Crime & Vice: The Business of the Forbidden

Figures current as of November 2026

How the forbidden pleasures and the trades around them work as businesses: who sells, who taxes, who bans, and who launders. The course begins with the four ways governments answer a vice and the economics of a market without courts. It then follows the drug trade, from the world market through cocaine and fentanyl to the war on drugs and the alternatives to it; the legal vices of alcohol, nicotine, and gambling; pornography and sex work; and organized crime, the scam industry, trafficking, and money laundering. It is a course about markets and policy, with nothing explicit and no instructions.

MODULE 1 — The Forbidden Economy

Goal: Learn the four ways governments answer a vice, how a market works without courts, and why every estimate of its size is a guess.

Ban, tax, license, or decriminalize; what Prohibition taught; risk as a cost; why banned goods grow stronger; where the violence comes from; heavy users; sin taxes; and how the hidden is counted.

MODULE 2 — The Drug Market

Goal: Map who uses which drugs, where each comes from, and who keeps the money.

The world's users by drug; opium after the Taliban's ban; plant drugs and lab drugs; the markup from farm to street; where drugs are sold now; and the bodies that run the treaty system.

MODULE 3 — Cocaine's Boom

Goal: Follow the fastest-growing drug market from Andean fields to European ports, and weigh whether destroying the crop cuts the supply.

Record output; Colombia's coca and the groups that tax it; Ecuador's ports and murders; Europe as the growth market; the routes and the brokers; and why counting hectares misleads.

MODULE 4 — Fentanyl and the Synthetic Turn

Goal: Understand how drugs made in laboratories changed the business, and weigh why American overdose deaths are falling.

The chain from Chinese chemicals to Mexican laboratories; seizures and purity; the overdose counts; the rival explanations for the fall; methamphetamine and captagon; and why synthetics favor the seller.

MODULE 5 — The War on Drugs

Goal: Trace American drug enforcement from 1914 to the military campaign of 2025-26, and weigh whether attacking supply works.

The laws and the prison numbers; Colombia and Mexico; killing the leaders; the terrorist designations; the strikes on boats; the seizure of Venezuela's president; and the death of Mexico's most wanted man.

MODULE 6 — Legalization and Harm Reduction

Goal: Learn what happens when governments legalize a drug, stop punishing its users, or treat instead of jail, and weigh the three approaches.

Cannabis in the states and in federal law; legal markets abroad; Portugal and Oregon; naloxone, treatment, and supervised sites; and psychedelics as medicine.

MODULE 7 — Alcohol and Nicotine

Goal: See how the two great legal drugs are sold and taxed, and weigh whether safer nicotine helps smokers or hooks the young.

Who drinks and who is harmed; the argument over a safe level; an industry losing customers; cigarettes' decline and the pouch and vape business; taxes, smuggling, and Australia's black market; and bans by birth year.

MODULE 8 — Gambling

Goal: Follow America's move from prohibition to a sportsbook on every phone, and weigh whether legal sports betting has been worth it.

Casinos, sportsbooks, and lotteries; how a sportsbook earns; the evidence on household harm; fixed games; prediction markets and the fight over who regulates them; and gambling abroad.

MODULE 9 — Pornography

Goal: Understand the business behind free and paid adult content and the laws closing in on it, and weigh whether age checks work.

From tapes to free sites to paid creators; Pornhub's owner and OnlyFans; card networks as regulators; obscenity law; age verification in America and Britain; images made or shared without consent; and what research can say about effects.

MODULE 10 — Sex Work

Goal: Learn the four ways the law treats the sale of sex, and weigh which best protects the people who sell it.

The words and who uses them; banning, banning the buyer, licensing, and decriminalizing; the American federal layer; what is known about the market; trafficking and its numbers; and what the evaluations found.

MODULE 11 — Organized Crime

Goal: Understand what criminal groups sell and how they come to govern, and weigh whether El Salvador's crackdown is a template or a warning.

Protection as a product; Italy's mafias and Japan's yakuza; gangs born in prison; rule by gang and extortion; Haiti's gangs; and El Salvador's state of exception.

MODULE 12 — The Scam Industry

Goal: Follow the newest criminal industry from Southeast Asia's compounds to a victim's phone.

The size estimates; investment and romance fraud; the compounds and their trafficked workers; the Prince Group case; the money channels; the crackdowns of 2025-26; and what platforms and banks owe victims.

MODULE 13 — Trafficking

Goal: Survey the other things moved illegally for profit: people, guns, wildlife, fakes, fuel, and gold.

Smuggling against trafficking; the migrant-smuggling business; American guns in Mexico and Haiti; wildlife and timber; counterfeit goods and pills; stolen fuel; and illegal gold.

MODULE 14 — Dirty Money

Goal: Learn how criminal profits are made usable, and weigh whether the rules against money laundering catch much.

The three stages; the rulebook and its lists; Chinese money laundering networks; the banks that were caught; cryptocurrency; and property and shell companies.

MODULE 15 — Where Things Stand, and What to Watch

Goal: Close with the argument, the contradictions, and a dated watch list.

The course's argument on a page; the contradictions no single module states; what to watch from November 2026 on; and a last word.

A note on the sources: illegal markets keep no accounts, so most figures here are estimates, and the course names whose estimate it gives and when it was made. Counts of users, crops, and seizures come mainly from the United Nations Office on Drugs and Crime (UNODC); American deaths, arrests, and court cases from the federal agencies and courts named beside each figure; company figures from filings and earnings releases. Where only news reports exist, the course says “as reported”. Provisional figures, such as recent overdose counts, are revised as records arrive. Leaders' ages are as of November 11, 2026.

The course explains how these markets and the laws around them work. It gives no legal, medical, or financial advice, and it describes criminal methods only in the general terms that official reports use. Where the argument is live, each side's case is made as its advocates make it, followed by the evidence and then the course's own reading, stated once. The live arguments are over crop eradication, why overdose deaths fell, attacking supply, legalization, safer nicotine, sports betting, age checks, the law on selling sex, El Salvador's mass arrests, the campaign against scam compounds, and the rules against money laundering.

Vice at a Glance, as of November 2026

The headline counts, who made them, and when

The Drug Trade

Measure	Figure	Period	Source and release
People who used an illegal drug	331 million, or 6.2% of people aged 15 to 64	2024	UNODC, *World Drug Report 2026*, June 26, 2026
Cocaine produced	About 4,100 tons, a record; the range is 3,800 to 4,700	2024	UNODC, *World Drug Report 2026*
Opium produced in Afghanistan	About 1,470 tons, up from 296 in 2025; about 6,200 before the Taliban's ban	2026; 2025; 2022	UNODC, *Afghanistan Opium Survey 2026*, October 29, 2026
American overdose deaths	66,478 in twelve months, down from a peak of 112,418	To May 2026; to August 2023	Centers for Disease Control and Prevention (CDC), provisional counts released in October 2026
Americans with a substance use disorder	44.6 million people aged 12 or older, or 15.3%	2025	National Survey on Drug Use and Health
States where adults may use cannabis legally	24 and the District of Columbia	November 2026	State laws; none was added in 2025 or 2026
American strikes on suspected drug boats	80 strikes and 243 people killed	September 2, 2025, to October 27, 2026	InSight Crime's count

The Legal Vices

Measure	Figure	Period	Source and release
American adults who drink alcohol	54%, tying the lowest share since 1939	July 2026	Gallup
Nicotine from illegal sources in Australia	80%, against 12% in 2017	2025	Australian Bureau of Statistics, June 2026
American commercial gambling revenue	$78.6 billion, a record	2025	American Gaming Association (AGA), May 13, 2026
American sports betting	$166.9 billion wagered, of which the books kept $16.9 billion	2025	AGA, May 13, 2026
Prediction markets	$188 billion of contracts traded, counted at their $1 payout	July to September 2026	Industry trackers, as reported
OnlyFans	Revenue of $1.55 billion and profit before tax of $715 million	Year to November 30, 2025	Company accounts, as reported in August 2026
States requiring age checks on adult websites	27 by one count; trackers range from 26 to 29	October 2026	Trackers kept by the industry and by law firms

Crime and Money

Measure	Figure	Period	Source and release
American murder rate	4.1 per 100,000 people, tied for the lowest on record	2025	Federal Bureau of Investigation (FBI), August 14, 2026
Murders in Latin America and the Caribbean	At least 108,838; the median national rate was 17.6 per 100,000	2025	InSight Crime, March 11, 2026
Homicides in Mexico	27,989, or 21.4 per 100,000 (preliminary)	2025	Mexico's national statistics institute, August 3, 2026
Homicides in Ecuador	9,216, or 50.9 per 100,000, a record	2025	Ecuador's Interior Ministry, as reported
Homicides in Haiti	9,063, or 76 per 100,000	2025	United Nations Secretary-General, April 2026
Homicides in El Salvador	82, or 1.3 per 100,000, on the official count	2025	El Salvador's police
Fraud losses reported by Americans	$20.9 billion, up 26%	2025	FBI Internet Crime Complaint Center, April 7, 2026
Suspicious transactions tied to Chinese laundering networks	About $312 billion in 137,153 reports	2020 to 2024	Financial Crimes Enforcement Network (FinCEN), August 28, 2025
Cryptocurrency received by illicit addresses	At least $154 billion, up 162%	2025	Chainalysis, January 8, 2026
Illegal gold exported from Peru	More than $11.5 billion, over 100 tons	2025	Peruvian Institute of Economics

Every figure for an illegal market is an estimate. The modules give the ranges, the methods, and the rival counts.

Who Leads, as of November 11, 2026

The officials who run the agencies and governments the course covers, with their ages and time in office

The United States

Office	Officeholder	Age	In office since (years)	Role in the course
President	Donald Trump	80	Jan 20, 2025 (1)	Ordered the boat strikes and the seizure of Venezuela's president, and began the rescheduling of marijuana (Modules 5 and 6)
Attorney General	Todd Blanche	51 or 52	Acting from Apr 2, 2026; confirmed Aug 8, 2026 (new)	Heads the Justice Department, which prosecutes Maduro and, through its drug enforcement agency, writes the drug scheduling rules (Modules 5 and 6)
Administrator, Drug Enforcement Administration (DEA)	Terrance Cole	Not published	Jul 23, 2025 (1)	Decides whether the rest of marijuana moves to Schedule III (Module 6)
Director, FBI	Kash Patel	46	Feb 2025 (1)	The FBI publishes the national crime figures and takes fraud complaints (Modules 12 and 15)
Secretary of Defense	Pete Hegseth	46	Jan 25, 2025 (1)	Directs the military campaign against suspected traffickers (Module 5)
Commander, US Southern Command	General Francis Donovan	Not published	Feb 5, 2026 (new)	Commands the forces carrying out the strikes (Module 5)
Secretary of State	Marco Rubio	55	Jan 21, 2025 (1)	Names foreign terrorist organizations (Module 5)
Director of National Drug Control Policy	Sara Carter	About 45	Jan 9, 2026 (new)	Coordinates federal drug policy from the White House (Modules 5 and 6)
Chairman, Commodity Futures Trading Commission (CFTC)	Michael Selig	Not published	Dec 2025 (new)	Claims federal authority over prediction markets (Module 8)
Acting Director, FinCEN	Jenna Casanova	Not published	Aug 2026 (new)	Runs the Treasury bureau that receives banks' reports (Module 14)
Acting Commissioner, Food and Drug Administration (FDA)	Kyle Diamantas	38	May 2026 (new)	The agency rules on psilocybin and on new nicotine products (Modules 6 and 7)
Director, CDC	Erica Schwartz	Not published	Aug 2026 (new)	The agency counts overdose deaths (Module 4)

Other Governments and International Bodies

Office	Officeholder	Age	In office since (years)	Role in the course
President of Mexico	Claudia Sheinbaum	64	Oct 1, 2024 (2)	Sent troops against fentanyl laboratories and handed cartel prisoners to the United States (Modules 4 and 5)
President of Colombia	Abelardo de la Espriella	48	Aug 7, 2026 (new)	Governs the largest grower of coca (Module 3)
President of Ecuador	Daniel Noboa	38	Nov 23, 2023 (2)	Declared an internal armed conflict against the gangs (Module 3)
President of El Salvador	Nayib Bukele	45	Jun 1, 2019 (7)	Author of the state of exception; sent troops to Haiti (Module 11)
Acting President of Venezuela	Delcy Rodríguez	57	Jan 5, 2026 (new)	Took office after American forces seized Nicolás Maduro (Module 5)
Prime Minister of Haiti	Alix Didier Fils-Aimé	Not published	Nov 10, 2024 (2)	Governs without an elected president or legislature (Module 11)
President of Peru	Keiko Fujimori	51	Jul 28, 2026 (new)	Inherits the illegal gold trade and the miners' register (Module 13)
President of Brazil	Luiz Inácio Lula da Silva	81	Jan 1, 2023 (3)	Re-elected on October 25, 2026; Brazil's prison gangs are among the continent's largest (Module 11)
Home Secretary, United Kingdom	Shabana Mahmood	46	Sep 5, 2025 (1)	Her department's Crime and Policing Act changed the law on pornography and soliciting (Modules 9 and 10)
Prime Minister of Cambodia	Hun Manet	49	Aug 22, 2023 (3)	Governs the country where the Prince Group was based (Module 12)
Executive Director, UNODC	Monica Juma	Not published	May 11, 2026 (new)	Leads the agency whose counts the course uses most (Module 2)
President, Financial Action Task Force (FATF)	Giles Thomson	Not published	Jul 1, 2026 (new)	Chairs the body that sets the rules on money laundering (Module 14)

Ages and time in office are as of November 11, 2026, from official biographies and news reports; years are completed years. Where a birth date has not been published, the table says so.

Who's Who, as of November 11, 2026

The agencies, groups, companies, and laws the course names; the leaders are on the page before this one

Agencies and Research Bodies

Name	What it is
United Nations Office on Drugs and Crime (UNODC)	The United Nations agency in Vienna that publishes the yearly *World Drug Report* and the crop surveys (Modules 1 to 4)
Drug Enforcement Administration (DEA)	The American federal agency that enforces the drug laws and decides, with the Attorney General, which schedule a drug belongs in (Modules 5 and 6)
Centers for Disease Control and Prevention (CDC)	The federal health agency whose monthly counts of overdose deaths are the main measure of the fentanyl crisis (Module 4)
Federal Bureau of Investigation (FBI)	The federal police agency. It compiles the national crime statistics and runs the Internet Crime Complaint Center (Modules 10, 12, and 15)
Financial Crimes Enforcement Network (FinCEN)	The Treasury bureau that receives banks' reports and writes the rules against money laundering (Module 14)
Commodity Futures Trading Commission (CFTC)	The federal regulator of futures markets, which claims authority over prediction markets (Module 8)
Federal Trade Commission (FTC)	The federal consumer-protection agency, which keeps a second database of fraud reports (Modules 9 and 12)
World Health Organization (WHO); International Labour Organization (ILO)	United Nations agencies for health and for labor, the sources of the death tolls for alcohol and tobacco and of the estimates of forced labor (Modules 7, 10, and 13)
Financial Action Task Force (FATF)	The body of governments that sets international standards on money laundering and lists the countries that fall short (Module 14)
RAND, a research organization in California	Its analysts produced the estimate of American drug spending that the course uses (Modules 1 and 2)
InSight Crime	A research group that reports on organized crime in Latin America and compiles yearly counts of homicides and cocaine seizures and a tracker of American boat strikes (Modules 3, 5, and 11)
American Gaming Association (AGA)	The casino industry's trade group and the source of most American gambling figures (Module 8)
Free Speech Coalition	The adult entertainment industry's trade group, which sued to stop the Texas age-check law (Module 9)

Criminal Organizations

Name	What it is
Sinaloa Cartel; Jalisco New Generation Cartel	Mexico's two largest criminal groups and the main makers of fentanyl. Sinaloa's factions have fought each other since 2024, and Jalisco's founder was killed in February 2026 (Modules 4 and 5)
Clan del Golfo	Colombia's largest armed criminal group, which taxes coca and controls smuggling routes (Module 3)
Tren de Aragua	A gang formed in a Venezuelan prison, named a terrorist organization by the United States in 2025 (Modules 5, 11, and 13)
MS-13; Barrio 18	Street gangs formed in Los Angeles that came to dominate El Salvador until the mass arrests that began in 2022 (Module 11)

Name	What it is
Primeiro Comando da Capital; Comando Vermelho	Brazil's two largest gangs, both founded in prisons (Module 11)
'Ndrangheta; Cosa Nostra; the yakuza	The mafias of Calabria and Sicily and the crime syndicates of Japan (Modules 3 and 11)
Viv Ansanm	The coalition of gangs that controls most of Haiti's capital (Module 11)
Prince Group	A Cambodian conglomerate that American prosecutors accuse of running scam compounds with forced labor (Module 12)
Chinese money laundering networks	Brokers who match criminals' dollars with Chinese customers who want money outside China (Module 14)

Companies

Name	What it is
Kalshi; Polymarket	The two largest prediction markets. Kalshi is registered with the CFTC, and Polymarket runs on cryptocurrency (Module 8)
FanDuel; DraftKings	The two largest American sportsbooks (Module 8)
Aylo	The Canadian owner of Pornhub and other free video sites, formerly called MindGeek (Module 9)
Fenix International	The British company that owns OnlyFans (Module 9)
Visa; Mastercard	The card networks whose rules decide which adult businesses can take payments (Module 9)
Philip Morris International	The largest publicly traded cigarette maker and the seller of Zyn nicotine pouches (Module 7)
TD Bank; Huione Group	A bank that pleaded guilty to a money laundering conspiracy in 2024, and a Cambodian payments company cut off from the American financial system in 2025 (Modules 12 and 14)

Laws and Cases

Name	What it is
Controlled Substances Act (1970)	The American law that sorts drugs into five schedules, with Schedule I the most restricted (Modules 5 and 6)
The three United Nations drug treaties (1961, 1971, 1988)	The agreements that oblige nearly every country to limit listed drugs to medical and scientific use (Module 2)
Murphy v. NCAA (2018)	The Supreme Court ruling that let states legalize betting on sports (Modules 1 and 8)
Free Speech Coalition v. Paxton (2025)	The Supreme Court ruling that upheld a state law requiring adult websites to check users' ages (Module 9)
FOSTA-SESTA (2018)	The law that made websites liable for knowingly helping sex trafficking (Module 10)
Bank Secrecy Act (1970)	The law that requires American financial institutions to report large cash transactions and suspicious activity (Module 14)
United States v. Maduro	The prosecution in New York of Venezuela's former president on drug and other charges, with trial set for June 14, 2027 (Module 5)

Terms

The vocabulary that recurs across modules, defined once; each module defines its other terms where they first appear

Term	Meaning	Where it matters
Prohibition, decriminalization, and legalization	Banning a product outright; removing criminal penalties for users while supply stays illegal; and allowing lawful sale under rules	Modules 1 and 6
Excise	A tax charged per unit of a product, such as per pack or per gallon	Modules 1 and 7
Balloon effect	The movement of an illegal trade to a new place when it is squeezed in an old one	Modules 1, 3, and 13
Precursor	An industrial chemical from which a drug is made	Module 4
Schedule	One of five classes into which American law sorts controlled drugs, from Schedule I (no accepted medical use) to Schedule V	Modules 5 and 6
Harm reduction	Measures that cut death and disease among drug users without requiring them to stop	Module 6
Foreign terrorist organization	A designation by the Secretary of State that makes it a crime to give a group material support	Modules 5 and 11
Handle and hold	The total amount wagered, and the share of it that the operator keeps	Module 8
Prediction market	An exchange selling contracts that pay $1 if a stated event happens and nothing if it does not	Module 8
Age verification	A check that a website's or device's user is an adult, done by document, by estimate from a face, or by a signal from the device	Module 9
Smuggling and trafficking	Moving a willing customer across a border for a fee, against exploiting a person by force, fraud, or coercion	Modules 10 and 13
Extortion and criminal governance	Payment demanded under threat, and the wider rule of a neighborhood or region by an armed criminal group	Module 11
State of exception	A legal emergency in which a government suspends some rights, such as access to a lawyer	Module 11
Scam compound	A guarded site where workers, many of them trafficked, run online fraud	Module 12
Forfeiture	A court order transferring to the government property tied to a crime	Modules 12 and 14
Money laundering	Disguising the criminal origin of money so that it can be spent or invested openly	Module 14
Stablecoin	A cryptocurrency token whose issuer pegs its value to a currency, usually the dollar	Modules 12 and 14
Shell company	A company with no operations of its own, often used to hide who owns an asset	Module 14
Rate per 100,000	The usual measure of homicide and overdose deaths: the number in a year for every 100,000 residents	Throughout
Provisional count	An early official figure that is revised as late records arrive	Module 4

Module 1 — The Forbidden Economy

Four Answers to a Vice, and a Market Without Courts

Recommended Reading / Reference

Book: Daniel Okrent, *Last Call: The Rise and Fall of Prohibition* (2010), the standard narrative of America's one attempt to ban a mass-market vice outright: who wanted the ban, who profited from it, and why the need for tax revenue ended it.

Reference: UNODC, *World Drug Report* (each June). The 2025 edition's booklet on contemporary drug issues sets out what is known about how trafficking groups are organized and what they earn, and how little of it can be measured.

1a. What Makes a Vice Different

A vice, as this course uses the word, is a product or service that many adults want to buy and many others want stopped: alcohol, nicotine, other drugs, gambling, pornography, and paid sex. What sets these trades apart from ordinary crime is consent. A burglary has a victim who calls the police. A drug sale, a bet, or a paid encounter has two willing parties and nobody to complain.

That one fact shapes the rest. Police cannot wait for reports, so they must go looking, with informants, undercover buyers, wiretaps, and searches. Those methods are costly and intrusive, and they leave officers wide discretion over whom to pursue. They also give sellers a reason to pay officers to look elsewhere, which is why corruption follows vice enforcement so closely.

The list of vices is not fixed. The United States banned alcohol from 1920 to 1933 and taxes it today. A federal law of 1992 stopped nearly every state from licensing bets on sports until May 14, 2018, when the Supreme Court struck it down in *Murphy v. NCAA*; 39 states and the District of Columbia now permit them. Cannabis is a federal crime to sell and, in about half the states, a licensed retail product. Iran has banned alcohol since 1979. Saudi Arabia banned it in 1952 and has since allowed narrow exceptions for some foreigners. Each society draws the line in a different place, and each moves it.

1b. The Four Answers

Governments have four basic answers to a vice, and most use more than one at a time.

Ban it. Prohibition makes production, sale, and usually possession a crime. It is the rule for cocaine, heroin, and methamphetamine almost everywhere, under three United Nations treaties (Module 2).

Tax it. A legal product can be made expensive. An excise is a tax charged per unit, such as per pack or per gallon, and governments use it both to discourage use and to raise money.

License it. The state decides who may sell, where, when, to whom, and with what advertising. The strictest form is a state monopoly, as in the seventeen American states that sell spirits through their own stores or wholesalers, or the Nordic countries' state alcohol shops.

Stop punishing the user. Decriminalization keeps a product illegal to sell but removes criminal penalties for using it or holding a small amount. It differs from legalization, which makes the supply itself lawful. Portugal has treated the possession of any drug for personal use as an administrative matter, not a crime, since July 2001 (Module 6).

The table shows how differently the same vices are treated. Later modules take each in turn.

