336. Availability of evidence-based treatment and rehabilitation facilities in Africa is substantially below the world average. Approximately one in six problem drug users globally receives treatment for drug abuse disorders or dependence each year. However, in Africa only one in 18 problem drug users has access to treatment services, predominantly for treatment related to cannabis abuse. Of particular concern in North Africa is the lack of community-based and gender-sensitive drug treatment programmes with adequate access to treatment facilities for women.

B. Americas

Central America and the Caribbean

1. Major developments

337. The Central America and Caribbean region continues to be exploited by organized criminal groups as a transit and trans-shipment route for illicit drugs heading to North America and Europe. It is estimated that more than 90 per cent of all cocaine trafficked to the United States is of Colombian origin and transits Mexico and the Central American corridor. Conversely, the flow of cocaine through the Caribbean region has declined significantly in recent years as traffickers have looked for alternative routes, particularly along the border between Guatemala and Honduras.

338. As cocaine trafficking remains the most lucrative source of income for organized criminal groups in Central America, the intensified competition in cocaine trafficking has increased the level of violence in the region. The most recent wave of violence is in particular affecting the northern part of Central America: Belize, El Salvador, Guatemala and Honduras. The national murder rate in Honduras continues to be one of the highest on record. The areas of highest concern with regard to violence lie along the Honduran coast, on both sides of the Guatemalan/Honduran border, and in Guatemala along the borders with Belize and Mexico.

339. Drug trafficking through these countries has been a contributory factor to high levels of violence and drugrelated corruption, as well as a further burden on already overloaded criminal justice systems. It is estimated that there are more than 900 gangs, called "maras", with over 70,000 members, currently active in Central America. In El Salvador, Guatemala and Honduras, 15 per cent of homicides are gang-related. 340. The Board continues to follow closely the drug policy discussion in the region, which includes proposals to establish regulatory regimes for substances under international control that are not fully in line with the international drug control treaties. Proponents assert that such policy changes would contribute to reducing crime, violence and corruption in the region. The Board wishes to draw attention to the fact that some of those proposals, if enacted, would contravene the text, objective and spirit of the treaties (namely, to preserve the health and well-being of mankind), to which all States of the region are parties. Those proposals would have a serious impact on the health of their populations, particularly young people, at a time when there is increasing scientific evidence of the harm caused by drug use and abuse, and could further contribute to illegal markets, crime, trafficking, corruption and violence, as well as transmit ambiguous messages regarding the health dangers of drug use and abuse.

341. Notwithstanding action taken by Governments in the region to tackle the diversion of precursor chemicals, the region continues to be used for the trafficking of these materials, perhaps as an alternative route in the face of strengthened controls in Mexico.

2. Regional cooperation

342. Central America and the Caribbean remains a hub for drug trafficking, thus making it an important area for regional cooperation. UNODC works with Governments of the region. During the past year, regional cooperation focused on law enforcement cooperation, tackling drug trafficking, preventing the diversion of precursors and reducing drug demand.

343. Operation Lionfish, led by INTERPOL and aimed at maritime trafficking of drugs and illicit firearms by organized criminal groups across Central America and the Caribbean, was carried out from 27 May to 10 June 2013. During the operation, nearly 30 tons of cocaine, heroin and cannabis, with an estimated value of \$822 million, were seized. The operation involved 34 countries and territories in the region and also resulted in 142 arrests, as well as the seizure of 15 vessels, eight tons of chemical precursors, 42 guns and approximately \$170,000 in cash.

344. Another operation, under the code name "Icebreaker", led by INTERPOL and supported by the Board and the World Customs Organization, took place during October 2012. The operation focused on combating methamphetamine manufacture and smuggling across

the Americas, and resulted in the seizure of more than 360 tons of chemicals, 200 kg of methamphetamine, cocaine and lysergic acid diethylamide (LSD), and \$2 million in cash. Four illicit methamphetamine laboratories were also dismantled. Eleven countries in the region participated in the operation, which led to the launching of 35 investigations across the region.

345. On 1 November 2012, UNODC and the Government of Panama launched the Regional Anti-Corruption Academy, with a view to enhancing capacities and increasing cooperation to fight corruption (including drugrelated corruption) in the region.

3. National legislation, policy and action

346. In Belize, the Domestic Banks and Financial Institutions Act was approved and enacted on 1 January 2013. The Act (a) enhances the regulatory and supervisory framework of domestic banks and financial institutions so that they can comply with international standards and best practices set by the Basel Committee on Banking Supervision; and (b) improves compliance and efficiency by setting administrative penalties for non-compliance with the requirements of the Act. Furthermore, Belize continues to implement its national anti-drug strategy for the period 2011-2014, which was updated in 2011.

347. El Salvador continues to implement a national antidrug strategy, covering the period 2011 to 2015, which tackles demand reduction and control of drugs and drugrelated offences. The principal aim of the strategy is to reduce the abuse of drugs and to combat illicit drug trafficking and drug-related crime.

348. In June 2013, the Inter-institutional Commission for the Revision of National Legislation on Drug Trafficking of Honduras presented to the President of the country a proposal for a new law on national security protection in the fight against drug trafficking and related crimes. The proposal provides, inter alia, for the classification of drug-related offences, including stricter penalties for serious drug trafficking offences, defines the substances to be controlled, including those under international control, and provides, inter alia, for the extradition of Honduran nationals for drug trafficking activities.

349. In August 2013, the Government of Panama signed into law amendments to Law 23 on drug-related crimes. The amendments provide for the custody and management of seized drug-related assets and property during the conduct of the judicial proceedings and, once a judgement for their confiscation has been made, for their transfer to the National Commission for the Study and Prevention of Drug-related Crimes (CONAPRED), which would adjudicate them to the institutions that are members of the Commission or proceed to their disposal through public auction.

4. Cultivation, production, manufacture and trafficking

(a) Narcotic drugs

350. Jamaica and Saint Vincent and the Grenadines continued to be major sources of cannabis. The quantities of cannabis produced in those two countries not only meet the demand in the region but also are trafficked to international markets. Jamaica reportedly continues to be the largest Caribbean supplier of cannabis to the United States; however, some amounts of the drug are also smuggled to Belgium, Germany, the Netherlands and the United Kingdom of Great Britain and Northern Ireland. Based on an analysis of individual cannabis seizure data covering the period from 2001 to 2012, Jamaica was listed among the 10 countries most frequently mentioned as countries of provenance. Another important source of cannabis in the region is Costa Rica, where authorities seized 1,214,056 cannabis plants in the first half of 2013.

351. Shipments of cocaine to Costa Rica have increased in recent years. While an average of five tons were seized annually between 2000 and 2005, those amounts increased to an average of 20 tons per year between 2006 and 2010. That trend has been further confirmed, with total seizures of almost 15 tons during 2012. It is estimated that nearly 80 per cent of cocaine reaches Costa Rica by air. In addition, it has been identified as a major transit country of cocaine for further smuggling to Europe by couriers on commercial flights. This route seems to have been used to a lesser extent in more recent times. This development is perhaps related to the increasing role of the Dominican Republic as a transit country for cocaine smuggled on commercial air flights to Europe. Maritime vessels in transit through the Caribbean are another important means of transport for cocaine destined for Europe.

352. According to Salvadorian authorities, only small quantities of cocaine transit their country, mostly because the country has no Atlantic coast.

353. Increased air trafficking from the border area between Colombia and the Bolivarian Republic of Venezuela to airstrips in central Honduras has been reported, in parallel with a decrease in activity along more established routes via Haiti and the Dominican Republic. In terms of maritime trafficking, remote coastal areas of Honduras and parts of northern Nicaragua are also used. In Nicaragua, most cocaine is seized in remote areas along the Atlantic coast. In 2012, the Nicaraguan authorities seized 9.3 tons of cocaine. In addition, 986 kg of cannabis, 4 kg of crack cocaine and 13 kg of heroin were seized, and 43,252 cannabis plants were destroyed.

354. There has nevertheless been some disruption in the chain of supply of cocaine, as a result of law enforcement interventions and inter-cartel violence in Central America, with seizures moving closer to the source in South America.

355. Guatemala continues to grow opium poppy destined for the domestic market but also for other countries in the region. While there is a lack of precise data concerning the areas where opium poppy is cultivated, the eradicated areas of opium poppy plant tripled from less than 500 ha in 2007 to over 1,500 ha in 2011.

