong to the following groups: central nervous system stimulants (14 substances); benzodiazepine-type anxiolytics (22 substances); other anxiolytics (1 substance); benzodiazepine-type sedative-hypnotics (11 substances); benzodiazepine-type anti-epileptics (1 substance); barbiturate-type sedative-hypnotics and anti-epileptics (7 substances); other sedative-hypnotics (5 substances); and analgesics (1 substance).

Central nervous system stimulants

73. There are 14 stimulants listed in Schedule IV: amfepramone, aminorex, benzfetamine, etilamfetamine, fen-camfamin, fenproporex, mazindol, mefenorex, mesocarb, pemoline, phendimetrazine, phentermine, pipradrol and pyrovalerone. Only amfepramone and pipradrol were originally included in Schedule IV. All the other stimulants were added to it at later stages. The stimulants in Schedule IV are mainly used as anorectics or for the treatment of ADD.

74. Reported manufacture of central nervous system stimulants in Schedule IV showed extreme fluctuations during

the period 1996-2000 (see figure 10). The level of manufacture was relatively stable, with an annual average of 1.2 billion DDD for total reported manufacture in the period 1991-1995. In 1996, a record high of 3.9 billion DDD was reached as a result of the increasing use of stimulants as anorectics. As a consequence of medical controversy on the use of those substances for the treatment of obesity, total manufacture started to decrease in 1997 and reached a record low level in 1998 (356 million DDD). After 1998, manufacture increased again and reached a level of total reported manufacture of 1.4 billion DDD in 2000.

75. The fluctuations between 1996 and 1998 were mainly a reflection of developments in the use of phentermine in the United States (see figure 11). The sharp increase in the consumption of that substance in the United States in 1996 and 1997 was attributed to its use for the treatment of obesity in a combination treatment involving phentermine and fenfluramine, commonly referred to as "phen/fen". Fenfluramine, an anorectic not under international control, was, however, withdrawn from the United States market in September 1997, following reports of serious adverse effects of that substance on health. After that, the consumption of phentermine dropped sharply in the United States.

Figure 10. Central nervous system stimulants listed in Schedule IV: total reported manufacture, 1991-2000

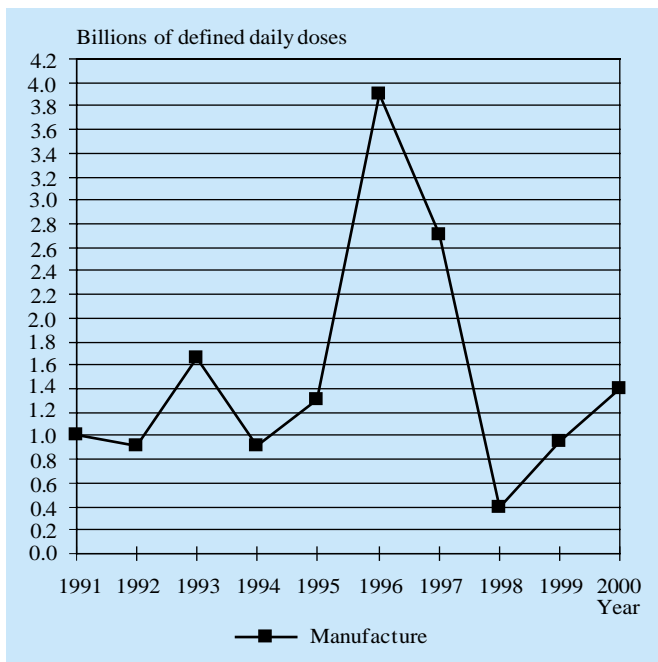
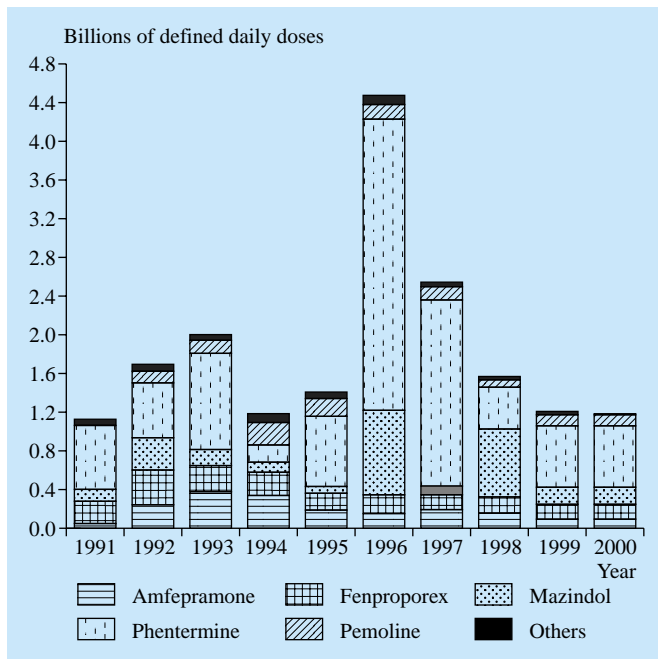


Figure 11. Central nervous system stimulants listed in Schedule IV: calculated global consumption,* 1991-2000



*Statistical data submitted by Governments are used to calculate the approximate global consumption in a given year. These consumption figures are expressed in defined daily doses.

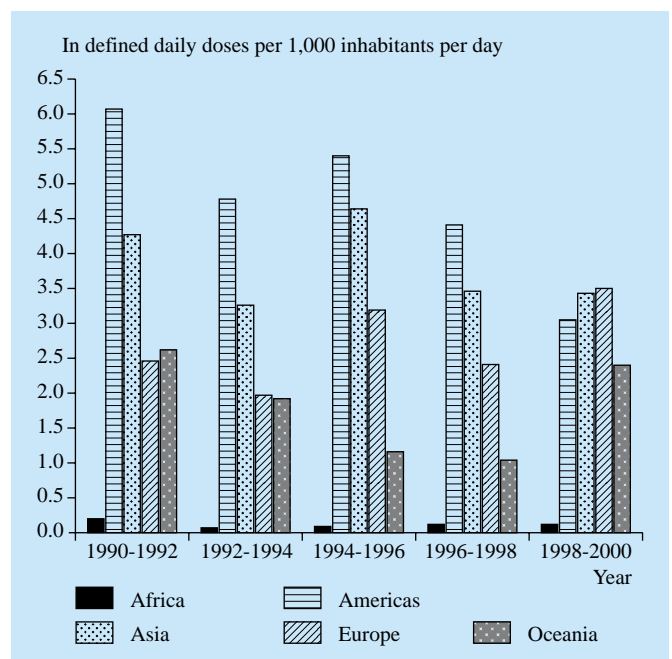
76. The highest per capita consumption of stimulants in Schedule IV has traditionally been in the Americas. The decline in the use of phentermine in the United States and measures against the inappropriate use of certain stimulants in some countries in Latin America (such as Argentina and Chile) have led to a decrease in consumption levels. At the same time, the consumption of anorectics in some countries in Asia have increased significantly (see figure 12). European countries have recorded very divergent trends. While

the consumption of anorectics has decreased significantly in some European countries, others have recorded remarkable increases. Of all the countries in the world, the United Kingdom (11.57 DDD per thousand inhabitants per day), Singapore (8.06 DDD) and Australia (5.82 DDD) reported the highest calculated per capita use of stimulants in Schedule IV in the period 1998-2000. Reports of diversion and abuse of anorectics have been received from several countries in all regions of the world in recent years.

77. In 2000, of the total reported manufacture of the stimulants in Schedule IV, the reported manufacture of phentermine (938 million DDD) accounted for 68 per cent, the reported manufacture of fenproporex (247 million DDD) accounted for 18 per cent, the reported manufacture of amfepramone (117 million DDD), accounted for 8 per cent, that of phendimetrazine (or 56 million DDD) accounted for 4 per cent and that of pemoline (33 million DDD) accounted for 2 per cent. No manufacture was reported for any of the other central nervous system stimulants included in Schedule IV (see figure 13).

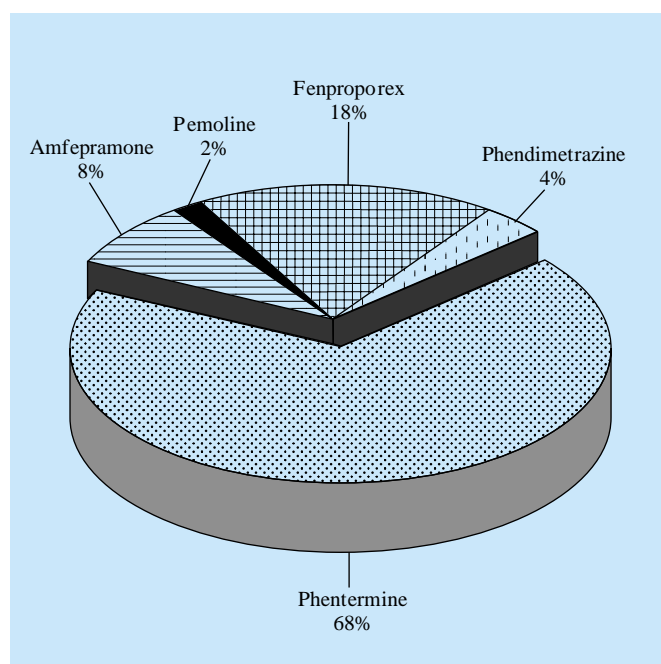
78. Phentermine used to be the main substance in the group of stimulants in Schedule IV, its share of total stimulant manufacture fluctuating between 25 per cent and 67 per cent. In the period 1991-1995, the average annual manufacture of phentermine was about 9.5 tons; and in 1996, its total manufacture amounted to 50 tons, the highest level ever reported. In 1997, that figure decreased to 30 tons, and no manufacture of phentermine took place in 1998 (see para. 72 above). Total reported manufacture of phentermine, after reaching a low level (2.6 tons) in 1999, when only the United Kingdom reported having manufactured the substance, increased to 14 tons in 2000, more than 90 per cent of which was accounted for by the United Kingdom; smaller quantities were manufactured by Germany (862 kg) and Italy (55 kg).