Vice	United States	A different answer elsewhere
Alcohol	Legal at 21 in every state, and taxed by federal and state governments	Banned in Iran, and in Saudi Arabia apart from narrow exceptions for some foreigners; sold only through state shops in Sweden, Norway, and Finland
Tobacco and nicotine	Legal at 21 since December 2019; taxed, and regulated by the Food and Drug Administration (FDA)	Britain will bar sales to anyone born in 2009 or later, starting January 1, 2027 (Module 7)
Cannabis	A federal crime, apart from state-licensed medical sales since April 2026; legal for adults in 24 states	Uruguay (2013) and Canada (2018) legalized sale nationwide. Germany (2024) allows home growing and members' clubs but no shops. Thailand legalized in 2022 and returned to prescription-only sale in 2025
Cocaine and heroin	Banned; possession is a crime	Portugal (2001) refers users to a health panel instead of a court. Singapore's law sets death as the penalty for trafficking more than 15 grams of heroin
Gambling	Decided state by state: lotteries in 45 states, sports betting in 39	Mainland China bans everything but state lotteries. Brazil opened a licensed online betting market on January 1, 2025
Pornography	Legal for adults; about half the states require websites to check users' ages (Module 9)	Banned in China, Saudi Arabia, and Iran. Britain has required age checks since July 25, 2025
Selling sex	A crime everywhere except in licensed brothels in parts of rural Nevada	Sweden (1999) punishes only the buyer. Germany licenses the trade. New Zealand (2003) removed it from the criminal law (Module 10)

As of November 2026. The count of cannabis states is UNODC's (*World Drug Report 2026*); Module 6 gives the later changes.

1c. What Prohibition Taught

The United States ran the largest experiment in banning a popular vice. The Eighteenth Amendment took effect on January 17, 1920, and the Volstead Act that enforced it defined intoxicating liquor as anything above 0.5% alcohol. The law banned making, selling, and transporting alcohol. It did not ban drinking it. The Twenty-first Amendment repealed the ban on December 5, 1933.

Drinking fell, though by less than the law's authors had hoped. Nobody counted illegal sales, so economists infer consumption from deaths from cirrhosis and alcoholism and from arrests for drunkenness. Jeffrey Miron and Jeffrey Zwiebel (1991) estimated that drinking dropped to about 30% of its earlier level when the ban began, then recovered to 60% or 70% within a few years. The historian Jack Blocker (2006) argues that the ban changed habits for a generation: drinking per person did not regain its pre-1920 peak until the 1970s.

The costs were of three kinds. The trade passed to criminals, who settled disputes with guns; the national homicide rate rose through the 1920s to a peak of 9.7 per 100,000 in 1933 and fell after repeal. Enforcement corrupted police and courts. And the Treasury lost money: before the income tax arrived in 1913, taxes on alcohol had supplied roughly a third of federal revenue. Repeal came in the Depression, when governments wanted that revenue back.

Both sides of today's arguments cite the episode. One side notes that a ban did cut drinking and the liver disease that goes with it. The other notes that most Americans came to judge the violence, the corruption, and the lost taxes a worse problem than the drinking.

1d. A Market Without Courts

An illegal business faces the same problems as a legal one, with two differences. The state may seize its goods and jail its people, and it cannot ask the state to enforce a contract. The economist Gary Becker proposed in 1968 that offenders be studied as people who weigh a crime's gain against the chance and the size of punishment. Peter Reuter and Mark Kleiman applied the idea to drug prices in 1986.

Their point was that enforcement works like a tax. Dealers and couriers must be paid for the risk of prison and of violence from rivals, and those payments end up in the price. A drug that costs little to grow or make can therefore sell for many times its production cost. Most of the street price is pay for risk taken inside the country where the drug is used. Module 2 follows a kilogram of cocaine up that ladder.

The same logic limits what seizures abroad can do. Where the imported drug is a small share of the final price, destroying a shipment costs the trade little, because its replacement is cheap.

Illegality also keeps firms small. Reuter's study of New York's gambling and loan-sharking rackets, *Disorganized Crime* (1983), found many small operators and no controlling monopoly. A firm that cannot advertise, keep records, borrow from a bank, or sue a partner has trouble growing. UNODC reached a similar view of the drug trade in 2025. Trafficking, it found, is done mostly by loose networks of small groups, and large organizations are giving way to specialists who sell transport, money laundering, or corrupt contacts to many clients.

1e. Why Banned Goods Grow Stronger

A smuggler is punished for being caught with a load, whatever its strength, so the stronger product earns more for each unit of risk. The writer Richard Cowan named this the “iron law of prohibition” in 1986: the harder the enforcement, the more potent the drug.

During Prohibition bootleggers moved spirits, and beer's share of drinking collapsed. A century of drug enforcement has seen opium give way to heroin and heroin to fentanyl, a synthetic opioid about fifty times stronger by weight (Module 4). Cannabis sold in the United States averaged about 4% tetrahydrocannabinol (THC), its main active compound, in 1995 and about 16% in 2019, by UNODC's figures.

Stronger products are harder to dose. That is one reason a ban can raise the danger of each use even as it lowers the number of users.

1f. Where the Violence Comes From

Drug markets are linked to violence in three ways, set out by the sociologist Paul Goldstein in 1985 and still used by UNODC. A drug's effect on the brain can make a user violent. Users may rob or steal to pay for it. And the trade itself breeds violence, because sellers who cannot sue must collect debts, defend territory, and punish informers themselves.

Goldstein's team studied 414 homicides in selected New York City police precincts between March and October 1988, at the height of the crack trade. They judged 218 to be drug-related, and about three quarters of those arose from the business, not from the drug's effect or a user's need for money.

Violence is a business choice, and many illegal markets are quiet. UNODC's 2025 review found that groups that only trade tend to avoid bloodshed, since it draws police, while groups that control territory use it to hold their ground. Violence rises when a market is disrupted: when a leader is removed and lieutenants fight over

the succession, or when a new route opens. Module 5 returns to this, because it bears on whether arresting leaders helps.

Pressure in one place also moves a trade to another, which is called the balloon effect. Between 1995 and 2000, crackdowns cut the land under coca in Peru from about 115,000 hectares to 43,000 and in Bolivia from 49,000 to 15,000. Colombia's rose from 51,000 to 163,000, and the total for the three countries barely changed.

1g. The Heavy Users

Sellers of any vice, legal or not, depend on their heaviest customers. The economist Philip Cook calculated that the top tenth of American drinkers average about 74 drinks a week and account for well over half of all the alcohol sold. Jonathan Caulkins found that 17.7 million Americans used cannabis daily or nearly so in 2022, more than the 14.7 million who drank that often. In 1992 the figures were 0.9 million and 8.9 million.

Gambling shows the same shape. A committee of Britain's House of Lords reported in 2020 that 60% of the industry's profits came from the 5% of customers who were problem gamblers or at risk of becoming so. Australia's Productivity Commission estimated in 2010 that problem gamblers supplied about 40% of the money lost in slot machines.

Two things follow. A business that grows by selling more to its heaviest users has interests opposed to public health, which is the main argument against handing a newly legal vice to ordinary commercial firms. And a policy that barely touches the typical user, such as a higher price, can matter a great deal if it reaches the heavy one.

1h. Taxing Sin

A tax on a vice is called a sin tax, and economists give it two justifications. The first, from Arthur Pigou in 1920, is that a price should include the harm a product does to other people, such as a drunk driver's victims. The second, from Jonathan Gruber and Botond Kőszegi in 2001, is that addictive goods harm the buyer's own future self in ways the buyer underrates. On that view a tax helps people do what they themselves would prefer.

Taxes work because demand responds to price, though less than one for one. A review of 112 studies found that a 10% rise in price cuts beer drinking by about 5%, wine by 7%, and spirits by 8% (Wagenaar, Salois and Komro, 2009). For cigarettes the usual estimate is about 4%.

Two objections follow. Sin taxes take a larger share of a poor household's income than of a rich one's, since poorer households spend more of their income on tobacco and lottery tickets. And a tax can be set so high that it rebuilds the illegal market it replaced. Australia, where tax makes up about four fifths of the price of a pack of cigarettes, is the current test (Module 7).

Governments also come to depend on the money. American states collected $17.9 billion in taxes on commercial gambling in 2025, by the casino industry's count, and their own lotteries passed tens of billions of dollars more to state budgets and designated causes.

1i. Counting the Hidden

Nobody files accounts for an illegal trade, so every figure in this course about one is an estimate. It helps to know how each kind is made.

Surveys ask people what they use. The main American one, the National Survey on Drug Use and Health, found that 44.6 million people aged 12 or older, 15.3%, had a substance use disorder involving alcohol or drugs in 2025. Surveys miss people who are homeless, in prison, or unwilling to answer. For 2010 the survey implied about 60,000 daily heroin users, where estimates built from tests of arrested people implied about a million.

Wastewater testing measures drug residues in sewage. It cannot count users, but it does not depend on honesty. In Australia it showed methamphetamine use rising while surveys showed it falling.

Seizures measure police effort as much as supply. Colombia seized 966 tons of cocaine in 2024, about 40% of all the cocaine seized in the world, in a year when estimated output still set a record.

Crop surveys measure fields by satellite, then multiply by estimates of the yield and of how much drug the laboratories extract. Each step adds error, which is why UNODC gives the cocaine output of 2024 as 4,100 tons with a range of 3,800 to 4,700.

Prices and purity are the best sign of scarcity, since a drug that is getting harder to supply should get dearer or weaker. They are collected in few places.

Estimates of the whole criminal economy stack these uncertainties on top of one another. UNODC put all criminal proceeds at about $2.1 trillion in 2009, or 3.6% of world output, with a range from 2.3% to 5.5%. The research group Global Financial Integrity estimated in 2017 that eleven kinds of cross-border crime earned $1.6 trillion to $2.2 trillion a year. UNODC's own count of the world's drug users in 2018 was 269 million, with a range from 166 million to 373 million. Figures like these give the order of magnitude and little more.

Worked example — One Number Built From Two Others

UNODC's 2026 report says that drug sales on darknet markets peaked at about $3.1 billion in 2021, which UNODC puts at “some 1.7 per cent of all retail drug sales in the United States and Europe.” Step 1, find the total that the percentage implies: $3.1 billion ÷ 0.017 = about $182 billion. Step 2, look for that total in UNODC's sources. Its 2025 report gives American retail drug sales as $146 billion, an estimate by the RAND Corporation for 2016, and the European Union's as €31 billion, an estimate for 2021. Step 3, convert and add: €31 billion at 2021's average rate of about $1.18 is $37 billion, and $146 billion + $37 billion = $183 billion. Result: the tidy “1.7%” joins an American estimate for 2016 to a European one for 2021, made by different methods five years apart. Step 4, add the error. UNODC's count of drug users in 2018 ran from 166 million to 373 million, or 38% either side of its central figure. If the sales totals are no firmer than that, the darknet's true share could lie anywhere from about 1.2% to 2.7%. A reader who meets a precise figure about an illegal market should ask what it was built from.

Module 1 Key Points

The Forbidden Economy

• Governments answer a vice in four ways: ban it, tax it, license it, or stop punishing its users. Most mix them.

• Prohibition left Americans drinking about a third less after its first years, at the cost of a violent illegal trade and lost taxes.

• Illegal sellers charge for risk, so enforcement works like a tax, and most of a drug's street price is risk pay.

• Bans favor compact, potent products: spirits over beer in the 1920s, fentanyl over heroin now.

• A small group of heavy users buys most of any vice, which sets sellers' profits against public health.

• Every size figure is an estimate with a wide range: UNODC's 2018 count of drug users ran from 166 million to 373 million.

Module 1 Quiz

Check Your Understanding

1. What distinguishes decriminalization from legalization?

A) They are two words for the same policy
B) Decriminalization applies only to alcohol and tobacco
C) Legalization lifts penalties for users only, while decriminalization makes sale and supply lawful too
D) Decriminalization removes criminal penalties for users, while selling stays illegal

2. By Miron and Zwiebel's estimate, what happened to American drinking under Prohibition?

A) It fell to about 30% of its earlier level at first, then recovered to 60% or 70%
B) It rose, because illegal liquor was cheaper
C) It stopped almost completely until 1933
D) It was unchanged, since the law banned only sales

3. Why did Reuter and Kleiman compare drug enforcement to a tax?

A) Fines fund the police
B) Sellers pass the cost of risk on in the price
C) Governments secretly collect a share of dealers' revenue at the border
D) Seized drugs are auctioned and the proceeds go to the Treasury

4. What does the “iron law of prohibition” predict?

A) Every ban eventually collapses into legalization
B) Prices fall as police seize more of the supply
C) Banned drugs get more potent
D) Heavy users are the first to quit when a drug is outlawed

5. In Goldstein's study of New York homicides in 1988, what lay behind most of the drug-related killings?

A) The drugs' effect on users' behavior
B) Users robbing or stealing to pay for drugs
C) Disputes within the trade
D) Police shootings during raids on dealers

Module 2 — The Drug Market

331 Million Users, Two Kinds of Supply, and a Markup at Every Border

Recommended Reading / Reference

Book: Tom Wainwright, *Narconomics: How to Run a Drug Cartel* (2016), a business journalist's account of the drug trade as an industry, with its supply chains, franchises, labor problems, and competition.

Reference: UNODC, *World Drug Report 2026* (June 26, 2026), with its online data platform: the yearly count of users, production, seizures, and prices that this module and the two after it draw on.

2a. Who Uses What

UNODC's *World Drug Report 2026*, published on June 26, 2026, estimates that 331 million people used an illegal drug at least once in 2024. That is 6.2% of the world's population aged 15 to 64, up from 5.2% in 2014, and 34% more people than a decade earlier.

Part of the rise is arithmetic. The population of that age grew by about 10% over the decade, and the share using a drug rose by about 19%. Multiplying 1.10 by 1.19 gives 1.31, close to the reported increase, so roughly one third of the growth is more people and two thirds a higher rate of use. UNODC adds that some of the higher rate reflects “new and more accurate data”, not new users.

Drug	Users in 2024	What the count covers
Cannabis	256 million	Up 40% in a decade; by far the most used illegal drug
Opioids	63 million	Nearly half use opiates, the drugs made from the opium poppy (opium, morphine, heroin); the rest use synthetic or pharmaceutical opioids
Amphetamines	32 million	Mostly methamphetamine, the largest market for a synthetic drug
Cocaine	25 million	Up from about 17 million in 2013 (Module 3)
Ecstasy (MDMA)	21 million	A synthetic stimulant taken mainly in clubs and at festivals

UNODC, *World Drug Report 2026*. A person who used two drugs is counted under each, so the rows sum to more than 331 million.

Use is spread unevenly. The Americas and Asia have about 105 million users each and Africa 74 million, while Oceania has the highest rate, at 15.5% of adults. About three quarters of users are men, and most are between 15 and 34.

Most use is occasional, and most of the harm falls on a minority. UNODC counts 63 million people with a drug use disorder, meaning use that has become harmful or dependent. Only 1 in 12 of them received any treatment in 2024: 1 in 9 men and 1 in 23 women.

About 492,000 deaths were attributed to drug use in 2023, 29% more than a decade before. Overdoses accounted for 172,500 of them. A larger number, about 225,000, died of liver disease caused by hepatitis C, a virus spread by shared needles. Some 14.3 million people inject drugs, and nearly one in eight of them lives with the human immunodeficiency virus (HIV).

2b. Plants and Laboratories

Illegal drugs come from two kinds of source, and the difference governs the business. Three plants supply the traditional drugs: cannabis; the coca bush, whose leaves yield cocaine; and the opium poppy, whose sap yields opium, morphine, and heroin. Plants need land, labor, and a season. Fields can be seen from a

satellite, farmers can be paid to grow something else, and a crop can fail. Coca is grown commercially only in the Andes of Colombia, Peru, and Bolivia, so all cocaine starts there.

Synthetic drugs are made from chemicals in a laboratory, which can be anywhere the chemicals can be had. Methamphetamine, ecstasy, and fentanyl are the main ones. They need no farmers, their makers can change the recipe when a chemical is restricted, and the product is compact.

UNODC counted 755 “new psychoactive substances” on sale in 2024, the most in any year, of which 118 had not been seen before. These are compounds outside the treaties' lists, often designed to be. Four times as many have now been identified as there are drugs under international control. “We have seen an unprecedented spike in new types of drugs on the market,” said Monica Juma, UNODC's executive director, at the report's launch.

So far the new substances matter more as a warning than as a market: in the countries with data, about 0.3% of adults used one in the past year. Methamphetamine is different. It is sold nearly everywhere, and seizures of it have grown by about 13% a year (Module 4).

2c. Opium After the Taliban's Ban

The clearest recent test of what a supply shock does came from Afghanistan, which had been growing about 80% of the world's illegal opium. The Taliban government banned poppy cultivation in April 2022. The land under poppy fell from 232,000 hectares in 2022 to 10,200 in 2025, and output from about 6,200 tons to 296. World output fell by 74% in 2023 alone.

Myanmar, at war with itself since a coup in 2021, became the largest producer, with more than 1,000 tons in 2025 against about 420 in 2021. UNODC sees no sign that Myanmar's farmers were responding to the Afghan shortage. The cause was the collapse of order at home.

For three years the world's heroin users were supplied largely from stocks. Opium keeps for years, and Afghan traders had stored it. Its wholesale price in Afghanistan rose to a peak near $800 a kilogram and stood at about $600 in the year before the report, still far above its level before the ban. UNODC judged that the stocks could last until about the end of 2026. The ban has since weakened. UNODC's Afghanistan Opium Survey 2026, reported on October 29, 2026, put the land under poppy at about 43,300 hectares, more than four times the 2025 figure but still about 80% below 2022. It put potential opium output at about 1,470 tons, up from 296 tons in 2025, with a wide range of 800 to 2,400 tons.

In the consumer markets the squeeze showed up as a higher price and a weaker product. Across twelve countries with data, the price of a pure gram of heroin roughly doubled in 2023 and 2024, from about $250 to nearly $500, and purity fell. Admissions to treatment for heroin fell in 17 of 19 reporting countries.

UNODC calls this a possible turning point. Synthetic opioids are filling part of the gap: fentanyl, and a newer family called nitazenes, some of them stronger than fentanyl. At least 34 nitazenes have been found in 37 countries since 2019. Britain recorded about 750 deaths involving them between June 2023 and August 2025, and in Estonia they were involved in 42 of the 100 drug deaths of 2024.

UNODC compares the moment to the shift from morphine to heroin a century ago, with two cautions. Outside North America, synthetic opioids are not yet cheap enough to undercut heroin by much. And Europe's heroin use was already in a long decline.

2d. The Markup, From Farm to Street

Drugs are cheap to produce and dear to buy, and the difference builds up at each border and each change of hands. The clearest published ladder is for cocaine sold in the United States, compiled by the economist Peter Reuter in 2009 from prices for 2006 and 2007. The coca leaf needed to make one kilogram earned a Colombian farmer about $800. The finished kilogram sold for about $2,200 at export from Colombia and $14,500 on arrival in the United States. A mid-level dealer paid $19,500. By the time the kilogram had been sold in single grams on the street at the usual retail purity of 64%, it had brought in about $78,000, a total worked out from the 2007 average of $121.82 per pure gram.

Two conclusions hold for every drug. Farmers receive a tiny share: UNODC estimated in 2005 that the world's drug crops earned their growers $13 billion in a year when retail sales were $322 billion, or about 4%. And most of the value is added inside the consuming country, after the border, where a kilogram is divided among many small sellers who each carry a risk of arrest. That is the risk pay described in Module 1.

The same shape appears wherever it has been measured. Afghanistan's exports of opiates were worth $1.7 billion to $2.6 billion in 2021, while moving them across Central Asia and Russia alone grossed about $10 billion a year. In European ports, the crews who pull cocaine out of shipping containers are paid 7% to 15% of a load's value.

The money is shared as unevenly among sellers as along the chain. The economist Steven Levitt and the sociologist Sudhir Venkatesh obtained the accounts of a Chicago gang that sold crack cocaine around 1990. Its street-level sellers earned about the minimum wage or less, while the gang's leader earned many times as much.

On the buyers' side, the RAND Corporation estimated that Americans spent about $146 billion on illegal drugs in 2016, or 0.8% of the economy's output. The European Union's retail market was put at €31 billion in 2021, of which cannabis took 39%, cocaine 37%, and heroin 17%.

2e. Where Drugs Are Sold Now

Most drugs still pass from hand to hand, but the meeting is now arranged on a phone. Three channels have grown.

Darknet markets are hidden websites where sellers post listings, buyers pay in cryptocurrency, and the goods arrive by post. Their drug sales peaked at about $3.1 billion in 2021. They fell in April 2022, when German police shut down the largest, a Russian-language market called Hydra, and have settled near $2.5 billion a year. About three quarters of the value in 2024 came from orders large enough to be for resale, so the darknet now works mostly as a wholesaler.

Social media and messaging apps have overtaken it for retail. In a European web survey of drug users, which is not a representative sample, 19% said they had bought through social media and 4% through the dark web.

Encrypted phone networks sold to criminals, such as EncroChat and Sky ECC, carried traffickers' own business messages until police broke into them. One network, AN0M, was run by police from the start.

The bulk still moves the old way, by sea and by road. Cocaine crosses oceans in shipping containers, on fishing boats, and in low-riding vessels built to avoid radar, the largest of which carry up to 10 tons. Colombia's navy seized 228 of those between 1993 and 2023.

2f. The Treaty System

The world's drug laws rest on three United Nations treaties that nearly every country has joined. The Single Convention on Narcotic Drugs (1961) limits opium, coca, cannabis, and the drugs made from them to medical and scientific use. The Convention on Psychotropic Substances (1971) adds synthetic drugs such as amphetamines and sedatives. A third convention (1988) requires each state to make trafficking a crime, control the chemicals used to make drugs, punish money laundering, and extradite traffickers.

Four bodies run the system. The Commission on Narcotic Drugs, made up of 53 member states, meets each March in Vienna and votes drugs onto and off the treaties' lists, which are called schedules. The World Health Organization (WHO) advises it on the science. The International Narcotics Control Board, thirteen independent experts, monitors whether countries comply. UNODC collects the data and helps governments enforce the rules.

The system has two strains. One is legal cannabis. The treaties do not permit a recreational market, yet Uruguay, Canada, and about half the American states have one. In December 2020 the Commission voted 27 to 25 to remove cannabis from the strictest schedule, accepting that it has medical uses, but it left the ban on other use in place.

The other strain is pain relief. The same treaties are meant to keep opioid medicines available, and for most people they have not: 87.5% of the world's population lives in countries with below-average access to them.

Enforcement falls mainly on users. In 2024 about 5.9 million people worldwide had formal contact with police over drug offenses, about two thirds of them for use or possession. Some 2.2 million were convicted, and about nine in ten of the people who came into contact with police were men. More than four fifths of reporting countries now offer an alternative to conviction for people caught using drugs.

