CHEMICAL CONTROLS

Introduction

Amendments to the Foreign Assistance Act contained in the Combat Methamphetamine Epidemic Act of 2005 (CMEA)(Title VII, USA Patriot Improvement and Reauthorization Act 2005, P.L. 109-177) require that additional information be included in the International Narcotics Control Strategy Report (INCSR) section on the major sources of precursor chemicals used in the production of illicit narcotic drugs (22 USC section 2291h(a)(3). The format of the 2007 Chemical Control Chapter has been changed to include the additional information required by Section 722 of the CMEA. The CMEA recognizes the grave threats that methamphetamine trafficking and addiction pose for America and, among other provisions, calls for additional reporting on international trade in the precursor chemicals used for methamphetamine manufacture. To meet these requirements, the final two sections of this chapter are devoted to methamphetamine chemicals and the Section 722 reporting requirements.

Executive Summary

The controls required by the CMEA and state laws on domestic over-the-counter sales of pharmaceutical preparations containing chemicals that can be used as methamphetamine precursors have significantly reduced the number of "small toxic labs" in the United States, those producing small amounts of methamphetamine, primarily using pharmaceutical preparations as a source of chemicals. These small labs had comprised the vast majority of labs seized, if not the largest total quantities of methamphetamine produced. As a result of their marked decrease, even more illicit production has shifted to "super labs" that can produce ten pounds or more of methamphetamine in a single production cycle. With the expansion of superlabs, production is increasingly taking place in Mexico. The super labs generally rely for chemicals on ephedrine and pseudoephedrine, and pharmaceutical preparations containing them, diverted at various stages from international commerce. The Government of Mexico has reacted strongly to this threat and traffickers are seeking new sources and routes for their chemicals. There are also indications that traffickers are starting to use unregulated substitute chemicals and natural ephedra as raw materials, although this requires more raw material, and produces a less pure product.

The methamphetamine precursors, ephedrine and pseudoephedine, will continue as a major focus of chemical control in 2007. A U.S.-drafted resolution adopted by the March 2006 UN Commission on Narcotic Drugs²¹ (CND) requested countries to provide to the International Narcotics Control Board²² (INCB) estimates of their legitimate requirements for these and other synthetic drug chemicals.²³ This will allow authorities in exporting and importing countries to do a quick "reality" check on proposed transactions, especially as traffickers turn to countries not normally trading in these chemicals as conduits for diversion. The U.S. Government will push for a full response to the resolution's request for estimates.

The emphasis on methamphetamine chemicals does not reduce the importance of continuing vigilance to prevent the diversion of chemicals for use in the illicit manufacture of other drugs. The explosion of opium poppy cultivation and heroin manufacture in Afghanistan focuses particular attention on the heroin essential chemical acetic anhydride. A November 27, 2006, meeting of the Paris Pact, a group of countries impacted by and concerned with Afghan heroin, noted there is no

^{1.} The UN Commission on Narcotic Drugs is the principal drug policy-making body of the United Nations.

^{2.} The International Narcotics Control Board is the quasi-judicial control organ of the UN, established by treaty, for monitoring the implementation of the international drug control treaties.

^{3.} Commission on Narcotics Drugs, Report on the 49th Session, Resolution 49/3, E/2006/28 ECN/2006/10.

legitimate requirement for acetic anhydride in Afghanistan, and that it would be most effective to concentrate on preventing its illegal entry into the country. Appropriate law enforcement measures will be an important agenda item for future meetings.

Cocaine and heroin manufactured in the Americas remain major drug threats and preventing the diversion of potassium permanganate, a key chemical for cocaine manufacture, and acetic anhydride, are important regulatory and law enforcement objectives. The U.S. Government will continue working bilaterally and through OAS/CICAD to prevent chemical diversion in this hemisphere.

All these chemicals, as with virtually all other chemicals used in illicit drug manufacture, are traded widely in international commerce. Therefore, extensive international cooperation is required to prevent their diversion from licit commercial channels. Two on-going multilateral law enforcement operations targeting key chemicals provide frameworks for this cooperation. Project Cohesion targets potassium permanganate and acetic anhydride and Project Prism targets synthetic drug chemicals. The INCB plays a central coordinating role in their implementation. The United States is the largest financial supporter of the INCB databank project, which is essential to its coordinating role. In the second half of 2006, Project Cohesion monitored 472 shipments of acetic anhydride and 494 shipments of potassium permanganate, and Project Prism monitored over 900 shipments of the amphetamine and methamphetamine precursors ephedrine and pseudoephedrine.

Despite these efforts, the enduring availability of illicit drugs shows that chemical diversion continues. Some of the obstacles to ending it completely include the large quantities of drug precursor chemicals licitly produced and the small percentage of this production that needs to be diverted to satisfy the requirements for illicit drug manufacture, the large number of chemical transactions, international and domestic, that must be monitored to prevent diversion, the many avenues for diversion, and the rapidity with which traffickers can adjust to effective chemical controls.

Background

Role of Chemicals in Drug Manufacture

Chemicals are essential to the manufacture of narcotic drugs. They become an integral component in the case of synthetic drugs, and are required for the processing of coca and opium into heroin and cocaine. Only marijuana, of the major illicit drugs of abuse, is available as a natural, harvested product.

Chemicals used in drug manufacture are divided into two categories, precursor and essential chemicals, although the term "precursors" is often used to identify both. Precursor chemicals are those used in the manufacture of synthetic drugs and they become part of the final product. Essential chemicals are used in the refining of coca and opium into cocaine and heroin. Although some remain in the final product, the basic raw material is the coca or opium. Many chemicals required for illicit drug manufacture have extensive commercial applications, are widely traded, and are available from numerous source countries.

Chemical Diversion Control

Chemical diversion control is a proactive and straightforward strategy to deny traffickers the chemicals they must have. A first essential element is the regulation of licit commerce in the chemicals most necessary for drug manufacture to ensure that transactions are permitted to proceed only after legitimate end-uses for the chemicals involved have been established. This requires

verifying that both the chemicals and the quantities ordered are appropriate for the needs of the buyer.

A second essential element of chemical control is tracking shipments to prevent diversion in transit. Ideally, this would be to the ultimate consignee, but this is complicated given the number of shipments and the many middlemen, wholesalers, distributors, etc., involved. Diversion can occur anywhere along the transaction chain.

