Colombian Cocaine Production Expansion Contributes to Rise in Supply in the United States

DEA-DCT-DIB-014-17
AUGUST 2017

(U) This product was prepared by the DEA Strategic Intelligence Section. Comments and questions may be addressed to the Chief, Analysis and Production Section at dea.onsi@usdoj.gov. For media/press inquiries call (202) 307-7977.
Executive Summary

Changes in key international cocaine market indicators point to the highest U.S. cocaine supply levels since at least 2007. National data also show the most significant increase in domestic cocaine usage since at least 2009. Recent cocaine production and U.S. Transit Zone movement indicators have reached the highest levels ever observed. Cocaine supply and usage in the United States is rising and will likely continue to expand in the near term based upon a body of rising indicators, though some usage indicators may increase at slower rates than others. Barring a significant shift in the Government of Colombia’s (GOC) policies, drug trafficking organization (DTO) behavior, or U.S. drug consumer preferences, this trend is likely to amplify through at least 2018.

Details

Colombian coca cultivation and cocaine production in 2016 reached the highest levels ever observed.

Colombian cocaine accounted for approximately 92 percent of cocaine samples seized in the continental United States (CONUS) in 2016, based on analysis from DEA’s Cocaine Signature Program (CSP). Colombia remains the primary cocaine source for the U.S. market (see Figure 1). Despite significant reductions in many key Colombian coca cultivation and cocaine production indicators between 2007 and 2012, trends since 2013 reveal a remarkable increase in cocaine production, which poses an increasing threat to the United States.

(U) Figure 1. Origin of Cocaine Base Seized in the Continental United States in 2016.

Scope Note:

2007 is used as the baseline year for most cocaine indicators included in this product because that year served as a key inflection point for a broad range of cocaine cultivation, production, supply, and usage indicators, which were observed at elevated levels through 2007.

The U.S. Transit Zone is a 42-million square-mile area that includes the Caribbean Sea, Gulf of Mexico, eastern Pacific Ocean, and Pacific Ocean land masses including Central America, Mexico, and the Caribbean (except the U.S. Virgin Islands and Puerto Rico).

U.S. Government (USG) estimates of coca cultivation and cocaine production began in 1986, but due to periodic methodological changes based on new data, Colombian estimates prior to 2005 cannot be directly compared with more recent figures.

Source country origins are based on CSP analysis of preliminary 2016 seizure data representing approximately 70 to 75 percent of expected total 2016 samples. CSP data are not intended to reflect U.S. market share per se, as it is not based on a systematic random sampling of all domestic cocaine seizures. California, Texas, and Florida account for approximately 80 percent of analyzed 2016 CONUS seizures.
Following a 53 percent decrease in coca cultivation between 2007 and 2012 due largely to concerted suppression efforts by Colombian security forces involving both manual and aerial eradication, Colombia experienced a 134 percent increase in coca cultivation between 2013 and 2016, increasing from 80,500 hectares (ha)\(^d\) to 188,000 ha (see Figure 2). This included the two largest single-year coca cultivation rises ever recorded in Colombia between 2013 and 2015, with increases of 39 and 42 percent, respectively. In every year since 1998, coca cultivation has remained higher in Colombia than in Peru and Bolivia combined, with the exception of 2013.

The recent spike in coca cultivation has been driven by several factors, including a decrease in both aerial eradication, which was particularly significant from 2013 to the program’s discontinuation in October 2015, and manual eradication. Coca eradication in 2016 reached its lowest level since at least 1996. In 2016, 17,642 ha were subject to eradication, 92 percent less than the 229,228 ha subject to eradication in 2008 (see Figure 2). These reduced eradication levels coincided with a two-thirds reduction in Colombia’s manual eradication budget since 2008, resulting in a 90 percent reduction in the number of manual eradicators. In addition, coca growers have employed countermeasures, including blockades of manual eradication teams and shifting coca fields to more remote and inaccessible locations, including national parks and indigenous reserves.

