

THE PRICE DYNAMICS OF SOUTHEAST ASIAN HEROIN

Synopsis

This report provides an analysis of available data on opium and heroin prices in Mainland Southeast Asia (Burma, Thailand, Laos, Cambodia, and Vietnam). The report is documented with detailed descriptions of the general wholesale price structure of opium and heroin in Asia. While the heroin market spans the globe, much of the Southeast Asian opium and heroin product is sold and consumed within the region. Therefore, the focus in this report is on prices in Southeast Asia with only limited reference made to United States prices. The data used to prepare this analysis are drawn from numerous sources. Opium price data are derived from anecdotal reports provided by confidential sources of the Thai police. Heroin price data are acquired from a variety of sources to include law enforcement reporting, intelligence reports, and open sources of information.

There are many factors impacting drug prices. The basic economic model of supply and demand can be used in most instances to appreciate opium and heroin price dynamics. With the exception of several years of decreased production due to poor weather conditions, opium and heroin production in Mainland Southeast Asia were robust throughout the 1990s. Major droughts in 1994, 1998, and 1999 caused the region's opium production to plummet in each of those years. The 1999-2000 harvest season recorded only a slight increase in production despite an 18-percent increase in land under cultivation. Again, adverse weather conditions, moderate to heavy rains in some locations, and uncharacteristically cold weather damaged poppy crops in Burma and Laos. The 2000 opium yield for Mainland Southeast Asia was estimated to be 1,301 metric tons of opium, as compared to 1,236 metric tons for 1999.

Although there were significant short term fluctuations within each year, prices for Southeast Asian opiate products have been relatively stable for at least the last 5 years. Price fluctuations during the year—as much as 200 to 300 percent—were related to the production cycle, availability of key chemicals, and the local supply of opium and heroin. Generally, prices were lower in January and February during the traditional harvest season and increased throughout the year.

Opium

Some of the opium produced in Mainland Southeast Asia never enters the distribution chain because it is consumed by opium poppy farmers. Studies suggest that up to 25 percent of the opium poppy crop is consumed as opium in Southeast Asia. The remaining surplus opium is sold and prices for this product have been stable in Southeast Asia over the last several years. The current price (1999-2000) for raw opium sold in the Golden Triangle ranges from \$150 to \$350 per kilogram. The price for “cooked opium,” which is preferred by opium smokers, usually includes a 20-percent markup.

A market (perhaps up to 2 metric tons per year) for cooked opium, also known as smoking opium, exists in the United States. There are an undetermined number of opium smokers among the 100,000-plus ethnic Hmong and Mien refugees from Laos, most of whom have resettled in Northern

California, Minnesota, and Wisconsin. Although reliable information on the wholesale Southeast Asian opium trade in the United States has been difficult to obtain, it can be assumed that the price of Laos-origin cooked opium among opium dealers in the United States may range from \$2,000 to \$2,500 per kilogram. Suppliers in Laos or Thailand may be paid as much as \$1,000 per kilogram to mail opium to the United States. Cooked opium usually is smuggled to the United States by mail parcel.

The price of opium in the highland source areas of the Golden Triangle (Burma, Laos, and Thailand) is called the *farmgate* price. This is the price offered by opium traders to opium poppy farmers in their own villages. Opium traders travel into these highland villages each year in January and February (after the annual opium harvest) to buy bulk amounts of raw opium from poppy farmers. A typical family of poppy farmers may have as much as 5 or 6 kilograms of harvested opium to sell to opium traders each year. Traders then resell that opium to local heroin refinery operators and a modest profit is realized. Traditionally, opium in these highlands is bought and sold on the wholesale level in 1.6-kilogram amounts, except in some parts of Laos and in Vietnam, where 1-kilogram amounts are the norm. Bumper crops of opium in the early 1990s caused the *farmgate* price for raw opium to drop significantly; however, prices rebounded somewhat in the mid-1990s.

In early 1996, the leadership of the Mong Tai Army (MTA), previously known as the Shan United Army, surrendered to the Burmese Government. MTA-controlled heroin refineries were ordered closed and MTA troops were disbanded and sent to their home villages. Most opium collection centers in the Shan State of Burma discontinued operations as distribution networks were disrupted, and prices for opium and heroin skyrocketed. By the end of the year, however, prices stabilized as other drug groups took control of the drug trade.