356. Seizures of heroin in the Caribbean remained stable between 2010 and 2011. In terms of seizure weight, the Dominican Republic has accounted for over 75 per cent of reported heroin seizures in the Caribbean since 2006. Forty-two kg were seized in the country during 2011, compared with 30 kg in 2010. A similar amount of heroin (39 kg) was seized in the Dominican Republic in 2012.

(b) Psychotropic substances

357. The manufacture of amphetamine-type stimulants in the region, which was unknown several years ago, has become an issue of serious concern. Belize, Guatemala and Nicaragua have reported such manufacture since 2009. In particular, large-scale manufacture of methamphetamine has been reported by Guatemala, which dismantled 13 laboratories manufacturing the substance between January and September 2012. Photographic evidence from those laboratories confirms the very significant size of the illicit operations. This trend was confirmed by the seizure of 15 large-scale methamphetamine laboratories in Guatemala during 2013.

(c) Precursors

358. Despite the strengthened controls over precursors of amphetamine-type stimulants in the region, Central

America continues to be affected by trafficking in precursors, particularly of non-controlled chemical substances, such as pre-precursors and made-to-order chemicals, which are not controlled under the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988. This poses new challenges to regulatory and law enforcement authorities, which have to identify which chemicals are being used in the production processes. For example, in 2012 Mexican authorities seized 195 tons of methylamine, a substance not under international control which is used in the illicit manufacture of methamphetamine, bound for Guatemala and Nicaragua.

359. In 2012, Guatemala seized large amounts of chemicals. The country remains an important transit point for pseudoephedrine shipments originating in Bangladesh in the form of pharmaceutical preparations and in India in bulk form. Honduras also reported the seizure and destruction of over 22 tons of pseudoephedrine of unknown origin.

360. In 2013, Guatemala reported, via PICS, a seizure of 240 litres of methyl ethyl ketone and 26,000 litres of one non-controlled substance, both of which are used as solvents for illicit drug manufacture, and 16,000 kg of ethyl phenylacetate destined for the illicit manufacture of methamphetamine.

361. Large quantities of precursor chemicals used in the production of methamphetamine are believed to transit Belize on the way to Mexico. In 2012, over 156 tons of such chemicals were seized and destroyed by Belizean authorities.

362. Another related challenge that authorities, particularly in Guatemala, are facing is the disposal of seized chemicals, as there is a lack of facilities to properly store these chemicals and the infrastructure to dispose such materials is insufficient. In that country, large amounts of precursor chemicals are awaiting disposal, which poses a high risk to the environment. In 2013, 15 clandestine laboratories were dismantled. The Board once again encourages the international community and interested Governments to support the countries of the region in effectively dealing with and resolving that serious issue. In addition, UNODC published the Guidelines for Safe Handling and Disposal of Chemicals Used in the Illicit Manufacture of Drugs, which provides information on methods for the safe handling and disposal of chemicals used in the illicit manufacture of different drugs.

(d) Substances not under international control

363. Costa Rica and Panama are among the 70 countries that reported the appearance of new psychoactive substances, a growing trend which poses challenges to the regulatory and enforcement authorities and carries serious health consequences, as the effects of such substances on the human body are not fully understood or known. In 2012, Costa Rica reported *N*-benzylpiperazine (BZP) and 1-(3-trifluoromethylphenyl)piperazine (TFMPP).

5. Abuse and treatment

364. In recent years, trends and patterns related to cannabis abuse in the Central America and the Caribbean region have remained relatively stable. The annual average prevalence rate of cannabis has been estimated at 2.6 per cent in Central America and 2.8 per cent in the Caribbean. In 12 Caribbean countries (Antigua and Barbuda, Barbados, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago), the average age at which students reported using cannabis for the first time was around 13 years of age.

365. As regards the use of opioids and "ecstasy" in Central America, UNODC has estimated the annual prevalence rate at 0.2 per cent and 0.1 per cent, respectively, which is well below the global average.

366. The estimated average prevalence rate for the abuse of cocaine in Central America and the Caribbean, at 0.6 per cent and 0.7 per cent, respectively, remains higher than the global average.

367. In 2012 in Costa Rica, a national survey of drug use among secondary students was carried out to determine levels of drug abuse among students attending public and private high schools. In total, 5,508 students from seven provinces were interviewed. According to the survey, the average age of initiation of cannabis use was 14.3 years. The results of the survey indicate a significant increase in cannabis use, from 6.8 per cent in 2009 to 9.7 per cent in 2012.

368. In comparison with the global average, the region continues to experience high levels of abuse of amphetamine-type stimulants, with an estimated annual prevalence rate of 1.3 per cent. In particular, the abuse of pharmaceutical preparations containing stimulants is widespread. At the same time, significant abuse of sedatives in the form of prescription medicines has been reported by Costa Rica and El Salvador. For example, according to UNODC, El Salvador ranks ninth in the world, with an annual prevalence rate for non-medical use of tranquillizers and sedatives among the general population of 7.8 per cent.

North America

1. Major developments

369. Although prevalence rates for abuse of most illicit drugs in North America have remained relatively stable, they continue to significantly exceed global averages. The region's higher rates of drug abuse have had significant public health implications. According to information provided by Governments in the region, there were almost 48,000 drug-related deaths in North America in 2011, representing a mortality rate of 155.8 per million inhabitants aged 15-64, the highest rate in the world.

370. In August 2013, the United States Justice Department issued a memorandum addressed to United States attorneys clarifying its position with respect to the adoption of laws in a number of the country's states to allow the use of cannabis for "medical" or recreational purposes. The Attorney General had pledged to clarify his Department's position with respect to that issue, in particular in the aftermath of ballot initiatives approved by voters in the states of Colorado and Washington in November 2012, legalizing cannabis use for recreational purposes. The Controlled Substances Act, however, continues to prohibit cannabis production, trafficking and possession, listing cannabis in its Schedule I, which contains substances having a high potential for abuse and no scientifically proven medical value and for which there is a lack of acceptance that the drug can be safely used under medical supervision.

371. In the Federal District of Mexico, draft bills providing for the legalization of cannabis are currently being prepared for consideration by the Legislative Assembly. Pursuant to the forum on drug policy held by the Legislative Assembly of the Federal District in early September 2013, the President of the Assembly stated that the Assembly would work on a new legislation focusing on treatment, prevention, reduction of risk and human rights with respect to use and abuse of licit and illicit substances. The forum also clearly identified the legal limits (international conventions and federal law) which any possible new law must observe. 372. In March 2013, the Government of Canada released its first national strategy to address the widespread problem of prescription drug abuse. The strategy was developed by the Canadian Centre on Substance Abuse in conjunction with various stakeholders at the federal and provincial levels, as well as with aboriginal groups.

2. Regional cooperation

373. Regional cooperation among the countries in the region is extensive and generally considered to be effective, including cooperation in the form of intelligencesharing, joint law enforcement activities and border control initiatives. A list of regional cooperation meetings for North America is available in English in electronic form on the INCB website (www.incb.org), published in conjunction with the annual report.

3. National legislation, policy and action

374. In the United States, 21 states and the District of Columbia have now enacted legislation allowing for the establishment of medical cannabis programmes, with the state Governors of Illinois, Maryland and New Hampshire having signed implementing legislation into law in 2013. In May 2013, the Governor of the State of Maryland signed a bill allowing the use of medical cannabis. The legislation creates a 12-member independent panel to administer a so-called "compassionate use" programme for seriously ill patients for whom traditional treatment options are deemed insufficient. Only state-regulated research programmes tied to university medical centres are eligible. The appointed panel will set criteria for patient participation in the programme and will assume responsibility for licensing cultivators. Patients will not be entitled to grow cannabis themselves or to purchase it directly from private dispensaries licensed by the State. In June 2013, the Governor of New Hampshire signed a bill into law establishing a process to set up "alternative treatment centers", which will dispense cannabis for qualified patients with "chronic or terminal diseases" or "debilitating medical conditions". Under the process, the cultivation of cannabis for personal use will remain illegal. In August 2013, the Governor of Illinois approved a bill to create a four-year, state-regulated pilot programme through which cannabis will be distributed to eligible patients through a network of 60 licensed dispensaries, which must comply with strict rules established by the state government. The law specifies 35 eligible medical conditions, such as muscular dystrophy, cancer, multiple sclerosis and HIV/AIDS. Cultivation by patients or

caregivers will remain forbidden. The Board reminds all governments in jurisdictions having established "medical cannabis" programmes, or considering doing so, that the Single Convention on Narcotic Drugs of 1961 sets out specific requirements for the establishment, administration and monitoring of such programmes and notes that many existing programmes are not in line with the provisions of the treaty.