Since 2014, peace negotiations between the GOC and the Revolutionary Armed Forces of Colombia (FARC) have at times exacerbated the problem of illicit coca cultivation in Colombia. Some FARC elements encouraged coca growers to plant more coca, ostensibly motivated by the belief that the GOC’s post-peace accord investment and subsidies would focus on areas with the greatest quantities of coca. In addition, the GOC eased eradication operations in areas controlled by the FARC to

\(^d\) 1 hectare is equal to approximately 2.5 acres (ac).
lessen the risk of armed conflict during peace negotiations. The final peace accord, signed by both delegations on November 24, 2016, includes assurances that the FARC will end all illicit drug operations and establishes a coca crop substitution and alternative development plan. The GOC maintains the right to eradicate illicit crops of any non-compliant growers. Regardless of the long-term efficacy of this plan, full implementation will take many years.

Even if cultivation levels remain constant, potential cocaine production is likely to increase further at least through 2017 due to the maturation of previously lower-yielding coca. In 2016, Colombian potential export quality cocaine production was at the highest level ever recorded, 35 percent higher than 2015 and more than three times higher than in 2012. The increase in cocaine production in 2016 reflects both higher coca cultivation levels and increased coca field maturity rates, which increase cocaine yields per hectare.\(^{e}\)

**Cocaine seizures in Colombia in 2016 reached the highest level in at least 9 years.**

- Colombian territorial cocaine seizures\(^{f}\) paralleled the rise in potential cocaine production. Territorial cocaine seizures jumped 30 percent between 2015 and 2016, from 249 metric tons (MT) to 323 MT, the highest level observed since at least 2007 (see Figure 3).\(^{g}\) Preliminary 2017 data show more than 90 MT of territorial cocaine seizures through March, a pace that would result in more than 360 MT seized by year’s end.

(U) Figure 3. Colombia Potential Cocaine Production and Territorial Seizures, 2007-2016.

---

\(^{e}\) The U.S. Government classifies coca fields as mature 18 months after they are planted.

\(^{f}\) Territorial seizures are those that occur within Colombia and its territorial waters, but not those that occur outside of Colombia based on Colombian-provided intelligence.

\(^{g}\) These figures include both cocaine base/paste and cocaine hydrochloride (HCl).
Cocaine production potential is the amount of cocaine that can be produced from the cultivation of coca. Potential pure cocaine production estimates make comparisons between different years and source countries easier, while potential export quality cocaine production estimates are representative of the average purity at which cocaine departs the Source Zone\(^h\) and typically reflect only the impurities introduced during the production of cocaine. Export quality will therefore be the primary cocaine production indicator referenced here. The export quality purity of Colombian cocaine has averaged between 73 and 83 percent between 2007 and 2016.

Northbound cocaine movement from South America has reached record levels.

- Due to a greater supply of cocaine, northbound cocaine movement from South America increased from 2014 to 2016. At least 82 percent of the documented cocaine departing South America transits the Eastern Pacific, with smaller amounts transshipped directly through the Western and Central/Eastern Caribbean (11 percent and 7 percent, respectively). Significant increases in northbound cocaine movement were driven primarily by increases in coca cultivation in the Andean region, which resulted in increases in documented flow through the Eastern Pacific Vector. Increased flow was also documented in the Caribbean Corridor, though the Caribbean Corridor’s overall share of flow was less than what was observed in 2014 (see Figure 4). As in previous years, by volume, the majority of this documented movement was via go-fast vessels.

(U) Figure 4. Cocaine Movement North from South America in 2016.

\(^h\) The Source Zone includes Colombia, Peru, and Bolivia—the world’s primary sources of coca cultivation.
Cocaine seizures in the U.S. arrival zone are increasing.

The Southwest Border (SWB) remains the key entry point for cocaine smuggled into the United States. Customs and Border Protection (CBP) cocaine seizures along the SWB increased 20 percent between 2015 and 2016, from 9,018 kilograms (kg) to 10,839 kg, the most cocaine seized along the SWB since at least 2011. The seizures from 2016 marks the second consecutive year there was an increase in seizures along the SWB, following a period of decrease between 2013 and 2014.