Pre-export notifications (PENs) and voluntary multilateral tracking systems are employed to verify legitimate end-use and to prevent diversion in transit. The 1988 United Nations Convention against Illicit Trafficking in Narcotic Drugs and Psychotropic Substances (1988 UN Drug Convention) has two tables listing chemicals under its control. Table I is primarily synthetic drug precursor chemicals, including ephedrine and pseudoephedrine. Table II is primarily essential chemicals, including potassium permanganate and acetic anhydride, used in the manufacture of other drugs. In the case of Table I chemicals, and upon the request of the importing country, The Convention requires that the exporting country must provide to the importing country prior notification of the details of transactions involving them. In 1998, the United States succeeded in having a pre-export notification requirement for potassium permanganate and acetic anhydride included in the chemical control action plan adopted by the United Nations General Assembly Special Session Devoted to Countering the World Drug Problem Together. Some countries, in cases of sensitive chemicals or exports to drug-producing regions, will not approve exports until they receive a positive response to the PEN verifying the legitimacy of the proposed transaction.

Projects Prism and Cohesion are multilateral cooperative mechanisms for tracking shipments. Their success depends on widespread and active participation. Effective participation requires the promulgation of national chemical control regimes, the regulatory structures to implement them, and the law enforcement structures to enforce them. The national regimes must include provisions for multilateral information exchange, while respecting the legitimate commercial interests of the businesses involved.

Effective participation can also be influenced by a government's approach to chemical control. Some governments consider it a health issue to be handled by health ministries, with a primary interest in protecting public health. Others consider it a trade issue to be handled by trade ministries or agencies with a bias towards promoting, not regulating trade. If these organizations do not allow sufficient scope for law enforcement, as well as regulatory measures in support of chemical control, they may unwittingly undermine this effective anti-drug strategy.

International Framework for Chemical Control

Article 12 of the 1988 UN Drug Convention is the framework for multilateral cooperation in chemical control. It establishes the obligations and international standards for parties to the Convention to observe in controlling their chemical commerce to prevent diversion to illicit drug manufacture. The two tables of the Annex to the Convention list 23 chemicals as those most necessary for drug manufacture and, therefore, subject to control. The Convention contains provisions for adding and deleting chemicals from the tables. Signatories to the Convention accept the obligation to enact national laws and regulations to carry out its provisions.

The European Union has chemical control regulations binding on all Member States. The regulations are updated regularly, most recently in 2005. The EU regulations meet the chemical control provisions of the 1988 UN Drug Convention. EU Member States implement the regulations through national laws and regulations.

The U.S. has a chemical control agreement with the European Union, signed on May 28, 1997. It is particularly valuable in that it involves a 27-Member State organization representing some of the world's largest chemical manufacturing and trading nations. As a result of this agreement and a natural confluence of interests, U.S./European cooperation in chemical control is excellent.

The Inter-American Drug Abuse Control Commission of the Organization of American States (CICAD) has approved Model Regulations for the control of drug-related chemicals that set a high standard for government action. The Model Regulations cover all the chemicals included in the 1988 UN Drug Convention. Many Latin American countries have adopted chemical control laws and regulations based on the CICAD Model Regulations. A CICAD experts group on chemical control meets annually to coordinate efforts in the hemisphere.

The 1988 UN Drug Convention, regional regulations, model legislation, and national legislation and regulations, provide frameworks for chemical control regimes. They do not provide the practical mechanisms for the multilateral cooperation required for their successful implementation internationally. The United States and other governments use annual meetings of the UN Commission on Narcotic Drugs (CND) and ad hoc arrangements to highlight emerging chemical control concerns, and to lay the groundwork for voluntary information exchange and chemical tracking mechanisms, such as Projects Cohesion and Prism.

The CND can be used to forge consensus on more formal procedures. However, many governments resist formal arrangements, particularly if they provide for multilateral information exchange beyond that required by the 1988 UN Convention. Moreover, any resolution calling for such arrangements must be approved by the consensus of the 53-member body. The result can be resolutions weakened with caveats and non-obligatory language.

The CND has been effective in establishing procedures for alerting members to trafficker use of substitute chemicals in place of those controlled under the 1988 UN Drug Convention, particularly in the manufacture of synthetic drugs. In 1996, the United States introduced a resolution which was adopted by the CND requesting the UN International Narcotics Control Board (INCB), with the UN Office of Drugs and Crime, to establish a limited international special surveillance list of chemicals not included in the Convention for which substantial evidence exists of their use in illicit drug manufacture. In 1998, the INCB, drawing on contributions of different governments, established the list to alert governments to the chemicals.

How Traffickers Obtain Chemicals

Chemicals are traded in vast quantities from multiple sources, both domestically and internationally, offering many opportunities for their diversion to illicit drug manufacture. Transshipment or smuggling from third countries into drug producing countries is increasing as the chemical and drug producing countries tighten their chemical controls, particularly in the case of synthetic drug precursors. The exploitation of pharmaceutical preparations containing easily extractable pseudoephedrine is a major source of that key chemical used in illicit manufacture of methamphetamine.

The following are some of the more common diversion and other methods used to obtain chemicals.

• Traffickers extract chemicals, particularly pseudoephedrine, from pharmaceutical preparations. Under prevailing international interpretations of the 1988 UN Drug Convention, it does not control pharmaceutical preparations, allowing them to be traded internationally without regard to legitimate requirements unless exporting and importing countries impose such controls.

- Chemicals are diverted from domestic chemical production to illicit in-country drug manufacture.
- Chemicals are imported legally into drug-producing countries with official import permits and subsequently diverted.
- Chemicals are manufactured in or imported by one country, diverted from domestic commerce, and smuggled into drug-producing countries.
- Chemicals are mislabeled or re-packaged and sold as non-controlled chemicals
- Chemicals are shipped to countries or regions where no systems exist for their control.
- New drugs ("designer drugs") are developed that have physical and psychological effects similar to controlled drugs, but which can be manufactured with non-controlled chemicals.
- Traffickers manufacture the controlled chemicals they require from unregulated raw materials, a costly and difficult process.
- Traffickers use unregulated substitute chemicals with chemical properties similar to regulated chemicals.

These tactics are masked by the use of front companies, false invoicing, multiple transshipments, use of free trade zones, and any other device that will conceal the true nature of the product, its ultimate recipient or its final end-use.

There is some recycling of the solvents used in heroin and cocaine drug manufacture; recycling cannot be used for acids, alkaline materials or oxidizing agents. Since recycling requires some sophistication, and there is a loss of chemical with each recycling process, it is not a preferred method for unsophisticated laboratories. The precursor chemicals used in the manufacture of synthetic drugs such as methamphetamine and Ecstasy cannot be recycled.

2006 Chemical Diversion Control Trends and Initiatives

The relative profitability of individual drugs is a function of their popularity and their ease of manufacture based on the availability of raw materials. This is the driving force in chemical diversion. Traffickers concentrate on drugs that provide the greatest returns with the greatest ease of manufacture.