375. In response to the recent referendums in the states of Washington and Colorado, the Deputy United States Attorney General issued a memorandum to United States attorneys with respect to federal law enforcement activities, including civil enforcement and criminal investigations and prosecutions, concerning cannabis in all states. The memorandum reaffirms the determination made by Congress that cannabis is a dangerous drug and that the illegal distribution and sale of that substance is a serious crime and reaffirms the commitment of the Department of Justice to enforcing federal law accordingly. The memorandum sets forth "enforcement priorities", which aim to prevent the distribution of cannabis to minors, the use of cannabis sales revenues by organized crime groups and cartels, the diversion of cannabis from states where it is legal to states where it is not, violence and the use of firearms in the cultivation and distribution of cannabis, drugged driving, the growing of cannabis on public land and the possession or consumption of cannabis on federal property. The memorandum urges states having authorized the use of cannabis in any form, to ensure the establishment of an effective regulatory and enforcement framework that addresses threats to public safety, public health and law enforcement associated with this use and ensures that federal enforcement priorities are not undermined. The Board wishes to reiterate that the 1961 Convention limits the use of cannabis to medical and scientific purposes within the strict conditions set forth in the Convention.

376. In June 2013, the Government of Canada introduced Bill C-65, entitled the Respect for Communities Act. The bill aims to create a legal framework that would be applicable to requests for exemptions under the Controlled Drugs and Substances Act involving activities with controlled substances, including the establishment and operation of supervised drug injection sites. Under current legislation, the Minister of Health has the authority to grant an exemption to undertake activities using controlled substances for medical or scientific purposes, or in the public interest. Bill C-56 would require applications for activities involving controlled substances at a supervised drug consumption site in Canada to be accompanied by evidence of extensive consultations, including stakeholder views, before such applications could be considered by the Minister. In July 2013, the Toronto Board of Health adopted a decision to prepare a submission to the federal Government expressing its opposition to Bill C-65 and recommending the development of a simplified application process for the establishment of supervised injection sites. The Board of Health also decided to solicit the financial support of the provincial government of Ontario for the integration of supervised injection services, on a pilot basis, into existing provincially-funded clinical health services for people in Toronto who use drugs. INCB wishes to reiterate its position that the establishment and operation of drug consumption facilities is inconsistent with the provisions of the drug control conventions.²²

377. In April 2013, the United States Government released its 2013 National Drug Control Strategy, which aims to reduce drug abuse and its consequences by balancing public health and public safety considerations. The Strategy contains a broad set of measures to address drug abuse, grouped in the following categories: prevention, early intervention in health care; the integration of substance abuse treatment into the health-care system; addressing the link between drug abuse, crime, delinquency and incarceration; the disruption of domestic drug trafficking and production; the strengthening of international partnerships; and the improvement of information systems for analysis, assessment and local management. The Strategy also sets two national goals to be attained by 2015, namely, the curtailing of illicit drug consumption and the improvement of public health and public safety by reducing the consequences of drug abuse. The Office of National Drug Control Policy also released its 2013 National Southwest Border Counternarcotics Strategy, which measures progress made in strengthening law enforcement efforts along the south-west border and fostering increased cooperation with Mexican authorities. The Strategy sets strategic goals and objectives related to information-sharing, control measures at ports of entry, investigations and prosecutions, money-laundering and smuggling of weapons and establishes indicators for measuring progress.

378. Through the release in March 2013 of its first national strategy on the topic, entitled *First Do No Harm: Responding to Canada's Prescription Drug Crisis*, the Government of Canada hopes to address the wide-spread abuse of prescription drugs in the country. The strategy is the result of widespread consultations and cooperation between various stakeholders led by the Canadian Centre on Substance Abuse. The document

lays out a comprehensive 10-year strategy centred on five streams of action: prevention, education, treatment, monitoring and surveillance, and enforcement. The strategy addresses prescription drugs that have legal status and therapeutic uses, together with a high potential for harm, including opioid pain relievers, stimulants, sedative-hypnotics and medications used to treat addiction. In order to stem abuse of those substances, the strategy addresses the diversion of licit substances from the authorized supply chain; inappropriate prescription and dispensing behaviour; and addiction, mental health, co-morbidities, concurrent disorders and pain. In addition, special emphasis is placed on environmental and social conditions that increase risk among women, youth, seniors, aboriginal populations and newborns. Provision is also made for the adoption of measures to address prescription drug abuse in geographically remote, rural and isolated communities.

379. In August 2013, the United States Attorney General announced plans to reform the criminal justice system with the stated objective of ensuring a more equitable and more efficient enforcement of federal laws. The five goals identified by the Department of Justice in the implementation of the reform were the following: to ensure that finite resources are devoted to the most important law enforcement priorities; to promote fair enforcement of the laws; to ensure proportionate punishment for lowlevel non-violent offences; to bolster prevention and social reinsertion efforts and reduce recidivism and; to strengthen protection for vulnerable populations. Under the proposed reform, individuals having committed "lowlevel, non-violent drug offences" will no longer be charged under criminal provisions that impose minimum mandatory sentences so long as their conduct was not violent and did not involve the use of a weapon or sales to minors and the individual is not the leader of a criminal organization, has no ties to criminal gangs or drug cartels and has "no significant criminal history".

380. The Government of Canada has continued to implement the transition from its existing medical cannabis programme, the Marihuana Medical Access Program, to the Marihuana for Medical Purposes Regulations, a new medical cannabis scheme aimed at reducing the risk of diversion into illicit channels, increasing public security and improving access by programme participants to medical cannabis. The new measures governing the production and distribution of medical cannabis include the phasing-out of cultivation for personal consumption and the strengthening of regulatory requirements applicable to licensed medical cannabis producers. The two programmes will operate concurrently until March 2014, when the Marihuana Medical Access

²²See the *Report of the International Narcotics Control Board for 2006* (E/INCB/2006/1), paras. 175-179.

Program will end. The Board wishes to acknowledge the positive changes that have been made to the medical cannabis access scheme in Canada, in particular the phasingout of personal cultivation, and the adoption of other measures aimed at preventing diversion.

381. Legislative and administrative measures to address the public health threat posed by the abuse of synthetic cannabinoids and cathinones in the United States have gained momentum at the state and federal levels. In June 2013, a bill banning the sale and possession of all synthetic cannabinoids in the State of Maine was adopted by the state legislature. The sale and possession of cathinones has been illegal in the State since 2011. Also in June, the New York State Senate passed a bill criminalizing the sale and possession of synthetic cannabinoids and cathinones (sold as "bath salts"). While the sale of cathinones has been illegal in the State of New York since 2011, possession had remained legal. The penalties set out in the bill for possession of synthetic cannabinoids and cathinones would be similar to those for possession of cannabis and methamphetamines, respectively. The legislation also establishes the Statewide Synthetic Cannabinoid and Substituted Cathinone Surrender Program, which would allow individuals to turn in any products containing those substances at designated disposal points for a 90-day period following the law's entry into force. A database of trade names, physical descriptions, brand names and images of products known to contain those substances would be created to inform retailers, members of the general public and law enforcement officials.

382. In response to the continued threat posed by new psychoactive substances, the United States Drug Enforcement Administration has made further use of its temporary and emergency scheduling procedures to impose strict control measures on new substances of abuse. In April 2013, the Administration published a final rule to permanently schedule 3,4-methylenedioxy-Nmethylcathinone (methylone) under schedule I of the Controlled Substances Act. In May 2013, the Administration issued a final order to temporarily schedule the three synthetic cannabinoids UR-144, XLR-11, and AKB-48 under schedule I of the Controlled Substances Act for a two-year period. The final order was based on the finding that the placement of those substances and their salts, isomers and the salts of isomers was necessary to avoid an imminent threat to public safety. As a result of the order, the criminal, civil and administrative penalties provided under the Controlled Substances Act, as well as the regulatory controls for schedule I substances, will be applicable to the manufacture, distribution, possession, importation and exportation of those three substances.

383. In the United States, the Drug Enforcement Administration has continued to take action against retail pharmacy chains for violations of the provisions of the Controlled Substances Act, which imposes civil monetary penalties for violations of the Act's record-keeping and dispensing requirements. Following civil claims brought against them under the Act, two of the country's biggest pharmacy chains agreed to multi-million dollar out-of-court settlements, one of which being the largest such settlement in the history of the Drug Enforcement Administration.