The drop in opium production in the Golden Triangle since 1998—now at half the levels of the early 1990s—does not appear to have had a lasting effect on prices paid for opium in the region. Opium poppy farmers continue to expect, and to receive, prices that are consistent with prior years. Stable opium prices correlated with intelligence reporting indicating an ample supply of opium to meet market demands.

The price offered to opium poppy farmers in a given year is principally dependent upon the point of sale. Point-of-sale factors include differences in local economies due to currency fluctuations, differences in the transportation infrastructure and ability to move product, the availability of raw opium, and opium trader preferences.

Perceptions about differences in opium quality also affect prices. Opium poppy farmers in Laos are being paid less for their opium than farmers in Burma because Lao opium is regarded by traders as being of low quality. However, there is no appreciable difference in the overall quality of the opium produced in the highlands of Mainland Southeast Asia. Opium quality is measured by morphine alkaloid content and ranges between 8 and 12 percent. The quality of Southeast Asian opium has remained constant over the years.

Burma

The average wholesale price of raw opium over the last 5 years in Burma has been between \$200 and \$450 *viss* or per *choi*—equal to between \$125 and \$280 per kilogram. *Viss* or *choi* are terms used in Mainland Southeast Asia to refer to 1.6-kilogram amounts of opium. In the interior of the Shan State of Burma, the 1.6-kilogram amount is known as a *viss*, whereas in Thailand and in the border areas of Burma and Laos, which border on Thailand, the term *choi* is used. Much of the raw

opium is purchased by traders and agents of heroin refinery operators for conversion to heroin. In Southeast Asia, heroin refinery operators use 10 to 12 kilograms of raw opium to produce 1 kilogram of heroin. A new, secondary market for Burma-produced opium is in China's Yunnan Province, where villagers in remote, mountainous areas smoke opium. The supply of opium in Burma's Shan State has always been much more abundant than elsewhere in Mainland Southeast Asia. The local drug armies that control the areas have provided farmers with a reliable, if not generous, buyer for their opium. An undeveloped road system throughout the highland areas keeps opium prices low at most times.

Estimated Potential Annual Production of Southeast Asian Opium and Heroin 1980 - 2000

	Burma		Laos		Thailand		SE Asia	
	OPIUM	HEROIN	OPIUM	HEROIN	OPIUM	HEROIN	OPIUM	HEROIN
2000	1,085	90	210	18	6	1	1,301	109
1999	1,090	91	140	12	6	1	1,236	104
1998	1,750	146	140	12	16	1	1,906	159
1997	2,365	197	210	18	25	2	2,600	217
1996	2,560	213	200	17	30	2	2,790	232
1995	2,340	195	180	15	25	2	2,545	212
1994	2,030	169	85	7	17	1	2,132	177
1993	2,575	215	180	15	42	4	2,797	234
1992	2,280	190	230	19	24	2	2,534	211
1991	2,350	196	265	22	35	3	2,650	221
1990	2,255	188	275	23	40	3	2,570	214
1989	2,430	203	375	31	50	4	2,855	238
1988	1,283	107	255	21	28	2	1,566	130
1987	1,078	90	225	19	33	3	1,336	112
1986	900	75	195	16	23	2	1,118	93
1985	490	41	100	8	35	3	625	52
1984	740	62	30	3	45	4	815	69
1983	600	50	35	3	35	3	670	56
1982	600	50	50	4	57	5	707	59
1981	550	46	50	4	50	4	650	54
1980	160	13	40	3	12	1	212	17

In metric tons

NOTES: Annual opium harvests in Mainland Southeast Asia takes place in January and February. To make data consistent, opium production estimates are identified by the calendar year in which the cultivation season ends.

SOURCE: National Narcotics Intelligence Committee

Laos

The average wholesale price of raw opium over the last 5 years has been between \$150 and \$300 per *choi*, which is equal to between \$94 and \$213 per kilogram. Large amounts of raw opium are sold to supply the needs of hill tribe groups in Northern Laos, most notably, the Hmong. Most of the remaining surplus raw opium is sold for smoking and injection to cross-border traders in northeastern Thailand and the Vietnamese highlands, where the rate of opium addiction is high. On occasion, raw opium destined for Malaysia also is sold to cross-border traders.

Thailand

The average wholesale price of raw opium over the last 5 years has been between \$250 and \$600 per *choi*, which is equal to between \$156 and \$375 per kilogram. Virtually all of Thailand's opium poppy crop is consumed in-country by opium addicts.