In Southeast Asia, the rising popularity of amphetamines and methamphetamine has accelerated a shift in drug manufacture from heroin to synthetic drugs. The availability of synthetic drugs is a factor in their rising popularity, but their availability is spurred by the availability of the chemicals, required for their manufacture, primarily in Burma. Under these circumstances, it is easier and more profitable for traffickers to manufacture synthetic drugs than to cultivate opium and manufacture heroin.

The spread of methamphetamine abuse eastward across the United States was facilitated by the ability of non-professionals, using recipes available on the Internet, to manufacture the drug in small toxic labs ("mom and pop labs") from readily available chemicals, particularly pseudoephedrine extracted from over-the-counter cold remedies.

A common factor in each of these developments is a need for the required chemicals, and the relative ease in obtaining them. The trend towards synthetic drugs probably will continue as the coca and opium required for cocaine and heroin manufacture become more difficult to acquire due to law enforcement and eradication activities.

The shifting emphasis in chemical control toward synthetic drug chemicals reflects this. The key heroin chemical, acetic anhydride, and the key cocaine chemical, potassium permanganate, are already the targets of an on-going multilateral chemical control operation, Project Cohesion. In addition, the Paris Pact countries have placed particular emphasis on the need to prevent acetic anhydride from reaching Afghanistan, noting that given the enormous amount of licit trade in the chemical and the relatively small proportion diverted to Afghanistan, their efforts should focus on law enforcement measures aimed at interdicting smuggling.

The quantity of chemicals required for synthetic drug manufacture is relatively small; depending on the efficiency of the lab, the ratio of pseudoephedrine to methamphetamine is approximately 1.6 to 1. It can be lower. Thus, a small percentage of diversion from licit trade can meet most chemical requirements for illicit drugs. However, synthetic drug chemicals are primarily Table 1 chemicals in the 1988 UN Drug Convention, the most tightly regulated, so authorities do have a common basis for controlling them.

In 2006, the United States cut off a significant source of chemicals for domestic methamphetamine manufacture with the signing of the CMEA. The Act places strict controls on the sale of over-thecounter pharmaceutical preparations containing easily extractable pseudoephedrine, closing an important chemical source used by small toxic labs. Many U.S. states and other governments already had similar restrictions. However, under prevailing international interpretations, the 1988 UN Drug Convention chemical control provisions do not apply to pharmaceutical preparations containing chemicals controlled by the Convention. Governments must voluntarily control trade in these products.

The United States introduced a resolution adopted by the March 2006 UN Commission on Narcotic Drugs requesting that governments provide to the INCB annual estimates of their requirements for the most critical chemicals used in the manufacture of synthetic drugs and preparations containing them. The estimates, which the INCB will make available for law enforcement purposes, will enable importing and exporting countries to make a quick check on proposed transactions to determine their legitimacy, or if they require further examination, especially in the case of countries that do not normally trade in these chemicals.

The Government of Mexico is already using estimates of its legitimate requirements of ephedrine and pseudoephedrine to drastically cut imports, with a goal of 70 metric tons in 2006.

In response, traffickers are expected to exploit the pharmaceutical preparation exemption in the 1988 UN Drug Convention and to turn to third countries in Central and South America, Africa, West Asia, and other areas that have weak chemical control regimes as conduits for chemicals. They also can turn to unregulated substitute chemicals (pseudoephedrine derivatives) and natural ephedra, although both can complicate the methamphetamine manufacturing process and, in the case of natural ephedra, require up to twenty-five times as much raw material.

The Way Ahead

Synthetic drug chemicals will be a central focus of chemical control efforts in the immediate future, while on-going initiatives against heroin and cocaine chemicals will continue. The U.S. Government will work with the primary producers of ephedrine and pseudoephedrine, bilaterally and multilaterally, to get better controls on these chemicals, with increasing emphasis on pharmaceutical preparations containing them, and stressing the obligation of exporting, importing and transit countries to monitor their trade in controlled chemicals to prevent diversion.

The March 2006 CND resolution requesting that governments provide to the INCB estimates of their legitimate requirements for synthetic drug chemicals and preparations containing them will be a valuable asset to countries in controlling their trade in these products. While the U.S.

Government considers this resolution an important step forward, the ability to obtain the information from the INCB is contingent on countries providing the estimates requested by the resolution. The U.S. Government will be pushing for full compliance at the March 2007 CND and in other appropriate fora.

The need for stricter controls on synthetic drug chemicals will be an important agenda item in U.S. counternarcotics discussions with other governments. It was on the agenda of the June and December 2006 U.S./European Union Troika meeting and will remain as long as chemical diversion remains a problem. The Troika meetings are the U.S. Government's most senior regular interaction with the 27-Member State European Union on drug issues.

U.S. participation, and leading role, in Project Prism is another vehicle for increasing cooperation in synthetic drug chemical control. The Project Prism Task Force - - United States (Americas), China (Asia), the Netherlands (Europe), South Africa (Africa), and Australia (Oceana) - - includes some of the most important governments involved in this effort. India, Germany and Mexico are other active participants.

The U.S. Government will also be working with Mexico bilaterally to enhance chemical control cooperation. For example, we are working with Mexican authorities to establish clandestine lab teams in Mexican "hot spot" locations. In addition, the U.S. Government has funded the training of more than 1,500 Mexican officials in a variety of clandestine laboratory and precursor related topics.

The apparent increase in the use of unregulated substitute chemicals in synthetic drug manufacture will require more attention. In addition to highlighting the problem at the March 2007 CND, the U.S. Government will urge governments to notify the INCB and others as they discover this usage. This will facilitate a quick reaction to the substitute chemicals, and allow the INCB to update its surveillance list of chemicals not included in the 1988 UN Drug Convention that are being used in illicit drug manufacture.

The attention to synthetic drug chemicals cannot be at the expense of programs to prevent the diversion of heroin and cocaine chemicals. The U.S. Government will continue its active participation in Project Cohesion and will be working with its Paris Pact partners in joint efforts to prevent acetic anhydride from reaching Afghanistan. In the Americas, bilateral cooperation and multilateral operations will continue to target key precursor chemicals for cocaine, heroin and synthetic drugs.

Major Chemical Source Countries

The countries included in this section are those with large chemical manufacturing or trading industries that have significant trade with drug-producing regions, and those countries with significant chemical commerce susceptible to diversion domestically for smuggling into neighboring drug-producing countries. Designation as a major chemical source country does not indicate a country lacks adequate chemical control legislation and the ability to enforce it. Rather, it recognizes that the volume of chemical trade with drug-producing regions, or proximity to them, makes these countries the sources of the greatest quantities of chemicals liable to diversion. The United States, with its large chemical industry and extensive trade with drug-producing regions, is included in the list.