Worked example — A Kilogram's Climb

Inputs: Reuter's ladder for a kilogram of cocaine sold in the United States (section 2d): $800 for the leaf, $2,200 at export, $14,500 at import, $78,000 at retail. Step 1, each stage's share of the final price. The farmer's $800 is 1.0% of $78,000. Everything done in Colombia, from the field to the export sale, comes to $2,200, or 2.8%. Smuggling the kilogram into the United States adds $14,500 − $2,200 = $12,300, or 15.8%. Distribution inside the United States adds $78,000 − $14,500 = $63,500, or 81.4%. Step 2, test a policy. Suppose that eradication doubled the export price in Colombia, from $2,200 to $4,400. If each later stage adds a fixed sum for its own costs and risks, the extra $2,200 passes through to the street, and the retail price rises to $80,200. That is an increase of 2.8%, or about $2 on a gram that sold for $78. Step 3, compare a change near the consumer. A 10% rise in the cost and risk of distribution inside the United States would add $6,350, or 8.1%. Result: on these figures a dollar of extra cost imposed near the buyer raises the street price by as much as a dollar imposed in the field, but the field accounts for only a few cents of every dollar spent. This is why analysts expect crop eradication to do little to street prices (Module 3 weighs the evidence). The ladder's figures are from the mid-2000s; the proportions, not the dollar amounts, are the point.

Module 2 Key Points

The Drug Market

• About 331 million people, 6.2% of those aged 15 to 64, used an illegal drug in 2024; three in four of them used cannabis.

• Plant drugs tie supply to places, as cocaine is tied to the Andes. Synthetic drugs can be made wherever the chemicals are.

• The Taliban's 2022 ban cut Afghan opium output 95% by 2025 and roughly doubled the price of pure heroin abroad; poppy farming rebounded in 2026.

• Farmers receive a few percent of a drug's street value. Most of the markup is added inside the consuming country.

• Only 1 in 12 people with a drug use disorder received treatment in 2024, and only 1 in 23 women.

• Three UN treaties oblige states to ban non-medical supply, which legal cannabis markets now strain.

Module 2 Quiz

Check Your Understanding

1. Which illegal drug had the most users worldwide in 2024, by UNODC's count?

A) Cocaine
B) Opioids, including heroin and fentanyl
C) Amphetamines and ecstasy
D) Cannabis

2. What followed the Taliban's ban on opium poppy in April 2022?

A) Afghan output fell by about 95%, and pure heroin's price abroad roughly doubled
B) Production moved entirely to Mexico within a year
C) Output fell briefly, then passed its old level by 2024
D) World output was unchanged, because Myanmar's rose by as much as Afghanistan's fell

3. Why are synthetic drugs harder to control than plant-based ones?

A) They are always weaker
B) They need no fields, so they can be made wherever the chemicals can be had, and new variants keep appearing
C) No treaty covers any of them
D) They cannot be detected in wastewater or seizures

4. In Reuter's ladder, where is most of the value of a kilogram of cocaine added?

A) Inside the consuming country, as it passes from importer to street dealer
B) On the farm
C) At the laboratory in the Andes
D) During the sea crossing

5. What share of people with a drug use disorder received any treatment in 2024?

A) About half
B) About 1 in 12
C) Roughly two thirds of men and one third of women
D) Nearly all, in rich countries

Module 3 — Cocaine's Boom

Record Output, Colombia's Fields, Ecuador's Ports, and Europe's Demand

Recommended Reading / Reference

Book: Toby Muse, *Kilo: Inside the Deadliest Cocaine Cartels, from the Jungles to the Streets* (2020), which follows a kilogram from a Colombian coca farm through the laboratory, the armed groups, and the smugglers to the coast.

Reference: InSight Crime, the yearly cocaine seizure round-up and homicide round-up (insightcrime.org): country-by-country figures for Latin America and its export markets, compiled from official sources.

3a. A Record Crop

Cocaine is the fastest-growing of the major drug markets. UNODC estimates that the Andes produced about 4,100 tons of it in 2024, the most ever, against 3,708 tons in 2023 and 2,757 in 2022. Output is now more than four times its low point of 2014. The figure is “potential” production: what the coca harvest would yield if every leaf were processed, counted at 100% purity. Street cocaine is diluted, so the weight sold is larger.

The land under coca reached a record 385,100 hectares in 2024, but land explains only part of the growth. Farmers have learned to get far more from each hectare. Around 2000 a Colombian hectare gave two or three harvests a year and about 4 kilograms of cocaine. Today's best plots give up to six harvests and more than 10 kilograms. Nearly half of Colombia's coca now grows in just ten municipalities, in dense, high-yield zones that analysts of UNODC's survey call enclaves.

Demand has grown too, though more slowly than supply. UNODC counts 25 million users, up from about 17 million in 2013. When supply outruns demand, the price should fall or the product should get purer, and in Europe both have happened (section 3e).

3b. Colombia: The Crop and the Groups That Tax It

Colombia grows about two thirds of the world's coca: 253,000 hectares in 2023 and a record 261,000 in 2024. Its government and UNODC have fought over the numbers. President Gustavo Petro, in office from 2022 to 2026, argued that the yield tests behind the output estimates were out of date. UNODC conceded limitations in its methods. When its survey for 2024 appeared in June 2026, months late, it gave no estimate of cocaine output for the first time in more than twenty years. An unpublished UNODC figure reported by the Spanish newspaper *El País* put it at 3,001 tons.

The farmers are not the traffickers. Armed groups control the coca zones, tax the growers, buy the coca paste, guard the laboratories, and sell the routes. The largest is the Clan del Golfo, also called the Gaitanistas, with an estimated 6,000 to 7,000 members in 2025. The others are the National Liberation Army (ELN), a guerrilla force founded in the 1960s, and factions of the Revolutionary Armed Forces of Colombia (FARC) that rejected the peace agreement of 2016.

Petro tried to negotiate with all of them at once, a policy he called Total Peace, and he all but stopped the forced destruction of coca. Hectares pulled up by hand fell from 68,893 in 2022 to 9,403 in 2024. His government chose to chase the finished drug instead, and seizures inside Colombia rose to 445.9 tons in 2025. The talks failed. Fighting between two groups in the Catatumbo region killed 117 people and

displaced more than 64,000 in the first four months of 2025, and the armed groups' ranks grew by about 15% in seven months.

Washington answered with a measure it had not used against Colombia since the 1990s. On September 15, 2025, it “decertified” the country, a yearly finding that a government has “failed demonstrably” to meet its drug-control obligations, though a waiver kept aid flowing. On October 24, 2025, the Treasury placed sanctions on Petro himself.

Colombians then changed course. Abelardo de la Espriella, a lawyer who promised a hard line, won the presidential runoff of June 21, 2026, by about 250,000 votes out of more than 25 million and took office on August 7. He ended the talks, ordered a military offensive, and signed 94 extradition orders in his first seven weeks. The United States said it intended to provide a $1 billion security package. His plan to resume spraying coca from the air, in a trial over 1,000 hectares in Putumayo with a herbicide other than glyphosate, was suspended by a lower court in September. On November 3, 2026, a regional tribunal kept the trial suspended for up to four months.

3c. Contested Ground: Does Destroying the Crop Cut the Supply?

The case that it does: American officials, Colombia's new president, and the defenders of Plan Colombia, the American aid program begun in 2000, point to the record. Colombia's coca fell from 163,300 hectares in 2000 to about 48,000 in 2013, years in which aircraft sprayed herbicide on as many as 172,000 hectares a year. Colombia stopped spraying in 2015. Coca stood at 96,000 hectares that year, 146,000 the next, and 253,000 by 2023. The latest records came as eradication by hand fell by 86%. In de la Espriella's words, “Coca cannot be combated with doctored statistics or manipulated maps.”

On this view the crop responds to pressure like any other business. A farmer who expects to lose the field plants less, and a state that stops destroying coca signals that growing it is safe.

The case that it does not: The economists Daniel Mejía and Pascual Restrepo, and research groups such as InSight Crime, argue that eradication moves coca more than it removes it. Their studies of Colombia's spraying found that each hectare sprayed reduced the crop by only a few hundredths of a hectare, because farmers replanted, pruned, or moved. Colombia pulled up a record 130,000 hectares by hand in 2020, and coca still expanded. Growth now comes from yields, which eradication of scattered plots does not touch.

Critics add two costs. Spraying was halted in 2015 after the World Health Organization's cancer agency classed the herbicide, glyphosate, as probably carcinogenic to humans, and one study linked spraying to skin problems and miscarriages nearby. And destroying a poor farmer's only cash crop, in places the state otherwise never reaches, recruits for the armed groups.

The evidence: Both records are real. Sustained spraying, together with troops and police, did coincide with a fall of 70% in Colombia's coca, and the purity of cocaine sold in the United States fell for several years after 2007. But the gains lasted only while the pressure did, and part of the crop moved to Peru and Bolivia in those years. Colombia's own health institute logged 93 reports of possible harm from spraying between 2003 and 2015 and could prove no cause. Peru's coca has fallen three years running, to 84,546 hectares in 2025, with eradication by hand and no spraying.

The arithmetic of Module 2 sets the limit. The farm accounts for about 1% of cocaine's street price, so even a doubling of what traffickers pay for leaf adds little to what a user pays.

The course's reading, stated once: destroying crops lowers output only while it is sustained, against a plant that can be replanted within months, and it does little to street prices. It works best as one part of bringing the state into a region, and worst as a substitute for doing so.

3d. Ecuador: Ports and Murders

Ecuador grows almost no coca. It sits between Colombia and Peru, the two largest growers, uses the American dollar as its currency, and is the world's largest exporter of bananas, which leave for Europe by the thousands of refrigerated containers. Those three facts made it the main exit for cocaine bound for Europe, and no country shows better what the trade does to a place it passes through.

Year	Homicides	Per 100,000 people
2019	1,189	6.8
2021	2,495	14.1
2023	8,248	47.3
2024	7,063	38.8
2025	9,216	50.9, the highest on record
January-September 2026	6,285	8.1% fewer than in the same months of 2025

Ecuador's Interior Ministry, as reported by Primicias and Extra; other official counts differ by a few percent.

The killing follows the routes. In the districts around Posorja, a deep-water port opened in 2019, homicides rose from 4 that year to 155 in 2023. Two gangs that grew up inside Ecuador's prisons do most of the fighting, each allied to a Mexican cartel: Los Choneros and Los Lobos. They are paid by foreign traffickers to move and guard cocaine, and they fight over the ports, the prisons, and the neighborhoods between.

President Daniel Noboa declared an “internal armed conflict” on January 9, 2024, named 22 gangs as terrorist groups, and put the army in charge of the prisons. Homicides fell in 2024 and then rose to a record. The United States added both gangs to its list of foreign terrorist organizations in September 2025, and the leader of Los Choneros, José Adolfo Macías, known as Fito, was recaptured and sent to New York for trial. In a referendum on November 16, 2025, Ecuadorians refused to allow foreign military bases. American forces nonetheless joined a strike on an alleged trafficking camp inside Ecuador on March 6, 2026.

In 2026 the violence has eased in the port city of Guayaquil and risen elsewhere, including a 62% increase in the province of El Oro in the first half of the year. Pressure in one district moved the trade to the next.

3e. Europe, the Growth Market

The United States was cocaine's first mass market, and Europe is its newest. Europe now has about 5.5 million users, 22% of the world's. Seizures in Western and Central Europe rose sevenfold between 2014 and 2023, yet over nearly the same years the drug sold there became purer while its price stayed about the same, which after inflation means cheaper. A market in which police seize seven times as much while the product improves is one with plenty to spare.

Most of it arrives by sea, hidden in containers of legal cargo. The great ports of Antwerp and Rotterdam were the main doors, and as their security tightened the trade spread. In 2025 Belgium seized 55 tons, 25% more than the year before, and the Netherlands 24.5 tons, down from 38. France seized 31.3 tons, up 49%, and Portugal 25.6 tons, its most in twenty years.

Price explains the pull. By UNODC's figures, a gram of cocaine retails for $4 or $5 in the countries that produce it and for $50 to $150 in North America and Europe. In Australia, the farthest large market, it costs 300 to 350 Australian dollars, and wastewater tests show record use there all the same.

3f. Routes and Brokers

No single organization runs this trade. It is a chain of specialists, each selling a service to the next, as Module 1 described. Colombian and Ecuadorian groups sell at the coast. From there most cocaine for North America travels up the Pacific toward Central America and Mexico, where the Mexican cartels take it north. Cocaine for Europe leaves from Ecuador's and Brazil's ports, or crosses the Caribbean, or goes by way of West Africa, where UNODC says seizures since 2019 point to “a strong resurgence” of the route.

The buyers in Europe are brokers. Europe's police agency, Europol, reports that the 'Ndrangheta, the mafia of Calabria in southern Italy, works with Brazil's largest gang to bring cocaine across the Atlantic, and InSight Crime describes Albanian networks as the most active European traffickers in Latin America (Module 11). At the destination port, local crews are paid a share of each load to pull it from the container before customs can.

The chain adapts quickly. South America accounted for 64% of the world's cocaine seizures in 2024, its highest share since 1984, and traffickers responded by sending smaller loads through more ports: UNODC reports that the average size of seized containers bound for Belgium dropped by 39%.

Worked example — Why Hectares Mislead

Inputs: UNODC's estimates for Colombia. In 2022, 230,000 hectares of coca and 1,738 tons of potential cocaine. In 2023, 253,000 hectares and 2,664 tons. In 2024, 261,000 hectares, of which 9,403 were pulled up by hand. Step 1, the yield in each year: 1,738 tons ÷ 230,000 hectares = 7.6 kilograms per hectare in 2022, and 2,664 ÷ 253,000 = 10.5 kilograms in 2023. Step 2, split the growth. The area grew by 253,000 ÷ 230,000 = 1.10, or 10%. The yield grew by about 39% (10.53 ÷ 7.56 = 1.39). Together, 1.10 × 1.39 = 1.53, which is the 53% jump in output. Result: about four fifths of the increase came from getting more out of each hectare and one fifth from planting more of them. Step 3, set eradication against that. The 9,403 hectares destroyed in 2024 were 3.6% of the crop. A rise in yield of 39% is equivalent to planting about 90,000 extra hectares at the old yield, nearly ten times what was destroyed. A policy measured in hectares is aiming at the smaller of the two numbers.

Module 3 Key Points

Cocaine's Boom

• Cocaine output reached about 4,100 tons in 2024, a record and more than four times its 2014 low.

• Most of the growth came from yields: Colombia's cocaine per hectare rose 39% in a single year.

• Colombia grows two thirds of the world's coca, taxed by armed groups; its new president reversed course in August 2026.

• Ecuador's homicide rate rose from 7 per 100,000 in 2019 to 51 in 2025 as it became cocaine's exit to Europe.

• Europe's seizures rose sevenfold from 2014 to 2023 while cocaine there became purer and cheaper.

• The course's reading: destroying crops lowers output only while sustained and does little to street prices.

Module 3 Quiz

Check Your Understanding

1. What mainly drove the 53% jump in Colombia's potential cocaine output in 2023?

A) A doubling of the land planted with coca
B) New coca fields opened in Ecuador and Venezuela
C) The end of all eradication by hand
D) Higher yields per hectare

2. What did the United States do about Colombia's drug record in September 2025?

A) It praised the peace talks
B) It ended all military aid at once
C) It found that Colombia had “failed demonstrably” but kept aid flowing with a waiver
D) It certified Colombia as fully cooperating, as it had each year since the 1990s, and doubled its aid

3. Which country's homicide rate rose from about 7 per 100,000 people in 2019 to about 51 in 2025?

A) Ecuador
B) Colombia
C) Bolivia, after its coca boom
D) Peru, around its Pacific ports

4. What does “potential” cocaine production measure?

A) Cocaine seized
B) Output if all coca were processed, at full purity
C) The amount that actually reaches consumers after seizures and losses along the way
D) The weight of coca leaf harvested, before any processing

5. Why do analysts expect crop eradication to have little effect on street prices?

A) Coca cannot be killed
B) Farmers are paid in advance for several years
C) The farm accounts for about 1% of the street price, so even a doubled farm cost adds little
D) Consumers do not respond to price at all

Module 4 — Fentanyl and the Synthetic Turn

Chemicals, Laboratories, and a Death Toll That Is Falling

Recommended Reading / Reference

Book: Ben Westhoff, *Fentanyl, Inc.: How Rogue Chemists Are Creating the Deadliest Wave of the Opioid Epidemic* (2019), a reporter's account of the chemical suppliers, the laboratories, and the users, written as the drug took over the American market.

Reference: The Centers for Disease Control and Prevention (CDC), *Provisional Drug Overdose Death Counts*, updated each month: the running national and state totals this module quotes.

4a. A Drug With No Fields

Fentanyl is an opioid painkiller first made in a Belgian laboratory in 1959 and still used in hospitals. The fentanyl sold on the street is made illegally from industrial chemicals called precursors. It changed the drug business because it removed the farm. A trafficker in heroin needed poppy fields, farmers, and a harvest. A trafficker in fentanyl needs chemicals, a room, and someone who can follow a process.

The chain, as American agencies describe it, has three links. Chemical companies and brokers in China, and increasingly India, sell the precursors. Mexico's two largest criminal groups, the Sinaloa Cartel and the Jalisco New Generation Cartel, make the drug and press it into counterfeit pills. Couriers then bring it north, mostly hidden in vehicles at legal border crossings, and most of those caught carrying it are American citizens. The Drug Enforcement Administration (DEA) says almost all the fentanyl in the country arrives this way.

The economics favor the seller at every step. Fentanyl is so strong that a year's supply for the whole American market weighs a small fraction of what the cocaine market needs. A small load is easy to hide and cheap to replace. The DEA estimated in 2019 that a pill cost about a dollar to make and sold for ten times that or more. This is the iron law of Module 1 at its extreme: the most compact product wins.

The same strength makes it deadly. Makers working without controls produce pills of uneven dose, and a user cannot tell a weak one from a strong one.

4b. China, Tariffs, and Mexico

China once shipped finished fentanyl directly to American buyers by post. In May 2019 it placed the whole family of fentanyl compounds under control, and the direct shipments stopped. The trade moved one step back, to precursors, and the manufacturing moved to Mexico.

Washington has since pressed both countries. In February 2025 the United States imposed a tariff on Chinese goods that it tied to fentanyl, raised it to 20% in March, and halved it after the two presidents met on October 30, 2025, when China agreed to cooperate in reducing the flow of precursors to North America. The Supreme Court ended the tariff on February 20, 2026, ruling 6 to 3 that the emergency law it rested on does not authorize tariffs at all. At home, Congress made the ban on fentanyl's chemical relatives permanent in July 2025, and an executive order of December 15, 2025, classed fentanyl as a “weapon of mass destruction”.

Mexico, under President Claudia Sheinbaum, has handed over prisoners in bulk: 29 accused cartel figures on February 27, 2025, and 26 more that August. Its forces reported dismantling more than 1,000 drug

laboratories in her first nine months. The Sinaloa Cartel has meanwhile turned on itself. Ismael Zambada, known as El Mayo, who had led it for decades, was flown to the United States and arrested on July 25, 2024, betrayed, he said, by a son of his former partner Joaquín Guzmán, El Chapo. Zambada pleaded guilty in August 2025, as did two of Guzmán's sons that year. Their followers have fought each other in Sinaloa since September 2024, and the Treasury described the two factions in September 2026 as “deadlocked in a costly civil war”.

4c. Counting the Dead

The United States measures its drug crisis in death certificates. The CDC publishes a provisional count each month, covering the twelve months up to a date about four months earlier. Because some certificates arrive late, it reports a “predicted” total that allows for the missing ones. Final counts for a calendar year come more than a year later and run a little lower.

Twelve months ending	Predicted overdose deaths	Note
August 2023	112,418	The peak
December 2024	81,313	The steepest yearly fall on record
December 2025	69,973	Almost 14% below 2024; the third yearly fall in a row
March 2026	67,798	12.3% below a year earlier
May 2026	66,478	11.5% below a year earlier; the latest count as of November 11, 2026

CDC, National Center for Health Statistics, provisional counts; the latest is from the data released in October 2026.

The latest total is 41% below the peak and the lowest since early 2017. It still means about 182 deaths a day, and overdose remains the leading cause of death for Americans aged 18 to 44.

Fentanyl and its relatives drove the rise and are driving the fall. Deaths involving synthetic opioids were 34,507 in the year to May 2026, down 19% in a year. Deaths involving stimulants such as methamphetamine were 24,409, down 14%, and those involving cocaine 19,225, down 6%. The categories overlap, because many deaths involve more than one drug.

The fall is uneven. Deaths declined in 46 of the 52 jurisdictions the CDC tracks and rose in six, led by New Mexico, up 32% to its worst year on record, with Nebraska and Colorado up about 10%. Fentanyl reached the western states years after the East. In 2019 the West had the country's lowest overdose death rate, and it now has the highest.

The burden is also unequal among groups. In 2024, by a study published in the journal Addiction, the death rate was 50.8 per 100,000 among American Indians and Alaska Natives and 36.0 among Black Americans, against 23.7 for the country as a whole.

4d. Contested Ground: Why Did the Deaths Fall?

Nobody predicted the fall, and researchers do not agree on its cause. The CDC lists several factors without ranking them. Five explanations have serious advocates.

The supply changed. A study published in *Science* in January 2026, whose authors include Peter Reuter, argues that the fentanyl trade suffered a supply shock. The purity of seized fentanyl fell after 2022, users reported a “drought” in 2023, and the authors suggest that Chinese action against precursor sellers was the cause. DEA laboratories found that about five in ten seized pills held a potentially lethal dose in 2024, down

from seven in ten the year before. The authors say the case is not certain, and warn that producers may find new suppliers.

Rescue and treatment spread. Federal health officials credit naloxone, a spray that reverses an opioid overdose and has been sold without a prescription since 2023, and wider use of the treatment medicines buprenorphine and methadone. A review by the Brookings Institution in August 2026 found that both almost certainly saved lives but judged neither large enough to account for a fall of about half in fentanyl deaths.

Fewer people are at risk. An epidemic can burn through the people most exposed to it. Many of the heaviest users have died, and surveys show fewer teenagers starting drug use. No test separates this from the other explanations, and it offers policymakers nothing to do.

Users changed how they take it. By 2022 smoking had overtaken injecting as the commonest route in overdose deaths, and injecting carries the higher risk. Smoked fentanyl still kills, and the shift began before deaths fell.

Enforcement worked. The administration points to sanctions on chemical suppliers, tighter borders, and pressure on Mexico. Its own health officials concede that it is hard to assign the decline to any one measure.

The evidence: Timing is the firmest fact. Deaths peaked in the year to August 2023, before the tariffs, terrorist designations, and military strikes of 2025 and 2026, so those cannot have started the fall. A second clue is that nonfatal overdoses have barely moved: the rate of emergency visits for overdose fell only 2.6% in the year to March 2026 while deaths fell 12.3%. People are overdosing nearly as often and surviving more often. That fits a weaker or more predictable drug and more naloxone on hand better than it fits fewer users.

A third clue is geography. The fall began in the eastern states, where fentanyl arrived first and had already killed many of those at risk, and it has yet to reach parts of the West. Daniel Ciccarone, a physician who studies the drug supply at the University of California, San Francisco, grants merit to several explanations and proof to none: “It's more complicated.”

The course's reading, stated once: the fall has several causes working together, with a changed drug supply and wider rescue the best supported, and it began before the measures of 2025. Because much of it rests on what traffickers happen to be selling, it could reverse.

4e. What Is in the Supply Now

The supply keeps changing, and not always for the better. Dealers stretch fentanyl with animal sedatives: first xylazine, and now medetomidine, which the CDC warned about in a health alert on April 2, 2026, after it was found in 18 states. Sedatives do not respond to naloxone, and medetomidine causes a severe withdrawal of its own. A forensic center that tracks new drugs logged 23 previously unseen compounds in the first five months of 2026, among them opioids stronger than fentanyl.