Morphine Base & Morphine Hydrochloride

Current price information on morphine base and morphine hydrochloride was not available for inclusion in this report. However, during the 1980s morphine base was compressed into 1-kilogram bricks and sold for \$800 to \$1,200 per kilogram—or about 10 times the price of opium during that time period. Today, heroin laboratories in the Golden Triangle refine heroin directly from raw opium, and have no need for intermediate morphine products.

Currently, the only market for morphine base and morphine hydrochloride in the region is centered in Southern Thailand, in Hat Yai and Sadao Districts of Songkhla Province, where traders sell these products to heroin dealers based in Malaysia. Heroin users in Malaysia prefer locally produced, less pure “heroin no. 3,” which is processed from morphine hydrochloride or heroin base. Morphine hydrochloride is believed to be in demand by Malaysia-based heroin refinery operators when heroin base is not available. Morphine hydrochloride is compressed into 3-pound blocks at heroin refineries in the Shan State and then smuggled to the Malaysian border. The 3-pound block of compressed morphine hydrochloride, and the 1-pound brick of heroin base (see below) are the most common standard weights for these two products. Both products were sold to Hong Kong buyers prior to the 1990s and continue to be sold to Malaysian buyers. The preferred non-metric weights may be related to British colonial practices.

Heroin Base

Heroin base, or *su-ta-p'i*, or *ts'ao-ta-pi*, is another intermediate opium-to-heroin product, and also is a drug of abuse. Heroin base can be smoked or injected. Heroin base is preferred by heroin chemists over morphine hydrochloride because it is easier to process into heroin. The trade in heroin base is believed to be limited to the Thailand–Malaysia border areas, especially in the Songkhla Province districts of Hat Yai and Sadao. Heroin base is produced in the Golden Triangle and smuggled to the Malaysian border in 1-pound compressed bricks. This product is used by Malaysia-based heroin chemists to make heroin no. 3, the drug of choice among Malaysia's drug addict population.

The current wholesale price of heroin base in the Thailand–Malaysia border area is reported to be \$4,000 per pound. The price in the Thailand–Burma border area (the source) is reported to be about \$2,500 per pound.

Heroin

Heroin prices in Southeast Asia for 1999 and 2000 are less than those reported for the previous 3 years, despite the fact that traffickers' ability to produce heroin would seem to have been significantly curtailed due to decreased production of raw opium for two consecutive years. While this could imply that sufficient supplies of raw opium were stockpiled to offset unforeseen shortages of opium due to the vagaries of the weather, corroborating intelligence does not exist. Although opium poppy eradication efforts do play a role, by and large, it has been adverse weather conditions that have determined during the 1990s whether or not an ample supply of raw opium was produced from year to year in Mainland Southeast Asia.

According to intelligence reporting, the wholesale price of Southeast Asian heroin at Shan State refineries—where at least 90 percent of Southeast Asian heroin is refined—was between \$2,500 and \$3,200 per unit (700 grams) in 2000.¹ This compares to a price range of between \$4,800 and \$7,500 in Northern Thailand, \$7,400 and \$9,200 in Metropolitan Bangkok, \$13,440 and \$15,876 in Hong Kong, and from \$60,000 to \$70,000 in the United States.

As with opium prices, the key factor impacting on heroin prices is the point of sale. Quality generally is not a factor because buyers do not have the capability to test actual purity. The wholesale purity of heroin, whether processed in the Shan State of Burma, Laos, or Thailand, ranges from 85 to 95 percent pure. Among wholesale heroin trafficking groups in the Golden Triangle, the heroin unit is never adulterated or otherwise altered as it is passed from one group to another. These wholesale units remain in their original high-purity form, packaged in the original plastic. A typical unit of Southeast Asian heroin is produced in a compressed brick form at numerous heroin refineries in the Shan State of Burma. A 700-gram brick is approximately 6-inches long, 4-inches wide, and 1 inch

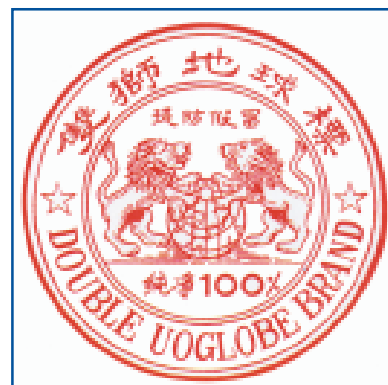
Average Wholesale Prices of Southeast Asian Heroin in US dollars