Many other countries manufacture and trade in precursor chemicals, but not on the same scale, or with the broad range of precursor chemicals, as the countries in this section.

A discussion of methamphetamine chemicals and the major exporters and importers of them is in separate sections immediately following this section.

Article 12 of the 1988 UN Drug Convention is the international standard for national chemical control regimes and for international cooperation in their implementation. The annex to the Convention lists the 23 chemicals most essential to illicit drug manufacture. The Convention includes provisions for the Parties to maintain records on transactions involving these chemicals, and to provide for their seizure if there is sufficient evidence that they are intended for illicit drug manufacture.

The Americas

Argentina

Argentina has a large chemical industry manufacturing chemicals susceptible to diversion to illicit drug manufacture. Bolivia is the major destination for these chemicals. Some cocaine is manufactured domestically using smuggled cocaine base and locally diverted precursors.

Argentina is a party to the 1988 UN Drug Convention and has laws meeting the Convention's requirements for record keeping, import and export licensing, and the authority to suspend shipments. Presidential decrees have placed controls on precursor and essential chemicals, requiring that all manufacturers, importers or exporters, transporters, and distributors of these chemicals be registered with the Secretariat for the Prevention of Drug Addiction and Narcotics Trafficking (SEDRONAR). In 2005, legislation was passed giving the SEDRONAR registry system the force of law. This increased its ability to regulate the distribution of precursors and impose fines on those who transport and sell unregistered chemicals.

Argentina participates in Project Cohesion and the regional Operation Seis Fronteras. Argentine authorities willingly share chemical control information with U.S. authorities.

Brazil

Brazil has South America's largest chemical industry and also imports significant quantities of chemicals to meet its industrial needs. Portaria Ministerial No.1.274-MJ, issued by the Justice Ministry in August 2004 to prevent the manufacture of illicit drugs, includes stringent chemical control previsions. The decree established controls on 146 chemicals that can be utilized in the manufacture of drugs, and requires the registration with the Brazilian Federal Police of all companies that handle, import, export, manufacture, or distribute any of these chemicals. There are approximately 25,000 companies registered with the police. The registered companies are required

to send a monthly report to the Brazilian Federal Police on their usage, purchases, sales, and inventory of these chemicals. Any person or company that is involved in the purchase, transportation or use of the substances must have a certificate of approval of operation, real estate registry, or special license issued by the police. Companies that handle the 22 most sensitive substances with regard to drug production are also regulated by the Ministry of Health's National Sanitary Vigilance Agency.

Brazil is a party to the 1988 UN Drug Convention and these legislative provisions meet the chemical control requirements. The country also participates and supports the multilateral chemical control initiatives, Project Cohesion, Project Prism and the regional Operation Seis Fronteras. In conjunction with Project Cohesion, the Brazilian Federal Police have agreed to work with DEA to perform a study on the use of acetic anhydride within the country and its exportation from the country. US/Brazil cooperation in other areas of chemical control is good, and the Brazilian Federal Police make records relating to chemical transactions available when requested. The Brazilian Federal Police also respond to Pre-Export Notifications of controlled chemicals in a timely fashion. DEA has a Diversion Investigator assigned to its Brasilia office.

Canada

Canada is a producer and transit country for precursor chemicals and over-the-counter pharmaceuticals used to produce synthetic drugs. There is domestic Ecstasy and methamphetamine manufacturing, indicating domestic diversion.

Health Canada, the Royal Canadian Mounted Police (RCMP) and the Canadian Border Services Agency are the agencies responsible for chemical control. Health Canada is the competent authority for managing the export of precursor chemicals listed in the 1988 UN Drug Convention.

In January 2006, the government implemented the Precursor Control Amendments to the Controlled Drugs and Substances Act. These amendments strengthen verification of import and export licensing procedures, require that companies requesting these licenses provide additional detail in their initial request, establish guidelines for the suspension and revocation of licenses for abusers, and add controls on six chemicals that can be used to produce GHB and/or methamphetamine.

Canada's active strategy to combat illicit drug use includes MethWatch implemented by the National Drug Manufacturers Association of Canada, a non-profit industry association of health care product and over-the-counter pharmaceutical manufacturers. This voluntary program trains retailers to monitor and identify irregular sales of methamphetamine precursors.

Canada is a party to the 1988 UN Drug Convention and complies with its record keeping requirements. Cooperation between U.S. and Canadian law enforcement agencies in chemical control is excellent. Information sharing is part of this cooperation. Canada participates in Project Prism, targeting synthetic drug chemicals, its principal precursor concern, and is a member of the North American working group. Although it supports Project Cohesion and contributes on an ad hoc basis, Canada is not actively engaged in it.

U.S./Canadian law enforcement cooperation and the strengthening of Canadian chemical control laws and enforcement have helped to significantly reduce the amount of Canadian-sourced pseudoephedrine discovered in clandestine U.S. methamphetamine labs.

Mexico

Mexico's major chemical manufacturing and trading industries produce, import and export most of the chemicals necessary for illicit drug manufacture. Mexico is a party to the 1988 UN Drug Convention and has laws and regulations meeting the Convention's chemical control requirements.

Mexican chemical control initiatives are now concentrating on methamphetamine precursors. The Mexican Federal Commission for the Protection Against Sanitary Risks (COFEPRIS) has conducted a survey to calculate domestic requirements for pharmaceutical products containing ephedrine and pseudoephedrine, and determined that imports have exceeded domestic requirements. As a result, COFEPRIS has greatly reduced the imports of ephedrine, pseudoephedrine and combination products containing them, from over 216 metric tons in 2004 to 130 metric tons in 2005. The goal for 2006 is 70 metric tons, including combination products containing pseudoephedrine and ephedrine.

COFEPRIS has also instituted a system of quotas for imports by pharmaceutical companies. They must now forecast their requirements for ephedrine and pseudoephedrine one year in advance.

Other controls on ephedrine and pseudoephedrine include:

- Prohibiting import shipments weighing more than three tons;
- Restricting importation of pseudoephedrine to drug companies only;
- Requiring shipments of pseudoephedrine to be transported in GPS-equipped, policeescorted armored vehicles to prevent hijacking and unauthorized drop offs;
- Limiting sales of pills containing pseudoephedrine to licensed pharmacies; and
- Restricting customer purchases to no more than three boxes of pills with a prescription required for larger doses.