Most of the cocaine seized along the SWB in 2016 occurred in the San Diego corridor (5,447 kg or 50 percent) and the Rio Grande Valley corridor (2,474 kg or 23 percent). In addition, seizures in the San Diego corridor increased 32 percent between 2014 and 2015, while seizures in the Rio Grande Valley decreased 21 percent during the same timeframe (see Figure 5). This marks the second consecutive year seizures in the San Diego corridor have increased, while seizures in the Rio Grande Valley previously decreased between 2014 and 2015. Traffickers most commonly smuggle cocaine into the United States via privately owned vehicles passing through ports of entry along the SWB. Cocaine is hidden amongst legitimate cargo on commercial trucks or secreted inside hidden compartments built within passenger vehicles.

(U) Figure 5. CBP Cocaine Seizures by Southwest Border Corridor in 2016, and Percent Change Since 2015.
Domestic cocaine use indicators have rebounded to at least 2009 levels.

Cocaine usage shows signs of increase in the United States, rebounding to at least 2009 levels across multiple data sets. The number of current cocaine users, cocaine initiates, and cocaine poisoning deaths all increased in 2015, signaling the continued rebound of cocaine usage and availability. However, positive workforce drug tests for cocaine in 2016 are still less than half of what they were in 2007, indicating that the United States has yet to fully return to 2007 benchmark levels.

- Past-year cocaine initiates in the United States have surpassed 2007 levels, and are likely to continue increasing in 2016 and 2017 given the strong historical correlation between past-year initiates and potential cocaine production in Colombia. According to the 2015 National Survey on Drug Use and Health (NSDUH)—the most recent year for which data are available—there was a 26 percent increase in the number of past-year cocaine initiates aged 12 or older, from 766,000 past-year initiates in 2014 to 968,000 past-year initiates in 2015 (see Figure 6).

- Current cocaine use (past 30 days) in the United States is now equal to usage levels from 2008, and marks an increase from use levels reported between 2009 and 2013. According to the 2015 NSDUH, current usage levels are still lower than 2006 and 2007 (2.4 million and 2.1 million current users, respectively). In 2015, there were approximately 1.9 million current cocaine users aged 12 or older. Of the approximately 1.9 million current users, 1.2 million users were aged 26 and older. This trend has remained consistent since 2003.

(U) Figure 6. United States Past-Year Cocaine Initiates and Colombian Export Quality Cocaine Production, 2007-2016.

Source: U.S. Government estimates and National Survey on Drug Use and Health

---

1 DEA field divisions (FDs) measure increased or higher cocaine availability as cocaine being “easily obtained at any time.” As such, changes in availability generally refer to accessibility as opposed to other measures.
The Treatment Episode Data Set (TEDS) indicates the number of people aged 12 and older with cocaine-related illnesses/dependencies who were admitted to publicly funded facilities continues to decline, probably due to an over-representation of crack cocaine users in treatment admissions. Cocaine-related admissions declined 66.5 percent, from 260,849 admissions in 2007 to 87,510 in 2014 (the most recent year for which data are available). Crack cocaine—referred to in TEDS as smoked cocaine—represented 66 percent of all primary cocaine admissions in 2014. However, NSDUH data indicates there were far fewer past-year crack cocaine users (773,000) than past-year powder cocaine users (3.78 million) in 2014. The average age at admission among primary crack cocaine admissions was 44, and the average age at admission for powder cocaine users was 38.

Positive workplace urine-based drug tests for cocaine reached a 7 year high in 2016; positive workplace cocaine tests are likely to continue increasing in 2017. This assessment is based on a moderate relationship between cocaine usage and Colombian cocaine production. The percentage of positive general workforce drug tests for cocaine showed a relative 12 percent increase between 2015 and 2016, from 0.25 percent to 0.28 percent (see Figure 7). This marks the highest percentage of positive cocaine tests in the general workplace since 2009. However, this still represents a significant decline from the .58 percent rate of positive drug tests in 2007, indicating rates are unlikely to reach 2007 benchmark levels in the near term. A relatively small population of heavy cocaine users account for a significant percentage of total demand, and this population may not be well-represented in workplace data. The disparity in the rate of increase observed between NSDUH data and workplace drug testing data may indicate an increase in light cocaine users, since urine tests—which account for almost 90 percent of general workforce drug tests—only detect cocaine in urine for an average of 2 to 4 days after consumption.