	SHAN STATE BURMA	NORTHERN THAILAND	METROPOLITAN BANGKOK	HONG KONG	UNITED STATES
2000	2,500 - 3,200	4,800 - 7,500	7,400 - 9,200	13,440 - 15,876	60,000 - 70,000
1999	2,200 - 3,600	4,600 - 7,700	6,300 - 8,900	11,600 - 15,400	60,000 - 80,000
1998	3,500 - 4,500	4,500 - 8,000	7,000 - 9,000	12,200 - 13,800	70,000 - 80,000
1997	3,600 - 7,000	3,800 - 10,000	6,400 - 12,800	13,800 - 14,800	63,000 - 80,000
1996	4,400 - 7,200	6,000 - 10,000	6,400 - 14,000	15,700 - 21,000	65,000 - 80,000
1995	3,100 - 5,200	3,800 - 6,900	5,200 - 10,500	14,800 - 22,400	55,000 - 83,000
1994	1,500 - 4,000	2,200 - 6,400	4,800 - 8,000	8,200 - 18,200	55,000 - 85,000
1993	1,300 - 2,200	1,700 - 3,400	3,600 - 6,000	8,800 - 12,600	58,000 - 80,000
1992	1,600 - 2,800	2,000 - 3,200	3,600 - 5,600	10,400 - 14,200	60,000 - 80,000
1991	2,000 - 3,200	2,400 - 3,600	3,400 - 5,600	11,000 - 17,200	55,000 - 75,000
1990	2,000 - 3,200	2,400 - 3,200	3,200 - 6,000	11,800 - 14,600	55,000 - 75,000

price per 700-gram unit

¹ Wholesale weights of Southeast Asian heroin usually are quoted in units—a 700-gram standard weight amount for heroin, which is used throughout Mainland Southeast Asia. The 700-gram unit is used only for finished heroin hydrochloride, also known as “no. 4” or “China White” heroin, in either powder or compressed (brick) form. In contrast, heroin traffickers of West African origin who deal in the Bangkok drug trade prefer to deal in kilograms.

thick; it is white in color, and is very hard. The brick is typically enclosed in a heat-sealed clear plastic bag with a unique logo stamped on the bag. The best-known and most widely used logo is the Double UOGlobe, otherwise known as the “Double Lion” brand. In the 1990s, a half-unit (350 grams) of Southeast Asian heroin, wrapped in the same manner, was introduced into the heroin trade, and has now become the preferred size. Among wholesale (multiunit) heroin traffickers in Southeast Asia, the powder form of heroin (unit or half-unit) is less common (and more expensive) than the brick form. There is no tiered price structure for wholesale amounts of heroin based upon purity levels. Most Southeast Asian heroin is about 90-percent pure at the refineries; sometimes higher with experienced heroin chemists and good-quality chemicals. No deterioration or adulteration should be expected at the delivery point in Northern Thailand.



Double UOGlobe logo

In addition to the point-of-sale factors cited previously for opium, there are additional associated costs such as transportation and smuggling fees, buyer-seller relationships, and profit margins. Smuggling fees may be set by the size of the heroin shipment (number of units) or as a flat fee based on the trip. The average fee to smuggle heroin from Northern Thailand to Bangkok or to Rayong (on the Gulf of Thailand), based on fragmentary reporting, is between \$200 and \$250 per unit. A typical smuggling fee of \$37,500 is commonly charged by heroin smugglers to transport heroin of any amount from the Gulf of Thailand to Hong Kong by ship or fishing trawler, and delivery is made within 8 to 10 days.

The fee for smuggling heroin from Bangkok to New York can go as high as \$5,000 to \$10,000 per unit, according to DEA intelligence reports. The risks are high, as are the potential profits. The 6-inch by 4-inch white brick of pure Southeast Asian heroin (described as a unit in the opening paragraphs and priced at \$3,000 at the refinery) generally is sold in New York City at a wholesale price of \$70,000.