U.S. and Mexican authorities cooperate closely in chemical control. The formal mechanism for cooperation is the U.S-Mexico Bilateral Chemical Control Working Group, and the DEA Country Office handles day-to-day contact, notably by a group of Diversion Investigators and agents posted to Mexico City. The result is a strong bilateral working relationship, involving information exchange and operational cooperation. Mexico also participates in the multilateral chemical control initiatives Projects Cohesion and Prism.

The United States

The United States manufactures and/or trades in all 23 chemicals listed in Tables I and II of the 1988 UN Drug Convention. It is a party to the Convention and has laws and regulations meeting its chemical control provisions.

The basic U.S. chemical control law is the Chemical Diversion and Trafficking Act of 1988 (P.L. 100-690, Title VI, Section 6051, November 18, 1988. *See generally* 21 USC Section 801 *et seq*, "Controlled Substances Act."). This law and three subsequent chemical control amendments were all designed as amendments to U.S. controlled substances laws, rather than stand-alone legislation. The Drug Enforcement Administration (DEA) administers them. In addition to registration and record keeping requirements, the legislation requires traders to file import/export declarations at least 15 days prior to shipment of regulated chemical. DEA uses the 15-day period to determine if the consignee has a legitimate need for the chemical. Diversion Investigators are assigned to DEA offices in key countries and at INTERPOL to assist in determining legitimate end-use. In other countries, DEA agents perform this task. The Diversion Investigators and agents work closely with host country officials in this process. If legitimate end-use cannot be determined, the legislation gives DEA the authority to stop shipments.

U.S. legislation also requires chemical traders to report to DEA suspicious transactions such as those involving extraordinary quantities, unusual methods of payment, etc. Close cooperation has developed between the U.S. chemical industry and DEA in the course of implementing the legislation.

Criminal penalties for chemical diversion are strict; they are tied to the quantities of drugs that could have been produced with the diverted chemicals. Persons and firms engaged in chemical diversion have been aggressively and routinely subjected to civil and criminal prosecution and revocation of DEA registration.

The U.S. has had a leadership role in the design, promotion and implementation of cooperative multilateral chemical control initiatives. It is actively working with other concerned countries to develop information sharing procedures to better control pseudoephedrine and ephedrine, the principal precursors for methamphetamine production. It is on the steering committee for Project Cohesion and the task force coordinating Project Prism. It also has established close operational cooperation with counterparts in major chemical manufacturing and trading countries. This cooperation includes information exchange in support of chemical control programs and in the investigation of diversion attempts.

Asia

China

China has one of the world's largest chemical industries, producing large quantities of chemicals that can be used for illicit drug manufacture such as acetic anhydride (heroin), potassium permanganate (cocaine), PMK (Ecstasy) and pesudoephedrine and ephedrine (methamphetamine). The country is a party to the 1988 UN Drug Convention and has laws and regulations meeting or exceeding the Conventions requirements. A November 2005 administrative law strengthening chemical control included provisions to control domestic chemical sales; previous laws and regulations focused solely on imports and exports. Despite the adequate legislation, the size of China's chemical industry is not matched by a law enforcement structure adequate to effectively monitor all its production and international trade. Because of resource constraints and lack of training, provincial police generally only address controlled chemicals when they are discovered at a clandestine laboratory.

China continues to be a strong partner with the United States and other concerned countries in international chemical control initiatives targeting the precursors of greatest current concern. These are Project Cohesion tracking acetic anhydride and potassium permanganate and Project Prism targeting synthetic drug chemicals. In addition, the National Narcotics Control Commission (NNCC) issues Pre-Export Notifications for all proposed transactions in bulk ephedrine and pseudoephedrine and requires a Letter of No Objection from the importing country before authorizing shipments.

U.S. and Chinese cooperation in chemical control is good. Information is exchanged within the frameworks of Projects Cohesion and Prism and in the course of normal counternarcotics cooperation. China is the Asian representative on the Project Prism Task Force. China is also a participant in Operation Icebreaker, an effort to combat diversion of precursor chemicals for the production of crystal methamphetamine. DEA has Diversion Investigator positions in its Beijing and Hong Kong offices. The Chinese signed a memorandum of understanding with the Netherlands on October 22, 2004, governing the sharing of information on precursor shipments to prevent diversion, and the Dutch assigned a law enforcement liaison officer to Beijing in July 2005. Additionally, in July 2006, the Office of National Drug Control Policy (ONDCP) and the Chinese National Narcotics Control Commission (NNCC) signed a Memorandum of Intent on behalf of their two countries to increase cooperation in combating drug trafficking and abuse.

India

India's developed chemical industry is one of the world's largest producers of chemicals that can be misused in the manufacture of illicit drugs. Chemicals are controlled in India under three different laws, the Narcotic Drugs and Psychotropic Substances Act (NDPS) of 1985, the Customs Act of 1962 and the Foreign Trade Development & Regulation Act of 1992.

India is a party to the 1988 UN Drug Convention, but it does not have controls on all the chemicals listed in the Convention. The GOI controls acetic anhydride, N-acetylanthranilic acid, anthranilic acid, ephedrine, pseudoephedrine, potassium permanganate, ergotamine, 3, 4-methylenedioxyphenyl-2-propanone, 1-phenyl-2propanone, piperonal, and methyl ethyl ketone, all chemicals listed in the Convention. Indian law allows the government to place other chemicals under control. Violation of any order regulating controlled substance precursors is an offense under the NDPS and is punishable with imprisonment of up to ten years. Intentional diversion of any substance, whether controlled or not, to illicit drug manufacture is also punishable under the Act.

The Indian Government will not permit the export of key chemicals until it has issued a No Objection Certificate. It also requires a No Objection Certificate for the import of acetic anhydride, ergotamine and piperonal. The government has also placed acetic anhydride under the control of the Customs Act for movements within 100 km of the Indo-Burmese border and 50 km of the Indo-Pakistan border. As an additional safeguard, all vehicles transporting acetic anhydride must be sealed with tamper proof seals.

Cooperation between U.S. and Indian authorities on chemical control is excellent, including on letters of no objection and verification of end-users, especially with regard to ephedrine and pseudoephedrine. Information is shared between Indian and U.S. authorities and India is a participant in Project Cohesion and Project Prism, where it is taking an active role. DEA has a Diversion Investigator assigned to its New Delhi office.

Europe

Chemical diversion control within the European Union (EU) is regulated by EU regulations binding on all Member States. The regulations are updated regularly, most recently in 2005. The EU regulations meet the chemical control provisions of the 1988 UN Drug Convention, including provisions for record keeping on transactions in controlled chemicals, a system of permits or declarations for exports and imports of regulated chemicals, and authority for governments to suspend chemical shipments. EU Member States implement the regulations through national laws and regulations.