Figure 12. Central nervous system stimulants listed in Schedule IV: average national consumption in selected countries, by region,* 1990-2000



*Statistical data submitted by Governments are used to calculate the average annual consumption for a three-year period. Data from the five countries with the highest consumption were included in the calculation for each region.

Figure 13. Central nervous system stimulants listed in Schedule IV: substances' share in total reported manufacture, 2000



79. The United Kingdom has been the main exporter of phentermine in recent years (more than 5 tons in 2000). Imports of phentermine in quantities of more than 1 kg were reported in 2000 by 24 countries and territories. Several major importers of the substance, including Australia, the Netherlands and Switzerland, re-exported a significant share of their imports. Phentermine continues to be consumed in large quantities in the United States, where stocks of that substance were reduced from 17 tons at the end of 1997 to less than 3.5 tons at the end of 2000.

80. Fenproporex, a substance mainly used as an anorectic, was brought under international control in 1986. Since then, only Brazil, France and Switzerland have reported its manufacture. In the period 1995-1999, the manufacture of fenproporex in France varied greatly, averaging around 1.3 tons annually, a significant drop from the annual average of nearly 3 tons of that substance manufactured in that country in the period 1992-1994. No manufacture of fenproporex was reported by France in 2000; that is probably related to the very stringent regulations governing the prescription of anorectics that had recently been introduced in that country. In 1997, Switzerland reported for the first time the manufacture of fenproporex (747 kg). After 1997, the manufacture of that substance in Switzerland increased progressively, reaching 4.9 tons in 2000, most of which was destined for export. The manufacture of fenproporex in Brazil has been relatively stable in recent years. The manufacture, which averaged around 850 kg annually in the period 1996-1999 (no report was submitted for 2000), was almost exclusively for domestic consumption. The leading importer of the substance was Brazil (averaging more than 1.5 tons annually in recent years), followed by Mexico (1.5 tons in 2000). Since 1995, 16 other countries, mainly in Latin America and southern Europe, have reported having imported the substance in quantities of more than 1 kg.

81. In 2000, total reported manufacture of amfepramone, a substance mainly used as an anorectic, amounted to about

8.8 tons, having significantly decreased from 18.9 tons in 1997. Only two countries reported having manufactured amfepramone in 2000: Switzerland (7.8 tons) and Italy (991 kg). Brazil, which reported the manufacture of 5.5 tons of the substance annually on average in the period 1996-1999, submitted no report for 2000. Switzerland was also the main exporter of amfepramone, having reported exports of more than 9 tons of the substance annually on average in the period 1997-2000. In Brazil, the amfepramone manufactured was almost exclusively for domestic use. In 2000, the largest imports of amfepramone were reported by the United States (3.9 tons), Germany (1.8 tons) and Mexico (1 ton); in all of those countries, the imported amfepramone was mainly for domestic use. Sixteen other countries reported imports of amfepramone in quantities of more than 1 kg in 2000. Attempts to divert amfepramone from licit distribution channels and cases involving illicit trafficking in the substance have been reported in several countries in Asia and Europe in recent years.

82. Italy was the only manufacturer of phendimetrazine in the period 1993-1998. The manufacture of phendimetrazine in that country amounted to 4.1 tons in 1996, declined in the following years and reached 3.9 tons in 2000. The United States reported the manufacture of phendimetrazine only in 1999, when it manufactured a relatively small quantity of that substance (560 kg). Phendimetrazine manufactured in Italy is mainly destined for export (3.7 tons in 2000). Traditionally, the United States has been the main importer of the substance (1.5 tons in 1999), but no imports were reported by that country for 2000. Since 1995, six other countries have reported imports of phendimetrazine in quantities of more than 1 kg.

83. The manufacture of pemoline, a substance under international control since 1989, amounted to 8.7 tons in 1995. Its manufacture then declined sharply to 4.6 tons in 1997 and no manufacture of the substance was reported in 1998. In 2000, only Switzerland (1.2 tons) and the United States (172 kg) reported its manufacture. In Switzerland, the substance is manufactured exclusively for export. In the United States, pemoline is mainly for domestic use, for the treatment of ADD. The substance is also imported into that country (400 kg in 2000). Stocks of pemoline in the United States diminished from 3.4 tons at the end of 1999 to 373 kg at the end of 2000. In 2000, eight other countries reported imports of pemoline in quantities of more than 1 kg.

84. In the 1980s and early 1990s, some of the international trade in pemoline was attributed to attempts by drug traffickers to divert that substance from licit manufacture and trade into illicit channels. Since 1993, most of those attempts have been thwarted by Governments working in close cooperation with INCB.

85. Reports on the manufacture of and trade in the other stimulants included in Schedule IV have been sporadic. In the period 1998-2000, the manufacture of 1 kg of benzphetamine was reported by the United States, the manufacture of mazindol was reported by Brazil (84 kg in 1999) and Poland (25 kg) in 1998 and 1 kg in 1999) and the manufacture of pipradrol was reported by France (20 kg in 1999). No manufacture of aminorex, etilamfetamine, femcamfamin, mefenorex, mesocarb or pyrovalerone was reported during that period.

Benzodiazepine-type anxiolytics

86. Thirty-three benzodiazepines were included in Schedule IV in 1984. Midazolam was added to Schedule IV in 1990 and brotizolam was added to it in 1995. Flunitrazepam was transferred in 1995 from Schedule IV to Schedule III.

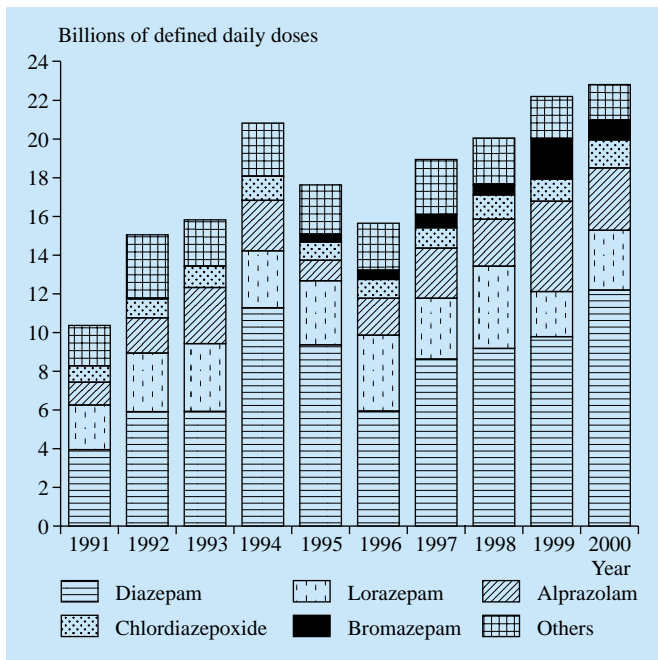
87. The number of countries and territories reporting on benzodiazepine manufacture and/or trade has increased considerably. Since 1990, 184 countries and territories have reported at least once the manufacture of or trade in benzodiazepines in quantities of more than 1 kg. In 2000, Canada provided, for the first time, data on benzodiazepines but that data covered only the period from September 2000 until the end of the year, since benzodiazepines became subject to national control only on 1 September 2000. Data on benzodiazepines have been made available by Austria only since 1998; such data were provided for the first time by Belgium in 1999.

88. Twenty-two benzodiazepines are generally classified as anxiolytics. The total reported manufacture of this group of substances, expressed in DDD, has been steadily increasing since 1995; in 2000 it reached a record level of 22.8 billion DDD.

89. Approximate consumption levels, calculated by INCB, have followed the trends in manufacture (see figures 14 and 15). The calculated average national consumption of benzodiazepine-type anxiolytics, expressed in defined daily doses per 1,000 inhabitants per day, is higher in Europe than in the other regions (see figure 16).