384. In early 2013, Public Safety Canada released a report entitled "Building a safe and resilient Canada: prescription drug return initiatives in Canada", which examines existing prescription drug return programmes already in operation in Canada at the provincial and local levels with a view to providing a reference document for best practices for the establishment of similar programmes.

385. In Canada and the United States, prescription drug "take-back" initiatives were held in order to reduce the supply of unused prescription drugs in households, which has been acknowledged to constitute the main source of these drugs in cases of diversion, trafficking and abuse. In the United States, the Drug Enforcement Administration organized two national prescription drug "take-back" days in April 2013 and in October 2013, which resulted in the collection of 371 tons of unused prescription drugs. In total, the Drug Enforcement Administration has collected more than 1,409 tons of prescription drugs in six such "take-back" days. In Canada, the first ever National Prescription Drug Drop-off Day was held in May 2013, building upon the success of previous prescription drug return initiatives at the municipal and regional levels. According to figures provided by the Government, a total of 2 tons of unused prescription drugs were collected. The Board encourages Governments in the region to continue to implement initiatives aimed at reducing the availability of prescription drugs that are no longer needed and liable to abuse and to raise awareness among their populations of the health risks associated with prescription drug abuse. In that regard, the Board would like to draw the attention of Governments to the special topic on prescription drug disposal initiatives contained in chapter II of the present report.

386. In January 2013, the United States Food and Drug Administration issued a document entitled "Guidance for industry: abuse-deterrent opioids evaluation and labelling", to advise the pharmaceutical industry on scientific methodologies to be used to test and evaluate new opioid drug formulations having

abuse-deterrent properties, and advise on the formulation of appropriate labelling claims based on the specific tamper-resistant properties of each formulation. In April 2013, the United States Food and Drug Administration approved "abuse-deterrent labelling" for OxyContin, which indicates the tamper-proof physical and chemical properties of the reformulated substance, making it more difficult to crush, break or dissolve, rendering intravenous and intranasal abuse more difficult. The Food and Drug Administration also indicated that, given the known abuse associated with the original formulation of OxyContin, it would not approve any new generic drugs based on the original formulation. In Canada, the Minister of Health refused a request by provincial health authorities to withhold approval of OxyContin generics due to their potential for abuse, because the law did not permit approval to be withheld on the basis of misuse if the drug was otherwise considered safe and effective for its recommended use. In the light of the difference in approach being taken in the two countries and the possible risk of diversion it created, the Federal Minister of Health of Canada emphasized the need for Canada and the United States to work together to develop joint evidence-based guidance on abuse deterrence that could be used on both sides of the border.

387. Through its participation in Operation Pangea VI, the largest Internet-based action of its kind, the United States Food and Drug Administration targeted websites selling unapproved and potentially dangerous prescription medicines that could pose significant threats to public health. As a result, the Administration's Office of Criminal Investigations seized and shut down 1,677 illegal pharmacy websites. As part of its work against illegal Internet pharmacies, the Food and Drug Administration has added a feature to its website allowing members of the public to report suspicious Internet pharmacies and has issued guidelines on how to identify legitimate online pharmacies.

388. In June 2013, the Canadian Community Epidemiology Network on Drug Use issued a "drug alert" regarding illicit fentanyl analogues being produced in clandestine laboratories in Canada and the United States. The alert warns that illicit fentanyl analogues have been appearing in several cities in both countries, in pill and powder form, and are being sold as oxycodone, heroin and other substances, leading to increased potential for overdose. The substances were first reported by police in the province of Quebec in May 2013 but they have since spread to other parts of the country.

4. Cultivation, production, manufacture and trafficking

(a) Narcotic drugs

389. North America accounts for roughly half of all cannabis seized globally, primarily due to large quantities seized in the United States and Mexico. According to seizure information submitted by Governments in the region to the Board, however, cannabis seizures in North America have continued to decline. In the United States, the amount of cannabis reported seized in 2012 was over 1,756 tons, compared with 1,834 tons reported for 2011. In Canada and Mexico, the decrease was more significant. Cannabis herb seizures in Mexico fell from nearly 1,796 tons in 2011 to under 1,300 tons in 2012, while in Canada, seizures decreased by more than 50 tons, from 111.4 tons in 2011 to 61.1 tons in 2012.

390. Owing to differences in consumption preferences, cannabis is consumed mainly in the form of cannabis herb in the Americas. In 2011, total seizures of cannabis herb in the region were more than 800 times greater than seizures of cannabis resin. The Americas accounted for only 0.5 per cent of global seizures of cannabis resin in 2011, with Canada accounting for the majority of those seizures. In the United States, over 443 kilograms (kg) of cannabis resin were seized in 2012, representing an increase of 268 per cent compared with the 165.3 kg reported seized in 2011. In Canada, the amount of cannabis resin seized declined from 4.75 tons in 2011 to 3.2 tons in 2012.

391. Cocaine manufactured in South America continues to be smuggled into North America via transit points in Central America and the Caribbean. Cocaine seizures for the region in 2012 present a mixed picture, with the United States and Canada reporting significant increases in seizures and Mexico showing a steep drop. The amount of cocaine seized in the United States increased from 58.23 tons in 2011 to 67.79 tons in 2012, while in Canada, cocaine seizures rose sharply, from 4.6 kg in 2011 to just under 1.7 tons in 2012. In Mexico, however, cocaine seizures fell from 9.46 tons in 2011 to just over 3.39 tons in 2012.

392. Mexico also reported a significant drop in heroin seizures, from 685.5 kg in 2011 to 214.9 kg in 2012. In the United States, heroin seizures increased from 2.9 tons in 2011 to just over 3.3 tons in 2012. Over the same period, heroin seizures in Canada also increased from 39.4 kg to 195.6 kg. Canada remains the only country in the Americas in which heroin is sourced primarily from Asia (mostly

Afghanistan) rather than from other countries on the continent, while heroin abused in the United States is produced mostly in Colombia and Mexico. In fact, the Heroin Domestic Monitor Program of the United States Drug Enforcement Administration revealed that 50 per cent of the heroin samples analysed by the Administration in 2011 originated in South America, 46 per cent in Mexico and only 4 per cent in South-West Asia.

393. While seizures of opium in 2012 remained relatively stable in Mexico, increasing slightly from nearly 1,452 kg to just over 1,471 kg, opium seizures in the United States plummeted from 48.5 kg in 2011 to only 0.07 kg in 2012, while Canada registered a strong increase in seizures, up from 87.7 kg reported seized in 2011 to 388.3 kg in 2012.

(b) Psychotropic substances

394. Although States are not required to submit information relative to seizures of psychotropic substances to the Board, information is available from other sources. According to figures for 2012 released by the World Customs Organization, the number of incidents of seizures of psychotropic substances in North America, as reported by customs agencies, has remained relatively stable, dropping slightly from 2,986 in 2011 to 2,947 in 2012. During that period, however, the quantity of psychotropic substances seized by customs authorities more than tripled, from 10.5 tons in 2011 to over 34.6 tons in 2012.

395. Although North America has accounted for just 1 per cent of global amphetamine seized in recent years (2005-2011), the seizures by North American customs authorities were equivalent to 50 per cent of all amphetamine seizures reported by customs agencies worldwide in 2012, owing in great part to the large seizures in the United States. According to the World Customs Organization, the source country of most of the amphetamine seized in the United States was Mexico, and most amphetamine was smuggled into the country by vehicle.

396. Methamphetamine seizures in Mexico continued to increase, reaching 33.1 tons in 2012, after more than doubling from 13 tons in 2010 to 31 tons in 2011. By 2011, Mexico was reporting the world's largest total methamphetamine seizures, ahead of the United States and China. Mexico has been identified also by United States customs officials as the primary country of origin of methamphetamine seized, with roughly 80 per cent of the substance seized by United States customs being manufactured in Mexico. 397. Customs officials in the United States reported seizures of 1.18 tons of MDMA in 2012, primarily manufactured in Mexico and Canada, also there are indications that domestic manufacturing still accounts for a significant proportion of the MDMA abused in the United States. Seizures of certain chemicals in Mexico frequently used in the manufacture of MDMA suggest that the drug may be being manufactured in Mexico to a greater extent than previously believed.

398. In addition to the abuse of psychotropic substances, the Canadian Centre on Substance Abuse has drawn attention to the fact that methylphenidate preparations used to treat Attention Deficit Hyperactivity Disorder are increasingly being abused by students in North America to boost concentration and improve academic performance.