The EU regulations govern the regulatory aspects of chemical diversion control. Member States are responsible for the criminal aspects, investigating and prosecuting violators of their national laws and regulations implementing the EU regulations.

The U.S.-EU Chemical Control Agreement, signed May 28, 1997, is the formal basis for U.S. cooperation with the European Commission and EU Member States in chemical control. The agreement calls for annual meetings of a Joint Chemical Working Group to review implementation of the agreement and to coordinate positions in other areas. The annual meeting has been particularly useful in coordinating national or joint initiatives such as resolutions at the annual UN Commission on Narcotic Drugs.

Bilateral chemical control cooperation is also good between the U.S. and EU Member States, and many are participating in and actively supporting voluntary initiatives such as Projects Cohesion and Prism.

Germany and the Netherlands, with large chemical manufacturing or trading sectors and significant trade with drug-producing areas, are considered the major European chemical source countries. Other European countries have important chemical industries, but the level of chemical trade with drug-producing areas is not as large and broad-scale as these countries.

Germany

Germany's large chemical industry manufactures and sells most of the precursor and essential chemicals, which can be used in illicit, drug manufacture. Germany produces large quantities of pseudoephedrine for licit pharmaceutical production. The country is a party to the 1988 UN Drug Convention and has chemical control laws and regulations, based on the EU regulations, meeting the Convention's requirements. The federal Precursor Control Act, which takes the EU regulations into account, criminalizes the diversion of controlled chemicals for the illicit manufacture of drugs. Effective January 1, 2006, the act was changed to implement 2005 amendments to EU regulations.

Germany has an effective and well-respected chemical control program that monitors the chemical industry, as well as chemical imports and exports. Cooperation between government chemical control officials and the chemical industry is a key element in the country's chemical control strategy. The Federal Office of Criminal Investigation and the Federal Office of Customs Investigation have a very active Joint Precursor Chemical Unit, based in Wiesbaden, devoted exclusively to chemical diversion control and chemical diversion investigations.

Germany is a leader in international cooperation in chemical control. It developed and promoted the concept that led to Operation Purple and was one of the original organizers of Operation Topaz. It strongly supports the INCB's Project Prism that concentrates on stricter tracking of trade in chemicals and equipment required for synthetic drug manufacturer. German chemical control officials and DEA counterparts maintain a close working relationship. A senior DEA Diversion Investigator in DEA's Frankfurt Resident Office is assigned to the Joint Precursor Chemical Unit, working on chemical issues of concern to both countries. The arrangement allows for the real-time exchange of information. German and U.S. delegations regularly support joint positions on chemical control in multilateral meetings such as the UN Commission on Narcotic Drugs. Information exchange during special operations has also been excellent.

The Netherlands

The Netherlands has a large chemical sector, making it an attractive location for criminals to attempt to obtain chemicals for illicit drug manufacture. There are large chemical storage facilities and Rotterdam is a major chemical shipping port. Currently, there are no indications that the Netherlands is a significant source for methamphetamine chemicals.

The country remains an important producer of Ecstasy, although production seems to be declining substantially, and there is some production of amphetamines and other synthetic drugs, indicating chemical smuggling or diversion. The government has been proactive in meeting this threat. Many of the important Ecstasy precursors originate in China and the government has increased cooperation with the Chinese. The joint Dutch/Chinese participation in Project Prism resulted in their signing a memorandum of understanding on October 22, 2004, governing the sharing of information on precursor shipments to prevent diversion. In July 2005, the Dutch assigned a law enforcement liaison officer to Beijing. One of the officer's primary missions is to coordinate the sharing of intelligence on precursor chemical investigations.

The Netherlands is a party to the 1988 UN Drug Convention and has legislation meeting its chemical control requirements and those of the EU regulations. The 1995 Act to Prevent Abuse of Chemical Substances is the most important piece of implementing legislation. The legislation provides for prison sentences up to six years, fines up to 50,000 Euros, and/or asset seizures. The Fiscal Information and Investigative Service and the Economic Control Service oversee implementation of the law.

The Netherlands participates in multilateral chemical control initiatives such as Project Cohesion. It took an active role in the design of Project Prism, hosting an important organizational meeting

December 2002. The Netherlands and the U.S. (DEA) have co-chaired the Project Prism Chemicals Working Group since its inception in 2002.

The Dutch and the U.S. work closely on precursor controls and investigations. There are formal and informal arrangements for information exchange. In addition to working together in multilateral operational initiatives, the U.S. and Dutch delegations to international meetings such as the UN Commission on Narcotic Drugs regularly coordinate positions. The Netherlands National Police expect to join the DEA International Drug Enforcement Conference (IDEC) as a full member in 2007.

Methamphetamine Chemicals

The control of ephedrine and pseudoephedrine, the key chemicals used for methamphetamine, in order to deny traffickers those chemicals required for its manufacture, is a major component of a comprehensive strategy to combat methamphetamine production and trafficking. Control has been complicated by the fact that the chemicals used in methamphetamine manufacture can be easily extracted from popular, non-prescription cold medications containing them. In the United States, access to diverted chemicals for methamphetamine production has been significantly reduced by increased domestic law enforcement pressure, coupled with enhanced regulatory and law enforcement controls by Canada, where chemical diversion had been taking place. Access to non-prescription cold medications is being effectively curtailed in the United States by state and federal laws (Combat Methamphetamine Epidemic Act of 2005 - CMEA) placing strict controls on their handling and sale. Similar controls already exist in many other countries.

The restricted availability of non-prescription cold medications has contributed to a reduction in the number of domestic "small toxic labs" in the United States -- those producing small amounts of methamphetamine, which generally use pharmaceutical preparations for the key chemicals -- and a shift to "super labs," that can produce more than ten pounds of methamphetamine in a single production cycle. Along with the shift to super labs, more production is taking place in Mexico, while super lab seizures in the U.S. are decreasing. The labs generally rely on ephedrine and pseudoephedrine, and pharmaceutical preparations containing them, diverted at various stages from international commerce at the wholesale level. The chemicals and preparations containing them can be diverted in one country and smuggled into another country where illicit drug production occurs.

The CMEA has given U.S. enforcement and regulatory agencies another tool for tracking shipments by requiring U.S. importers of methamphetamine chemicals to file with Federal regulators detailed information about the chain of distribution of imported chemicals from the foreign manufacturer to the United States.