Burma

Sales of heroin at refineries in the Shan State of Burma are limited and most sales are not conducted there. Instead of picking up the load at the refinery themselves, most multiunit heroin traffickers will contract for the delivery of the heroin to another location, such as a point on the Thai border. The journey from the refinery to the border can be a 5- to 6-hour walk along unpaved roads and mountain trails, where bandits can ambush strangers believed to be carrying money, heroin, or methamphetamine tablets. These smuggling routes are generally used by experienced tribesmen (Lahu, Akha, Lisu, etc.) who are paid up to \$100 per unit as a transportation fee, depending on the route.

Thailand

Once successfully smuggled into Thailand, the value of that same unit of heroin will increase to between \$4,750 and \$6,000 per unit. One typical “gateway” to Thailand is the northern border town of Mae Sai. Other key border points are Ban Piang Luang in Chiang Mai Province, Ban Pha Mi in Chiang Rai Province, and Mae Sot in Tak Province.

Some heroin traffickers will arrange to have their multiunit loads transported from the border area to a major city, such as Chiang Rai, Chiang Mai, or Lampang, where prospective buyers can arrive on a Thai Airways flight and negotiate with the suppliers over the amount, price, and proposed point of delivery of the heroin, all in the comfort of first-class hotel surroundings. In these cities, the price of this same unit of heroin (purchased at the refinery for \$3,000) is now priced at \$6,000-\$7,500 per unit. A finder's fee is generally paid to the broker.

This unit of heroin may also be sold in a Northern Thailand city, on occasion, to a buyer who is neither a well-established customer nor a local ethnic Chinese. In such an instance, the price of the unit of heroin may be increased by as much as 25 percent by the broker. A \$7,500 unit, for example, could be sold for \$10,000 to a Nigerian or Hong Kong national. Most "outsider" sales, however, take place in Bangkok, rather than in Northern Thailand.

According to recent U.S. Government intelligence reports, the current wholesale price of Southeast Asian heroin in Bangkok is between \$7,500 and \$9,000 per unit. The Metropolitan Bangkok area has easy access to international flights, commercial containerized cargo services, fishing trawlers, and other ocean-going vessels, which routinely call on such ports as Singapore, Hong Kong, and Kaohsiung (Taiwan).

China

Along the major heroin route across southern China, there are only a few reports with heroin price information. In the Yunnan Province border areas with the Shan State, a unit of heroin may cost from \$3,000 to \$4,000. In Yunnan's capital city of Kunming, the price has been doubled. Heroin in Guangdong Province (on the southern coast of China) sells for \$10,000 per unit, with the price higher within the Hong Kong Special Administrative Region. According to the Hong Kong Police (Narcotics Bureau), the current wholesale price of Southeast Asian heroin in Hong Kong is between \$12,000 and \$14,400 per unit. On Taiwan, the same unit of heroin is reported to sell for about \$30,000 per unit, according to Taiwan's Ministry of Justice Intelligence Bureau.

United States

During 2000, wholesale prices for a unit of Southeast Asian heroin in New York City ranged between \$60,000 and \$70,000 as compared to \$60,000 and \$80,000 in 1999. After being cut and resold on the street for \$10 in 50-milligram dime bags, a 700-gram unit of Southeast Asian heroin will generate \$280,000 in sales.

Typically, a 700-gram unit of Southeast Asian heroin is mixed with an equal amount of adulterants, usually lactose, resulting in a dry, white powder mix, which weighs approximately 1,400 grams. This amount of powder can make about 28,000 50-milligram bags, each bag containing a mixture of 25 milligrams of heroin and 25 milligrams of adulterant, which are routinely analyzed at 50 percent purity.

Outlook on Prices

It is likely that prices will continue to be stable for Southeast Asian opium and heroin. Prices over the past decade have withstood economic and political turmoil in Southeast Asia and vagaries of weather conditions in the region. At the same time, the short-term fluctuations that were experienced in Southeast Asia were not translated into price fluctuations in the Metropolitan New York Area, where Southeast Asian heroin prices have remained remarkably stable. It is likely that this pattern will also continue in the future. In much the same way that the international diamond trade is conducted, drug traffickers may be controlling the market by limiting the amount of heroin available on the streets while maintaining quality. The lack of fluctuation in the street price of heroin in the United States suggests that the supply of heroin on the world market far exceeds demand.

This report was prepared by the Strategic Europe/Asia/Africa Unit of the Office of International Enforcement Support. Comments and requests for copies are welcome and may be directed to the Intelligence Production Unit, Intelligence Division, DEA Headquarters, at (202) 307-8726.