Stimulants are the other concern. Deaths from methamphetamine or cocaine with no fentanyl involved rose from 18,142 in 2023 to 18,907 in 2024, even as the total fell. There is no equivalent of naloxone for a stimulant overdose.

4f. Methamphetamine and Captagon

Methamphetamine is the world's largest synthetic drug market, and its center is Asia. Shan State, in eastern Myanmar, is the leading source: armed groups there host industrial laboratories, and since the coup of 2021 they have depended more on the income. Police in East and Southeast Asia seized a record 236 tons in 2024, and the price of crystal methamphetamine kept falling, the mark of a market that seizures are not denting.

The drug is spreading. In Mexico, the number of people treated for methamphetamine disorders rose 25-fold between 2015 and 2023. Afghanistan's ban on poppy barely touched its methamphetamine laboratories, which are far easier to hide than fields. Production has also spread in Africa.

Captagon shows how fast a synthetic trade can be made and unmade. It is a counterfeit amphetamine tablet, popular in the Gulf states, and under President Bashar al-Assad Syria made most of the world's supply. After his government fell in December 2024, the new authorities dismantled 16 laboratories and 15 storage sites, and the price of a tablet in neighboring Lebanon rose from $2 or $3 to between $5 and $7. UNODC expects some users to switch to methamphetamine.

In West Africa a cheap mixture called kush, often containing synthetic opioids, has spread in recent years. Liberia and Sierra Leone both declared emergencies over it in 2024.

Worked example — Reading a Rolling Count

Inputs: the CDC's predicted counts for the twelve months ending May 2026 and May 2025, and for the peak. Total deaths: 66,478, against 75,094 a year earlier and 112,418 at the peak. Deaths involving synthetic opioids: 34,507, against 42,640. Deaths involving cocaine: 19,225, against 20,408. Step 1, the daily toll: 66,478 ÷ 365 = 182 deaths a day. Step 2, the fall from the peak: 66,478 ÷ 112,418 = 0.59, so the total is 41% lower. Step 3, the yearly change: (75,094 − 66,478) ÷ 75,094 = 11.5%. Step 4, the changing mix. Synthetic opioids were involved in 34,507 ÷ 66,478 = 52% of deaths, down from 42,640 ÷ 75,094 = 57%. Cocaine was involved in 19,225 ÷ 66,478 = 29%, up from 27%. Result: fentanyl still figures in about half of all overdose deaths, but its share is shrinking while cocaine's grows. Step 5, a caution on the headline. A twelve-month total changes each month by dropping one old month and adding one new one. If it stops falling, that means the newest month was as bad as the same month a year before, not that deaths have started to rise. Watch the direction over several releases, and remember that each figure is revised as late certificates arrive.

Module 4 Key Points

Fentanyl and the Synthetic Turn

• Fentanyl needs no fields: chemicals from China and India, laboratories in Mexico, and loads small enough to cross at legal border posts.

• American overdose deaths peaked at 112,418 in the year to August 2023 and stood at 66,478 in the year to May 2026.

• The fall began in 2023, so the tariffs and military strikes of 2025 and 2026 cannot have started it.

• Nonfatal overdoses barely fell, which points to a weaker supply and more naloxone, not fewer users.

• Deaths are still rising in parts of the West, and new sedatives and stronger opioids keep entering the supply.

• The course's reading: several causes together, with supply and rescue best supported, and a fall that could reverse.

Module 4 Quiz

Check Your Understanding

1. How does most illegal fentanyl reach the United States, as American agencies describe it?

A) By mail from India
B) Across the Canadian border
C) By sea from China, in shipping containers of finished pills
D) From Mexico, mostly through legal border crossings

2. What was the CDC's predicted count of overdose deaths for the twelve months ending May 2026?

A) 112,418
B) About 40,000
C) 66,478, about 41% below the peak
D) 81,313, the highest count ever recorded

3. Why does the timing of the fall in deaths matter for explaining it?

A) Deaths peaked in 2023, before the 2025 tariffs and strikes
B) The fall began the day naloxone was invented
C) Deaths began falling only after the Supreme Court's tariff ruling in February 2026
D) The decline started in 2019, before fentanyl reached the West

4. What is medetomidine?

A) A treatment for opioid addiction
B) An animal sedative
C) The chemical name for captagon
D) A test strip that detects fentanyl

5. What happened to nonfatal overdoses as deaths fell?

A) They doubled
B) They fell faster than deaths did
C) They were not counted in any of those years
D) They barely fell, which suggests people are overdosing nearly as often but surviving more

Module 5 — The War on Drugs

From a Tax Act of 1914 to Missiles at Sea

Recommended Reading / Reference

Book: Ioan Grillo, *El Narco: Inside Mexico's Criminal Insurgency* (2011), a correspondent's history of how Mexico's smuggling gangs became armies, and of what the military campaign against them set off.

Reference: Just Security's timeline of the vessel strikes and InSight Crime's strike tracker (insightcrime.org), which log each American strike on an alleged drug boat with its date, place, and toll.

5a. Building the Machine, 1914-1986

American drug control began as a tax. The Harrison Narcotics Tax Act of 1914 required anyone handling opiates or coca products to register and pay a small levy, and the courts soon read it as forbidding doctors to supply addicts. The Marihuana Tax Act of 1937 used a prohibitive tax to the same end. The modern law is the Controlled Substances Act of 1970, which sorts drugs into five schedules. Schedule I is for drugs judged to have no accepted medical use, such as heroin. Schedule II holds dangerous drugs that have one, such as cocaine and fentanyl. The schedules descend to V, for weak codeine mixtures.

President Richard Nixon gave the effort its name on June 17, 1971, when he called drug abuse “public enemy number one”. Most of the new money he asked for that day was for treatment. The emphasis shifted to policing over the next fifteen years. The Drug Enforcement Administration was created in 1973.

In 1986, at the height of alarm over crack cocaine, Congress set fixed minimum prison terms by weight. Five grams of crack drew the same five years as 500 grams of powder cocaine, a ratio of 100 to 1 that fell mostly on Black defendants. Congress cut the ratio to 18 to 1 in 2010 and applied the change to past sentences in 2018.

5b. What It Cost, and What It Bought

The bill can be counted in arrests, prisoners, and dollars. American police made about 1.56 million arrests for drug offenses in 2019, nearly nine in ten of them for possession, and markedly fewer since. At the end of 2022, about 190,000 people were in prison for drug offenses, making up some 44% of federal prisoners and 13% of state prisoners. The federal government asked Congress for $44.5 billion for drug control in fiscal 2025, more than half of it for treatment and prevention.

What it bought is harder to show. Enforcement aims to make drugs scarce, and scarcity should show up as a higher price or a weaker product. A study of American surveillance data found the opposite: between 1990 and 2007, after adjusting for purity and inflation, the street price of heroin fell by 81%, of cocaine by 80%, and of cannabis by 86% (Werb and colleagues, 2013).

Abroad, the United States paid for other countries' campaigns. Plan Colombia cost American taxpayers about $10 billion between 2000 and 2015, and the Mérida Initiative gave Mexico about $3.5 billion in equipment and training from 2008 to 2021. Module 3 gave Colombia's results. Mexico's follow.

Some governments have gone further. Police in the Philippines killed more than 6,000 people in the anti-drug campaign of President Rodrigo Duterte between 2016 and 2022, by their own count, and human rights groups put the toll several times higher. Duterte was arrested on March 11, 2025, and sent to the International Criminal Court in The Hague. The court confirmed charges of crimes against humanity in April

2026 and set his trial to open on November 30, 2026. The monitoring group Harm Reduction International counted at least 615 executions for drug offenses worldwide in 2024, and reported on March 10, 2026, that the 2025 total was a record.

5c. Mexico and the Kingpin Problem

Mexico sent its army against the cartels in December 2006 and adopted what is called the kingpin strategy: capture or kill the leaders, and the organizations will collapse. The leaders fell, and the killing rose.

Year	Homicides in Mexico	Note
2006	10,452	The army is deployed in December
2011	27,213	After five years of the kingpin strategy
2020	36,773	The peak
2024	33,550	25.8 per 100,000 people
2025	27,989	Preliminary; 21.4 per 100,000, down 16.6%

Mexico's national statistics institute (INEGI), from death certificates; the 2025 figure was published on August 3, 2026.

Researchers have measured why. Removing a leader splits his organization into factions that fight over the succession, and it invites rivals to invade. Studies of Mexico found homicides rising by more than 30% in the six months after a leader was removed, and spreading along the trafficking routes into neighboring towns. Arrests brought a brief lull followed by a longer rise, and killings of leaders brought no lull at all. More than 460,000 people have been murdered in Mexico since 2006, and about 130,000 are listed as missing.

5d. Terrorists by Designation

In 2025 the United States began to treat drug trafficking as a matter for war powers as well as police. On February 20, 2025, the State Department named eight criminal groups as foreign terrorist organizations: six Mexican cartels, the Venezuelan gang Tren de Aragua, and the Central American gang MS-13. By September 10, 2026, the list of such groups had reached 21, among them gangs in Haiti and Ecuador, Colombia's Clan del Golfo, and Brazil's two largest prison gangs.

The label has defined legal effects. It makes it a crime to give the group money or other material support, freezes its assets, and bars its members from the country. It does not, by itself, authorize the use of military force.

5e. The Boats

On September 2, 2025, an American military strike destroyed a speedboat in the Caribbean and killed the eleven people aboard, who the government said were traffickers from Tren de Aragua. It was the first of a campaign later named Operation Southern Spear, run by US Southern Command, the military headquarters for Latin America. In October the administration told Congress that the United States was in a “non-international armed conflict” with the designated cartels, and that the boats' crews were “unlawful combatants”.

By October 27, 2026, the research group InSight Crime had counted 80 strikes and 243 people killed, in the Caribbean and the eastern Pacific. Other tallies give 72 strikes and the same deaths, because they leave

out eight operations in which crews were removed before the boat was sunk. The Pentagon's inspector general put the cost of the whole operation at about $647 million from its start through March 31, 2026.

The government's legal case rests on the president's authority as commander in chief, on the claim of an armed conflict with groups whose drug money pays for violence against Americans, and on self-defense. In a war, enemy fighters may be attacked without warning.

The critics' legal case, made by United Nations human rights officials and by many scholars of the law of war, is that smuggling is a crime and not an armed attack. Without an armed conflict, peacetime law applies: suspects must be stopped, arrested, and tried, as the Coast Guard has always done, and killing them is unlawful.

Congress has not settled it. Six attempts to end the campaign under the War Powers Resolution, the 1973 law that limits undeclared hostilities, all failed. The closest were a tie in the Senate, 50 to 50, broken by the vice president on January 14, 2026, and a tied vote in the House eight days later.

5f. Venezuela: A President in the Dock

The campaign's largest act came on January 3, 2026. American forces flew into Caracas, seized Venezuela's president, Nicolás Maduro, and his wife, Cilia Flores, from their compound, and brought them to New York. American officials put the dead at about 75, and Venezuela's government at 100 or more. Maduro's vice president, Delcy Rodríguez, has governed since as acting president and has cooperated with Washington.

The charges date from an indictment of 2020 and were widened on October 8, 2026. Maduro and Flores now face five counts: conspiracy to commit narco-terrorism, conspiracy to import cocaine, two weapons counts, and conspiracy to commit torture. Both have pleaded not guilty. The judge who had handled the case, Alvin Hellerstein, died on October 28, 2026, aged 92, and Judge Analisa Torres took it over. She is to hear the motions to dismiss on December 17, 2026, with trial set for June 14, 2027.

The defense argues that a sitting head of state cannot be tried in another country's courts for official acts, and that the capture itself was unlawful. Prosecutors reply that the United States has not recognized Maduro as president since 2019. They rely on the case of Manuel Noriega, the ruler of Panama seized by American troops in 1989, whose claim of immunity a Miami court rejected on that ground. American courts have also long held that an unlawful capture does not bar a trial.

The case also turns on what Maduro led. The State Department says he headed a trafficking organization of Venezuelan officials called the Cartel de los Soles. InSight Crime describes something looser, a system of officials who took a cut of trafficking, with no single command.

5g. Mexico: The Death of El Mencho

On February 22, 2026, Mexican special forces raided a hideout at Tapalpa, in the state of Jalisco, and fatally wounded Nemesio Oseguera Cervantes, known as El Mencho, the founder of the Jalisco New Generation Cartel and Mexico's most wanted man. Mexico's defense secretary said that some of the intelligence was American and the command Mexican. The cartel answered within hours with 252 road blockades in 20 states. Twenty-five members of the National Guard were killed, and the official toll was 62 dead.

The kingpin research predicted a war of succession. As of October 2026 there had not been one. Washington named a stepson of the dead man as the new leader, though InSight Crime sees no single

successor. American diplomatic security analysts reported no large-scale splintering. Homicides in Jalisco fell by nearly 40% in the first eight months of 2026, and nationally, police files show about 42 murders a day in September 2026 against 87 two years earlier. Independent monitors warn that some killings may be going uncounted as disappearances.

Sinaloa is the counterexample. The war inside its cartel, which began after one leader was delivered to the United States (Module 4), has killed more than 3,700 people in two years, and October 2026 was the state's worst month of the year.

President Trump has said repeatedly that the United States will strike the cartels on land. As of early November 2026 no American strike on Mexican soil had been confirmed. President Sheinbaum's answer has not changed: “We have said no. And, proudly, we continue saying no.” Relations are strained in other ways too. On April 29, 2026, American prosecutors indicted ten current and former Mexican officials, including Sinaloa's governor, Rubén Rocha Moya, who stepped aside days later, and Mexico refused to extradite them.

5h. Contested Ground: Does Attacking Supply Work?

The case that it does: The analysts Peter Reuter, Mark Kleiman, and Jonathan Caulkins start from a comparison that critics of the drug war often skip. Cocaine and heroin sell for many times what they would cost if legal, and that gap exists only because the trade is banned and pursued. Dearer drugs mean fewer users and lighter use. Sharp shocks have also cut harm: American controls on a methamphetamine ingredient in 1995 tripled the drug's price and halved hospital admissions for a time, and a heroin shortage in Australia in 2001 cut overdose deaths by more than half.

For the current campaign, a Pentagon official, Joseph Humire, told the House Armed Services Committee in March 2026 that boat traffic had fallen about 20% in the Caribbean and 25% in the eastern Pacific since the first strike. In September 2026 a US official said Southern Command's figures showed falls of 50% to 65% over the year. Police in Ecuador say that boat crews now demand double pay. Mexico's falling homicide count suggests that sustained pressure on the cartels need not end in bloodshed.

The case that it does not: Researchers such as Dan Werb, and advocacy groups such as the Washington Office on Latin America, point to the long record. Prices fell and purity rose through decades of escalation. The world's cocaine output more than quadrupled in ten years. Pressure moves routes and crops without removing them, favors the most compact drugs, and has usually raised violence when it removed leaders. The costs are counted in prisoners in the United States, in murders in Mexico, and now in people killed at sea without trial.

On the boats in particular, critics note that the fentanyl behind most American overdose deaths is made in Mexico and crosses by land, and that the strikes have left no mark on the market. Street cocaine still sold for $60 to $100 a gram in mid-2026. Cocaine seized at the American border was 2% higher in the campaign's first ten months than in the ten months before. Southern Command's own commander, General Francis Donovan, told the Senate Armed Services Committee on March 19, 2026, that “the boat strikes aren't the answer,” and said the campaign was shifting toward the whole trafficking network.

The evidence: Each side is right about a different margin. The ban as a whole does keep prices far above what a legal market would charge. But studies find little sign that adding enforcement to an existing ban raises prices further, and the shocks that did work, such as the 1995 chemical controls, faded within about eighteen months as suppliers adapted. The fall in overdose deaths began in 2023, before the campaign of

2025 (Module 4). Mexico in 2026 cuts against a simple rule that removing leaders always raises violence, though Sinaloa fits the rule, and the national figures are disputed.

The course's reading, stated once: prohibition keeps drugs expensive, which limits their use, but beyond that baseline extra force has bought little that lasts. The measures with the best record are narrow ones aimed at a chokepoint, such as a chemical or a broker, and the evidence so far gives no sign that sinking boats is one of them.

Worked example — Boats Against Supply

Inputs: 80 strikes through October 27, 2026 (InSight Crime's count, which includes eight in which the crew was taken off before the boat was sunk); world cocaine output of about 4,100 tons in 2024 (UNODC); and an assumption, generous to the campaign, that every boat carried a full ton. Step 1, the cocaine destroyed: 80 boats × 1 ton = 80 tons. Step 2, as a share of supply: 80 ÷ 4,100 = 2.0% of one year's output, removed over fourteen months. On a yearly basis that is about 1.7%. Step 3, compare ordinary seizures. Colombia alone seized 966 tons in 2024 (Module 1), twelve times as much, without ending the boom. Step 4, the cost. The Pentagon's inspector general counted $647 million for the whole operation through March 31, 2026, a period in which about 47 strikes had been announced. If all of that cost is charged to the strikes, $647 million ÷ 47 = about $14 million a strike. In the price ladder of Module 2, at prices of 2006 and 2007, a ton of cocaine is worth $2.2 million at export from Colombia and $14.5 million on arrival in the United States. Result: on generous assumptions the strikes removed about 2% of supply, at a cost per boat, if the whole operation is charged to the strikes, close to its cargo's value at the American border, and the trafficker replaces the cargo at the far lower export price. The campaign's defenders answer that deterrence matters more than tonnage: a crew that fears death may not sail. Whether enough crews stay ashore to move the price is what the coming year's data will show.

Module 5 Key Points

The War on Drugs

• American drug control grew from a 1914 tax law into five schedules, fixed minimum sentences, and a federal budget above $40 billion a year.

• Through decades of rising enforcement, American street prices of heroin and cocaine fell by about 80% and purity rose.

• Removing cartel leaders usually raised violence in Mexico, where more than 460,000 people have been murdered since 2006.

• By one count, American strikes on alleged drug boats had killed 243 people by October 27, 2026; their legality is disputed.

• Nicolás Maduro, seized in Caracas on January 3, 2026, is due to stand trial in New York on June 14, 2027.

• The course's reading: prohibition keeps drugs expensive, but extra force beyond it has bought little that lasts.

Module 5 Quiz

Check Your Understanding

1. What does designating a group a foreign terrorist organization do under American law?

A) It declares war
B) It bars the group's members from buying property
C) It makes supporting the group a crime and freezes its assets, but does not itself authorize force
D) It requires the president to seek a new vote of Congress before any strike on the group's members abroad

2. What did studies of Mexico's "kingpin strategy" find?

A) Removing a leader was usually followed by more killing, as the group split and rivals moved in
B) Homicides fell for good
C) Arrests had no effect on any cartel
D) Violence fell wherever the army was deployed

3. On what date did American forces seize Nicolás Maduro?

A) September 2, 2025
B) January 3, 2026
C) February 22, 2026, in Jalisco
D) October 8, 2026, after a new indictment

4. What happened to the purity-adjusted street price of heroin and cocaine in the United States between 1990 and 2007?

A) It doubled
B) It rose in step with spending on enforcement
C) It was unchanged for cocaine and heroin but tripled for cannabis
D) It fell sharply while purity rose

5. On what ground do critics call the strikes on boats unlawful?

A) The boats were American
B) The Coast Guard has no power to stop vessels
C) There is no armed conflict, so suspects must be arrested and tried, not killed
D) Congress passed a resolution in January 2026 ordering the strikes to stop, and they continued

Module 6 — Legalization and Harm Reduction

Cannabis Shops, Portugal's Panels, Naloxone, and Psilocybin

Recommended Reading / Reference

Book: Jonathan Caulkins, Beau Kilmer and Mark Kleiman, *Marijuana Legalization: What Everyone Needs to Know* (second edition, 2016), a question-and-answer guide by three analysts who disagree with each other about what should be done, and say so.

Reference: The National Survey on Drug Use and Health, published each year by the federal Substance Abuse and Mental Health Services Administration (SAMHSA): how many Americans use each drug, how many have a disorder, and how many get treatment.

6a. Cannabis in the States

The largest experiment with a legal drug market is American cannabis. Colorado and Washington voted to license sales to adults in 2012. Twenty-four states and the District of Columbia now let adults use it legally, and about forty states allow medical use. No state joined them in 2025 or 2026.

The election of November 3, 2026, tested whether voters wanted to go back. In Massachusetts, a measure backed by the country's main anti-legalization group would have ended sales to adults and home growing. It lost by about 76% to 24% on the preliminary count. Idaho's voters rejected a proposal to bar citizens from legalizing any drug by ballot initiative. Colorado's, in the same election, approved stiffer penalties for selling and possessing fentanyl. The public appears to have settled on cannabis and hardened on everything else.

The legal industry sells more than $30 billion a year and paid the states about $4.4 billion in cannabis taxes in 2024. Competition has done what economists predicted to the price. In Michigan, an ounce of legal cannabis flower averaged about $512 in January 2020 and about $65 in 2025.

Legal shops have not swept away illegal sellers. A study for California's regulator estimated in 2025 that licensed stores supply only about 40% of the cannabis Californians use. High taxes, local bans on shops, and an established illegal trade keep the rest outside the system. In Canada, where the rules are looser and stores more common, about 72% of users say they buy legally.

6b. Cannabis in Federal Law

Under federal law marijuana has sat in Schedule I since 1970, beside heroin, as a drug with no accepted medical use. That changed in part in 2026. An executive order of December 18, 2025, told the Attorney General to finish a long-stalled review. On April 23, 2026, the Justice Department announced a rule, effective April 28, that moved two categories into Schedule III: marijuana products approved by the Food and Drug Administration, and marijuana sold under a state medical license.

The change matters most for taxes and research. Section 280E of the tax code denies ordinary business deductions to anyone trafficking in a Schedule I or II drug, which had left legal dispensaries paying tax on income they never earned. That no longer applies to licensed medical sellers, who can also register with the DEA. Scientists can study the drug with less paperwork.

Everything else stays as it was. Cannabis sold for adult use remains in Schedule I. It cannot cross state lines, and most banks still avoid the industry. A hearing on moving the rest of marijuana to Schedule III ran from June 29 to mid-July 2026. The final written arguments were filed on November 5, and as of November

9 the DEA's judge had not issued his recommendation. The decision belongs to the agency's administrator, Terrance Cole. Nebraska and Indiana have asked a federal appeals court to overturn the April rule.

A second federal fight concerns hemp. A farm law of 2018 legalized cannabis plants with very little THC, meaning them for rope and seed. Manufacturers used the opening to sell intoxicating drinks and candies made from hemp extracts, in stores and states where marijuana is banned. A law of November 12, 2025, capped THC at 0.4 milligrams per container, a limit that would end most of that trade. It was written to take effect one year later, but a stopgap spending law signed in early September 2026 moved the start for most hemp products to December 11, 2026.

6c. What Legal Cannabis Has Shown

A decade of data supports neither the hopes nor the fears in full. Adult use rose, and daily use rose most (Module 1). Teenage use did not: the share of American twelfth-graders who used cannabis in the past year was 25.8% in 2024, near its lowest in decades. UNODC calls the evidence on adolescents “mixed and often conflicting”.