The international community has long recognized the need for strong controls on ephedrine and pseudoephedrine; for example, they are included in Table I of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988 UN Drug Convention) calling for the strictest levels of control. The Convention does not, however, provide for controls on pharmaceutical preparations containing the chemicals, which it controls. There is concern that traffickers will exploit this exemption as controls on bulk ephedrine and pseudoephedrine tighten.

Effective national chemical controls and international cooperation are required to prevent the diversion of any drug precursor chemical. A basic element of this is ensuring that the chemicals are only traded domestically and internationally after establishing that there is a legitimate end-use, which corresponds to the quantities, involved, and that the chemicals reach the legitimate buyer without being diverted during shipment.

The International Narcotics Control Board (INCB), an independent and quasi-judicial organization within the United Nations charged with monitoring the implementation of international drug control treaties, has taken the lead in establishing an international regulatory and law enforcement initiative, Project Prism, to assist governments in verifying the legitimate requirements for controlled chemicals and in tracking shipments once made to prevent diversion. Project Prism targets the key chemicals used to manufacture synthetic drugs, including ephedrine and pseudoephedrine. One hundred and twenty-six countries and five international organizations participate in Project Prism. The governing Project Prism Task Force consists of the following

regional representatives: United States (Americas), China (Asia), the Netherlands (Europe), South Africa (Africa), and Australia (Oceana). India, Germany and Mexico are also active participants.

To assist governments in determining the legitimacy of proposed export and import transactions, the United States introduced a resolution at the March 2006 CND requesting that governments provide annual estimates to the INCB of their legitimate requirements for the most critical chemicals used in the manufacture of synthetic drugs of greatest concern to Member States, such as methamphetamine and Ecstasy. These are pseudoephedrine, ephedrine, 3,4 methlenedioxyphenyl-2 propanone, and phenyl-2-propanone, all Table I chemicals in the 1988 UN Drug Convention. Governments are requested to use these estimates to verify that their exports of these chemicals are commensurate with legitimate requirements. The resolution also requests countries to permit the INCB to share shipping information on consignments of these chemicals with concerned law enforcement and regulatory authorities to prevent or interdict diverted shipments.

In addition, the resolution requests Member States to provide "to the extent possible, estimated requirements for imports of preparations containing those substances that can be easily used or recovered by readily applicable means." This is an important addition and its inclusion was agreed upon after considerable debate, reflecting the fact that the Convention does not provide for the control of pharmaceutical preparations, the difficulty many governments would have in estimating requirements, and the trade-sensitive nature of the information requested. Reflecting the trade-sensitive nature of the information, the INCB is requested to provide the estimates to Member States in "such a manner as to ensure that such information is used only for drug control purposes."

The primary objective of the U.S. resolution is to provide additional information to national law enforcement and regulatory authorities to assist them in deciding whether to authorize exports and imports of these chemicals. Traffickers are quick to react to increased controls in one country by importing their chemicals into another country, frequently one that has not historically traded in the chemicals and which may lack the regulatory and enforcement infrastructure to control them. Once diverted in the new importing country, production of methamphetamine can begin there, or the chemicals can be smuggled across borders into countries where illicit drug production already exists. A quick check of estimated requirements can assist authorities in exporting and importing countries in determining whether a proposed transaction is proportionate to legitimate requirements, or requires closer inspection. Stopping the export transaction before it starts can then prevent diversion.

The INCB reports there has been a good response to the request for estimates, indicating that governments, especially those not normally trading in these chemicals, recognize the importance of determining their legitimate requirements to assist them in controlling their exports and imports. The INCB plans to publish the licit requirements list by March 2007, the first anniversary of the resolution.

Combat Methamphetamine Epidemic Act (CMEA) Reporting

Section 722 of the CMEA amends Section 489(a) of the Foreign Assistance Act of 1961 (222 USC Section 2291h) by requiring the following information to be included in the annual International Narcotics Control Strategy Report (INCSR):

- The identification of the five countries that exported the largest amounts of pseudoephedrine, ephedrine and phenylpropanolamine (including the salts, optical isomers, or salts of optical isomers of such chemicals, and also including any products or substances containing such chemicals) during the preceding calendar year.
- An identification of the five countries that imported the largest amounts of these chemicals during the preceding calendar year and that have the highest rate of diversion for use in the illicit production of methamphetamine (either in that country or in another country). The identification is to be based on a comparison of legitimate demand for the chemicals as compared to the actual or estimated amount imported into the country. It also should be based on the best available data and other information regarding the production of methamphetamine in the countries identified and the diversion of the chemicals for use in the production of methamphetamine.
- An economic analysis of the total worldwide production of pseudoephedrine, ephedrine, and phenylpropanolamine as compared to legitimate worldwide demand for the chemicals.

In addition, Section 722 of the CMEA amends Section 490 (a) of the Foreign Assistance Act of 1961 to require that the countries identified as the largest exporters and importers of these chemicals be certified by the President as fully cooperating with U.S law enforcement or meeting their responsibilities under international drug control treaties.

The Department of State, in consultation with the Attorney General, is required to submit to Congress a comprehensive plan to address the chemical diversion within 180 days in the case of countries that are not certified.

Section 723 of the CMEA requires the Secretary of State, acting through the Assistant Secretary of the Bureau of International Narcotics and Law Enforcement, to take such actions as are necessary to prevent the smuggling of methamphetamine into the United States from Mexico. Section 723 requires annual reports to Congress on its implementation.

Major Exporters and Importers of Pseudoephedrine and Ephedrine (Section 722, CMEA)

This section of the INCSR is in response to the Section 722 requirement for reporting on the five major importing and exporting countries of the identified chemicals. In meeting these requirements, the Department of State and DEA considered the chemicals involved and the available data on their export, import, worldwide production, and the known legitimate demand for them.

Ephedrine and particularly pseudoephedrine are the much-preferred chemicals for methamphetamine production. Phenylpropanolamine, a third chemical listed in the CMEA, is not a methamphetamine precursor, although it can be used as an amphetamine precursor. Phenylpropanolamine is banned in the United States for human consumption or in products intended for human consumption. A limited amount is imported for veterinary medicines, but there

is little data available on its production and trade. Since phenylpropanolamine is not a methamphetamine precursor chemical, and in the absence of useful trade and production data, this section provides information only on pseudoephedrine and ephedrine.