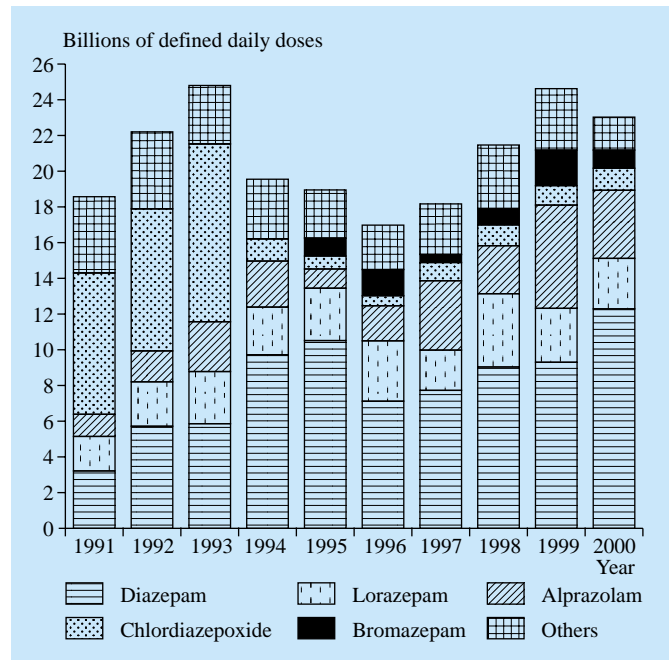
90. Attempts have frequently been made to divert some benzodiazepine-type anxiolytics, especially diazepam and chlordiazepoxide, from international trade into the illicit drug traffic, mainly in countries in Africa and south-east Asia.⁶

Figure 14. Benzodiazepine-type anxiolytics: total reported manufacture, by substance, 1991-2000



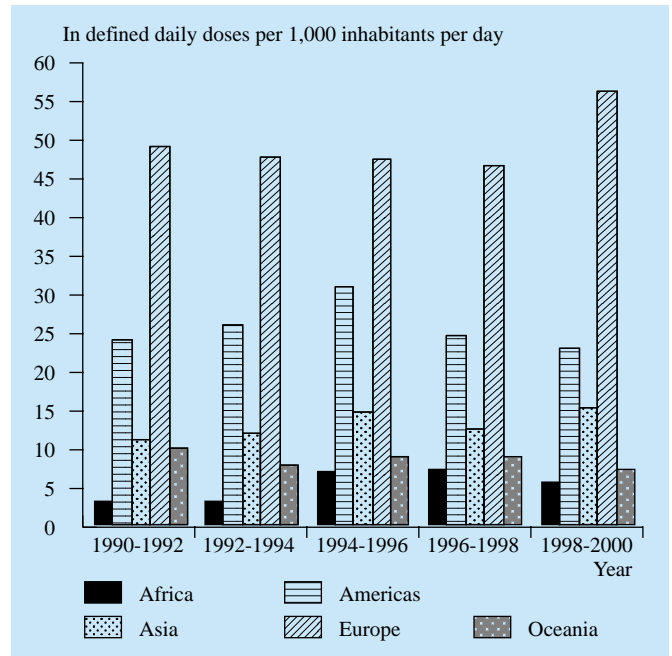
⁶See *Report of the International Narcotics Control Board for 1997* (United Nations publication, Sales No. E.98.XI.1), para. 180; and *Report of the International Narcotics Control Board for 1998* (United Nations publication, Sales No. E.99.XI.1), para. 114.

Figure 15. Benzodiazepine-type anxiolytics: calculated global consumption, by substance, 1991-2000



*Statistical data submitted by Governments are used to calculate the approximate global consumption in a given year. Those consumption figures are expressed in defined daily doses.

Figure 16. Benzodiazepine-type anxiolytics: average national consumption, in selected countries, by region, 1990-2000



*Statistical data submitted by Governments are used to calculate the average annual consumption for a three-year period. Data from the five countries with the highest consumption were included in the calculation for each region.

91. Fluctuations in the level of manufacture of benzodiazepine-type anxiolytics are usually a reflection of fluctuations in the manufacture of diazepam, the main substance of this group. Until 1987, diazepam had always accounted for more than one half of the total manufacture of all benzodiazepine-type anxiolytics. Since the beginning of the 1990s, its share

has fluctuated between one half and one third. In 2000, diazepam again accounted for more than one half of the total manufacture of all benzodiazepine-type anxiolytics.

92. In 2000, of the total reported manufacture of benzodiazepine-type anxiolytics, the reported manufacture of diazepam (or 12.2 billion DDD) accounted for 53 per cent, the reported manufacture of alprazolam (3.2 billion DDD) accounted for 14 per cent, and the reported manufacture of lorazepam (3.1 billion DDD) accounted for 13 per cent. Chlordiazepoxide (1.5 billion DDD), bromazepam (1 billion DDD), oxazepam (522 million DDD) and clorazepate (427 million DDD) each accounted for between 2 and 6 per cent of the total reported manufacture of benzodiazepine-type anxiolytics in 2000 (see figure 17). The manufacture of tetrazepam, prazepam and delorazepam was reported to be, respectively, 255 million DDD, 158 million DDD and 143 million DDD. The manufacture of less than 100 million DDD was reported for clobazam, clotiazepam, ethyl loflazepate, ketazolam, medazepam, nordazepam and pinazepam. No manufacture of camazepam, cloxazolam, fludiazepam, halazepam and oxazolam was reported for 2000.

93. Diazepam, the most traded substance in the group of benzodiazepine-type anxiolytics, is consumed in all regions of the world. During the period 1996-1999, global manufacture of diazepam averaged nearly 85 tons annually. In 2000, its manufacture was reported by seven countries, and the total quantity manufactured amounted to 122 tons. China has traditionally been the major manufacturer and exporter of the substance. That country and the three other main manufacturers and exporters of diazepam, Italy, India and Switzerland, account for more than 99 per cent of world manufacture of that substance.

94. In China, the manufacture of diazepam reached a peak of 92 tons in 1994. Manufacturing levels in the following years only reached between one third and two thirds of the 1994 level. In 2000, manufacture of diazepam in China

Figure 17. Benzodiazepine-type anxiolytics: substances' share in total reported manufacture, 2000

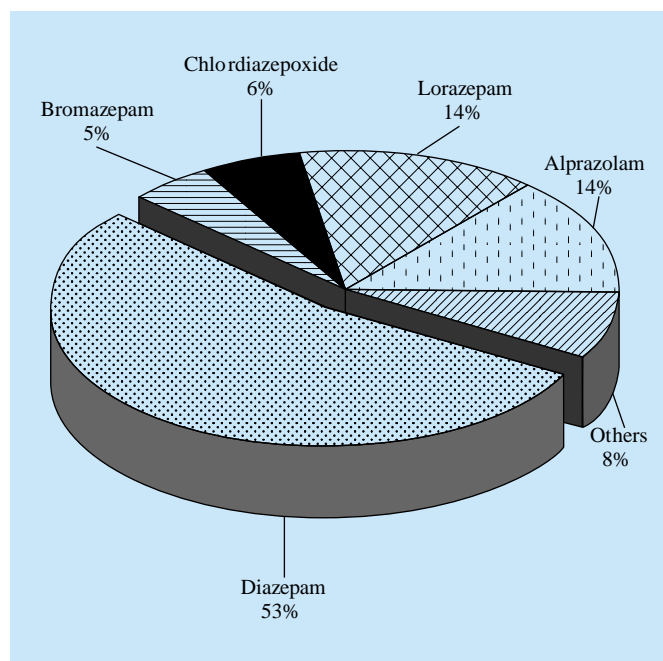


Figure 18. Benzodiazepine-type anxiolytics: countries' share in total reported manufacture, 2000

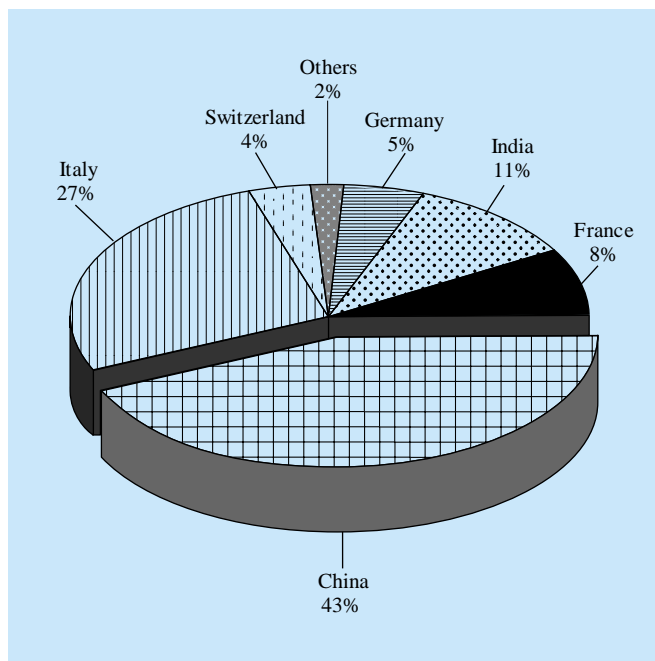
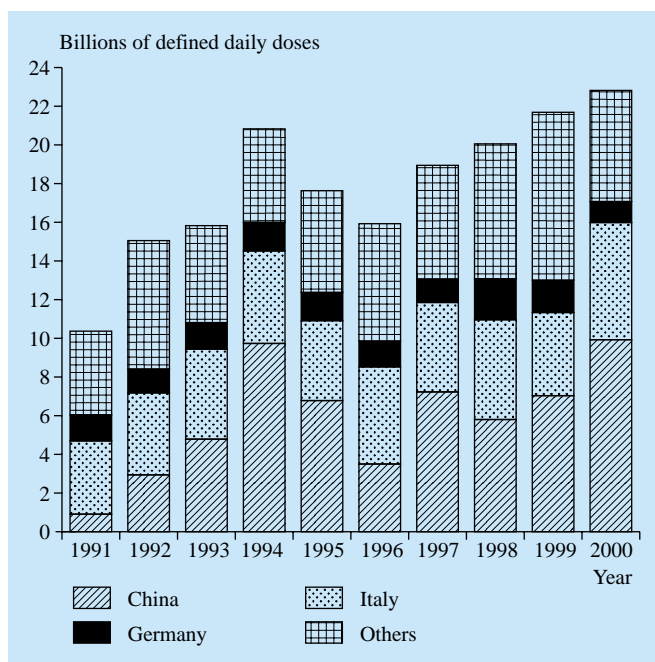


Figure 19. Benzodiazepine-type anxiolytics: reported manufacture, selected countries, 1991-2000



reached 91.8 tons (almost equally the 1994 level), accounting for more than 75 per cent of the world total. China was also the main exporter of diazepam in 2000, exporting 22 tons of the substance. That was far below the level of diazepam exports reported by China for 1994 (67 tons) but represented an increase when compared with export levels in the period 1998-1999, which averaged 18 tons per year.