The harms that have been measured are real but moderate. In five states that opened shops, injury crashes rose 5.8% and fatal crashes 4.1%, by an insurance industry study. In Ontario, the share of new schizophrenia cases linked to cannabis use disorder rose from 3.7% to 10.3% in the years around legalization, while a study of American insurance claims found no rise in psychosis diagnoses. About 19.3 million Americans had a marijuana use disorder in 2025, by the national survey.

Other countries legalized differently, and the differences are deliberate. Uruguay, the first in 2013, lets registered adults buy from pharmacies, join a growers' club, or grow at home, with no brands and no advertising. Canada licensed commercial producers in 2018 but left each province to run or regulate its shops. Germany since April 2024 has allowed home growing and non-profit clubs of up to 500 members, and no shops at all. Each design is an attempt to make cannabis legal without creating an industry that profits from heavy use.

6d. Decriminalization: Portugal and Oregon

Portugal took a different road for all drugs. Since July 1, 2001, a person caught with up to ten days' supply is not charged with a crime. Police refer the person to a regional panel of health and legal staff, called a dissuasion commission, which can order nothing, a fine, or a referral to treatment. Selling remains a crime. The law came with a large expansion of treatment.

The results made Portugal the reformers' model. New diagnoses of HIV among people who inject drugs fell from 1,287 in 2001 to 16 in 2019, drug deaths stayed far below the European average, and use did not surge. The system has frayed since its funding was cut and its management decentralized after 2012, and visible drug use has returned to parts of Porto and Lisbon.

Oregon tried the idea in 2021 and abandoned it in 2024. Voters approved Measure 110 with 58% of the vote, making possession of small amounts a violation with a $100 fine that could be waived by calling a help line. Few people called. Treatment money was slow to arrive, public drug use grew, and fentanyl reached Oregon in the same months. The legislature made possession a crime again from September 1, 2024.

Studies of Oregon disagree. One estimated about 180 extra overdose deaths in the first year. Two others found no link, one of them after accounting for fentanyl's arrival. British Columbia ran a similar trial from

January 2023, banned public use in 2024, and let the trial end in January 2026. The lesson most analysts draw is that Portugal's law worked as one part of a funded treatment system and did little as a law alone.

6e. Harm Reduction

Harm reduction means cutting death and disease among people who use drugs without first requiring them to stop. Its tools differ greatly in how well they are proven.

Treatment medicines have the strongest evidence. Methadone and buprenorphine are opioids taken daily under medical care that prevent withdrawal and craving. A review of studies found that people on methadone died at about a third of the rate of those who had left treatment. In 2025 only 15.7% of Americans with an opioid use disorder received any such medicine.

Naloxone reverses an opioid overdose within minutes and has been sold without a prescription since 2023 (Module 4). **Syringe programs**, which exchange used needles for clean ones, are associated with about half the rate of new HIV and hepatitis C infections.

Supervised consumption sites are rooms where people use drugs they bring, with staff ready to treat an overdose. The evidence is from observation, not trials. After Vancouver opened the first North American site in 2003, overdose deaths within 500 meters fell 35%, against 9% in the rest of the city. Two sites opened in New York City in November 2021 and one in Providence, Rhode Island, in 2025. Opponents answer that the sites concentrate disorder and signal acceptance.

Federal policy has turned against the term. An executive order of July 24, 2025, barred federal grants for “harm reduction” or “safe consumption” programs and favored compulsory treatment, and in April 2026 SAMHSA barred its grants from buying strips that test drugs for fentanyl. States have another source of money. Drug makers and distributors have agreed to pay more than $50 billion to settle lawsuits over their part in the opioid epidemic, including $7.4 billion from Purdue Pharma, the maker of OxyContin, and its owners.

6f. Psychedelics as Medicine

Psilocybin, the active compound in “magic mushrooms”, and MDMA are Schedule I drugs that researchers are testing as treatments for depression and trauma. Three states have not waited for federal approval. Oregon has licensed supervised psilocybin sessions since 2023 and Colorado since 2025, and New Mexico passed a medical psilocybin law in April 2025.

The federal path was slow until 2026. In August 2024 the FDA refused an application for therapy with MDMA, after its advisers voted that the trials had not shown it worked. An executive order of April 18, 2026, told agencies to speed the review of psychedelic treatments, and on April 24 the FDA gave fast-review vouchers to three developers. One of them, Compass Pathways, completed its application on November 9, 2026, for a psilocybin treatment for depression that earlier treatments had failed to lift.

The evidence is positive and modest. In Compass's two large trials, patients given a full dose scored 3.6 and 3.8 points better on a 60-point depression scale than those given a placebo or a tiny dose. An earlier, smaller trial had found 6.6 points. There is also a problem that no trial design has solved: patients can usually tell whether they received a psychedelic, which can inflate the measured benefit. Approval would not make the drug legal to sell until the DEA moved it out of Schedule I.

6g. Contested Ground: Legalize, Decriminalize, or Enforce?

The case for legal, regulated supply: Groups such as the Transform Drug Policy Foundation and the Global Commission on Drug Policy, and the economist Jeffrey Miron, argue that most of the harm in Modules 3 to 5 comes from the ban and not from the drugs. Illegality hands the trade to armed groups and leaves users with products of unknown strength. A regulated market, on this view, would offer known doses, age limits, and tax revenue. Its advocates propose pharmacies or state shops with strict rules, starting with the milder drugs. Miron has estimated that ending prohibition would be worth about $107 billion a year to American governments in saved spending and new taxes.

The case for decriminalizing and treating: Portugal's drug coordinator, João Goulão, and the United Nations' health agencies hold that using drugs is a health problem and that a criminal record often harms a user more than the drug does. They would keep supply illegal, stop arresting users, and spend the savings on treatment. Goulão himself says the model fails without the treatment, and Oregon is the proof he would cite.

The case for enforcing smarter and resisting commerce: Kevin Sabet, who leads the main American group opposing legalization, and scholars such as Keith Humphreys and Jonathan Caulkins start from the opioid epidemic, which began with a legal, profit-seeking industry selling prescription painkillers. Their fear is commercialization. Sellers earn most from the heaviest users, cannabis potency has climbed, and daily use has multiplied. They prefer state monopolies or home growing for cannabis, swift and modest penalties that push users into treatment, and continued bans on harder drugs to keep their prices high.

The evidence: Legal cannabis raised adult and daily use, left teenage use about where it was, cut arrests, and collapsed prices, while a large illegal trade survived wherever taxes and rules were heavy. Decriminalization has worked when paired with treatment and has not been shown to work without it. The medicines and naloxone are proven to save lives whatever the legal regime. One gap limits every side: no country has licensed the sale of heroin, cocaine, or fentanyl for non-medical use, so claims about what that would do rest on argument and on cannabis.

The course's reading, stated once: the evidence favors treating drug use as a health problem and paying for treatment and rescue, which help under any law. On supply, how a legal market is designed matters more than whether it exists, and designs that keep sellers from profiting on heavy use have the better case.

Worked example — What Section 280E Does to a Dispensary

This example uses round, invented figures for a licensed shop; the rule is real. Inputs: yearly sales of $1,000,000; cannabis bought for $500,000; other costs (rent, wages, security, licenses) of $400,000; and the federal corporate tax rate of 21%. Step 1, the true profit: $1,000,000 − $500,000 − $400,000 = $100,000. Step 2, the tax an ordinary shop would owe: 21% of $100,000 = $21,000, leaving $79,000. Step 3, the tax under section 280E. A business trafficking in a Schedule I or II drug may subtract the cost of the goods it sells but none of its other expenses. Its taxable income is $1,000,000 − $500,000 = $500,000, and 21% of that is $105,000. Result: the shop owes $105,000 in federal tax on a profit of $100,000, an effective rate of 105%, and loses $5,000 for the year. Step 4, what the April 2026 rule changed. A licensed medical seller now deals in a Schedule III drug, so section 280E no longer applies, and the same shop would owe $21,000. A shop selling to adult users remains under the old rule. The gap of $84,000 a year on these figures is why the industry cared more about the schedule than about any other federal question.

Module 6 Key Points

Legalization and Harm Reduction

• Twenty-four states have legalized cannabis for adults, and in November 2026 Massachusetts voters refused to end sales there by about three to one.

• Since April 28, 2026, medical marijuana is a Schedule III drug in federal law; cannabis for adult use remains in Schedule I.

• Legal cannabis raised adult and daily use but not teenage use, and prices collapsed while an illegal trade survived.

• Portugal's decriminalization worked alongside funded treatment; Oregon's version was reversed after three and a half years.

• Methadone, buprenorphine, and naloxone are the best-proven measures, yet under one in six Americans with opioid disorders gets the medicines.

• The course's reading: treat use as a health problem; on supply, a market's design matters more than its legality.

Module 6 Quiz

Check Your Understanding

1. What did the federal rule that took effect on April 28, 2026, change about marijuana?

A) It legalized all cannabis
B) It banned medical marijuana in every state
C) It allowed interstate sales between legal states
D) It moved FDA-approved products and state-licensed medical marijuana to Schedule III, leaving the rest in Schedule I

2. Under Portugal's 2001 law, what happens to a person caught holding a small amount of a drug?

A) They are referred to a health panel
B) They are charged with a minor criminal offense
C) They must complete a year of residential treatment
D) The dealer who sold it is fined instead

3. What did Massachusetts voters decide about cannabis on November 3, 2026?

A) To ban hemp
B) To keep legal cannabis sales
C) To end adult-use sales and home growing from 2027
D) To decriminalize possession of all drugs, as Oregon once did

4. Which measures have the strongest evidence for cutting deaths among people who use opioids?

A) Longer prison terms
B) Crop eradication abroad
C) Compulsory abstinence programs lasting at least a year, followed by regular testing
D) Naloxone and the treatment medicines methadone and buprenorphine

5. Why do some analysts accept legal cannabis but oppose a commercial market for it?

A) Firms profit most from the heaviest users, so they prefer state shops, non-profit clubs, or home growing
B) They expect prices to rise
C) They think use will end
D) Treaties require commercial sale

Module 7 — Alcohol and Nicotine

The Legal Vices, Their Taxes, and Australia's Tobacco War

Recommended Reading / Reference

Book: Philip J. Cook, *Paying the Tab: The Costs and Benefits of Alcohol Control* (2007), an economist's case that price and availability shape drinking more than education or treatment do.

Reference: *Tobacco in Australia: Facts and Issues*, the online compendium kept by Cancer Council Victoria: prices, tax rates, smoking rates, and the illegal trade, updated chapter by chapter.

7a. The Legal Killers

Alcohol and tobacco are vices that most countries chose to tax and regulate, and they do more damage than all the banned ones together. The World Health Organization (WHO) attributes about 2.6 million deaths a year to alcohol and more than 7 million to tobacco, against roughly 600,000 to illegal drugs. In the United States the CDC counts about 178,000 deaths a year from excessive drinking and about 480,000 from smoking. Each figure exceeds the overdose toll of Module 4.

Their legal status is an accident of history more than a judgment about risk. Both were in mass use long before their harms were measured. They matter to this course for a second reason. They are the working models of a legal vice market, with brands, advertising, lobbyists, and taxes, and each shows something that the debates over cannabis and gambling need.

7b. Drinking Less

Fewer Americans say they drink than at any time on record. In Gallup's poll of July 2026, 54% of adults said they drink alcohol, matching the previous year's figure as the lowest since the question was first asked in 1939. A slim majority, 51%, said that even moderate drinking is bad for health. In 2018 the share was 28%.

The fall is steepest among adults under 35. Explanations include the health warnings described below, the cost of a night out, and substitution by cannabis (Module 1). Brewers and distillers have reported falling volumes since 2023.

The harm is concentrated, as the market is. Deaths that doctors attribute directly to alcohol, such as those from liver disease and poisoning, rose from 39,043 in 2019 to 54,258 in 2021, during the pandemic. They eased to 47,938 in 2023.

7c. Is Any Drinking Safe?

For decades, studies found that moderate drinkers outlived people who never drank, and doctors spoke of a glass of wine as good for the heart. Newer work argues that the comparison was unfair. Many non-drinkers in those studies had quit because they were already ill, which made abstaining look dangerous.

Official advice has moved, though not all in one direction. The WHO declared in January 2023 that no level of drinking is safe. A review by America's National Academies in December 2024 still found that moderate drinkers had lower overall mortality than people who never drank, along with a higher risk of breast cancer. In January 2025 the Surgeon General asked for a cancer warning on every bottle and attributed about

100,000 cancer cases and 20,000 cancer deaths a year to alcohol. The federal dietary guidelines issued in January 2026 dropped their numerical daily limits and advise only drinking less.

7d. What Reduces the Damage

The measures with the best evidence are the least popular ones: higher prices, fewer outlets, and shorter opening hours. American policy has drifted the other way. The federal excise on alcohol was last raised in 1991 and is fixed in dollars, so inflation has since cut its real value by more than half.

Scotland took the opposite course. Since May 2018 it has set a minimum price per unit of alcohol, which raises the cost of the cheap, strong drinks that the heaviest drinkers buy and leaves the price of a pint in a pub untouched. The floor was 50 pence and rose to 65 pence in September 2024. Public Health Scotland estimated in 2023 that deaths caused wholly by alcohol were 13.4% lower than they would have been without the policy.

7e. Tobacco's Long Decline

Smoking is the vice that rich countries have come closest to defeating without a ban. In 1965, 42% of American adults smoked cigarettes. By 2024 the figure was 9.9%, the first reading below 10%, according to an analysis of the federal health survey published in March 2026.

No single measure did it. The Surgeon General's report of 1964 established that smoking causes lung cancer. Cigarette advertising left television and radio in 1971. Taxes rose, and smoking was barred from offices, restaurants, and aircraft. In the Master Settlement Agreement of November 1998, the largest cigarette makers agreed to pay 46 states about $206 billion over 25 years, with payments continuing for as long as cigarettes are sold.

The rest of the world is following more slowly. The WHO counted 1.2 billion tobacco users in 2024, down from 1.38 billion in 2000 despite a much larger population.

7f. The New Nicotine

As cigarettes declined, the industry and its rivals built products that deliver nicotine without burning tobacco. An e-cigarette, or vape, heats a nicotine liquid into an aerosol. A nicotine pouch, such as Zyn, sits between lip and gum. Philip Morris International, the largest publicly traded cigarette maker, now earns about two fifths of its revenue from such products.

American law requires the FDA to authorize each new nicotine product before it is sold. The agency authorized 20 Zyn products in January 2025 and Juul's vapes in July 2025. Most vapes on American shelves have no authorization at all. They are flavored disposable devices made in China, sold openly, and seized only now and then.

Teenage vaping, the fear that drove the rules, has fallen. In 2019, 27.5% of American high-school students said they had vaped in the past month. In 2024 the share was 7.8%. Worldwide the WHO counts more than 100 million people who vape, at least 15 million of them aged 13 to 15.

7g. The Generational Ban

A newer idea is to end smoking by birth date. Under a generational ban, nobody born after a set day may ever be sold tobacco, so the legal age rises by a year every year. New Zealand passed the first such law in December 2022, and a new government repealed it in February 2024 before it took effect. The Maldives has applied one since November 1, 2025.

Britain is the large test. Its Tobacco and Vapes Act received royal assent on April 29, 2026, and its sales ban begins on the date given in Module 1. A shopkeeper will one day have to tell a 40-year-old customer from a 41-year-old. Supporters reply that few people take up smoking as adults. Critics expect the ban to send those customers to the smugglers who, by the industry's count, already supply about a tenth of the European Union's cigarettes.

7h. Australia: A Tax That Built a Black Market

Australia shows what happens when a tax outruns enforcement. Governments of both parties raised the excise on tobacco by 12.5% a year from 2013 to 2020 and by a further 5% a year above wage growth in 2023, 2024, and 2025. The most popular pack of 20 cigarettes costs about 43 Australian dollars (A$). An illegal pack, smuggled or made for the black market, sells for A$15 to A$20.

Measure	Figure	Source and date
Excise on one cigarette	A$1.55	Tax office rate from September 1, 2026
Most popular pack of 20	A$42.99, of which A$30.57 was excise	Senate committee report, August 2026, at the rate in force from March 2026
Share of nicotine from illegal sources	80% in 2025, against 12% in 2017	Bureau of Statistics, June 2026, from wastewater tests set against legal sales
Share of vapes sold illegally	95.7% in 2024-25	Illicit Tobacco and E-cigarette Commissioner
Tobacco excise collected	A$16.3 billion in 2019-20; A$3.56 billion forecast for 2026-27	ABC News, August 2026; Budget papers, May 2026
Firebombings of tobacco shops	More than 200 since 2023, with at least three deaths	Australian Criminal Intelligence Commission

Vapes may be sold legally in Australia only through pharmacies. Estimates of the illegal share differ: the federal commissioner put it at 50% to 60% of tobacco in 2024-25.

Buyers moved faster than the tax collector expected. Revenue from the excise has fallen by about three quarters in six years, and the Treasury keeps cutting its forecasts. Rival gangs fighting over the trade have burned shops across Melbourne and other cities, in what the press calls the tobacco wars. Module 1's point about markets without courts applies to a legal product once most of it is sold illegally.

The official figures also conflict in an instructive way. The national survey shows daily smoking falling to 5.6% of people aged 14 and over in 2025, from 8.3% three years earlier. The wastewater tests show nicotine use rising almost 40% since 2017. People under-report illegal purchases in surveys, and wastewater cannot tell a cigarette from a vape.

The politics split in 2026. A Senate committee recommended in August that every increase be paused and the rate reviewed. The Labor government let the increase of September 1 proceed. Its health minister, Mark Butler, argues that illegal packs would undercut legal ones at almost any tax rate. On September 3 the opposition leader, Angus Taylor, pledged to cut the excise by 80% and to legalize and tax vapes.

The commissioner who polices the trade gave the committee a caution against simple answers. Portugal and Ecuador levy the same tax, about 16 Australian cents a cigarette, and their illegal shares are 2.4% and 83.6%. The rate matters, and so do borders, policing, and how many shops will sell under the counter.

7i. Contested Ground: Is Safer Nicotine a Way Out or a Way In?

The case that it is a way out: England's health agencies, the Royal College of Physicians, and the authors of the Cochrane reviews of the evidence hold that burning tobacco, not nicotine, does most of the killing. A smoker who switches completely to a vape or a pouch takes in far fewer toxic chemicals. In randomized trials, nicotine vapes helped more smokers quit than patches or gum did, by about four in every hundred. Sweden, where many men use a moist oral tobacco called snus, has the lowest smoking rate in the European Union, about 5%.

The case that it is a way in: The WHO, the Campaign for Tobacco-Free Kids, and Australia's Cancer Council answer that the products are flavored and marketed for the young, often by cigarette makers. Many adult vapers go on smoking as well. A review for the Australian government found that non-smokers who vape are about three times as likely to take up cigarettes. Nobody yet knows the effect of inhaling the aerosol for forty years.

The evidence: The trial evidence for quitting is rated high in certainty. Smoking has fallen fast in countries that allowed the alternatives, including Sweden, England, and New Zealand. Teenage vaping surged before regulators acted and has since fallen in the United States. Australia restricted vapes to pharmacies and saw smoking fall, while almost the entire vape market passed to criminals.

The course's reading, stated once: for an adult who smokes, switching is a clear gain, and for a teenager who does not, starting is a clear loss. The evidence fits legal sale to adults under strict rules better than it fits either an open market or a ban.

Worked example — What the Tax Does to an Australian Pack

Inputs: from the Senate committee's report of August 2026, a pack of 20 that sells for A$42.99 and excise of A$30.57 in that price; a goods and services tax of one eleventh of the price; and, from press reports, an illegal pack at A$15 to A$20. Step 1, the sales tax: A$42.99 ÷ 11 = A$3.91. Step 2, total tax: A$30.57 + A$3.91 = A$34.48, which is 80% of the price. Step 3, what is left for the maker, the wholesaler, and the shop: A$42.99 − A$34.48 = A$8.51. Step 4, the price with no excise at all: A$8.51 plus one tenth for the sales tax = A$9.36. That is below today's illegal price, but an illegal seller's costs are far lower still, so the seller could cut the price and stay in business. This is the minister's argument. Step 5, the opposition's 80% cut. Excise falls to 20% of A$30.57 = A$6.11, and the pack costs (A$8.51 + A$6.11) × 1.1 = A$16.08, about level with an illegal pack today. Step 6, the revenue. Each legal pack would now yield A$6.11 where it yielded A$30.57, one fifth as much. Result: to collect the same excise at the lower rate, legal sales would have to rise fivefold. If four fifths of nicotine is now bought illegally, that means winning back nearly the whole black market. The cut can be defended as a way to take the trade from the gangs, but the cigarette excise alone cannot be expected to restore the revenue.

Module 7 Key Points

Alcohol and Nicotine

• Alcohol and tobacco kill far more people each year than all illegal drugs combined.

• American drinking is at its lowest in Gallup's records: 54% of adults drink, and about half think moderate drinking unhealthy.

• Smoking fell from 42% of American adults in 1965 to under 10% through taxes, advertising bans, and lawsuits, without prohibition.

• Britain will bar tobacco sales to anyone born in 2009 or later, a ban that grows by one birth year every year.

• Australia taxed a pack to about A$43; illegal sellers took most of the market, and tobacco revenue fell by three quarters.

• The course's reading: safer nicotine helps adult smokers and harms teenagers, so regulated adult sale beats both an open market and a ban.

Module 7 Quiz

Check Your Understanding

1. What did Gallup's poll of July 2026 find about drinking in the United States?

A) A record 70% of adults drink
B) 54% of adults drink, tying the record low
C) Drinking rose among adults under 35 and fell among the old
D) Most adults now believe that moderate drinking is good for the heart

2. Which policy does Scotland use to raise the cost of cheap, strong alcohol?

A) A ban on advertising beer and spirits at sports events
B) State-run shops on the Nordic model
C) A minimum price per unit
D) A legal drinking age raised to 21

3. What will Britain's Tobacco and Vapes Act do from January 1, 2027?

A) Ban all vapes
B) Double the tax on cigarettes
C) Limit tobacco sales to licensed pharmacies
D) Bar the sale of tobacco to anyone born on or after January 1, 2009, for life

4. What happened in Australia as the excise on tobacco rose to about A$1.55 a cigarette?

A) Smoking rose
B) Illegal sellers took most of the market
C) Tax revenue from tobacco doubled in five years
D) Legal sales held steady while the price of illegal packs climbed

5. What do the randomized trials reviewed by Cochrane show about nicotine vapes?

A) They beat patches and gum for quitting
B) They work no better than a placebo inhaler
C) They double the risk of a heart attack within one year
D) They lead most adult users back to smoking within months

Module 8 — Gambling

Sportsbooks, Prediction Markets, and the Fight Over Who Regulates a Bet

Recommended Reading / Reference

Book: Jonathan D. Cohen, *Losing Big: America's Reckless Bet on Sports Gambling* (2025), a historian's short account of how sports betting spread after 2018 and what its critics want changed.

Reference: The American Gaming Association's Commercial Gaming Revenue Tracker: monthly and quarterly revenue by state and by type of gambling, compiled by the industry from state regulators' reports.

8a. A Legal Industry at Record Size

Gambling is the vice that American states have embraced fastest. Commercial casinos, sportsbooks, and online casino games won a record $78.6 billion from their customers in 2025, by the count of the American Gaming Association (AGA), the casino industry's trade group. Casinos run by Native American tribes won another $46.2 billion in fiscal 2025, by the count of the National Indian Gaming Commission.