(U) Figure 7. U.S. Workplace Positive Urine Drug Tests and Colombian Export Quality Cocaine Production, 2007-2016.

Source: U.S. Government estimates and Quest Diagnostics
Cocaine poisoning deaths have surpassed 2007 levels.

Cocaine-involved drug poisoning deaths have exceeded 2007 levels, and increased for the fourth straight year. More cocaine deaths were recorded in 2015 (6,784) than any other year in the past decade since 2006 (7,448) (see Figure 9). Cocaine-involved drug poisoning deaths increased 25 percent from 2014 to 2015. Analysis shows a strong relationship between cocaine drug poisoning deaths and Colombian cocaine production, which suggests that cocaine deaths in the United States are likely to reach record high levels by 2017.

Cocaine and Opioids

The relationship between cocaine and opioids is not a significant strategic trend at this time, because a relatively small sample size of cocaine and fentanyl mixtures has been analyzed by forensic laboratories. Deaths involving cocaine without opioids have increased at a much slower pace than cocaine deaths that also involve opioids. In 2015, of the 6,784 total cocaine-involved overdose deaths reported, 2,778 (34 percent) were “cocaine deaths without opioids” (as listed on the death certificate) (see Figure 8). By contrast, in 2007, 3,485 (54 percent) out of 6,512 total cocaine-involved overdose deaths were “without opioids.” However, these data identify neither which drug actually killed the user, nor the type of drug user (primarily cocaine or primarily opioid) to which these deaths are attributed. In addition, it is possible that given the recent law enforcement, public health, and media attention surrounding the rise of fentanyl, significantly more post-mortem tests for fentanyl are being performed, leading to a more accurate assessment of the presence of synthetic opioid positivity.

(U) Figure 8. Opioid Involvement in Cocaine Overdose Deaths, 2007-2015.
According to historical death data, cocaine deaths without opioids appeared to rise and fall concomitantly with total cocaine deaths from 2007 through 2013, suggesting a historical relationship between opioid- and cocaine-involved deaths. In 2014, the two data sets began to diverge; total cocaine deaths have since displayed larger increases than cocaine deaths without opioids. However, given the limited timeframe of this increase and the complicating factors previously discussed, more analysis is needed to assess the current relationship between cocaine and opioids.

Information from the National Forensic Laboratory Information System (NFLIS) indicates mixtures of cocaine and fentanyl/fentanyl-related compounds are relatively rare in the United States. Despite significant increases in synthetic opioid (fentanyl) deaths and seizures in 2015, an overwhelming majority of all fentanyl exhibits submitted to NFLIS were fentanyl alone (9,361 out of 14,051 total exhibits, or 67 percent). For comparison, NFLIS recorded only 125 exhibits of fentanyl and cocaine in 2015. Although cocaine and fentanyl combinations pose a significant risk to the public health and to first responders, current indicators provide limited insight into this combination as a strategic trend.

Analysis of state-level 2015 drug overdose data reveal the greatest age-adjusted overdose rates for cocaine deaths were in Rhode Island; Ohio; Massachusetts; West Virginia; and Washington, DC (compared to either heroin or psychostimulants) (see Figure 9). Cocaine was also responsible for more overdose deaths in South Carolina and Rhode Island compared to heroin or psychostimulant deaths. This represents a significant decline from 2007, when 39 states reported cocaine as the drug involved in the highest number of overdose deaths. This indicates the increases in cocaine poisoning deaths are still primarily a regional threat, with some regions of the United States seeing significant increases while other areas continue to report decreases in fatalities.