95. Italy, the second largest manufacturer and exporter of diazepam in 2000, reported the manufacture of 21 tons and the export of 17 tons of the substance. India, the third largest

manufacturer of diazepam, reported the manufacture of 7 tons of the substance in 2000, mainly for domestic use. Switzerland reported having manufactured 1.4 tons and exported nearly 8 tons of diazepam, using its stocks and considerable imports (more than 5 tons) of the substance. Three countries reported having manufactured only small quantities of the substance in 2000: Iraq (457 kg), Poland (164 kg) and United Kingdom (199 kg). Brazil, which had regularly reported diazepam manufacture (on average around 3 tons per year during the period 1996-1999), did not submit any statistical report for 2000.

96. For 2000, 102 countries and territories reported having imported diazepam in quantities of more than 1 kg. The largest importers of the substance in 2000 were Denmark (7.5 tons), Switzerland (5.6 tons), the United States (5.1 tons), Yugoslavia (4.7 tons), the Islamic Republic of Iran (3.2 tons), Germany (3.1 tons) and the United Kingdom (2 tons). Denmark, Switzerland and the United Kingdom re-exported most of their imports of diazepam, and Germany, the Islamic Republic of Iran, the United States and Yugoslavia imported diazepam mainly for domestic use. Spain, formerly the main importer of diazepam, reduced its imports from the peak import year of 1989 (28.7 tons, used mainly for veterinary purposes) to 10 tons in 1997 and to only 1.5 tons in 2000.

97. Total reported manufacture of alprazolam gradually increased from 1.1 tons in 1995 to its highest level of 4.7 tons in 1999. In 2000, reported manufacture of alprazolam declined to 3.2 tons. Fluctuations in world manufacture of the substance reflect to a large extent its manufacturing levels in the United States. Before 1995, the United States accounted for on average 60 per cent of total reported manufacture of that substance. The drop in manufacture of alprazolam between 1999 and 2000 is mainly related to the non-manufacture of that substance in 2000 by the United States, which had reported the manufacture of 1.5 tons of the substance in 1999. In 2000, the main manufacturers of alprazolam were France (1 ton) and India (1.3 tons), which, together with Italy, accounted for two thirds of all exports of that substance.

98. In 2000, 56 countries and territories in all regions of the world declared imports of alprazolam in quantities of more than 1 kg. Alprazolam imports, after reaching a peak of 4.1 tons in 1999, decreased to 3.7 tons in 2000, mainly because Belgium, the main importer of the substance in 1999 (1.2 tons), had reduced its imports to 729 kg in 2000. Other major imports of alprazolam in 2000 were reported by Slovenia (663 kg), the United States (483 kg), Spain (338 kg), Argentina (202 kg), France (163 kg), Switzerland (150 kg) and Italy (126 kg). The United States and Spain imported alprazolam mostly for domestic consumption, while in Belgium, France, Italy, Slovenia and Switzerland, the substance was imported mainly to be re-exported.

99. Total reported manufacture of lorazepam amounted to 7.7 tons in 2000, which was lower than the annual average of the previous four years (8.5 tons). That drop was attributable to a decrease in the manufacture of lorazepam in Germany, from an annual average of 3.7 tons during the period 1996-1999 to 2.7 tons in 2000. The main manufacturer of lorazepam in 2000 was Italy, which manufactured 4.4 tons, accounting for more than one half of global manufacture of the substance. Germany and Italy exported most of the lorazepam that they manufactured. The only other countries

that reported having manufactured lorazepam in 2000 were India (489 kg, slightly less than one third of which was subsequently exported) and Poland (171 kg for domestic use).

100. Since 1996, 84 countries and territories worldwide have reported importing more than 1 kg of lorazepam at least once. In 2000, the largest amounts of imported lorazepam were reported by Ireland (2.8 tons, mainly for re-export) and the United States (1.3 tons for domestic use). Other major importers were Argentina (478 kg), France (874 kg), Germany (434 kg), Italy (672 kg), Spain (479 kg) and the United Kingdom (894 kg). Argentina, France and Spain imported lorazepam mostly for domestic consumption; the United Kingdom re-exported one half of its imports of lorazepam, and Germany, Italy and Switzerland re-exported most of their imports of the substance.

101. During the period 1995-1997, total reported manufacture of chlordiazepoxide averaged 29 tons per year. The manufacture of that substance reached 38 tons in 1998, dropped to 34 tons in 1999 and increased to its highest ever reported level (43 tons) in 2000. Those fluctuations reflect changes in the quantity of chlordiazepoxide manufactured in China and Italy. China was the main manufacturer of chlordiazepoxide in 2000, having reported the manufacture of 20.4 tons of the substance, a little less than three quarters of which was destined for domestic consumption. Italy exported 12.8 tons of chlordiazepoxide, including, in addition to its manufactures, part of its stocks of the substance.

102. Imports of chlordiazepoxide in quantities of more than 1 kg have been reported at least once by 101 countries and territories since 1993. Those imports, which had peaked at more than 25 tons in 1994, amounted to more than 20 tons in 2000. The major importers of the substance in 2000 were Switzerland (nearly 6 tons, most of which was re-exported), the Islamic Republic of Iran (4 tons, for domestic use), the United States (1.5 tons, for domestic use) and Spain (1.4 tons, mostly for domestic use).

103. Total reported manufacture of bromazepam, after reaching a peak of 21 tons in 1999, decreased by more than 50 per cent to 10 tons in 2000, a level still considerably higher than that of the former peak year of 1997 (6.9 tons). In 2000, the manufacture of bromazepam was reported only by Switzerland (6.3 tons) and Italy (4.1 tons); those countries were also the main exporters of the substance. Brazil, which had regularly reported bromazepam manufacture (an average of 1.7 tons annually) during the period 1996-1999, did not submit any statistical report for 2000.

104. In 1999, global imports of bromazepam, which had been gradually increasing, totalled 14 tons. In 2000, those imports decreased to 11 tons, the same level as in 1998. For 2000, 67 countries reported imports of bromazepam in quantities of more than 1 kg. The main importers of the substance were France (2.6 tons), Switzerland (1.5 tons) and Germany (1.1 tons). Switzerland imported the substance mainly for re-export. Germany re-exported about one half of its imports, and France used most of its imported bromazepam for domestic consumption.

105. World oxazepam manufacture and trade have been fairly stable in the last few years, amounting to 26 tons in 2000. The main manufacturers of oxazepam in 2000 were France and Italy, which together accounted for nearly 95 per

cent of total reported manufacture of the substance. In 2000, 43 countries reported oxazepam imports in quantities of more than 1 kg.

106. Total reported manufacture of clorazepate in 2000 was 8.5 tons, more than 10 per cent below the annual average of 9.6 tons of that substance manufactured during the period 1996-1999. France accounted for more than three quarters of total reported manufacture of clorazepate in 2000. International trade in clorazepate remained at approximately the same level in 2000 as in 1999.

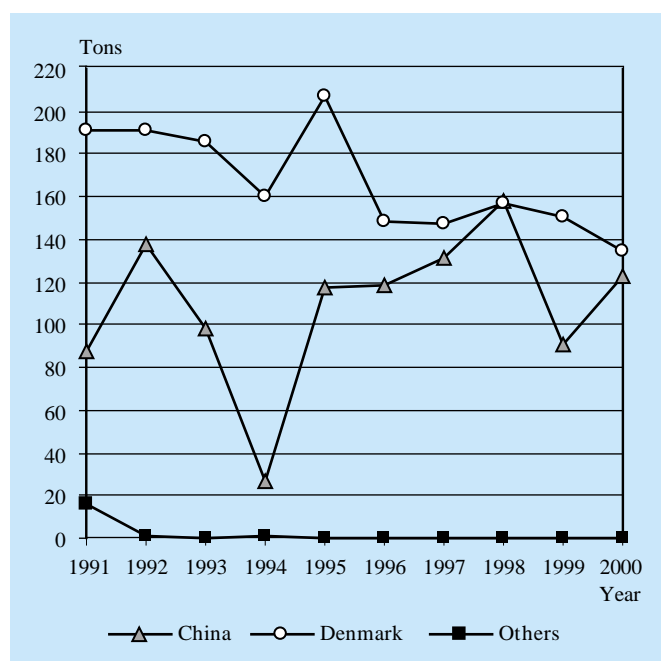
107. The manufacture of delorazepam, pinazepam, prazepam and tetrazepam increased from 1999 to 2000. The manufacture of clobazam, clotiazepam, ethyl loflazepam, ketazolam, medazepam and nordazepam declined in 2000.