The industry's vocabulary hides who pays. “Revenue” means the money gamblers lost: the amount wagered minus the amount paid back in winnings. The total wagered is called the handle, and the share of it that the operator keeps is the hold.

Growth has moved to the phone. Seven states license online casino games, which won $10.7 billion in 2025, up more than a quarter in a year. Sportsbooks won $16.9 billion. Then, in the first quarter of 2026, Americans wagered slightly less on sports with licensed books than a year earlier, the first such fall since the pandemic. The AGA blames the prediction markets described below.

8b. How a Sportsbook Makes Money

A sportsbook does not need to predict games. It sets its prices so that it keeps a margin whoever wins. In 2025 Americans wagered $166.9 billion with legal sportsbooks, and the books kept about a tenth of it.

The hold is not spread evenly. On a simple bet on one game, a book keeps about 5%. On a parlay, a single bet that pays only if several outcomes all occur, it keeps far more, around 20% in some states' reports, because the margin on each part compounds. Betting apps promote parlays for that reason.

States take their share from the book's winnings. New York taxes online sports betting revenue at 51% and collected about $1.3 billion in a year. Legislatures have learned that a rate can rise once an industry is established: Illinois, Louisiana, Maryland, and New Jersey all raised theirs in 2025.

8c. Who Loses

About 27% of American adults had an online sportsbook account in April 2026, up from 19% two years earlier, and so did about half of men aged 18 to 49, according to a university survey. Six in ten online bettors said they had chased a loss, meaning they bet more to win back money already gone.

Economists have begun to measure the effect on households by comparing states before and after betting became legal. One team found that each dollar bet on sports cut a household's net investment by about two

dollars (Baker and colleagues, 2024). A second found that online betting raised bankruptcies by a quarter or more within a few years (Hollenbeck, Larsen and Proserpio, 2024). A third linked unexpected losses by home football teams to a rise of about 10% in violence against partners where betting was legal (Matsuzawa and Arnesen, 2024).

Public opinion has soured. The share of Americans who call legal sports betting bad for society rose from 34% in 2022 to 43% in 2025, in polls by the Pew Research Center.

8d. Fixing the Game

On October 23, 2025, federal prosecutors in Brooklyn announced 34 arrests in two cases that reached into the National Basketball Association. One charged 31 people, among them Chauncey Billups, then Portland's coach, over rigged poker games tied to Mafia families. The other charged the Miami guard Terry Rozier. Prosecutors say that bettors who knew he would leave a March 2023 game early wagered more than $200,000 that his statistics would fall short.

Billups and Rozier have pleaded not guilty, and jury selection in the poker case is set for March 8, 2027. The betting case turns on the prop bet, a wager on an event inside a game, such as one player's points. A single player can decide a prop bet alone without making his team lose. Leagues have since pressed sportsbooks to restrict such bets, and an agreement brokered by Major League Baseball caps a wager on a single pitch at $200.

8e. Prediction Markets

A prediction market sells contracts on whether an event will happen. Each contract pays $1 if it does and nothing if it does not, so a price of 42 cents implies a 42% chance. Buyers trade with one another, and the exchange takes a fee.

Kalshi, founded in 2018, has been registered since 2020 with the Commodity Futures Trading Commission (CFTC), the federal regulator of futures markets. It began listing contracts on sports in January 2025. To its buyer, a contract on who wins Sunday's game is a sports bet. To Kalshi it is a federal financial product, which the company says lets it operate in every state, accept customers at 18, and owe no state gambling tax.

Sport now dominates the business. A federal appeals court found that more than 90% of Kalshi's trades in 2025 were on sports. Trading across the sector reached a reported $188 billion in the third quarter of 2026, though that figure counts each contract at its $1 payout and not at the lower price paid. A funding round reported in late October 2026 valued Kalshi at $40 billion. FanDuel and DraftKings, the two largest sportsbooks, have opened prediction markets of their own.

The markets have also produced a new offense. In April 2026 prosecutors charged an Army master sergeant with using classified knowledge of the raid that captured Nicolás Maduro (Module 5) to win about $409,000 on Polymarket, Kalshi's main rival. It was the first insider-trading case brought over a prediction market.

8f. Swap or Bet? The Fight in the Courts

The legal question is whether a sports contract is a “swap”, a kind of financial contract that a federal law of 2010 placed under the CFTC alone. If it is, state gambling law cannot reach a registered exchange. If it is a bet, the states regulate it as they regulate any sportsbook. The CFTC, under its chairman Michael Selig, sides with the exchanges. It has sued ten states, and on October 9, 2026, it proposed a rule defining contracts on sports and politics as swaps, with public comments due by November 18.

Court	Date	Ruling
Third Circuit (New Jersey)	April 6, 2026	Two judges to one for Kalshi: the contracts are probably swaps, and federal law displaces state regulation
Ninth Circuit (Nevada)	August 28, 2026	Three to none for Nevada: the contracts are sports gambling whatever they are called. Rehearing refused November 4
Sixth Circuit (Ohio and Tennessee)	September 25, 2026	Unanimous for the states: not swaps, and state law would survive even if they were
Fourth Circuit (Maryland)	Argued May 7, 2026	No decision as of November 11, 2026
Supreme Court	Petition filed September 2, 2026	New Jersey has asked the Court to hear the case. Kalshi's answer is due December 7, 2026, and the justices have not yet said whether they will take it

Every ruling so far concerns temporary orders issued while the lawsuits continue. No court has given a final judgment.

Thirty-nine states and the District of Columbia have backed New Jersey's request, as have the National Football League and 145 tribes and tribal organizations. Utah went further. On October 28, 2026, its attorney general filed criminal gambling charges against Kalshi and its two founders.

8g. Lotteries and the Wider World

The oldest legal bet is the state's own. American lotteries sell about $110 billion of tickets a year. A lottery pays back roughly 60 to 65 cents of each dollar in prizes, a worse return than most casino games offer.

Other governments are tightening as the American market loosens. Britain raised its tax on online casino winnings from 21% to 40% from April 2026. Macau, the world's largest casino center and the one place in China where casinos are legal, won about $31 billion from gamblers in 2025.

8h. Contested Ground: Has Legal Sports Betting Been Worth It?

The case that it has: The AGA, the leagues, and state budget writers argue that Americans bet on sports long before 2018, with offshore websites and local bookmakers that paid no tax and checked nobody's age. The AGA still puts that illegal market at $53.9 billion a year. Legal books paid about $3.7 billion in state taxes in 2025, verify ages, let customers bar themselves, and report odd betting patterns. On this view the scandals were caught by legalization and not caused by it. Unusual betting on Rozier's game was reported in March 2023, years before the arrests, and the alternative today is a prediction market with fewer protections.

The case that it has not: The advocacy group Stop Predatory Gambling, Representative Paul Tonko of New York, the historian Jonathan Cohen, and the economists cited above argue that legalization created bettors as well as moving them. An app with instant deposits, constant promotions, and parlays on every play is a different product from a corner bookmaker. The household studies show money leaving savings,

with the worst effects among people with the least. States have come to rely on their residents' losses, and the response to budget gaps has been higher tax rates, not tighter limits.

The evidence: The tax and wagering figures are solid. The size of the illegal market is an industry estimate built from a survey. The household studies cover only the first years after legalization and cannot yet separate sportsbooks from online casinos, and “chased a loss” is a self-report, not a diagnosis. Against the industry's case, its own data now show bettors leaving licensed books for exchanges that pay no state tax. Against the critics', the $200 cap on pitch bets shows that a licensed market can be steered in a way an illegal one cannot.

The course's reading, stated once: legalization moved an existing market into the open and then enlarged it. The measured harm attaches to particular features, the phone in the pocket, the parlay, and constant promotion, and those can be restricted without sending the trade back offshore.

Worked example — Where a Sportsbook's Bad Month Came From

In October 2026 the AGA reported that sports betting revenue for August had fallen 15.6% from a year earlier, and headlines said bettors were leaving. The arithmetic says something else. Inputs: August 2026 handle of $10.89 billion and a hold of 9.2%; August 2025 handle of $10.97 billion and a hold of 10.8%. Step 1, this year's revenue: $10.89 billion × 9.2% = $1.00 billion. Step 2, last year's: $10.97 billion × 10.8% = $1.185 billion. Step 3, the fall: $1.185 billion − $1.00 billion = about $185 million, or 15.6%. Step 4, split the fall in two. Had the books kept last year's 10.8% of this year's handle, revenue would have been $10.89 billion × 10.8% = $1.176 billion. The lower hold therefore cost $1.176 billion − $1.00 billion = about $176 million. The smaller handle cost only the remaining $9 million. Result: about 95% of the fall came from the hold, which moves with the luck of results and the mix of bets, and about 5% from customers betting less. Handle fell 0.7%. A reader who wants to know whether bettors are leaving should look at the handle, and over several months, before the revenue.

Module 8 Key Points

Gambling

• American casinos and sportsbooks won a record $78.6 billion in 2025; in gambling statistics, revenue means the customers' losses.

• Legal sportsbooks kept about a tenth of the $167 billion wagered in 2025, and far more on parlays than on single bets.

• Early studies link legal online betting to lower savings and more bankruptcies, concentrated in financially weaker households.

• Prediction markets sell sports bets as federal financial contracts, open to customers at 18 and free of state gambling tax.

• Appeals courts have split over whether states can stop them, and the Supreme Court has not yet agreed to decide.

• The course's reading: legalization enlarged the market it captured; the phone, the parlay, and promotion do the damage and can be restricted.

Module 8 Quiz

Check Your Understanding

1. Why were basketball figures arrested in October 2025?

A) For betting on prediction markets
B) For failing to pay tax on winnings
C) For schemes including rigged poker games and bets placed on inside information
D) For promoting unlicensed offshore sportsbooks to children during televised playoff games

2. What have early studies of legal online sports betting found in household finances?

A) Less saving and more bankruptcies
B) Higher credit scores
C) A rise in retirement saving among men under 35
D) Fewer payday loans, since winnings cover emergencies

3. In the three appeals rulings described in this module, how did the courts rule on the states' power over Kalshi's sports contracts?

A) All have sided with Kalshi
B) They have split: one court sided with Kalshi and two with the states
C) All have sided with the states
D) They have refused to rule until the Supreme Court decides the question itself

4. Why does the casino industry say prediction markets have an unfair advantage?

A) They pay higher taxes
B) They are run by the sports leagues
C) They may advertise on television, which sportsbooks cannot
D) They take customers at 18 and pay no state gambling tax while offering what are in effect the same bets

5. What is a sportsbook's hold?

A) The limit it sets on a single bet
B) The delay before it pays out a winning bet
C) The share of wagers it keeps
D) The deposit a state requires before granting a license

Module 9 — Pornography

Tube Sites, Creator Platforms, Card Networks, and Age Checks

Recommended Reading / Reference

Book: Kelsy Burke, *The Pornography Wars: The Past, Present, and Future of America's Obscene Obsession* (2023), a sociologist's account of the people on each side of the argument, from performers to the campaigners who want the trade ended.

Reference: The annual report and accounts of Fenix International Limited, the owner of OnlyFans, filed each year at Companies House, Britain's public company registry.

9a. An Industry Nobody Can Measure

Pornography is legal for adults in most democracies, sold in every country with an internet connection, and almost impossible to size. Published estimates of American revenue run from about $3 billion a year to $12 billion, and of world revenue to $97 billion and beyond. Most trace back to a magazine article or a marketing firm, not to any company's books.

The reason is structural. Most of the companies are private and registered where little disclosure is required, and most of what they distribute is given away. The best figures available are the audited accounts of a single British company, examined below.

9b. Three Business Models

The business has been rebuilt twice in a generation. In the age of videotape and disc, studios sold and rented films, and American sales and rentals passed $4 billion in 2000.

The second model gave the product away. “Tube” sites, built on the pattern of YouTube, let anyone upload video and earned their money from advertising. Pornhub opened in 2007. Much of what filled the tube sites was copied from the studios, whose sales collapsed. Applications for permits to film adult productions in Los Angeles County fell 95% from 2012 to 2015.

The third model charges for a person instead of a film. On a creator platform, a performer sells subscriptions and private messages directly to fans, and the platform keeps a share. OnlyFans, founded in London in 2016, is the largest. Its fans paid $7.2 billion in the year to November 2024.

9c. Pornhub and the Card Networks

The story of Pornhub's owner shows who regulates this industry in practice. The company, called MindGeek until 2023 and Aylo since, runs most of the best-known tube sites from Montreal. Since March 2023 it has belonged to a Canadian private-equity firm, Ethical Capital Partners.

On December 4, 2020, a column in the New York Times reported that the site hosted videos of rape and of children. Six days later Mastercard and Visa stopped processing payments to it. Within another four days Pornhub had deleted every video uploaded by an unverified user, which cut its library from about 13 million videos to about 4 million.

No court or legislature had ordered anything. Two payment networks changed the world's largest adult site in ten days. Mastercard has since required every adult site it serves to verify the age and consent of everyone shown and to review material before it is posted. Banks add their own caution: by press reports, adult businesses pay card fees of 5% to 10%, where other merchants pay 2% to 3%.

The law arrived later. In December 2023 Aylo admitted to federal prosecutors in Brooklyn that it had taken money from a production company that trafficked women, and it accepted an outside monitor for three years. In September 2025 it settled charges brought by the Federal Trade Commission and the state of Utah over illegal material on its sites.

9d. OnlyFans in One Set of Accounts

OnlyFans belongs to Fenix International, a British company that must file audited accounts. For the year to November 30, 2025, it reported revenue of $1.55 billion and a profit before tax of $715 million. It paid creators about $6.2 billion and had 47 employees. About 2.5 million creators and 132 million fans were active on the site.

Its owner prospered. Leonid Radvinsky, an American investor born in Ukraine, bought 75% of the company in 2018 and took about $2.3 billion in dividends from 2021 onward. He died of cancer in March 2026, aged 43, and a family trust now controls the business. On May 8, 2026, an investment firm, Architect Capital, agreed to buy about 16% for $535 million, a price reported as valuing the whole company at about $3.15 billion.

That price is the instructive number. A year earlier, buyers had discussed about $8 billion. The discount measures what investors fear, which is that card networks, banks, or lawmakers could cut the business off as they cut off Pornhub.

The earnings are also concentrated. Spread evenly, the payout would give each active creator about $2,500 a year. It is not spread evenly, and most creators earn far less than that.

9e. What the Law Allows

American law protects most sexual material made by adults for adults, under the First Amendment. The exception is obscenity, which the Supreme Court defined in *Miller v. California* (1973) with a three-part test. The work must appeal to a prurient interest by community standards, show sexual conduct in a patently offensive way, and lack serious artistic, political, or scientific value. Prosecutions of adult material under that test are now rare. Material showing children is a separate category, and making, sharing, or possessing it is a crime everywhere.

A minority wants to go further. The foreword to Project 2025, a policy plan published by the Heritage Foundation in 2023, said that pornography should be outlawed and its producers imprisoned. Bills to widen the federal definition of obscenity have been introduced and have not advanced. Utah has taxed sales of adult content at 2% since October 1, 2026.

9f. Age Checks

The measure that has passed is the age check. Louisiana required adult sites to verify that users are 18 from January 1, 2023, and by one tracker's count 27 states had such laws in October 2026. On June 27, 2025, in *Free Speech Coalition v. Paxton*, the Supreme Court upheld the Texas version by six votes to three. Justice Clarence Thomas wrote for the majority that adults have “no First Amendment right to avoid age verification”.

The largest site chose to leave. Pornhub blocks visitors from most of these states, arguing that checks done site by site drive users to sites that ignore the law. Many sites simply carry on unchecked. Ohio's attorney general found in 2025 that only one of the twenty most-visited adult sites was complying.

A second generation of laws moves the check from the website to the device. California's, signed in October 2025, will require the operating systems of phones and computers to pass an age signal to apps from January 1, 2027. Congress has enacted nothing. The House approved a bill containing a national age-check rule in June 2026, and the Senate has not passed it.

Britain, whose age checks began in 2025, added criminal law in 2026. Its Crime and Policing Act makes it an offense to possess or publish pornography that shows strangulation, among other categories, with effect from November 6, 2026.

9g. Images Without Consent

The fastest-growing problem is material made or shared without its subject's agreement. Software can now produce a realistic sexual image of a real person from an ordinary photograph. The Take It Down Act, signed on May 19, 2025, made it a federal crime to publish intimate images, real or forged, without consent. Since May 19, 2026, platforms must remove such an image within 48 hours of a valid request. Britain's 2026 act made it a crime to supply the “nudification” software itself.

The volume of the worst material is very large. The CyberTipline, the American clearinghouse to which technology companies must report images of child sexual abuse, received 36.2 million reports in 2023.

9h. What the Research Shows

Children see this material early. In a 2022 survey of American teenagers by the group Common Sense Media, 73% had seen online pornography, the average age of first exposure was 12, and more than half of those who had seen it said they first met it by accident.

Whether it causes harm is disputed among researchers. A 2016 analysis that pooled 22 studies found that people who consumed more pornography showed higher rates of sexual aggression. A 2022 analysis of 59 studies found no link for non-violent material and a weak one for violent material, with smaller effects in the better-designed studies. Studies of this kind struggle to separate what the material causes from the tastes of people already inclined to aggression.

The word “addiction” is disputed too. The American psychiatric manual lists no such disorder. The WHO's classification recognizes compulsive sexual behavior as a disorder of impulse control, and it excludes distress that arises only from moral disapproval of one's own habits.

9i. Contested Ground: Do Age Checks Work, and at What Cost?

The case that they work: The states that have passed these laws, the Texas attorney general Ken Paxton, and England's Children's Commissioner argue that an age check applies an old rule in a new place. A shop must ask for identification before it sells an adult magazine. Children meet this material young and often by accident, and a gate stops the accident. The gate bites, too: Pornhub's owner says its traffic fell about 80% in Louisiana once it began checking ages there. Methods now exist that confirm an age without keeping a record of who was checked.

The case that they fail: The industry's trade group, the Free Speech Coalition, the American Civil Liberties Union, and the dissenting justices argue that the laws burden speech that adults are entitled to see. Justice Elena Kagan, dissenting, argued that Texas should have been made to prove that no less burdensome method would work. Critics say users move to sites that ignore the law, or disguise their location with a virtual private network (VPN), so the careful sites lose and the worst ones gain. They add that stores of identity documents are sooner or later stolen.

The evidence: The traffic losses are real, but they are the company's own figures and do not show where the users went. A study of Google searches in states with these laws found searches for the largest compliant site down by about half, and searches for a non-compliant rival and for VPNs up. Breaches have happened: in October 2025 about 70,000 users of the chat service Discord had identity photographs exposed through a vendor that handled appeals against age checks. Two points cut against the critics. Aylo gains commercially if the check moves to the device, and privacy groups oppose the device laws as well. No study has yet measured whether children see less after a law takes effect.

The course's reading, stated once: a check that sends adults from regulated sites to unregulated ones protects few children. The evidence so far favors checking age once, on the device, over checking it at every site, though the study that would settle the matter has not been done.

Worked example — Reading OnlyFans's Accounts

Inputs, from the accounts for the year to November 30, 2025: $6.2 billion paid to creators; creators keep 80% of what fans pay; profit before tax of $715 million; 47 employees; 2.5 million active creators; and the reported May 2026 valuation of $3.15 billion. Step 1, what fans spent: $6.2 billion ÷ 0.80 = $7.75 billion. Step 2, the platform's share: 20% of $7.75 billion = $1.55 billion, which matches the revenue the company reported. Step 3, the profit margin: $715 million ÷ $1.55 billion = 46%. Step 4, profit per employee: $715 million ÷ 47 = about $15 million. Step 5, the average creator: $6.2 billion ÷ 2.5 million = $2,480 a year, or about $48 a week. Step 6, the price investors paid: $3.15 billion ÷ $715 million = 4.4 times one year's profit. Result: the company is a payments business with almost no staff and a margin few firms approach, and its creators on average earn very little. Investors nonetheless valued it at under five years of profit. A cheap price for a very profitable firm is how a market records the risk that the firm could be shut out of the banking system.

Module 9 Key Points

Pornography

• Nobody knows the industry's size; estimates differ many times over, and OnlyFans's audited accounts are the best figures there are.

• Free tube sites destroyed paid video after 2007, and subscription platforms rebuilt paid content around individual creators.

• By cutting off payments in December 2020, Visa and Mastercard changed Pornhub faster than any law had.

• More than two dozen states require adult sites to check ages, and the Supreme Court upheld such a law in June 2025.

• Pornhub's owner says its traffic fell about four-fifths where it checked ages, and search data suggest many users move to sites that ignore the law.

• The course's reading: site-by-site checks push adults to worse sites; one check on the device is the better-supported design.

Module 9 Quiz

Check Your Understanding

1. Why is the size of the pornography industry unknown?

A) Most firms are private and publish no accounts
B) It is illegal everywhere
C) Governments classify the figures to protect national security
D) The United Nations stopped collecting the data after a treaty in 1988

2. What led Pornhub to delete most of its videos in December 2020?

A) A Supreme Court ruling on obscenity
B) Visa and Mastercard cut it off
C) A federal law requiring age checks
D) A boycott by performers demanding higher pay

3. What did the Supreme Court hold in Free Speech Coalition v. Paxton in 2025?

A) That pornography is obscene
B) That age checks violate the First Amendment
C) That only Congress, and not the states, may regulate what is shown on the internet
D) That Texas may require adult sites to verify their users' ages

4. What do OnlyFans's accounts for the year to November 2025 show?

A) A small loss
B) Revenue below $100 million
C) Revenue of $1.55 billion and a profit before tax of $715 million, earned with only 47 employees
D) Profit that fell by half after the owner's death

5. What is the main criticism of age checks carried out by each website?

A) Courts have struck them all down
B) Users move to sites that ignore the law, and identity documents handed to checkers can leak
C) They apply only to sites based abroad
D) They require a passport, which most adults lack

Module 10 — Sex Work

Four Legal Models and the Evidence for Each

Recommended Reading / Reference

Book: Ronald Weitzer, *Legalizing Prostitution: From Illicit Vice to Lawful Business* (2012), a sociologist's comparison of the legal systems of the Netherlands, Belgium, and Germany. It favors regulation, and readers should weigh it against the opposing views set out in this module.

Reference: The Scottish Parliament's page for the Prostitution (Offences and Support) (Scotland) Bill, which holds the committee's report of January 2026 and the written evidence submitted by every side.

10a. The Words Themselves

Even the name of the subject is contested. “Sex work” was coined by the American activist Carol Leigh in 1978 to describe selling sex as a form of labor. It is the term used by the WHO, by Amnesty International, and by most public-health researchers. People who regard the trade as exploitation in itself reject it. They speak of “prostitution”, of “prostituted women”, and of “commercial sexual exploitation”.

This module uses “sex work” for adults who sell sex by their own decision, “prostitution” where the law uses that word, and “trafficking” where force, fraud, coercion, or a child is involved. Where the first ends and the last begins is the center of the dispute.

10b. A Market Known Mostly by Guesswork

Nobody has counted the people who sell sex. Britain's standard figure, about 72,800, comes from a parliamentary report of 2016 and rests on extrapolation from local studies. The buyers are better measured, because they can be surveyed. A British study published in 2014 found that 3.6% of men had paid for sex in the previous five years.

Two things are reasonably well established. The trade has moved indoors and online, where website advertisements have replaced the street corner. And it is dangerous: studies have found that a large share of sex workers, in some studies a majority, report violence in a given year.