(U) Figure 9. Age-Adjusted Rate of Cocaine Overdose Deaths, 2015.
Domestic cocaine prices are falling and purity is rising.

The average annual purity of 1 gram of cocaine in the United States remained relatively stable at 45.3-49.1 percent between 2009 and 2015, well below the 61.1 percent average purity observed in 2007. Average annual purity was 56.4 percent in 2016. Between 2007 and 2015, the average annual price per pure gram of cocaine nearly doubled, from $116 to $202, prior to dropping to $165 in 2016 (see Figure 10).

Since 2007, average annual cocaine purity in the United States has had a relatively strong correlation with Colombian cocaine production, though the relationship between cocaine production and domestic prices is weak. This suggests that other factors, including competition within drug markets and changes in the user population, have more influence on domestic prices than previously recognized.

(U) Figure 10. U.S. Cocaine Price and Purity and Colombian Export Quality Cocaine Production, 2007-2016.

Law enforcement agencies continue to perceive cocaine as a low threat.

State, local, and tribal law enforcement agencies continue to view cocaine as one of the lowest drug threats when compared to other major drugs, likely as a result of the immediate threats posed by opioids in the Eastern United States and methamphetamine in the Western United States. Nationally, only 4 percent of respondents to the 2016 National Drug Threat Survey (NDTS) identified either powder cocaine or crack cocaine as the greatest drug threat, which was the lowest rate amongst drugs surveyed, well below the level recorded by the NDTS in 2009 (see Figure 11). In addition, 17.3 percent of respondents identified cocaine as highly available, meaning cocaine is easily obtained at any time. The 17.3 percent rate is lower than 2009 levels.
DEA domestic FD reporting shows cocaine is most often ranked as a moderate threat and as being moderately available. In the first half of 2016, six of the 21 DEA FDs ranked cocaine as their fourth greatest threat, making it the most common ranking for cocaine. However, there was a wider spread of rankings for cocaine as the greatest drug threat in the first half of 2015, with five FDs reporting cocaine as the third greatest drug threat and four FDs reporting cocaine as the second greatest drug threat. Only two FDs—Miami and the Caribbean—ranked cocaine as their number one drug threat (see Figure 12). Likewise, 15 of the 21 DEA FDs reported cocaine availability as moderate and stable compared to the previous reporting period.\(^1\) Four DEA FDs ranked cocaine availability as high during the first half of 2016 (Houston; Los Angeles; Philadelphia; and Washington, DC). As with other law enforcement agencies, it is likely that DEA FDs are dealing with other, more immediate threats than cocaine, meaning their rankings of cocaine may remain slightly lower than actual availability levels.

---

\(^1\)The Atlanta, Caribbean, Denver, Detroit, El Paso, Miami, New England, New Jersey, New Orleans, New York, Phoenix, San Diego, San Francisco, Seattle, and St. Louis FDs reported cocaine as moderately available in the first half of 2016 and stable compared to the second half of 2015. The Chicago and Dallas FDs reported cocaine availability as moderate during the first half of 2016, but more available compared to the second half of 2015.
**Intelligence Gap**

A lack of comprehensive datasets on recent U.S. cocaine consumption and cocaine demand limit DEA's ability to differentiate between supply and demand drivers causing the current increase in cocaine indicators.

**Outlook**

Through 2018, the United States will likely continue to experience the highest cocaine supply and usage levels in a decade. Even if cultivation levels remain constant, potential cocaine production in Colombia is likely to increase through at least 2017 due to the maturation of previously lower yielding coca planted in 2016 and the strong economic incentives for farmers to continue growing coca. As production and other international indicators increase, the United States will very likely see continued increases in cocaine-related deaths, new initiates, seizures, and positive workplace drug tests. Some domestic indicators have surpassed 2007 levels (new initiates and deaths), while other indicators are on pace to meet or surpass 2007 levels by 2017 (current use and retail purity). Other domestic availability indicators, including seizures and workplace drug tests, have not seen significant increases relative to other U.S.-based indicators, and historical analysis indicates retail price will remain difficult to predict.