Other anxiolytics

Meprobamate

108. As a result of the gradual replacement of meprobamate by benzodiazepines, the manufacture of meprobamate, the only non-benzodiazepine-type substance in Schedule IV used as an anxiolytic, decreased continuously, from a record level of nearly 1,000 tons in the late 1970s to an annual average of a little more than one quarter of that amount in the period 1993-2000. Apart from two occasions in which smaller amounts of meprobamate were manufactured by Iraq (110 kg in 1996) and Switzerland (56 kg in 1997), China and Denmark have been the only manufacturers of the substance (see figure 20); most of the meprobamate that they have manufactured has been exported. The manufacture of meprobamate in China during the period 1996-2000 averaged 124.4 tons per year; that country's share of total reported manufacture of the substance ranged from a low of 38 per cent (91 tons) in 1999 to a high of 50 per cent (157.8 tons) in 1998. In Denmark, the manufacture of meprobamate averaged 147.5 tons per year during the period 1996-2000.

Figure 20. Meprobamate: total reported manufacture, 1991-2000



109. Exports of meprobamate increased from 301 tons in 1996 to an average of 346 tons per year during the period 1997-1999, then fell to a level of 262 tons in 2000. Nineteen countries have exported the substance in recent years. China, Denmark and the Netherlands have been the main exporters of meprobamate, their combined exports accounting for more than 94 per cent of total exports of the substance. Annual exports of meprobamate from Denmark increased steadily from 166 tons in 1996 to 191 tons in 1999 before reaching a low of 140 tons in 2000; however, that country's share of total exports of the substance has been relatively stable, ranging from 50 per cent (in 1998) to 57.8 per cent (in 1999). Exports of the substance from China averaged nearly 36 per cent of total reported exports during the period 1996-2000, increasing steadily from 107 tons in 1996 to 144 tons in 1998 and then gradually decreasing to 90 tons in 2000. The contribution of the Netherlands to total exports of meprobamate ranged from 1.9 per cent to 7 per cent during the period 1996-2000, its exports of the substance fluctuating between 22 tons (in 1999) and 5 tons (in 2000). Other exporters of the substance included France (more than 5 tons annually, on average), Belgium (5 tons in 2000) and the United Kingdom (11.5 tons in 2000).

110. During the period 1996-2000, 81 countries reported imports of meprobamate. France continued to account for the largest share of total global imports of the substance, averaging 30 per cent during that period. France's imports of the substance fell gradually from 108 tons in 1997 to 69 tons in 2000. The other major importers of meprobamate in 2000 were Hungary (22 tons, for domestic use), Denmark (18 tons, part of which was re-exported), the United Kingdom (11.5 tons, exclusively for re-export) and the United States (9.7 tons, for domestic use). Cuba, which imported more than 57 tons of meprobamate per year in the period 1997-1998, reduced its imports of that substance to 5 tons in 1999 and to nil in 2000.

Benzodiazepine-type sedative-hypnotics

111. Twelve benzodiazepines are generally used as sedative-hypnotics: brotizolam, estazolam, flunitrazepam (the only benzodiazepine included in Schedule III), flurazepam, haloxazolam, loprazolam, lormetazepam, midazolam, nimetazepam, nitrazepam, temazepam and triazolam.

112. In 2000, the total reported manufacture of all 12 substances in the group was with 6.3 billion DDD, the same level as in 1999, when the largest quantity ever manufactured was reported for the group. Until 1996, approximate consumption levels, calculated by INCB, had in most years been about 50 per cent higher than levels of reported manufacture. That was because calculated consumption also included quantities imported from countries such as Belgium, Canada and Switzerland that had not yet begun reporting to INCB on their manufacture of benzodiazepines. Since 1997, the year in which statistics from Switzerland first became available, this difference has gradually disappeared (see figures 21 and 22).

113. The calculated average national consumption of benzodiazepine-type sedative-hypnotics, expressed in defined daily doses per 1,000 inhabitants per day, is higher in Europe than in the other regions (see figure 23). Overall consumption of sedative-hypnotics over the years has been fairly steady in all regions of the world.

Figure 21. Benzodiazepine-type sedative-hypnotics: total reported manufacture, by substance, 1991-2000

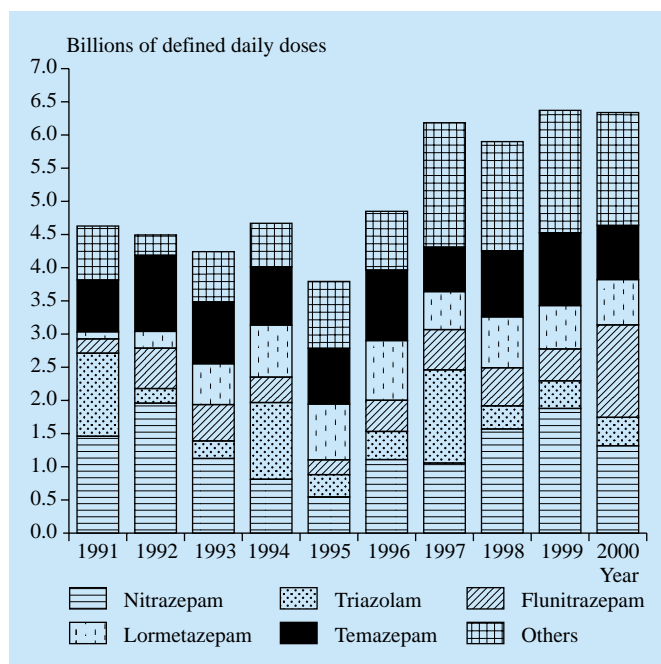
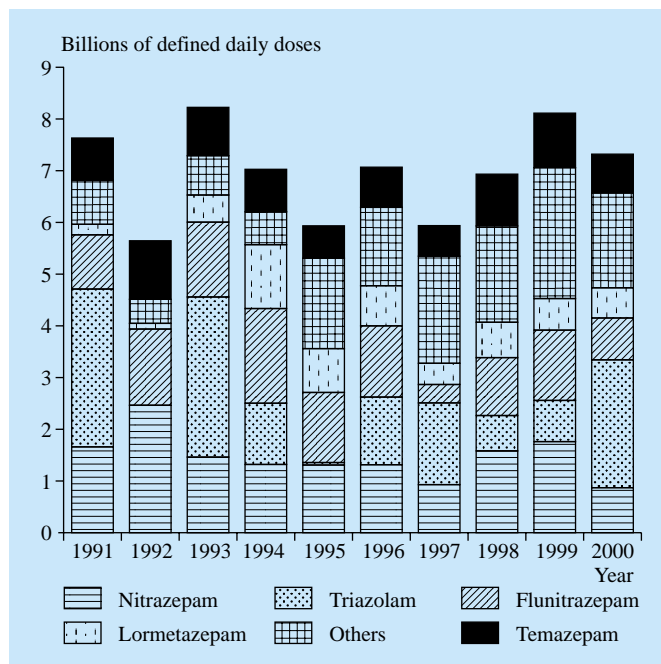


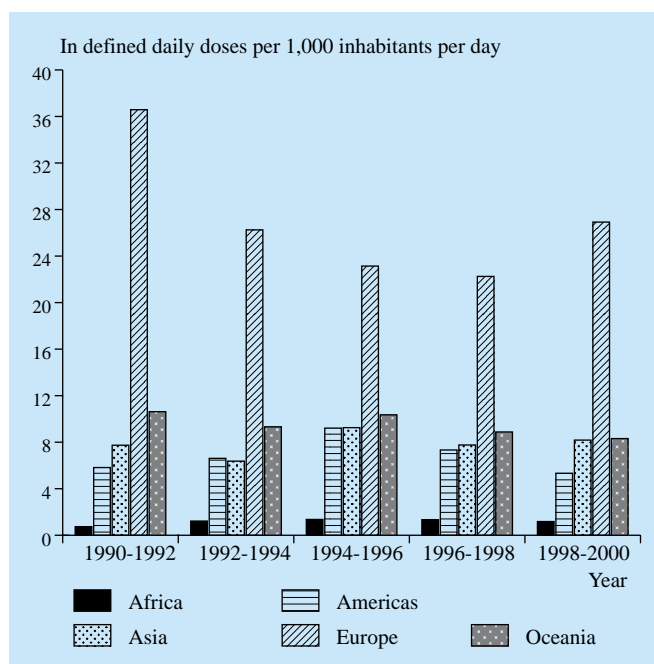
Figure 22. Benzodiazepine-type sedative-hypnotics: calculated global consumption,* by substance, 1991-2000



*Statistical data submitted by Governments are used to calculate the approximate global consumption in a given year. Those consumption figures are expressed in defined daily doses.