The Global Trade Atlas (GTA), complied by Global Trade Information Services, Inc. (www.gtis.com), provides the most comprehensive export and import data on pseudoephedrine and ephedrine; however, the most recent data is from 2005. GTA data have been used in the following tables. Data on legitimate demand will not be available until the estimates requested in the U.S. resolution adopted by the March 2006 CND are made available in the spring of 2007. Therefore, the countries listed as major importers are those with the largest imports, rather than those with the highest imports as compared to estimated legitimate demand. This does not necessarily demonstrate that these countries have the highest rates of diversion. Future reports should be able to make that comparison. This report provides export and import figures for both 2004 and 2005 to illustrate the wide annual shifts that can occur in some countries, reflecting such commercial factors as demand, pricing, and inventory buildup. GTA data on U.S. exports and imports have been included to indicate the importance of the U.S. in international pseudoephedrine and ephedrine trading.

Data on the worldwide production of pseudoephedrine and ephedrine are not available, because the major producers will not release them publicly for commercial, proprietary reasons. The U.S. government unsuccessfully sought this data, as well as production data on pharmaceutical preparations containing these chemicals, from the major producers at a February 2006 DEA-organized meeting in Hong Kong. The meeting, intended to increase multilateral cooperation in controlling methamphetamine chemicals, did succeed in strengthening commitments by governments to work together in Project Prism and also helped lay the groundwork for the March 2006 CND estimates resolution.

The following data are for 2004 and 2005 to provide an indication of the volatility of the trade in pseudoephedrine and ephedrine.

Pseudoephedrine	2005	2004	
Germany	390,000	579,000	
India	270,600	393,157	
China	107,914	177,907	
Switzerland	41,084	84,370	
<u>Taiwan*</u>	31,546	41,141	
Sub-Total	841,144	1,185,575	
United States	28,895	55,540	
All Others	19,088	47,983	
Total	889,127	1,289,098	

Exporters (Kg)

* According to official Taiwan data and the Global Trade Atlas, Taiwan was the fifth-largest exporter of pseudoephedrine. However, the data are misleading because a criminal investigation has revealed that during the period 2003-2005, a Taiwan company that had reported exports included in the trade data had actually diverted the chemical to local drug manufacture for local consumption. Nevertheless, while Taiwan's actual exports were lower, the trade data show that exports by the sixth largest exporter were sufficiently small that Taiwan would remain the fifth-largest exporter despite the falsely reported exports.

Ephedrine	2005	2004
India	217,106	79,708
Germany	51,000	23,000
Singapore	16,350	12,555
China	8,955	12,893
United Kingdom	4,000	3,000
Sub-Total	297,411	132,156
United States	5,542	4,388
All Others	6,083	73,435
Total	309,036	209,979

Exporters (Kg)

Analysis of exports - Germany, India and China are the largest producers of pseudoephedrine and ephedrine. Their principal markets for 2005 and the 2001-2005 time period were:

•	Germany:	pseudoephedrine -	(2005) U.S., Belgium, Mexico (2001-05) U.S. Belgium, Mexico
		ephedrine -	(2005) U.S., South Korea, Russia (2001-05) Japan, U.S., South Korea
•	India:	pseudoephedrine -	(2005) U.S., Mexico, Germany (2001-05) U.S., Mexico, Canada
		ephedrine -	(2005) U.S., Iran, Egypt
			(2001-05) U.S., Singapore, Canada

• China: pseudoephedrine - (2005) Switzerland, U.S., Pakistan

	(2001-05) U.S., Switzerland, Mexico
ephedrine -	(2005) Canada, Pakistan, Hong Kong
	(2001-05) Mexico, Hong Kong, Canada

Excluding the U.S., the other top-five exporting countries are trading countries, such as Singapore and Switzerland, which appear as both importers and exporters, or as exporters of relatively small amounts. Switzerland and Singapore also have important pharmaceutical industries.

Pseudoephedrine	2005	2004
United Kingdom	203,000	29,000
Mexico	124,552*	226,574
South Africa	91,400	6,477
Switzerland	67,800	95,114
Belgium	52,000	70,000
Sub-Total	538,752	427,165
United States	319,998	616,346
All Others	365,419	372,972
Total	1,224,169	1,416,493

Importers (Kg)

• The GTA reports Mexico's 2005 pseudoephedrine imports as 3,115,552 kg, of which 3,009,000 kg were imported from Germany. A cross-reference to Germany's reported exports to Mexico indicates that Germany exported only 18,000 kg to Mexico. Therefore, the Mexican imports noted in this report have been revised downward by 2,991,000 kg to reflect actual exports from Germany to Mexico. The Government of Mexico has confirmed this revised data.

Ephedrine	2005	2004	
Singapore	19.875	14 529	
South Korea	17,550	7,600	
Indonesia	16,177	15,110	
South Africa	14,374	11,185	

Importers (Kg)

United Kingdom	14,000	4,000
Sub-Total	81,976	54,424
United States	178,657	218,118
All Others	57,274	66,838
Total	317,907	337,380

Analysis of imports:

- Of the top five noted above, Mexico is the only importer of pseudoephedrine or ephedrine that is a known major methamphetamine producer (it is making impressive strides unilaterally and multilaterally to attack the problem with chemical control an important element of its national drug strategy).
- None of the other top-five importers noted above is considered a major methamphetamine producer, although there may be some production in South Africa and Indonesia for domestic and regional consumption. They are not considered sources of precursors for methamphetamine production in Mexico or the U.S.
- Singapore and Switzerland, as trading countries, appear as both importers and exporters. They along with Belgium and the United Kingdom also have pharmaceutical industries that utilize ephedrine and pseudoephedrine.

These data are useful in determining overall trends in legitimate trade, but they cannot identify diversion when traffickers use false labeling and other subterfuges. The 2007 National Drug Assessment prepared by the National Drug Intelligence Center notes as intelligence gaps: "The extent of precursor chemical diversion from sources of supply in Asia is unclear. Intelligence and law enforcement reporting confirms the shipment of wholesale (multiple ton) quantities of ephedrine and pseudoephedrine – often repackaged with vague labeling and disguised as legitimate business transactions – to Mexico from source areas in Asia, particularly Hong Kong and China. However, there are relatively few data available to measure such activity, thereby impeding a full and accurate assessment of the situation."

The diversion problem may spread as Mexico continues its increasingly effective controls on pseudoephedrine and ephedrine imports and traffickers turn to third countries in Central and South America, Africa, West Asia, and other areas that have weak chemical control regimes in which to import and divert the chemicals. The estimates of legitimate requirements requested by the 2006 CND resolution will help make the international community aware of this, but repackaging, mislabeling and smuggling will continue to require law enforcement and regulatory attention.

Burma, a major methamphetamine producer, illustrates another problem. It does not appear in trade data because the precursor chemicals for its methamphetamine production are smuggled into the country, primarily from domestic diversion in China and India. Because the chemicals are domestically diverted, they also will not appear as exports from these countries.