In the United States, enforcement has receded without any change in the law. The FBI estimated about 62,700 arrests for prostitution offenses in 2010, and fewer than half as many by 2019.

10c. Four Legal Models

Countries have settled on four different answers, and each rests on a different theory of what the trade is.

Model	What the law does	Where, and since when
Criminalize both sides	Selling and buying are both crimes	The United States, apart from the Nevada counties in Module 1
Criminalize the buyer	Paying for sex is a crime and selling it is not. Profiting from another person's sex work stays illegal. Often called the Nordic model	Sweden (1999), Norway and Iceland (2009), Canada (2014), Northern Ireland (2015), France (2016), Ireland (2017), and the state of Maine (2023)

Model	What the law does	Where, and since when
Legalize and license	The trade is lawful inside a system of permits, registration, and inspection	The Netherlands (2000) and Germany (2002, with compulsory registration of workers since 2017)
Decriminalize	Selling, buying, and managing leave the criminal law and fall under ordinary labor and health rules. Coercion stays a crime	New Zealand (2003); the Australian states of New South Wales (1995), Victoria (2022), and Queensland (2024); Belgium (2022)

Dates are the years each law took effect.

The gap between a model on paper and the trade on the ground can be wide. Germany's statistics office counted about 32,000 registered sex workers at the end of 2024, against common estimates of 200,000 or more, so most of the German trade runs outside the licensing system built for it. Belgium has gone furthest in the other direction. Since December 1, 2024, sex workers there can hold employment contracts that carry sick pay, maternity leave, and pension rights.

10d. The American Experiment: Closing the Websites

On April 6, 2018, federal agents seized Backpage, the website that carried most American advertisements for commercial sex. Five days later the president signed the Allow States and Victims to Fight Online Sex Trafficking Act (FOSTA), usually called FOSTA-SESTA after the House and Senate bills that formed it. Websites are normally shielded from liability for what their users post. The new law removed that shield where a site knowingly helps sex trafficking.

Websites responded by removing anything that might expose them, including forums that sex workers had used to screen clients and warn one another. Three years later the Government Accountability Office found that prosecutors had brought one criminal case under the new law. The advertising had moved to sites hosted abroad.

Research on an earlier episode suggests what was lost. Economists estimated that when the classified site Craigslist opened pages for erotic services, moving part of the trade indoors, homicides of women fell by as much as 17% in the cities concerned (Cunningham, DeAngelo and Tripp).

10e. Britain's Votes of 2026

Britain debated the whole question in 2026 and changed little. In Scotland, a bill from the independent member Ash Regan would have made paying for sex a crime and repealed the offense of soliciting. The Scottish Parliament rejected it on February 3, 2026, by 64 votes to 54. The governing Scottish National Party said that it favored penalizing buyers in principle. It cited sex workers' warnings that the bill would bring more violence, and promised an independent commission.

In England and Wales, a group of members of Parliament led by Tonia Antoniazzi proposed to criminalize paying for sex and the websites that advertise it. Ministers declined, and the proposals fell. The Crime and Policing Act 2026 did one thing in this field. It pardons people convicted of soliciting when they were under 18, about 350 of them across thirty years of records. Buying and selling sex remain legal there, while soliciting in the street and keeping a brothel remain crimes.

10f. Where Trafficking Begins

Every side agrees that forced prostitution is a grave crime. They disagree about how much of the trade it describes. American law treats anyone under 18 who is induced into commercial sex as trafficked, and an adult only where there is force, fraud, or coercion. The International Labour Organization (ILO), a United Nations agency, estimated that 6.3 million people were in forced commercial sexual exploitation in 2021. Counts of identified victims are far smaller, and they rise where police look harder (Module 13).

10g. What the Evaluations Found

Rhode Island. Through a drafting accident, selling sex indoors was not a crime in Rhode Island from 2003 to 2009. Economists found that the market grew, while reported rapes fell by about 30% and gonorrhea among women by about 40% (Cunningham and Shah, 2018).

New Zealand. An official review in 2008 found no growth in the number of sex workers and reported that most felt more able to refuse a client. The law excludes migrants on temporary visas, who remain outside its protection.

Sweden. A government inquiry in 2010 reported that street prostitution had halved since the ban on buying. Critics replied that the inquiry had no measurement from before the law and no data on the indoor trade.

Northern Ireland. A review for the justice department in 2019 found no fall in demand, and very few convictions in the law's first three years.

France. In a 2018 survey of 583 sex workers, carried out by researchers working with a medical charity, 63% reported worse living conditions and 42% more violence since the ban on buying.

Across countries. A study of up to 150 countries found that those with legal prostitution reported larger inflows of trafficked people (Cho, Dreher and Neumayer, 2013). A review of 134 studies found that sex workers exposed to repressive policing, such as arrests and raids, had about three times the odds of suffering violence (Platt and colleagues, 2018).

10h. Contested Ground: Which Law Best Protects the People Who Sell Sex?

The case for decriminalizing: The New Zealand Prostitutes' Collective, Amnesty International, the WHO, and the public-health researchers published in The Lancet hold that selling sex is work and that criminal law around it puts the workers in danger. Any ban, even one aimed at buyers, pushes the trade out of sight, makes clients unwilling to be screened, and makes workers unwilling to call the police. Safety measures such as working in pairs become the crime of brothel-keeping.

The case for penalizing the buyer: The governments of Sweden and France, campaign groups such as UK Feminista, and organizations led by women who have left the trade hold that prostitution is exploitation driven by men's demand, and that consent given out of poverty is not free. They would punish the buyer and the profiteer, lift every penalty from the seller, and pay for routes out. Demand, they say, responds to law. In Sweden the share of men who reported having paid for sex fell from 13% in 1996 to 8% in 2008.

The case for licensing: The authors of Germany's laws and the Dutch cities that license window brothels start from the view that the trade will exist whatever the statute says. A legal market can be inspected, taxed,

and held to health and labor standards. Germany's 2002 law let sex workers sue for unpaid fees and join the social insurance system.

The case for keeping both sides criminal: American police and prosecutors argue that the power to arrest deters buyers and sellers alike, protects neighborhoods from street markets, and gives officers a way to reach trafficking victims and send them to services through special courts. Since every alternative rests on disputed evidence, they say, the burden of proof lies with those who would change the law.

The evidence: It is thinner than in any other module, because the population cannot be counted and surveys reach only those willing to answer. Against decriminalization stands the cross-country link to trafficking, though that study measures reports and not people. Against the buyer ban stand the reviews from Northern Ireland and France, the second of them commissioned by opponents of the law. Against licensing stands Germany's own register, which most of the trade avoids. Against full criminalization stand the review linking police action to violence and the lack of any study showing that arrests make sellers safer.

The course's reading, stated once: the best-supported finding is that punishing the people who sell sex harms them, and two of the four camps would stop doing so. On whether to punish the buyer, the studies conflict and none is strong enough to settle it.

Worked example — How Often the Law Is Used, and How Close the Vote Was

Two short calculations from Britain's 2026 debates. First, England and Wales. Inputs: 1,161 convictions for loitering or soliciting from 2013 to 2023, a span of 11 years; and the estimate of 72,800 people selling sex. Step 1: 1,161 ÷ 11 = about 106 convictions a year. Step 2: 72,800 ÷ 106 = about 690. In a typical year, roughly one person in 690 of those thought to be selling sex is convicted of the offense. Step 3: the 2026 pardon covers about 350 people over 30 years, about 12 a year. Result: the soliciting law is used rarely, and the reform Parliament passed touches a small part of even that. Second, Scotland. Inputs: 54 votes for the bill, 64 against, and 11 members not voting. Step 4: 54 + 64 + 11 = 129, the full membership. Step 5: of the 118 who voted, a bill needs more votes for than against. Six members switching sides would have made the result 60 to 58 in favor. Result: a ten-vote defeat was six changed minds from a law, in a chamber whose largest party says it supports the principle. The question is likely to return.

Module 10 Key Points

Sex Work

• Four models exist: criminalize both sides, criminalize the buyer, license the trade, or remove it from criminal law.

• No country has a reliable count of people who sell sex, so every evaluation rests on partial surveys and enforcement records.

• After the United States closed Backpage and passed FOSTA-SESTA in 2018, advertising moved abroad and one criminal case followed in three years.

• Scotland's parliament rejected a ban on buying sex by 64 votes to 54 on February 3, 2026.

• A review of 134 studies linked arrests and raids to about three times the odds of violence against sex workers.

• The course's reading: punishing sellers harms them; on punishing buyers, the evidence conflicts and settles nothing yet.

Module 10 Quiz

Check Your Understanding

1. What does the “Nordic model”, first adopted by Sweden in 1999, make a crime?

A) Paying for sex, while selling it is not punished
B) Selling sex only
C) Both buying and selling
D) Advertising sexual services online, while buying and selling stay legal

2. What did the Scottish Parliament do on February 3, 2026?

A) Licensed brothels in Glasgow and Edinburgh
B) Made paying for sex a crime across Scotland
C) Pardoned everyone ever convicted of soliciting
D) Rejected a ban on buying sex

3. What did the Government Accountability Office find three years after FOSTA-SESTA became law?

A) Online ads had ended
B) Trafficking reports had fallen by half in every state
C) Prosecutors had used it in one criminal case
D) Sex workers reported greater safety once Backpage and its rivals had closed

4. What did economists find when indoor prostitution was not a crime in Rhode Island from 2003 to 2009?

A) The market shrank
B) Violence against women rose sharply
C) The market grew, while reported rapes and gonorrhea among women both fell
D) Trafficking arrests tripled within two years

5. Why are counts of identified trafficking victims hard to interpret?

A) They are secret
B) They include only men forced into farm and factory labor
C) They are published once a decade, after each national census
D) They rise where police look harder

Module 11 — Organized Crime

Protection, Prison Gangs, Haiti, and El Salvador

Recommended Reading / Reference

Book: Diego Gambetta, *The Sicilian Mafia: The Business of Private Protection* (1993), the study that explained the mafia as an industry selling a service, and the starting point for most later research on criminal groups.

Reference: InSight Crime's annual Homicide Round-Up, which gathers the murder counts and rates of every country in Latin America and the Caribbean and explains what drove each year's changes.

11a. What Organized Crime Sells

The earlier modules treated criminal groups as sellers of drugs. Scholars who study them say their basic product is something else. In a market where no contract can be enforced in court (Module 1), someone has to do the enforcing. The sociologist Diego Gambetta, studying Sicily, defined a mafia as a business that sells protection. It guarantees deals, settles disputes, and punishes cheats, for a fee. The economist Thomas Schelling had argued in 1971 that the real business of organized crime is governing and taxing other illegal businesses.

Protection becomes extortion when the seller is also the threat. A shopkeeper who pays a gang every week is buying safety from the gang itself. The payment has a name wherever it is common: “pizzo” in Sicily, “piso” in Mexico, “renta” in El Salvador.

The groups in this course differ in kind. Trafficking organizations move a product across borders and need ports, pilots, and chemists (Modules 3 and 4). Mafias and gangs hold territory and live off the people in it. Many groups do both.

11b. Old Mafias in Decline

The classic mafias are weaker than their legends. Sicily's Cosa Nostra lost most of its leaders to trials that began in the 1980s. The last fugitive boss of that generation, Matteo Messina Denaro, was arrested in January 2023 after thirty years in hiding and died that September. The 'Ndrangheta of Calabria, now the stronger Italian group, saw 207 of its members and associates convicted in a single trial in November 2023.

Japan shows that a mafia can be starved as well as prosecuted. The yakuza syndicates operated openly for decades, with offices and business cards. Police counted about 184,000 members and associates in 1963 and 18,800 at the end of 2024. A national law of 1992 and local rules adopted by 2011, which penalize any firm that does business with a member, shut them out of bank accounts, leases, and phone contracts. Looser crews recruited online for single crimes, which the police call “tokuryu”, have taken some of their place.

11c. Gangs Born in Prison

The strongest criminal groups in Latin America were formed behind bars. Brazil's Comando Vermelho began in a Rio de Janeiro prison in 1979, and the Primeiro Comando da Capital (PCC) in a São Paulo prison in

1993. Venezuela's Tren de Aragua grew up inside Tocorón prison around 2014. Ecuador's gangs have the same origin (Module 3).

The reason is practical. An overcrowded prison gathers thousands of young men whom the state cannot protect from one another. A gang offers order. Whoever runs the prison can also command the streets, since most members outside expect to be inside one day and will need the gang's goodwill. Locking up more people can therefore strengthen the organization that the arrests were meant to break.

The gang MS-13 took a different road to the same place. Salvadoran refugees formed it in Los Angeles in the 1980s. American deportations in the 1990s carried it to El Salvador, where it and its rival, Barrio 18, came to control whole neighborhoods.

These groups now reach well beyond drugs. A Brazilian investigation in August 2025 found the PCC passing money through about 1,000 gas stations and a payments company. Two months later a police raid on the Comando Vermelho in Rio left more than 100 people dead, the deadliest police operation in Brazil's history.

11d. Rule by Gang

Where a gang controls territory, it acts as a rough government. It taxes businesses, settles quarrels, decides who may enter, and sometimes hands out food. Researchers call this criminal governance. One study based on surveys estimated that about 14% of Latin Americans, nearly 80 million people, live under some form of it.

Extortion is the main income of gangs that have nothing to export, and a growing one for those that do. The United States Treasury calls fuel theft the Mexican cartels' most important source of money outside drugs, and lists extortion and fraud against owners of vacation timeshares beside it. One research group puts employment in Mexico's criminal organizations at 160,000 to 185,000 people, which would rank them among the country's largest employers.

11e. Haiti: Where the Gangs Outgun the State

Haiti shows where the process ends. Its last president was assassinated in 2021, it has held no election since 2016, and an unelected prime minister governs. On February 29, 2024, the capital's rival gang alliances united in a coalition called Viv Ansanm, “Live Together”. It now controls up to 90% of Port-au-Prince.

The United Nations counted 9,063 homicides in Haiti in 2025, a rate of 76 per 100,000 people, and about 1.5 million people driven from their homes. A foreign force that the Security Council authorized in September 2025 was meant to reach 5,550 personnel and had about 1,500 a year later. The government has also hired private contractors, whose armed drones had killed at least 1,243 people by January 2026, by the count of Human Rights Watch.

In October 2026 El Salvador sharply expanded its role. After gangs seized four Salvadoran technicians working with the foreign force on October 18, President Nayib Bukele sent more than 2,000 troops, more than that force itself, and they launched a ground offensive on November 2. As of early November the four had not been found. Haiti's elections, already postponed twice, were moved on October 28, 2026, to July 18, 2027.

11f. El Salvador: The State of Exception

In 2015 El Salvador had the highest murder rate of any country not at war. On March 27, 2022, after a weekend in which gangs killed 87 people, the legislature declared a state of exception that suspended the right to a lawyer and allowed arrest without a warrant. It has been renewed 56 times and remains in force. Police and soldiers have detained 93,334 people under it.

Year	Homicides	Per 100,000 people
2015	6,656	About 105
2019	2,398	36
2021	1,147	18
2022	495	7.8
2023	154	2.4
2024	114	1.9
2025	82	1.3

Official police figures, which leave out suspects killed by the police and deaths in prison. Nayib Bukele took office on June 1, 2019, and the state of exception began on March 27, 2022.

About 120,000 people are now in prison, roughly 2% of the population, one of the highest rates in the world. Human Rights Watch says more than nine in ten people behind bars are still waiting for trial, and since early 2026 the courts have tried defendants in groups of more than a hundred. Human rights groups have documented between 470 and 584 deaths in custody. The president said in October 2026 that 8,000 detainees had been released as innocent.

The policy is popular. Bukele won re-election in 2024 with about 85% of the vote. In July 2025 the legislature, which his party controls, removed the limit on presidential terms.

11g. Contested Ground: El Salvador's Crackdown, a Model or a Warning?

The case that it is a model: Bukele, his security minister Gustavo Villatoro, and admirers across the region point to the count: from 6,656 killings to 82 in ten years, from the hemisphere's highest rate to its lowest. Even critics accept that the gangs are broken. InSight Crime judges that the crackdown has “largely dismantled” MS-13 and Barrio 18. People who paid extortion for a generation no longer pay it, and they vote accordingly. Supporters add that rights which the state could never enforce in gang territory were rights on paper only, and that the government admits its errors by releasing the innocent.

The case that it is a warning: The Salvadoran rights group Cristosal, Human Rights Watch, and Amnesty International answer that the price is a prison system holding tens of thousands of people who have not been tried, hundreds of whom have died. Amnesty said in July 2026 that the abuses “could constitute crimes against humanity”. An emergency renewed 56 times with killings near zero is no longer an emergency, and the same machinery has removed term limits and driven journalists and rights lawyers into exile. Critics also doubt the cause. Killings had already fallen 83% between 2015 and 2021, before the first mass arrest, and the United States Treasury sanctioned two of Bukele's officials in 2021 for secret negotiations with the gangs.

The evidence: The fall in killings is real. An independent newspaper's tally for 2025 was lower than the official one. The timing supports both sides: most of the decline came before the emergency, and the final drop to near zero came after it. By the state's own figures, about one detainee in twelve was innocent. The

model has not traveled well. Honduras copied the emergency and its murder rate fell 8% in 2025, to 23 per 100,000. Ecuador sent in the army and its rate rose 31%. El Salvador's gangs were poor street extortionists without the money or weapons of exporting cartels, and one man controls its courts and legislature.

The course's reading, stated once: El Salvador shows that mass detention can break street gangs, at a price in liberty and lives that a democracy with independent courts could not pay. It is better evidence of what the method costs than of what other countries could copy.

Worked example — El Salvador's Ledger

Inputs: 93,334 people detained from March 2022 to October 2026; 8,000 released as innocent; 10,561 convicted; between 470 and 584 deaths in custody; a prison population of about 120,000, three times its earlier level; and homicides of 1,147 in 2021 and 82 in 2025. Step 1, the admitted error rate: 8,000 ÷ 93,334 = 8.6%, about one detainee in twelve. Step 2, the share convicted after four and a half years: 10,561 ÷ 93,334 = 11.3%. Step 3, deaths: 584 ÷ 93,334 = one for every 160 people detained, or one in 199 on the lower count. Step 4, the extra prisoners. A population that tripled to 120,000 was about 40,000 before, so about 80,000 more people are held. Step 5, the killings averted each year, crediting the whole fall since 2021 to the crackdown: 1,147 − 82 = 1,065. Step 6: 80,000 ÷ 1,065 = about 75. Result: on the assumption most favorable to the policy, El Salvador holds about 75 additional prisoners for each killing it prevents in a year. Supporters consider that a fair exchange and critics do not. The arithmetic cannot settle the question, but it states the price in the policy's own figures.

Module 11 Key Points

Organized Crime

• A mafia's core product is protection: enforcing deals and settling disputes for people who cannot go to court.

• Japan's yakuza shrank by about nine tenths after laws cut members off from banks, leases, and contracts.

• Latin America's strongest gangs were born in overcrowded prisons, which they govern and use as headquarters.

• In Haiti a gang coalition holds most of the capital, and the United Nations counted 9,063 homicides in 2025.

• El Salvador's homicides fell from 6,656 in 2015 to 82 in 2025, with about 2% of its people in prison.

• The course's reading: mass detention broke El Salvador's gangs at a price in liberty that makes it a poor model to export.

Module 11 Quiz

Check Your Understanding

1. What, in Diego Gambetta's account, is a mafia's main product?

A) Cocaine and heroin
B) Protection
C) Stolen cars and fuel
D) Loans to legitimate banks

2. Why have so many of Latin America's powerful gangs grown up inside prisons?

A) Crowded prisons gather recruits, and the gang governs daily life inside them
B) Prisons pay wages
C) Guards are forbidden to enter
D) Constitutions in the region guarantee prisoners the right to form associations and to trade

3. How much of Port-au-Prince do Haiti's gangs control, by recent estimates?

A) About a tenth
B) About a quarter of the city
C) Only the port district
D) Up to 90%

4. What happened to El Salvador's official homicide count between 2015 and 2025?

A) It fell from 6,656 to 82
B) It doubled
C) It fell by about a third, to 4,400
D) It held steady until 2022 and then rose sharply

5. What is the strongest evidence against treating El Salvador's crackdown as a model?

A) Killings rose
B) Voters turned against it
C) Tens of thousands are held without trial, and hundreds have died in custody
D) The gangs it targeted were wealthy exporters of cocaine with armies larger than the state's

Module 12 — The Scam Industry

Compounds, Cryptocurrency, and the Question of Who Bears the Loss

Recommended Reading / Reference

Book: Ivan Franceschini, Ling Li and Mark Bo, *Scam: Inside Southeast Asia's Cybercrime Compounds* (2025), built on interviews with people who worked in the compounds, willingly or not, and on the property records of the men who own them.

Reference: The Federal Trade Commission's Consumer Sentinel data, published online with yearly and quarterly totals of reported fraud by type, payment method, and age of victim.

12a. Fraud at Industrial Scale

Fraud is now among the crimes an ordinary person is most likely to suffer and among the least likely to be solved. Americans reported losses of $20.9 billion to the FBI's Internet Crime Complaint Center in 2025, up 26% in a year, in more than a million complaints. The Federal Trade Commission (FTC), which keeps a separate database, recorded $15.9 billion. The two overlap and cannot be added together.

Both understate the problem, because most victims tell nobody. The FTC estimates from survey research that fewer than one victim in twenty files a complaint. It puts the true losses to fraud in 2024 as high as $195.9 billion, against the $12.5 billion that was reported to it.

Who made the estimate	Losses	What it measures
FBI, United States	$20.9 billion (2025)	Losses that victims reported in complaints
FTC, United States	$15.9 billion (2025)	Losses that victims reported; overlaps with the FBI's count
FTC, adjusted, United States	Up to $195.9 billion (2024)	Reported losses scaled up for victims who never report
United States Institute of Peace, world	About $64 billion a year (2023)	Built from estimated numbers of scammers and their takings; $43.8 billion of it from the Mekong countries
Global Anti-Scam Alliance, world	About $442 billion (year to early 2025)	An industry group's survey of 46,000 adults in 42 countries, scaled up to the world

No two rows measure the same thing, and the largest comes from the group with the most interest in a large number.

Investment fraud is the largest category by money, at $8.6 billion of the FBI's total. People over 60 lost $7.75 billion.

12b. The Long Con

The scam that built the industry is called pig-butchering, from a Chinese phrase about fattening an animal before slaughter. A stranger makes contact by text message or on a dating or social media app and spends weeks building trust as a friend or a romantic interest. The victim is then shown a way to invest, usually in cryptocurrency, through a website that the scammers control. The account appears to grow. Requests to withdraw are met with demands for fees and taxes, until the victim has nothing more to send.

The method began in China around 2016. It moved to Southeast Asia during the pandemic, when casinos built for Chinese gamblers in Cambodia, Myanmar, and Laos stood empty and their owners wanted a new

business. A University of Texas study traced more than $75 billion passing from victims to cryptocurrency exchanges between 2020 and early 2024.

12c. The Compounds

The work is done in guarded compounds, some larger than 500 acres, with dormitories, shops, and their own security forces. The United Nations human rights office reported in February 2026 that at least 300,000 people from 66 countries work in such operations and that 74% of the compounds it identified are in the Mekong region. Many workers were recruited with offers of office jobs, had their passports taken on arrival, and were told to scam or be beaten. Every former worker the office interviewed had suffered or witnessed torture.