114. In 2000, two substances accounted for more than 40 per cent of total reported manufacture of benzodiazepine-type sedative-hypnotics: flunitrazepam (1.4 billion DDD) and nitrazepam (1.3 billion DDD). Temazepam (816 million DDD), lormetazepam (683 million DDD), brotizolam (584 million DDD) and estazolam (571 million DDD) accounted for between 9 and 13 per cent of total reported manufacture (see figure 24). Triazolam (428 million DDD), midazolam

Figure 23. Benzodiazepine-type sedative-hypnotics: average national consumption,* by region, 1990-2000



*Statistical data submitted by Governments are used to calculate the average annual consumption for a three-year period. Data from the five countries with the highest consumption were included in the calculation for each region.

(216 million DDD), flurazepam (202 million DDD) and loprazolam (128 million DDD) accounted for between 2 and 7 per cent of total reported manufacture. No manufacture of haloxazolam and nimetazepam was reported during 2000. China, Germany, Italy and Switzerland were the major manufacturers of this group of substances (see figures 25 and 26).

115. Comments on flunitrazepam, a substance that was transferred from Schedule IV to Schedule III in 1995, are included in paragraphs 64-66 above.

116. In the 1990s, nitrazepam manufacture fluctuated between its lowest level of 2.7 tons (in 1995) and its peak level of 9.7 tons (in 1992). Since 1996, nitrazepam manufacture has steadily increased, reaching 9.4 tons in 1999. Reported manufacture of that substance in 2000 decreased to 6.6 tons. The fluctuations in total reported manufacture of the substance mainly reflect developments in manufacturing levels in Italy, the leading manufacturer and exporter of nitrazepam. Italy manufactured 4 tons of nitrazepam in 2000 and exported, using also its stocks, 4.2 tons of the substance. The only other countries reporting manufacture of nitrazepam in 2000 were India (1.7 tons) and China (860 kg). Italy, China and Switzerland were the main exporters of the substance.

117. In the period 1995-1999, global imports of nitrazepam were stable, averaging 6.5 tons annually. In 2000, imports of nitrazepam totalling 4.2 tons were reported by 42 countries. The main importers of the substance in 2000 were Switzerland (1.2 tons), the United Kingdom (528 kg), Germany (400 kg), the Netherlands (315 kg), Bangladesh (275 kg), Hungary (270 kg) and Spain (225 kg). Of the other 35 countries that reported having imported nitrazepam in 2000 in quantities of more than 1 kg, four had imported between 100 and 200 kg of the substance: Australia, France, Poland and Slovakia.

Figure 24. Benzodiazepine-type sedative-hypnotics: substances' share in total reported manufacture, 2000

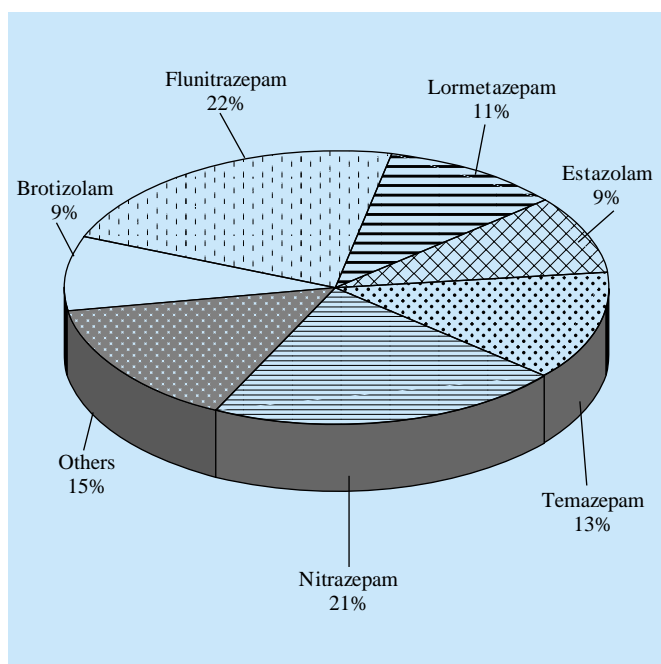


Figure 26. Benzodiazepine-type sedative-hypnotics: countries' share in total reported manufacture, 2000

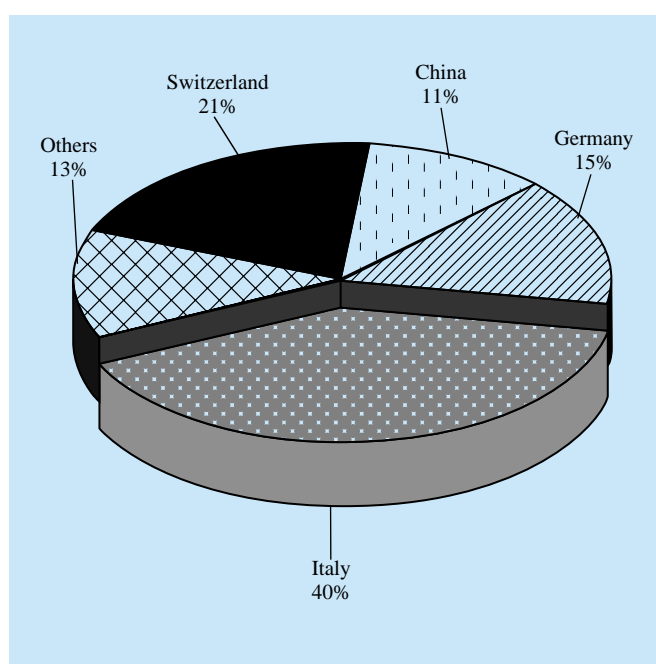
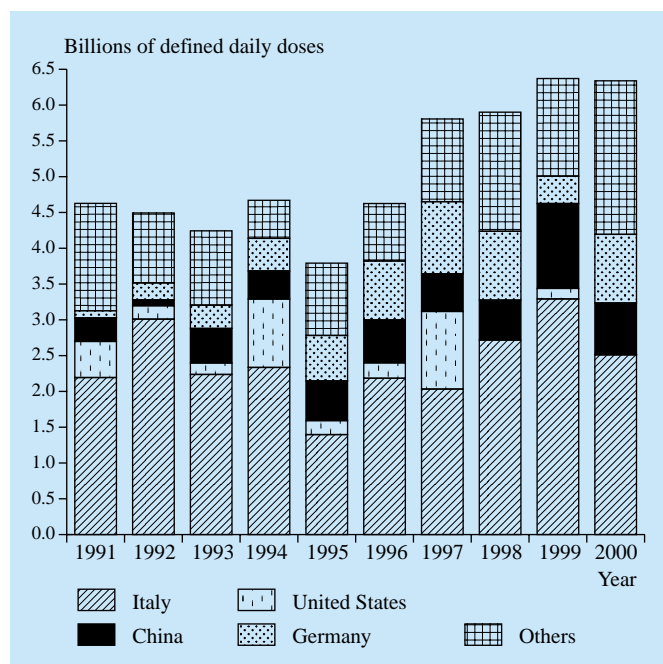


Figure 25. Benzodiazepine-type sedative-hypnotics: reported manufacture, selected countries, 1991-2000



118. After reaching its peak level of 23 tons in 1992, total reported manufacture of temazepam declined to its lowest level, 13.4 tons, in 1997. After increasing to 22 tons in 1999, manufacture of that substance declined in 2000 to 16 tons. In 2000, the largest share of total reported manufacture of temazepam was accounted for by Italy (15.7 tons). The only other country reporting manufacture of that substance in 2000 was Poland (630 kg). In 2000, Italy used its stocks and manufactures of temazepam to export 15.8 tons of the substance, accounting for more than 70 per cent of total temazepam exports. Other important exporters of the substance in 2000 were Ireland (1.5 tons), Finland (1.1 tons) and Germany (855 kg).

119. Temazepam imports in quantities of more than 1 kg were reported by 37 countries and territories in all regions of the world in the period 1996-2000. The United Kingdom had been the largest temazepam importer for a number of years, re-exporting part of its imports of that substance. In 1995, control measures for temazepam were strengthened in the United Kingdom to counter the increasing diversion of the substance into the illicit market in that country.⁷ Imports of the substance by the United Kingdom decreased considerably from a peak level of 6.3 tons in 1994 to 1.3 tons in 1996. Then, however, temazepam imports in the United Kingdom began to increase and the country again became a large importer of the substance (2.7 tons in 2000). Other major importers of temazepam in 2000 were the United States (4.4 tons), Finland (3.1 tons), Ireland (2.3 tons), Australia (1.4 tons), the Netherlands (1.4 tons) and Germany (1.2 tons). Finland, Germany and Ireland re-exported approximately one half of their imports of temazepam; in all of the other countries, the substance was imported mainly for domestic consumption or to be added to stocks.