(c) Precursors

399. The use of non-scheduled esters of phenylacetic acid remain the predominate starting material in large-scale illicit manufacture of methamphetamine in Mexico, where the substances have been under national control since November 2009. While ephedrines continue to be seized in the region, seizures totalled just 270 kg in 2012, far lower than the annual multi-ton seizures reported in earlier years. The reliance upon those precursor chemicals in the illicit manufacture of methamphetamine is now limited to the numerous small-scale laboratories in the United States and larger-scale laboratories in Canada, where loopholes in domestic legislation allow for continued diversion.

400. A detailed overview of the situation in North America with respect to the control of precursor chemicals can be found in the 2013 report of the Board on the implementation of article 12 of the 1988 Convention.²³

(d) Substances not under international control

401. The United States identified 158 new psychoactive substances in 2012, making it the country having identified the largest number of these new substances of abuse. The substances identified were mostly synthetic cannabinoids and synthetic cathinones. In Canada, authorities identified 59 new psychoactive substances over the first two quarters of 2012, a rate similar to that in the United States. As in the United States, the substances identified

²³E/INCB/2013/4.

were mostly synthetic cannabinoids and synthetic cathinones but also included phenethylamines. The abuse of new psychoactive substances in North America also includes plant-based substances such as *Salvia divinorum* and khat. The Board encourages Governments in the region to continue their efforts to deal with the public health menace posed by new psychoactive substances by sharing information on new substances of abuse, by identifying and implementing best practices aimed at addressing them and by subjecting these substances to national control measures.

402. The abuse of Salvia divinorum, a herb native to Mexico, in Canada and the United States has continued, making the substance one of the most abused new psychoactive substances in the region. Although legislative measures aimed at curbing access to the herb have multiplied in recent years, particularly at the state level in the United States where more than 20 states have now banned it, Salvia divinorum remains widely available throughout the region. In Canada, the sale and distribution of products containing Salvia divinorum are regulated by the country's Food and Drugs Act, with no authorizations having been granted for the sale of products containing the substance since early 2011. Despite a process initiated by the Government of Canada in 2011 to control Salvia divinorum under the Controlled Drugs and Substances Act, the measure has not yet been adopted.

403. According to data provided by the Canada Border Services Agency, there has been a significant increase in attempts to smuggle khat into the country, where it is illegal. In the Greater Toronto Area alone, more than 13 tons of khat have been seized by the Agency in approximately 13,000 seizures effected between 1 January 2012 and 31 May 2013. In 2012, the total amount seized in the Greater Toronto Area was over 10 tons.

5. Abuse and treatment

404. North Americans with substance addiction problems have greater access to treatment than people in other regions, with an estimated one in three problem drug users in the region receiving some sort of treatment intervention per year, compared to one in six problem users globally.

405. According to figures released by UNODC, the illicit cocaine market in North America has decreased significantly over the period 2006-2012, both in absolute and relative terms. In 2011, roughly 4.6 million people in North America reported using cocaine in the past year, a decrease of approximately 2 million over the amount in

the period 2004-2005. Over the same period, the proportion of cocaine users in North America decreased from 49 per cent of the world total to 27 per cent, although the reasons for that decline also include increases in other regions.

406. According to the 2012 Canadian Alcohol and Drug Use Monitoring Survey released by Health Canada, the prevalence of past-year cannabis abuse among Canadians aged 15 years and older increased slightly in 2012, from the 9.1 per cent reported in 2011 to 10.2 per cent. Despite that increase, prevalence of past-year cannabis abuse in 2012 was still significantly lower than the 14.1 per cent registered in 2004. In terms of differences among various age groups, the survey reveals a past-year prevalence among youth (defined as 15 to 24 years of age) of 20.3 per cent against 8.4 per cent for adults (defined as 25 years of age or older). The survey also found a slight increase in the age of initiation to cannabis, rising from 15.6 years in 2011 to 16.1 years in 2012. Past-year prevalence for the abuse of other illicit drugs identified by the Survey was as follows: "ecstasy", 0.6 per cent; hallucinogens (including Salvia divinorum), 1.1 per cent; cocaine or "crack" cocaine, 1.1 per cent. The Survey also examined the use and abuse of opioid pain relievers, tranquillizers and sedatives. Among respondents over the age of 15 having used any of those substances in the previous year, 6.3 per cent reported to have abused the drug in order to get high.

407. In the United States, recent studies have revealed drugged driving to be more common than initially thought, with 9.4 million people (i.e., 3.4 per cent of the population aged 12 or older) reported to have driven under the influence of illegal drugs in 2011. Of those having tested positive for drugged driving, 66 per cent also tested positive for alcohol.

408. According to statistics released in July 2013 by the Centers for Disease Control and Prevention, prescription drug abuse, in particular of opioid analgesics, has continued to constitute a serious threat to public health in the United States, with women increasingly and disproportionately affected. Although the number of annual deaths related to overdose of prescription opioids continues to be higher among men than among women, the Centre's figures reveal that the number of deaths among women between 1999 and 2011 has increased disproportionally, by 400 per cent, compared with an increase of 265 per cent among men. For the years in question, almost 48,000 women died of prescription opioid abuse, averaging about 18 deaths per day in 2010. The Centre estimates that for every woman who dies of prescription opioid abuse, another 30 women are admitted to hospital emergency rooms across the United States for painkiller misuse or abuse—roughly one every three minutes.

409. In Mexico, the National Institute of Women (INMUJERES) has called for a review of public policies relative to the prevention and treatment of drug abuse in order to include gender perspectives that take into account the particularities of the effects of drug abuse on women. The Institute points out that drug abuse among women in Mexico has doubled in the past decade and that the health consequences of drug abuse among women manifest themselves more quickly and are more severe than among men using similar quantities of the same drug for similar amounts of time. Women are also more at risk of being victims of drug-related domestic violence, crime and sexual assault. INMUJERES also highlights that women in Mexico are less likely than men to seek out treatment due to social stigma and fear of rejection by their partners or families. The Board encourages Governments in the region, in the preparation of their national drug abuse prevention and treatment strategies, to take gender perspectives into account and to involve groups representing women in the elaboration of these strategies.

410. In February 2013, the United States National Institute on Drug Abuse released the results of its Monitoring the Future survey for 2012 on drug use among adolescents. The survey was based on a sample group of 45,400 eighth, tenth and twelfth grade students at 395 secondary schools across the United States. According to the study, increases in cannabis use among secondary school students, which had been noted for the past four years, ceased. Nonetheless, current cannabis use in 2012, based on past-month prevalence data, was 20 per cent higher than in 2007. The rise in use seems to have been mainly linked to falling risk perceptions. The study found that the perceived risk associated with cannabis use has been in decline among adolescents for the past six years and that disapproval of cannabis use has declined for the past three to four years in line with ongoing discussions on the legalization of cannabis in various states of the United States. The study also examined the perceived availability of cannabis as an alternative explanation for the rise in cannabis use. Availability of cannabis, however, was not found to have changed. Increase in cannabis use over the past few years did not affect only youth. The National Survey on Drug Use and Health, published in September 2013, revealed an increase of 20 per cent in the annual prevalence of cannabis use among the general population aged 12 and older over the 2007-2012 period, from 10.1 per cent in 2007 to 11.5 per cent in 2011 and 12.1 per cent in 2012, the highest such rate found over the past decade.

411. Past-year use of synthetic cannabinoids (known as "Spice" or "K2") for 2012 among twelfth grade students remained relatively unchanged, at 11.3 per cent (compared with 11.4 per cent for 2011), and remained the second most widely used group of substances after cannabis. The 2012 survey, the first in which eighth grade and tenth grade students were asked about past-year use of synthetic cannabinoids, reported prevalence rates of 4.4 per cent and 8.8 per cent respectively. Annual prevalence rates for cathinones ("bath salts") for 2012 were 0.8 per cent, 0.6 per cent and 1.3 per cent for grades 8, 10 and 12 respectively. Lower rates of abuse were noted for heroin, "ecstasy" and sedatives.

412. In June 2013, the Federal District of Mexico released the results of a survey on the use of drugs among students in Mexico City. Based on a sample of over 26,500 high school and higher education students, the survey reveals an increase in illegal drug abuse led by cannabis, cocaine, "crack" cocaine and hallucinogenics. The most significant increase was noted for cannabis: past-year usage rose by four percentage points, from 8.2 per cent in 2009 to 12.2 per cent in 2012. In contrast to declining prevalence rates for cocaine abuse in North America as a whole, the figures for past-year cocaine abuse among those students also rose, from 1.7 per cent in 2009 to 2.5 per cent in 2012.