120. Lormetazepam manufacture steadily increased after 1991 and reached 899 kg in 1996, its highest level ever reported. After 1996, the manufacture of the substance fluctuated from 572 kg in 1997 to 767 kg in 1998 and 683 kg in 2000. Those fluctuations reflect changes in manufacturing levels in Italy, which reported having manufactured 303 kg of lormetazepam in 2000. Germany, traditionally the main manufacturer and exporter of lormetazepam, reported in 2000 the manufacture of 374 kg of the substance; using some of its stocks and imports of lormetazepam, it also exported 502 kg of the substance in 2000. The main importers of lormetazepam in 2000 were Ireland (257 kg), Spain (235 kg), France (211 kg) and Italy (204 kg); those countries imported the substance mainly for re-export. The lormetazepam

⁷See Report of the International Narcotics Control Board for 1995 (United Nations publication, Sales No. E.96.XI.1), para 113.

imports of those countries, together with those of Germany (71 kg), accounted for more than 80 per cent of the world total. Eleven other countries reported having imported smaller amounts of the substance.

121. In 1995, brotizolam, a potent hypnotic with the same defined daily dose as triazolam (DDD of 0.25 mg), was included in Schedule IV of the 1971 Convention. The manufacture of that substance was reported for the first time ever in 1997. In 2000, total manufacture of brotizolam was reported to be 146 kg, slightly below the average level for the period 1997-1998 (165 kg), but significantly more than the level reported for 1999 (37 kg). Those fluctuations reflect changes in manufacturing levels in Germany, the main manufacturer of the substance. No other country reported manufacture of the substance in 2000. Germany was also the largest exporter of brotizolam in 2000 (107 kg). Germany exported or added to its stocks most of the brotizolam it manufactured. Brotizolam imports were reported by 10 countries in 2000, the largest imports of the substance being reported by the Republic of Korea (49 kg) and Colombia (18 kg).

122. World manufacture of estazolam, which had reached a new peak of 2.3 tons in 1999, dropped to 1.7 tons in 2000, mainly because the amount manufactured by China (1.5 tons, for domestic use) decreased. Poland was the only other country reporting manufacture of that substance in 2000 (247 kg, mostly for domestic consumption). Exports of the substance were reported by Italy (24 kg), the Netherlands (18 kg) and Poland (12 kg). Eleven countries reported imports of estazolam in quantities of more than 1 kg in 2000 (a total of 161 kg). The main importers were Portugal (39 kg) and the United States (31 kg); both of those countries imported the substance for domestic use.

123. Triazolam is a potent hypnotic, having, together with brotizolam, the lowest defined daily dose of all psychotropic substances. Total reported manufacture of triazolam reached a record level of 539 kg in 1988. Discussions at the beginning of the 1990s on the medical use of triazolam had major repercussions on the market for the substance. The manufacture of triazolam decreased considerably to 55 kg in 1992. The manufacture of the substance increased to 351 kg in 1997 and dropped again sharply to an average of 105 kg in the period 1999-2000. The above-mentioned fluctuations mainly reflect developments in the United States, the former leading manufacturer and still the largest exporter of the substance.

124. The manufacturers of triazolam in 2000 were Italy (53 kg), France (39 kg) and China (15 kg). The United States, which reported having manufactured 271 kg of triazolam in 1997 (mainly for stocks), has not reported any manufacture of the substance since 1998. Significant exports of triazolam were reported by the United States (90 kg), France (75 kg), Belgium (42 kg) and Italy (21 kg). The largest import of triazolam in 2000 was reported by Canada (475 kg). Significant quantities of the substance were also imported, mainly to be re-exported, by Belgium (77 kg) and Italy (11 kg). Eleven other countries reported imports of the substance in quantities of more than 1 kg.

125. In 2000, midazolam manufacture reached 4.3 tons, a significant drop from 1999, when the highest level ever (10 tons) was reported. Those fluctuations relate to manu-

facture levels in China, which reported having manufactured 6.9 tons of midazolam in 1999 and only 9 kg of the substance in 2000. In 2000, Switzerland (2.3 tons) once again became the world's largest manufacturer of the substance; it was followed by Israel (1.3 tons). The only other countries reporting the manufacture of midazolam in 2000 were the Czech Republic (2 kg), India (238 kg), Italy (289 kg), the Netherlands (53 kg) and the United States (149 kg); the majority of those countries have recently started manufacturing the substance. Trade in midazolam increased in 2000. Imports of the substance rose in 2000 to 4.5 tons. In 2000, 65 countries and territories throughout the world reported having imported midazolam in quantities of more than 1 kg. The largest imports of midazolam in 2000 were reported by the United States (1.3 tons), Bangladesh (523 kg), the Netherlands (406 kg) and Germany (376 kg).

126. Manufacture of flurazepam alternates annually between 6 tons and more than 10 tons. In 2000, the manufacture of 6 tons of the substance was reported. Italy accounts for more than 99 per cent of world manufacture of flurazepam; most of the flurazepam manufactured by that country is exported. The only other country reporting having manufactured the substance in 2000 was China (15 kg, for export). Brazil, which, in the past, had reported major manufacture of flurazepam (on average more than 4 tons per year during the period 1995-1998), did not submit any statistical data for 2000. Imports of flurazepam were reported by 22 countries in 2000, the largest quantities being imported by Switzerland (3.4 tons), Spain (2.9 tons), the Netherlands (1.9 tons) and the Islamic Republic of Iran (1.2 tons). The main exporters of the substance in 2000 were Italy (6.5 tons) and Switzerland (4.3 tons).

127. The manufacture of loprazolam increased from 62 kg in 1999 to 128 kg in 2000. France was the main manufacturer (103 kg) and exporter (79 kg) of the substance in 2000. The United Kingdom was the only other manufacturer (25 kg) and exporter (13 kg) of loprazolam in 2000. Eight countries reported imports of loprazolam in quantities of more than 1 kg in 2000.

Benzodiazepine-type anti-epileptics

128. Clonazepam is the only benzodiazepine generally used as an anti-epileptic. Total reported manufacture of clonazepam, after reaching its highest level in 1998 (5.5 tons, or 690 million DDD), dropped to around 3 tons annually (430 million DDD) in the period 1999-2000. That was attributed to a decrease in reported manufacture in Switzerland from more than 3 tons in 1998 to around 1.4 tons annually in the period 1999-2000. Reductions were also reported by Italy, the other main manufacturer of the substance (1.2 tons in 2000). Italy and Switzerland together exported 2.6 tons of benzodiazepine in 2000, accounting for nearly 75 per cent of total exports of the substance. Smaller amounts of clonazepam manufacture were reported by China (140 kg, for domestic consumption), India (464 kg, mainly for export) and Poland (168 kg, mainly for domestic use). The United States, once a major manufacturer of clonazepam, has reported no manufacture of the substance since 1995. In 2000, eight countries (Argentina, France, Islamic Republic of Iran, Israel, Italy, Mexico, Switzerland and United States) reported clonazepam imports of over 100 kg, and 48 countries and territories reported imports in quantities of more than 1 kg.

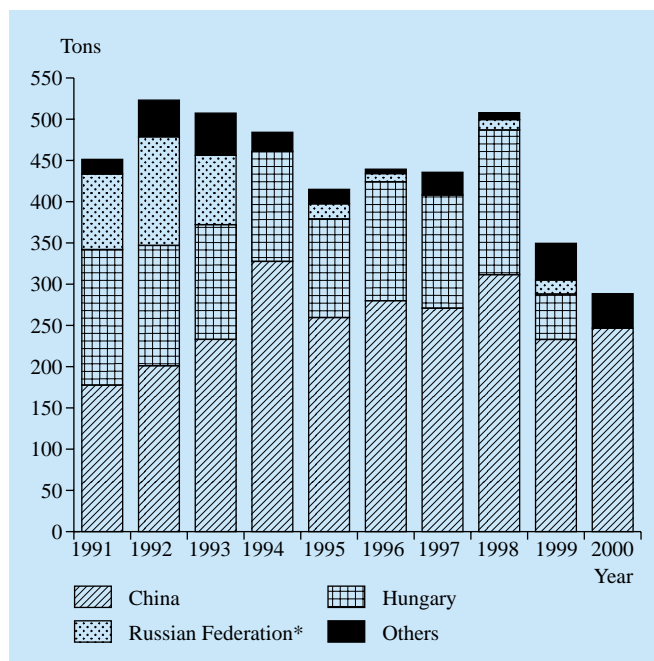
Barbiturate-type sedative-hypnotics and anti-epileptics

129. Seven barbiturates are listed in Schedule IV: allobarbitol, barbital, butobarbital, methylphenobarbital, phenobarbital, secbutobarbital and vinylbital. In the period 1996-2000, total reported manufacture of those barbiturates, recalculated in defined daily doses, gradually increased from 4.6 billion DDD (in 1996) to 5.4 billion DDD (in 1998); then, a sharp reversal of that trend took place, as total reported manufacture of those substances plunged to 3.8 billion DDD in 1999 and further down to 3.1 billion DDD in 2000. Total reported stocks of those barbiturates followed a similar trend, peaking at 1.8 billion DDD in 1998 and then falling to 780 million DDD in 2000. During the period 1996-2000, phenobarbital accounted for an average of more than 90 per cent of total manufacture and of total stocks of the barbiturates included in Schedule IV (in defined daily doses). Barbital was second, accounting for 6 per cent of total manufacture and 4 per cent of total stocks; it was followed by methylphenobarbital and allobarbitol. No manufacture of vinylbital was reported in the period 1996-2000.

130. Phenobarbital is used as a hypnotic and as an anti-epileptic. Its total reported annual manufacture averaged 438 tons in the period 1996-1997 and peaked at 508 tons in 1998 before falling to 288 tons in 2000. China and Hungary were the major manufacturers of the substance, accounting for an average of 95 per cent of total output in the period 1996-1998 (see figure 27). Manufacture in China fluctuated between 234 tons (in 1999) and 312 tons (in 1998), close to its five-year average of 269 tons per year; 247 tons of phenobarbital (85.5 per cent of total manufacture) were reported to have been manufactured in 2000. Hungary reported having manufactured an average of 152 tons of phenobarbital per year during the period 1996-1998; its manufacture of that substance was reduced to 55.2 tons in 1999. No manufacture of phenobarbital was reported by Hungary in 2000. Other manufacturers of the substance in the period 1996-2000 included India (an average of 33 tons in the period 1999-2000), Switzerland (an average of 5.5 tons in the period 1997-1999 and 7.7 tons in 2000), the Russian Federation (nearly 10 tons in 1996, 13 tons in 1998 and 17 tons in 1999) and Japan (6 tons in 1997 and 5 tons in 1999). The United States reduced its manufacture of phenobarbital from 16 tons in 1997 to 2 tons in 1998 and has reported no manufacture of that substance since then.

131. Phenobarbital exports from Hungary, the major exporter of that substance since the 1970s, have been relatively stable, averaging 112 tons annually in the period 1995-2000, except in 1997, when its exports reached 143 tons. Phenobarbital exports from China increased steadily from 25 tons in 1990 to 185 tons in 1994 and then decreased sharply to only 79 tons in 1995. China reported having exported an average of 129 tons of phenobarbital per year during the period 1996-1998; after that, its exports of that substance fell to 76 tons in 1999 and increased to 106 tons in 2000. In the period 1996-2000, there were 51 countries reporting exports of phenobarbital. Total exports fluctuated between 397 tons (in 1997) and 264 tons (in 1999). Most of the trade in phenobarbital (up to 70 per cent) came from Hungary and China. Other important exporters of the substance in 2000 included Switzerland (40 tons), Germany (18 tons), Denmark (14 tons), the United Kingdom (10 tons) and the Netherlands (almost 10 tons).

Figure 27. Phenobarbital: total reported manufacture, 1991-2000



*Data before 1992 relate to the former Union of Soviet Socialist Republics.

132. Phenobarbital continues to be one of the most widely imported psychotropic substances. During the period 1996-2000, 168 countries and territories reported having imported the substance at least once. The major importers in 2000 included Ukraine (211 tons), Switzerland (33 tons, to be re-exported), Germany (19 tons, mostly for re-export) and France (18 tons). In recent years, Brazil, Denmark, the Netherlands, the Russian Federation, the United Kingdom and the United States have also reported relatively large imports of phenobarbital.

133. In addition to its medical use as a sedative-hypnotic, barbital is also used in industry for the manufacture of non-psychotropic substances or products. Total reported manufacture of barbital declined sharply from nearly 259 tons in 1992 to 84 tons in 1995. It then increased from 101 tons in 1996 to 141 tons in 1998, before gradually falling to 97 tons in 2000. World stocks of barbital fell from an average of 25 tons during the period 1996-1998 to 17 tons in 2000. About 99 per cent of total manufacture of the substance took place in China. China's manufacture of the substance fell from 126 tons in 1999 to 97 tons in 2000. Japan was the other regular manufacturer, reporting 1.2 tons of output in 1996, 2 tons in 1997, 567 kg in 1998 and 2.8 tons in 1999. The only other manufacturers of the substance since 1996 have been Denmark (977 kg in 1997) and the United Kingdom (51 kg in 2000). The Russian Federation, previously a major manufacturer of barbital, has reported no manufacture of the substance since 1993.

134. Although 15 countries reported exports of barbital in the period 1996-2000, China and Germany together accounted for over 96 per cent of exports. Exports of barbital fell gradually from 92.6 tons in 1996 to 48.9 tons in 2000. During that period, China's exports of the substance fell by 36 per cent, from 50 tons in 1996 to 31.8 tons in 2000, while Germany's exports fell by 60 per cent, from 41.5 tons in 1996 to 16.5 tons in 2000.

135. There were 52 countries that imported barbital at least once in the period 1996-2000. Germany, the leading

importer of barbital, decreased its imports of the substance gradually from more than 51 tons in 1996 to 20 tons per year in 1999 and 2000, re-exporting almost all of those imports. India was the second-leading importer of barbital; its imports of that substance fell from an average of 15 tons during the period 1996-1999 to 6.2 tons in 2000. Japan's imports of barbital also fell, from 10.6 tons in 1996 to an average of 8 tons per year during the period 1997-1999. Denmark, on the other hand, has increased its imports of the substance from 266 kg in 1996 to an average of 1.6 tons per year during the period 1997-1998 and to 3 tons annually during the period 1999-2000.

136. Almost 8 tons of methylphenobarbital were manufactured in Germany in 1990. Since then, Switzerland has been the only manufacturer of methylphenobarbital; its manufactures of the substance have followed a downward trend, falling from 9.5 tons in 1997 to a little over 1 ton in 2000. World stocks of the substance fluctuated significantly, first increasing from 1.2 tons in 1996 to 4.8 tons in 1997, then falling to an average of 3.4 tons during the period 1998-1999 and to 1.2 tons in 2000.

137. During the period 1996-2000, Switzerland has been by far the largest of eight exporters of methylphenobarbital, accounting for about 96 per cent of total exports of that substance. Exports of methylphenobarbital fell from 7.3 tons in 1997 to 4 tons per year during the period 1998-1999 and to 2.5 tons in 2000. There were 21 countries that imported the substance at least once in the period 1996-2000. The biggest importers in 2000 were Italy (400 kg), the United Kingdom (299 kg), Argentina (275 kg), Australia (253 kg) and Slovenia (107 kg).

138. Poland last reported manufacture of allobarbital in 1995 (228 kg) and Denmark discontinued its manufacture of that substance after 1994 (11 kg). Germany has been the only country reporting the manufacture of allobarbital in recent years. Germany's manufacture of allobarbital increased from 393 kg in 1998, when the country first started to report its manufacture of the substance, to 2.4 tons in 1999 and about 4 tons in 2000. Total exports of the substance fluctuated greatly, averaging 4.5 tons per year during the period 1996-2000. Germany has consistently accounted for about 75 per cent of total exports of allobarbital since 1997. In 2000, total exports of the substance amounted to 5 tons, of which 3.7 tons were exported by Germany. Other exporters of the substance in 2000 included Denmark (425 kg) and Switzerland (301 kg). There were 19 countries importing allobarbital in the period 1996-2000. In 2000, the major importers included Poland (1.1 tons), Hungary (850 kg), Denmark (625 kg, mostly for re-export), Turkey (500 kg) and Switzerland (301 kg, entirely for re-export).

139. Since 1991, Germany is the only country that has reported having manufactured secbutobarbital. Its manufacture of that substance increased from 67 kg in 1997 to 749 kg

in 1999. No manufacture of that substance was reported by Germany for 2000. Total stocks of secbutobarbital averaged 145 kg during the period 1996-1998, increasing to 365 kg in 1999 and then falling sharply to 32 kg in 2000. Germany, Lebanon and Switzerland were the only countries that reported trade in the substance in recent years.

140. Denmark and Germany are the only two countries that have reported manufacture of butobarbital in recent years. Denmark manufactured 1 kg of butobarbital in 1996 and about 1.3 tons in 1998, while Germany manufactured 596 kg of the substance in 1996 and 304 kg in 1997; no manufacture of the substance was reported for 1999 and 2000. Total stocks of the substance fell from about 3 tons in 1996 to 1.1 tons in 2000. Trade in the substance fell from an average of 2.6 tons per year during the period 1996-1998 to an average of 813 kg in the period 1999-2000; Denmark, Germany, Hungary, France and the United Kingdom were the major traders.

Other sedative-hypnotics

141. Three substances from the group of sedative-hypnotics in Schedule IV, ethchlorvynol, ethinamate and methyprylon, are neither barbiturates nor benzodiazepines. All three substances have been listed in Schedule IV since the adoption of the 1971 Convention. In 2001, two more substances were included in this group: *gamma*-hydroxybutyric acid (GHB) and zolpidem. Comments on the statistics for the latter will be provided in future.

142. The manufacture and export of ethchlorvynol have been reported only by the United States, whose manufacture of the substance amounted to 857 kg (1.7 million DDD) in 1991. In that country, there was no ethchlorvynol manufacture in 1992 and 1993, but the manufacture of that substance (a total of almost 9 tons, mainly for domestic use) was reported in the period 1994-1996. No manufacture of ethchlorvynol took place in the United States in 1997 and 1998; however, in 1999, that country reported the manufacture of 1.3 tons of the substance, mainly for domestic use. Ethchlorvynol exports from the United States were last reported in 1997 (301 kg). The manufacture of ethinamate was last reported by Germany in 1988 (500 kg), and the manufacture of methyprylon was last reported by the United States in 1990 (2.1 tons). There have been no reports on international trade in ethinamate and methyprylon since 1991.

Analgesics

Lefetamine

143. Lefetamine is the only analgesic included in Schedule IV. No manufacture and no trade in the substance have been reported since 1996.