413. In February 2013, the Centers for Disease Control and Prevention warned of multiple cases of acute kidney injury associated with synthetic cannabinoid use reported by the health authorities in several states of the United States. Figures released by the American Association of Poison Control Centers in April 2013 indicated that there were over 5,200 calls to poison centres across the United States for exposure to synthetic cannabinoids in 2012.

414. According to the 2012 Arrestee Drug Abuse Monitoring Program released in May 2013 in the United States, 60 per cent of adult males arrested in the five regions covered by the survey had at least one illicit drug in their system at the time of their arrest, the drugs most commonly detected being cannabis, cocaine and methamphetamine. While the detection of cannabis in the urine samples of male arrestees increased by 17 per cent over the period 2007-2012, the detection of cocaine fell by 37 per cent over the same period, possibly due to declines in cocaine manufacture in Colombia and stronger law enforcement actions by the Mexican authorities against the Mexican drug cartels trafficking cocaine. The proportion of urine samples from male arrestees testing positive for methamphetamine increased slightly between 2007 and 2012. Among the arrestees having tested

positive for illicit drug consumption, 70 per cent had never received any kind of drug treatment.

415. Over the past decade, intravenous drug abuse in North America has declined significantly. In the United States alone, the number of people injecting drugs dropped by more than 400,000 between 2008 and 2011. Notwithstanding that decline, figures for 2011, published in the *World Drug Report 2013*, show that an estimated 0.63-0.68 per cent of North Americans aged 15 to 64 years of age continue to inject drugs. Approximately 13.5 per cent of intravenous drug users in the region are estimated to be infected with HIV. In Canada, drug injection remains relatively high at 1.3 per cent of the general population, approximately double the North American average.

South America

1. Major developments

416. The availability of South American cocaine in illicit global markets appears to have stabilized or even declined since the period 2005-2007. Large seizures of cannabis reported by countries in South America suggest a possible increase in cannabis production in the region in recent years. Illicit cultivation of opium poppy continues to occur to some extent in South America; however, its magnitude is rather limited.

417. In 2012, the total area of coca bush cultivation decreased by a quarter in Colombia, to 48,000 ha. It also decreased slightly in Bolivia (Plurinational State of), to 25,300 ha, and Peru, to 60,400 ha. The total area under coca bush cultivation in South America in 2012 was estimated at 133,700 ha, indicating a sizeable decrease from the 153,700 ha reported in 2011.

418. In 2013, the Plurinational State of Bolivia reacceded to the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol, with a reservation on coca leaf. Since February 2013, the chewing of coca leaf and the consumption and use of the coca leaf in its natural state for "cultural and medicinal purposes" are permitted on the territory of the Plurinational State of Bolivia by the virtue of the reservation.

419. The past two years have seen intensive discussion on drug policies in the Americas, including South America (for a discussion of this issue in the context of Central America and the Caribbean, see para. 340, above). The Board notes that in November 2012, the member countries of the Organization of American States approved a new procedure for the Multilateral Evaluation Mechanism for assessing drug policies in the Americas. The new procedure takes into account new standards set by the Hemispheric Drug Strategy and its plan of action.

2. Regional cooperation

420. There is a high level of cooperation and coordination among the countries in South America, and the Americas as a whole, in terms of the number of dedicated forums and activities to confront the underlying problems related to illicit cultivation and to the illicit production, manufacture, trafficking and abuse of drugs in the region. The Board acknowledges the number of regional cooperation activities organized by the Governments of the countries in the region in cooperation with the Inter-American Drug Abuse Control Commission and UNODC.

421. The issue of drug control became an integral part of the cooperation programmes of various communities of countries in South America, including the Common Market of the South, the Andean Community, the Union of South American Nations and the Community of Latin American and Caribbean States. The Board also takes note of the efforts of the American Police Community, which aims to promote police cooperation and judicial assistance among police forces in the western hemisphere.

422. In 2012 and 2013, in addition to high-level meetings on national and regional drug control policies, health and law enforcement experts from Latin America at diverse technical forums shared their views and experiences on drug-related issues, such as the abuse of smokeable forms of cocaine, the achievements of drug treatment courts or the forecasting of trafficking in drugs in the western hemisphere by 2020.

3. National legislation, policy and action

423. In January 2013, the Secretariat for Planning the Prevention of Drug Abuse and the Fight against Drug Trafficking of Argentina launched an online system that records all national transactions in chemical precursors. The system will assist the competent national authorities in reducing the risk of diversion of precursor chemicals for the illicit manufacture of drugs. 424. In 2013, the Colombian drug observatory launched an early warning system that is aimed at identifying and issuing alerts about domestic consumption of new psychoactive substances, analysing their potential effects on health and reporting findings to the interested communities, including the health sector and other entities responsible for drug control in the country.

425. In November 2012, Ecuador joined the Hemispheric Information Exchange Network for Mutual Assistance in Criminal Matters and Extradition, established in 2000 to increase and improve the exchange of information between States members of the Organization of American States in the area of mutual assistance in criminal matters.

426. The Board notes that, in response to a higher rate of misuse and abuse of narcotic drugs and psychotropic substances among the student population in Peru, in November 2012 the Peruvian National Commission for Development and Life without Drugs (DEVIDA) initiated a pilot programme for drug prevention at universities, which is aimed at creating awareness among students about the harmful effects of drug abuse and the need to develop healthy lifestyles.

427. In March 2013, DEVIDA and UNODC agreed to establish in Peru a centre of excellence for Latin America and the Caribbean for the prevention and control of supplies and precursor chemicals.

428. With a view to promoting shared responsibility among local communities in preventing drug trafficking and drug abuse, at the beginning of 2013 the Government of the Bolivarian Republic of Venezuela, in cooperation with State institutions, initiated public consultations on the National Drug Plan 2013-2019.

429. The Board notes with concern that in July 2013, the lower house of Uruguay approved new legislation that would allow the State to assume control over and regulate activities related to the importation, production or acquisition of any title, storage, sale or distribution of cannabis or its derivatives, under terms and conditions to be determined by a regulation, for the purpose of nonmedical use. The law has yet to be approved by the Senate. The Board wishes to point out that such legislation, if approved, would be contrary to the provisions of the international drug control conventions.

4. Cultivation, production, manufacture and trafficking

(a) Narcotic drugs

430. The data on cannabis cultivation in South America are scarce. Increased seizures of cannabis have been reported by several countries in the region in recent years. For example, Colombia and Paraguay reported increases of over 100 per cent in seizures of cannabis herb when comparing the period 2002-2006 with the period 2007-2011. Those increased seizures may warrant closer examination to determine whether they are primarily the result of strengthened law enforcement activities or whether they may indicate increased illicit cultivation of cannabis plant in the region.

431. The Board noted the high volumes of cannabis plant and cannabis herb seized in the Plurinational State of Bolivia in recent years. From 2008 to 2011, the Bolivian authorities seized 3,500 tons of cannabis. In 2012, they seized a further 407 tons of the drug of local origin (403 tons of cannabis plant and 4 tons of cannabis herb), 25 tons more than in 2011.

432. Illicit cannabis cultivation in Brazil is destined primarily for local abuse. In 2012, seizures of cannabis herb decreased significantly, from 174 tons in 2011 to only 11.2 tons. In that year, the Brazilian authorities eradicated a total of 21.7 ha of area under illicit cannabis cultivation in their country and assisted in joint operations, to eradicate illicit cannabis cultivation in Paraguay.

433. Cannabis that has been illicitly cultivated in Paraguay continues to be smuggled to Southern Cone countries. According to the Paraguayan National Anti-Drug Secretariat, the eradication of illicit cannabis plant grown in the country has decreased gradually, from 1,776 ha eradicated in 2008 to 721 ha in 2011. In 2012, seizures of cannabis herb in the country amounted to 175.7 tons, a decrease of 43 per cent from the level of the previous year. The Board wishes to encourage the Government of Paraguay to increase its efforts to address decisively the illicit cultivation of cannabis plant on its territory.

434. In Peru, a total of 722.7 tons of cannabis plant was seized in the period from 2000 to 2011. In 2012, the Peruvian authorities seized 979 tons of cannabis plant. Large seizures of cannabis plant continued in 2013, with the authorities seizing some 700 tons in the first half of the year.

435. In Uruguay, seizures of cannabis herb in 2012 amounted to only 2 tons, the same as in 2011. Venezuelan authorities seized 17.9 tons of cannabis herb in 2012, including cannabis herb containing high levels of tetrahydrocannabinol.

436. Most indicators, including cultivation of coca bush, manufacture of cocaine, seizures of the substance and prevalence estimates in the major consumer countries, suggest that in recent years the cocaine market, on the whole, has been declining.

437. In 2011, UNODC estimated that the total global potential manufacture of cocaine ranged from 776 to 1,051 tons. As the research to determine the ratios for the conversion of coca leaf to cocaine in South America is ongoing, UNODC did not provide any estimate of the global potential manufacture of cocaine in 2012.

438. The total area under coca bush cultivation in South America in 2012 decreased to 133,700 ha, 13 per cent less than the total area in 2011. Peru accounted for 45 per cent of that total, followed by Colombia and Bolivia (Plurinational State of), which accounted for 36 per cent and 19 per cent, respectively.

439. In 2012, the total area under illicit coca bush cultivation in the Plurinational State of Bolivia decreased to 25,300 ha, 7 per cent less than in 2011. In 2012, a total of 11,044 ha of coca bush were manually eradicated in the country. That total area of annual eradication was the second largest reported since 2000.

440. In 2012, about 30,486 ha of illicitly cultivated coca bush were eradicated manually in Colombia and a further 100,549 ha were sprayed by aircraft. Those eradication efforts resulted in a 25 per cent decrease in the area under illicit coca bush cultivation over the year. The final estimated total area under illicit coca bush cultivation amounted to 48,000 ha, the smallest in the country since 1995. The potential cocaine manufacture in Colombia decreased accordingly in 2012 to 309 tons, 39 tons less than in 2011.

441. Despite annual eradication of illicit coca bush ranging from 6,400 ha to 12,000 ha from 2001 to 2011, there was still a gradual increase in the total area under illicit cultivation in Peru, from 46,200 ha to 62,500 ha, over that period. The area under illicit coca bush cultivation in the country was, however, still about half the area of two decades before.

442. The Peruvian National Drug Control Strategy 2012-2016 provides for a gradual stepping up of eradication efforts aimed at reducing the potential production of coca leaf in the country by 30 per cent by 2016, from the level in 2011. In 2012, the Peruvian authorities eradicated 14,170 ha of illicit coca bush, 170 ha more than the target set for that year. By June 2013, the authorities reported eradicating 10,400 of the 22,000 ha of coca bush planned to be eradicated by the end of the year.

443. At the end of 2012, the total area under illicit coca bush cultivation in Peru decreased to 60,400 ha, 3 per cent less than in 2011.

444. Cocaine produced in South America, in addition to its local consumption, is trafficked from the region, mainly to North America and Europe. While rates of cocaine abuse have been falling in the United States in the past few years, large quantities of cocaine continue to be trafficked to that country and to Canada, notably from Colombia, through Ecuador, Mexico and countries in Central America.

445. The use of speedboats and submersible and semisubmersible vessels for trafficking of cocaine from South America continued to be reported by countries in the subregion. A breakdown of cocaine seizures in Colombia suggests that the Atlantic route is gaining importance, in comparison with the Pacific route, for the smuggling of cocaine.

446. Brazil, with its extensive land borders with all three major cocaine manufacturing countries and a long coastline, in addition to being a destination country for large amounts of cocaine, also affords easy access to the Atlantic Ocean for onward trafficking to West and Central Africa and from there to Europe and farther afield. In 2012, the cocaine seized in Brazil had originated in Bolivia (Plurinational State of), Peru and Colombia, in descending order of quantities seized.

447. The Government of the Bolivarian Republic of Venezuela reports that the decrease in the trafficking of illicit drugs through its territory is partly due to the continued implementation of systems for the detection of and severe penalties for drug trafficking.

448. In 2012, several countries in South America, including Colombia, Chile, Peru, Paraguay and Uruguay, reported that greater quantities of cocaine hydrochloride had been seized than in 2011. In 2012, Colombian authorities seized 188 tons of cocaine hydrochloride (an increase of 29 per cent), constituting a large proportion of potential cocaine production in the country. The Chilean authorities, in addition to 9.7 tons of coca paste, also seized 3.2 tons of cocaine hydrochloride, 1.3 tons

more than in 2011. In Peru seizures of cocaine hydrochloride of domestic origin increased in 2012 by 1.9 tons, to 12.7 tons seized. In the first half of 2013, 4 more tons of the substance were seized in Peru. In Paraguay, seizures of cocaine hydrochloride doubled from 2011 to 2012, when they amounted to 3.1 tons. It was the fourth consecutive increase since 2008, when 0.3 tons of the substance was seized. In Uruguay such seizures increased from 266 kg in 2011 to 685 kg in 2012. In 2012, seizures of cocaine hydrochloride decreased in Bolivia (Plurinational State of) to 4.2 tons, 1.4 tons less than in 2011, while those of cocaine base increased by 3.8 tons, to 32.1 tons. In Brazil, seizures of cocaine hydrochloride totalled 19.9 tons, 19 per cent less than in the previous year. In the Bolivarian Republic of Venezuela, seizures of cocaine hydrochloride remained stable in 2012, totalling 27.4 tons.

449. In South America, most of the laboratories manufacturing cocaine hydrochloride are found in the three coca-growing countries: Bolivia (Plurinational State of), Colombia and Peru. Cocaine hydrochloride laboratories have also been destroyed in a number of other countries, including Argentina, Chile, Ecuador, Venezuela (Bolivarian Republic of), and the United States.

450. The number of illicit cocaine laboratories dismantled in the Plurinational State of Bolivia decreased by 24 per cent in the past three years, from 5,956 laboratories in 2010 to 4,508 laboratories in 2012.

451. In Colombia, the number of both coca base and cocaine hydrochloride processing laboratories dismantled has gradually decreased by one third from 2008 to 2011, following a decreasing trend in illicit cultivation of coca bush. In 2012, 2,110 laboratories processing coca base and 246 manufacturing cocaine hydrochloride were destroyed.

452. In Peru in 2012, 26 cocaine hydrochloride processing laboratories and 1,145 coca base processing laboratories were dismantled, respectively the highest and lowest numbers in the past five years.

453. Illicit cocaine laboratories discovered in Ecuador were primarily purification laboratories or laboratories processing coca base into cocaine hydrochloride. In 2012, four cocaine laboratories were dismantled in Ecuador. The Chilean authorities reported the destruction of eight laboratories processing coca base in their country in 2012.

454. There is no illicit cultivation of coca bush in the Bolivarian Republic of Venezuela. However, since 2007, the Venezuelan authorities have dismantled on average 18 illicit cocaine hydrochloride processing laboratories per year. In 2012, those authorities destroyed 24 such laboratories.

455. Although there is some illicit cultivation of opium poppy in South America, its magnitude is negligible. In 2012, illicit opium poppy in Colombia was cultivated on an estimated area of 313 ha, equivalent to only about 0.1 per cent of global area under illicit opium poppy cultivation. During the first four months of 2013, the Colombian authorities eradicated 324 ha of illicit opium poppy cultivation. The potential manufacture of heroin in Colombia has been stable for several years at about 1 ton. In 2012, 18 ha of opium poppy were reported eradicated in Peru.

456. In 2012, the following seizures of heroin were reported in South America: 10 kg in Brazil, 814 kg in Chile, 464 kg in Colombia and 2 kg in Peru. In addition, Peru reported a seizure of 71 kg of opium of local origin and Chile reported seizures of 120 kg of morphine.

(b) Psychotropic substances

457. The problem of the manufacture, trafficking and abuse of psychotropic substances in South America encompasses all main groups of those substances, including amphetamine-type stimulants, sedatives and tranquillizers and hallucinogens, as well as psychoactive substances that are not under international control. The characteristics and magnitude of the problem differ from country to country.

458. According to the Government of Brazil, the illicit manufacture of synthetic drugs does not occur in the country. Synthetic drugs are trafficked to Brazil from Europe, on some occasions in exchange for cocaine. In 2011, Brazil reported its highest figure for seizures of MDMA ("ecstasy") in the past two decades, 70 kg; over the past 10 years the amounts of the annual seizures of the substance in the country have usually been smaller than 1 kg. In 2012, Brazil seized 339,000 tablets of "ecstasy" and 10,000 units of amphetamine.

459. The Government of Colombia reported on increased seizures of synthetic drugs, which may indicate increased abuse of those substances in the country. In 2012, the Colombian authorities seized almost 39,700 tablets of "ecstasy".

460. In 2010, Peru reported the seizure of 250,000 units of "ecstasy", the largest amount in the past decade. In 2011 seizures of "ecstasy" amounted to 229 units, and in 2012 the country did not report any such seizures. The

Uruguayan authorities reported the seizure of 60,000 units of "ecstasy" in 2011; in 2012 the country did not report any seizures of the substance.

461. From 2011 to 2012, seizures of amphetamine and/ or methamphetamine were reported by Argentina, Brazil, Chile, Colombia and Venezuela (Bolivarian Republic of).

462. In 2011, a number of countries in South America, including Argentina, Brazil, Chile, Colombia and Uruguay, reported the largest amounts of hallucinogens seized since 2007. In 2012, seizures of hallucinogens, in particular LSD, were reported by Brazil (65,000 units), Chile (4,200 units), Colombia (100 units) and Uruguay (2,000 units). According to the Chilean authorities, most of the LSD seized in the country had originated in Argentina.

(c) Precursors

463. In all countries that are major sites for coca bush cultivation, the efficiency of illicit cocaine manufacture has been improving. Potassium permanganate remains the key oxidizing agent used in the manufacture of cocaine hydrochloride in the region, although the extent of its illicit use and the methods used for its diversion have changed in South America in the past few years. In 2012, countries in South America accounted for two thirds of global seizures of potassium permanganate (92.7 tons). In that year, Colombia seized 55.7 tons, Peru 3.1 tons, Venezuela (Bolivarian Republic of) 2.4 tons and Bolivia (Plurinational State of) 960 kg of the substance.

464. In Colombia, in addition to the recycling and reuse of solvents, traffickers have begun to manufacture some precursor chemicals, including potassium permanganate, ammonia and hydrochloric acid. In 2012 the Colombian authorities dismantled eight illicit laboratories manufacturing potassium permanganate.

(d) Substances not under international control

465. The problem of new psychoactive substances has also emerged in countries of Latin America. Reported substances of abuse include ketamine and plant-based substances, notably *Salvia divinorum*, followed by piper-azines, synthetic cathinones, phenethylamines and, to a lesser extent, synthetic cannabinoids. Brazil also reported the emergence of mephedrone and DMMA (a phenethylamine); Chile reported the emergence of *Salvia divinorum* and tryptamine.

5. Abuse and treatment

466. In January 2013, the Andean Community presented the results of the second Andean epidemiological study on drug use among university students. The study found that the prevalence of drug abuse among university students in the Andean countries was quite heterogeneous: the last-year prevalence of abuse of any illicit drug, including inhalants, was 4.6 per cent in Bolivia (Plurinational State of), 16.7 per cent in Colombia, 10.1 per cent in Ecuador and 5.6 per cent in Peru.

467. Cannabis continues to be the most abused drug in South America, where about 14.9 million persons aged 15 to 64 were estimated to have taken the substance in the past year, 4.5 times the number of persons who abused cocaine. According to UNODC data, the prevalence of cannabis abuse has significantly increased in the region in recent years, particularly in Brazil.

468. The Board notes with concern the low perception of risk regarding cannabis abuse by the young population in some South American countries: according to the fifth national survey on the abuse of drugs among the secondary school population, published in October 2012, up to 60 per cent of students in Uruguay aged 13 to 17, consider recreational use of cannabis to pose little or no risk.

469. The past-year prevalence of cocaine abuse among the general population in South America (1.3 per cent) is the third highest in the world, after North America and Oceania (1.5 per cent each), and it is about triple the global average prevalence (0.4 per cent). According to UNODC, the past-year prevalence of cocaine abuse increased in particular in Brazil, from 0.7 per cent (population aged 12-65) in 2005 to 1.75 per cent (population aged 16-64) in 2011.

470. The high prevalence of cocaine use in South America is also reflected in the demand for treatment for cocaine abuse. According to UNODC, treatment for cocaine abuse accounted for 46 to 83 per cent of all drug-related treatment in, in ascending order, Peru, Ecuador, Venezuela (Bolivarian Republic of), Argentina and Chile from 2010 to 2011. Demand for treatment for cannabis abuse was also significant in Ecuador, and in Peru, where nearly 40 per cent of treatment demand was for cannabis abuse.

471. A study of cocaine base paste over four decades, published in April 2013 by DEVIDA, indicates that abuse of cocaine base paste in South America commenced in the 1970s, particularly in Bolivia (Plurinational State of), Colombia and Peru, and that over the past 10 years it has spread to other countries in the region, including Argentina, Chile and Uruguay. The study calls attention to the quick onset of dependence to cocaine base paste and the challenges of its clinical treatment. According to the study, in Peru, 59.6 per cent of persons who had abused cocaine base paste in the past 12 months showed signs of drug dependence, compared with 47.8 per cent of those who had abused cocaine.

472. The annual prevalence of opioid abuse (mainly non-medical use of prescription opioids) in South America is estimated to be 0.3 per cent of the adult population, corresponding to 790,000 to 860,000 people aged 15 to 64.

473. Past-year prevalence of abuse of amphetaminetype stimulants (excluding MDMA ("ecstasy")) among the general population in South America (0.4-0.6 per cent) is lower than in Central America or North America (1.3 per cent). Past-year prevalence of "ecstasy" abuse among the general population is even lower, at 0.1-0.2 per cent.

474. The second Andean epidemiological study also pointed to the increasing abuse of hallucinogenic substances in the Andean countries. According to the study, the past-year prevalence of LSD abuse had increased fourfold among the university population in the region, from 0.23 per cent in 2009 to 0.95 per cent in 2012. In Colombia, the past-year prevalence of abuse of LSD was 3.16 per cent and that of hallucinogenic mushrooms 1.02 per cent. Abuse of hallucinogenic mushrooms had also increased recently in the Plurinational State of Bolivia, in particular among university students, and became the second most abused drug in the country, after cannabis, among that population.

C. Asia

East and South-East Asia

1. Major developments

475. The manufacture of and demand for heroin in East and South-East Asia continues to be of major concern to the Board. In the mid 2000s the Governments of the Lao People's Democratic Republic, Myanmar and Thailand undertook successful opium poppy eradication programmes. In recent years, there has been an upsurge in cultivation, threatening the positive gains made over the

past decade. From the low of 24,157 ha reported to have been cultivated in 2006, the total area of illicit cultivation of opium poppy in the Lao People's Democratic Republic and Myanmar increased substantially, amounting to 58,000 ha in 2012. In the Lao People's Democratic Republic, the area of cultivation in 2012 amounted to about 25 per cent of the area of cultivation in 1998, when illicit cultivation reached its peak. Myanmar, which also reported an increase in cultivation, had the largest total area of opium poppy cultivation in the region, at 51,000 ha. However, the increase in demand for heroin in East and South-East Asia is so great that even with the reported increase in illicit cultivation in the three abovementioned countries, Afghan opium is reportedly now being smuggled into East and South-East Asia in order to satisfy demand-in an area where approximately one quarter of the world's opiate abusers live.

476. The region's long-established demand for amphetamine-type stimulants showed no signs of weakening. Demand for amphetamine-type stimulants both increased and diversified, with a growing demand for crystalline methamphetamine among the new trends in the region. Illicit manufacture of amphetamine-type stimulants continued to be prevalent, and in 2011 hundreds of illicit synthetic drug manufacturing facilities were reported to have been dismantled by the Governments of Cambodia, China, Indonesia, Malaysia, Myanmar, the Philippines and Thailand. In addition, the abuse of noncontrolled substances has become more prevalent, with the abuse of synthetic cannabinoids and synthetic cathinones being reported. Ketamine remained the most widely reported abused substance among those substances not under international control.

477. As part of the regional response aimed at reducing high levels of drug abuse, in particular of amphetaminetype stimulants, there was a noticeable move by Governments towards enhancing community-based treatment programmes.

2. Regional cooperation

478. Countries in the region continued to look at ways to enhance cooperation at the ministerial level and between law enforcement agencies in order to focus on combating the supply of illicit drugs. The increasing number of regional meetings on drug control issues highlights the existing political will to use multilateral mechanisms to exchange information and enhance cooperation in order to more effectively combat illicit manufacture and use of drugs.