The industry thus has victims at both ends, the person who loses savings and the person forced to take them. It also depends on protection. UNODC says the compounds “could not exist without some official complicity”.

12d. The Prince Group

The largest case so far names a Cambodian conglomerate. On October 14, 2025, American prosecutors unsealed an indictment of Chen Zhi, the chairman of Prince Group, whose businesses included a bank and real estate. It charges that the group ran at least ten scam compounds worked by forced labor. The Treasury sanctioned 146 people and companies the same day. Prosecutors also asked a court to award the government about 127,271 bitcoin that they tied to Chen, worth about $15 billion at the time.

Chen was arrested in Cambodia on January 6, 2026, and flown to China, where he was formally arrested in July on suspicion of offenses including fraud and running casinos. He has never appeared in an American court. The bitcoin case remains open. In September 2026 the judge ruled that nine people who say they were defrauded cannot claim the coins directly and must ask the Attorney General for a share if the government wins. The Treasury added further sanctions on November 5, 2026.

A second target was the plumbing. In October 2025 the Treasury cut Huione Group, a Cambodian payments company, off from the American financial system, after finding that it had laundered at least $4 billion.

12e. Crackdowns and Their Limits

Governments have moved against the compounds since 2025. Thailand cut electricity, fuel, and internet service to sites across its border with Myanmar, and about 7,000 people were released within two weeks. Myanmar's army raided KK Park, one of the best-known compounds, in October 2025. An American task force formed the next month seized more than $578 million in cryptocurrency in its first three months.

The UN human rights office judged in 2026 that the operations were “increasingly entrenched” and that centers resume or relocate soon after a raid. New sites have been reported deeper inside Myanmar, and rings have surfaced in West Africa, the Gulf, and Madagascar.

12f. Who Bears the Loss?

A scam victim usually sends the money willingly, which in most countries means the bank owes nothing. Britain has changed that rule. Since October 7, 2024, its banks must refund victims of authorized push-payment fraud, in which the customer is tricked into making the transfer, up to £85,000. The bank that sent the money and the bank that received it split the cost. The aim is to give both a reason to stop suspicious payments.

Australia chose duties without automatic refunds. A law of 2025 requires banks, phone companies, and digital platforms to detect and disrupt scams, with fines of up to A$50 million. The United States has no general rule, and the loss stays with the victim.

The platforms where scammers find their targets carry less liability still. Reuters reported in November 2025 that internal documents at Meta, the owner of Facebook and Instagram, projected that about a tenth of its 2024 revenue came from advertisements for scams and banned goods. Meta called the estimate rough and overly inclusive.

Artificial intelligence lowers the scammers' costs. It writes fluent messages in any language and can imitate a voice or a face. The FBI counted 22,364 complaints in 2025 that involved it, with losses of $893 million.

12g. Contested Ground: Is the Crackdown Breaking the Industry or Moving It?

The case that it is breaking: American and Cambodian officials point to results that no earlier campaign produced. An owner, and not only his workers, is in custody. A bank has been liquidated, a payments network cut off, and assets frozen in the United States, Britain, Hong Kong, Taiwan, and Singapore. Thousands of workers walked out of Cambodian compounds in the weeks after Chen's arrest.

The case that it is moving: The UN human rights office and researchers such as Jason Tower of the Global Initiative Against Transnational Organized Crime reply that the industry has relocated before and is relocating again, inland and to other continents. In May 2026 police found 104 people still at work in Phnom Penh buildings linked to Chen, four months after his arrest.

The evidence: Both sides have facts. No measure of the industry's total takings exists that could show a fall. Reported American losses are still rising, though complaints lag behind the crimes. What is new is pressure on owners and on the channels that move the money. Raids on compounds have a record of freeing workers without ending operations.

The course's reading, stated once: seizing money and arresting owners damages the industry in a way that raiding compounds does not, and the evidence so far shows it relocating faster than it shrinks.

Worked example — Two Numbers That Mislead

First, the bitcoin. Inputs: about 127,271 coins; the $15 billion value announced in October 2025; and a price of about $76,000 a coin on November 6, 2026. Step 1, the price implied by the announcement: $15 billion ÷ 127,271 = about $117,900 a coin. Step 2, the value a year later: 127,271 × $76,000 = about $9.7 billion. Step 3, the change: $15 billion − $9.7 billion = $5.3 billion, a fall of about 35% while the case was argued. Result: the largest forfeiture figure in American history was a price on one day. What victims might eventually share depends on a court ruling and on the price when the coins are sold. Second, the reporting gap. Inputs: $12.5 billion in fraud losses reported to the FTC for 2024, and the agency's upper estimate of $195.9 billion in true losses. Step 4: $195.9 billion ÷ $12.5 billion = 15.7. Result: by the FTC's own estimate, each reported dollar may stand for almost sixteen lost. A rise in reported losses can therefore mean more fraud, more reporting, or both, and the published figure alone cannot say which.

Module 12 Key Points

The Scam Industry

• Americans reported $20.9 billion in fraud losses to the FBI in 2025, and the FTC thinks true losses are many times larger.

• The largest operations run from guarded compounds in Southeast Asia, worked by at least 300,000 people, many of them trafficked.

• The United States is seeking 127,271 bitcoin tied to Cambodia's Prince Group, and the court has not yet awarded them.

• Raids free workers and close sites, but operators reopen elsewhere; the United Nations calls the industry increasingly entrenched.

• Britain makes banks refund most victims of payment fraud, while in the United States the loss stays with the victim.

• The course's reading: seizing money and arresting owners hurts the industry; raids on compounds mostly move it.

Module 12 Quiz

Check Your Understanding

1. Why do official figures understate losses to fraud?

A) Banks hide them
B) Most victims never report: the FTC estimates that fewer than one in twenty files a complaint
C) Losses in cryptocurrency are excluded by law
D) Only losses above $1 million are counted

2. Where are most of the scam compounds identified by the United Nations?

A) West Africa and the Gulf
B) Eastern Europe and Russia
C) The Mekong region
D) The Caribbean and Central America

3. What was the status, in November 2026, of the 127,271 bitcoin tied to the Prince Group?

A) In American custody, with the forfeiture case still undecided
B) Returned to Chen Zhi
C) Paid out to the victims
D) Destroyed by court order after Cambodia and China both refused to accept them

4. What does Britain's rule on authorized push-payment fraud require?

A) Victims bear every loss
B) Police must freeze the account
C) Platforms that carried the advert must repay half
D) Banks must refund most victims, up to £85,000, with the cost split between the sending and receiving bank

5. Who is made to work in many of the scam compounds?

A) Local police
B) People trafficked with false job offers
C) Former bank staff recruited on high salaries
D) Prisoners leased by the governments of Myanmar and Cambodia

Module 13 — Trafficking

People, Guns, Wildlife, Fakes, Fuel, and Gold

Recommended Reading / Reference

Book: Moisés Naím, *Illicit: How Smugglers, Traffickers, and Copycats Are Hijacking the Global Economy* (2005), an early and still useful survey that treats every smuggled good, from people to fake medicine, as one business with common methods.

Reference: The monthly statistics pages of US Customs and Border Protection: arrests at the border, and seizures of drugs, weapons, cash, and counterfeit goods.

13a. Smuggling People Versus Trafficking Them

Two words that are often used as one describe different crimes. Smuggling is a paid service. A person hires a guide, called a coyote on the Mexican border, to cross a frontier illegally. The customer consents, and the business ends on arrival. Trafficking is exploitation: recruiting, moving, or holding a person by force, fraud, or coercion, for labor or for sex. It needs no border at all. United Nations agreements of 2000 define the two separately.

One becomes the other when a migrant cannot pay. In April 2025 American prosecutors charged 27 people tied to Tren de Aragua, alleging that women the gang had smuggled were made to repay their “debts” through commercial sex.

The prices explain why criminal groups entered the business. Court cases cited by the Treasury put the fee at $15,000 to $20,000 a person on one route from Mexico into the United States. One organization based in Guatemala is estimated to have taken in between $104 million and $416 million in under three years. Groups that control territory along the routes need not move anyone. They charge the smugglers a toll.

13b. A Market That Follows Policy

Smuggling is a business whose demand governments can change overnight, by opening or closing the legal ways in.

Route	Peak year	Latest full year
Darién Gap, the jungle between Colombia and Panama	520,085 crossings in 2023	About 3,000 in 2025
United States border with Mexico, encounters by the Border Patrol	2.21 million in fiscal 2022	About 237,500 in fiscal 2025, the fewest since 1970
Central Mediterranean, arrivals in Italy by sea	157,651 in 2023	About 66,300 in 2025
English Channel, arrivals in Britain by small boat	45,774 in 2022	41,472 in 2025

Sources: Panama's migration service; US Customs and Border Protection; Italy's interior ministry; Britain's Home Office.

The American numbers fell after January 2025, when the new administration suspended asylum claims at the southern border and sent troops there. Fewer customers did not mean lower prices. When a crossing is harder, the smuggler's fee rises, and the migrants who still travel depend more on organized groups.

The Channel shows the opposite case. Years of British and French enforcement have not cut the crossings. The boats have instead grown more crowded, from about 13 people each in 2020 to more than 50 in 2024.

13c. Forced Labor

The ILO estimates that 27.6 million people were in forced labor on any given day in 2021. Most of them work in ordinary industries: farms, fishing boats, building sites, factories, and private homes. The profits come to more than $236 billion a year, close to $10,000 for each victim in the private economy. Within the private economy, sexual exploitation accounts for 27% of the victims and 73% of the profits. The scam compounds of Module 12 are a new branch of the same trade.

13d. Guns Going South

Drugs move north across the American border, and guns move south. Mexico's only legal gun shops are run by its army. Of the firearms that Mexican authorities recovered and submitted for tracing from 2014 to 2018, about 70% came from the United States, according to the Government Accountability Office. Estimates of the yearly flow start at 200,000 guns.

Mexico's government sued American gun makers in 2021, seeking $10 billion. The Supreme Court ended the case on June 5, 2025, ruling unanimously that a 2005 law protecting the industry from such claims barred the suit. The same pipeline arms the Caribbean. Haiti makes no firearms, and about 73% of the guns recovered and traced in the Caribbean from 2018 to 2022 came from the United States.

13e. Wildlife and Timber

Trade in protected animals and plants is governed by a treaty of 1975, the Convention on International Trade in Endangered Species (CITES). UNODC's 2024 report on wildlife crime found seizures in the years 2015 to 2021 involving about 4,000 species in 162 countries. Measured by value, the animal products seized most were rhinoceros horn and the scales of pangolins, a scaly anteater. The plants seized most were tropical hardwoods such as rosewood.

The report's verdict was mixed. Poaching of elephants and rhinoceroses has fallen over the past decade, helped by China's decision to close its legal ivory market at the end of 2017. For the trade as a whole, the report found no overall reduction in twenty years.

13f. Fakes and Small Parcels

Counterfeit goods are among the largest illegal trades by value. The Organisation for Economic Co-operation and Development (OECD), a club of mostly rich countries, and the European Union's intellectual property office put it at $467 billion in 2021, or 2.3% of world imports. China and Hong Kong are the main sources. Most fakes are clothes, shoes, and electronics. The dangerous ones are medicines, including the counterfeit pills of Module 4.

The channel was the small parcel. The United States let packages worth under $800 enter free of duty and with little inspection, and their number rose from 139 million in fiscal 2015 to 1.36 billion in fiscal 2024. The government ended the exemption for China on May 2, 2025, and for every country on August 29, 2025.

13g. Stolen Fuel

Fuel theft, the cartels' second business (Module 11), works in two ways. Thieves tap the pipelines of Pemex, Mexico's state oil company, or take crude oil outright, which brokers relabel and sell to small American importers. The larger fraud is on paper. Fuel is imported into Mexico under false customs descriptions to escape excise tax, a practice Mexicans call “huachicol fiscal”. In September 2025 Mexican prosecutors arrested 14 people over one such scheme, among them a vice admiral of the navy.

13h. Illegal Gold

The fastest-growing illegal trade in South America is in a legal metal. Gold passed $3,500 an ounce in April 2025 and traded between $4,500 and $5,000 a year later, and each rise made an unlicensed pit in the Amazon more profitable.

Peru is the clearest case. A research institute in Lima estimates that illegal mining produced more than $11.5 billion of gold exports in 2025, over 100 tons. In the first half of 2026, by its count, illegal gold made up 54% of all the gold Peru exported. Peru's foreign minister said in 2025 that the illegal gold economy was seven times the size of the country's cocaine trade.

Gold suits criminals for the reasons it suits investors. It is valuable, compact, and anonymous once melted. Illegally mined ore passes through licensed processing plants and leaves as a legal export, much of it to India and the United Arab Emirates. Peru began a process in 2012 to bring informal miners inside the law, built around a register. Only 2.3% of the more than 84,000 who signed up completed the process, and registration served mainly to shield the rest from prosecution. The government says the register must end on December 31, 2026, though some lawmakers want it extended.

The costs are mercury in rivers, cleared forest, and violence. In May 2025, thirteen guards at a mine in the Pataz district were kidnapped and killed.

13i. The Common Pattern

Three points run through all these trades. The same groups work several of them at once: the Jalisco cartel appears in American cases on drugs, stolen fuel, and fraud. The most profitable goods are often legal ones moved illegally, such as gold, fuel, and cigarettes (Module 7), because they can be sold openly once inside the legal supply chain. And pressure at one point usually moves the route instead of ending the trade, the balloon effect of Module 1.

Worked example — Is Peru's Illegal Gold Figure Plausible?

A large estimate from a single institute deserves a check against prices. Inputs: $11.5 billion and 100 tons of illegal gold exports in 2025; 32,151 troy ounces in a metric ton; and, for January to June 2026, illegal gold at 54% of export volume, which the institute says was 8.7 tons more than legal gold. Step 1, ounces in 2025: 100 × 32,151 = about 3.22 million. Step 2, the price implied: $11.5 billion ÷ 3.22 million = about $3,570 an ounce, close to what gold sold for during 2025. Step 3, total exports in the first half of 2026. Shares of 54% and 46% differ by 8 points, and 8 points equal 8.7 tons, so the total was 8.7 ÷ 0.08 = about 109 tons, of which 59 were illegal and 50 legal. Step 4, a full year at that pace is about 117 tons of illegal gold, or 3.76 million ounces. The institute projects $16 billion for 2026, which implies $16 billion ÷ 3.76 million = about $4,250 an ounce, below the price of $4,500 or more that the Associated Press reported in April 2026. Result: the tonnage and the dollar figures agree with each other and with the gold price, and the 2026 projection is, if anything, cautious. The estimate also counts only gold that passes through customs, so metal smuggled over the borders to Bolivia and Brazil is missing from it.

Module 13 Key Points

Trafficking

• Smuggling is a paid service to cross a border; trafficking is exploitation by force or fraud and needs no border.

• Migrant smuggling follows policy: Border Patrol encounters fell from 2.2 million in fiscal 2022 to about 237,500 in fiscal 2025.

• About 70% of guns traced from Mexico came from the United States, and the Supreme Court ended Mexico's lawsuit in 2025.

• Forced labor in the private economy earns more than $236 billion a year; sexual exploitation is 27% of its victims and 73% of its profits.

• Illegal gold made up 54% of Peru's gold exports in early 2026 and is now a larger criminal business there than cocaine.

• The most profitable contraband is often a legal product moved illegally, which can be sold openly once inside the supply chain.

Module 13 Quiz

Check Your Understanding

1. What separates human trafficking from migrant smuggling?

A) Trafficking always crosses a border

B) Smuggling involves only goods

C) Trafficking exploits a person by force, fraud, or coercion, while smuggling is a paid service to cross a border

D) Smuggling is legal in most countries, and trafficking is not

2. What happened to crossings of the Darién Gap between 2023 and 2025?

A) They fell by about 99%

B) They doubled

C) They held steady at about half a million

D) They shifted from northbound adults to unaccompanied children

3. Where did about 70% of the guns recovered in Mexico and traced come from?

A) China and Hong Kong

B) The United States

C) Mexico's own army stores

D) Central American civil-war stocks

4. Why is gold attractive to criminal groups in Peru?

A) It is banned

B) Its price has fallen sharply

C) The state buys all gold at a fixed price and asks no questions about where it was mined

D) It is legal to sell and cannot be traced to its mine once melted

5. What did the United States do in 2025 about duty-free small parcels?

A) Raised the limit

B) Banned parcels from Mexico

C) Ended the exemption, first for China and then for all countries

D) Kept the exemption but required every parcel to be opened and inspected by hand

Module 14 — Dirty Money

How Criminal Income Is Laundered, and What the Rules Catch

Recommended Reading / Reference

Book: Oliver Bullough, *Moneyland: Why Thieves and Crooks Now Rule the World and How to Take It Back* (2018), a reporter's tour of the shell companies, law firms, and property markets that hide stolen and criminal wealth.

Reference: The United States Treasury's *National Money Laundering Risk Assessment*, published periodically, most recently in March 2026: the government's own account of who launders money in America and how.

14a. Why Money Must Be Washed

Crime pays in a form that is hard to use. A drug organization's income arrives in small bills, and cash is heavy. Every American banknote weighs about a gram, so $1 million in twenties weighs about 50 kilograms, or 110 pounds. Money in that form cannot buy a house, pay a supplier abroad, or sit in a bank account without questions.

Laundering is the service that solves the problem, and it is usually described in three stages. Placement gets the cash into the financial system. Layering moves it through accounts, companies, and countries to break the trail. Integration returns it to its owner as apparently lawful wealth: a property, a business, or a loan repaid.

14b. How Much?

The figure quoted most often, that laundering equals 2% to 5% of the world's output, comes from a speech by the head of the International Monetary Fund in 1998 and was a rough guess then. UNODC estimated in 2011 that criminals had laundered about $1.6 trillion in 2009, or 2.7% of world output, and that well under 1% of it was seized. The United States Treasury offers no total. Its 2026 assessment says only that fraud and drug trafficking generate hundreds of billions of dollars a year.

14c. The Rulebook

The system built to stop this turns banks into informants. Under the Bank Secrecy Act of 1970, American financial institutions must report every cash transaction above $10,000, and they must file a suspicious activity report when a customer's behavior suggests a crime. They filed about 27.5 million reports in fiscal 2024, of which 4.7 million were suspicious activity reports. The reports go to the Financial Crimes Enforcement Network (FinCEN), a bureau of the Treasury, where investigators can search them.

Internationally, the standards are set by the Financial Action Task Force (FATF), a body of governments founded in 1989. It reviews each country in turn and names those that fall short. Its “grey list” of countries under increased monitoring held 18 names after its meeting of October 28 to 30, 2026, among them Haiti, Venezuela, Vietnam, and Kenya. Its “black list” names North Korea, Iran, and Myanmar. The FATF adopted its review of the United States at the same meeting, with publication expected in December 2026.

14d. The Chinese Networks

The most important change of the past decade is in who does the laundering. The Treasury's 2026 assessment says that Chinese money laundering networks have become the dominant professional launderers for drug traffickers and other criminal groups around the world. FinCEN counted 137,153 reports under the Bank Secrecy Act, covering about $312 billion of suspicious transactions, that were linked to such networks from 2020 through 2024.

The networks won the business on price, and the price reflects a second market. China limits each citizen to buying $50,000 of foreign currency a year, so wealthy Chinese will pay a premium for dollars that are already outside China. The cartels hold dollars in cash that they cannot bank. A broker takes the cartel's cash in an American city and hands it to a Chinese customer who wants dollars. The customer pays the broker inside China, and the broker's partners pay the cartel in pesos in Mexico. Nothing crosses a border. The arrangement is called a mirror transaction.

Because the broker earns from both sides, the fee to the cartel is low: 0.5% to 2% in one American case, against the 5% to 10% that older methods cost.

14e. Banks That Were Caught

On October 10, 2024, TD Bank, the American arm of a Canadian lender, pleaded guilty to conspiring to launder money, the first bank in the United States to do so, according to the Justice Department. It agreed to pay about $3.1 billion. Prosecutors said that the bank had frozen its compliance budget while its business grew, and that criminal networks had moved more than $670 million through its accounts. Regulators capped its American assets. Earlier cases include HSBC in 2012, which paid $1.9 billion over Mexican cartel cash, and the cryptocurrency exchange Binance in 2023, which paid $4.3 billion.

In June 2025 the Treasury used a new power against three Mexican financial firms, CIBanco, Intercam, and Vector, naming them as channels for money tied to fentanyl. Mexico's president said that Washington had shown no convincing evidence. All three have since closed or been sold.

14f. Cryptocurrency

Cryptocurrency was expected to make laundering easy, and its record is mixed. The analytics firm Chainalysis counted at least $154 billion received by illicit addresses in 2025, up 162% in a year, with much of the rise coming from entities under sanctions. That was still under 1% of all cryptocurrency transactions. Stablecoins, which are tokens pegged to the dollar, carried 84% of the illicit volume.

The weakness for criminals is the ledger, which is public and permanent. Investigators traced the bitcoin of Module 12 years after it moved. Companies that issue stablecoins can freeze the tokens held at a given address, and a federal law of July 2025, the GENIUS Act, requires them to be able to do so on a lawful order.

14g. Property and Shell Companies

The integration stage usually runs through assets whose owners are hard to identify: companies with no operations, called shells, and real estate bought in a company's name without a mortgage. Here the United States has loosened its rules. A law that took effect at the start of 2021 required most small companies to tell

the Treasury who really owns them. In March 2025 the Treasury exempted American companies, and a rule of August 2026 made the exemption permanent, leaving only foreign firms registered in the United States.

A second rule required reports on homes bought without bank financing by companies and trusts. It took effect on March 1, 2026, and a federal judge in Texas struck it down nationwide on March 19. The government has appealed to the federal appeals court for the Fifth Circuit.

14h. Contested Ground: Does the System Catch Much?

The case that it works: The FATF, the Treasury, and prosecutors argue that the reports are leads, not cases. Federal tax investigators found a subject named in a Bank Secrecy Act report in 87% of the cases they sent for prosecution in fiscal 2024. The largest cases, such as TD Bank and the indictments of Chinese networks, were built on them. The controls also act as a tax on crime. Launderers charge fees, and money forced into cash and couriers moves slowly and at risk. Counting only seizures, they say, ignores the money that never entered a bank at all.

The case that it fails: The researcher Ronald Pol, in a 2020 paper that called anti-money-laundering policy possibly “the world's least effective policy experiment”, estimated that it takes less than 0.1% of criminal funds, at a compliance cost more than a hundred times the amount recovered. Analysts at the Cato Institute add that convictions follow from a tiny fraction of the reports. Banks, they argue, respond by closing the accounts of money-transfer firms, charities, and poorer customers, while the largest banks treat fines as a cost of business.

The evidence: The defenders' figures show reports being used, which is different from reports starting cases. The share of federal tax investigations that began with a bank report fell from 15.8% in 2022 to 13.3% in 2024. The Treasury's own assessment concedes that the main threats have stayed much the same for a decade. The critics' ratios, for their part, divide by a total that nobody has measured. Two facts are awkward for the defenders. Illicit cryptocurrency flows rose 162% in a year despite being traceable, and the networks the Treasury calls dominant grew during the decade of heaviest spending on compliance.

The course's reading, stated once: the system supplies evidence for cases that investigators already have and raises the cost of moving criminal money. Nothing shows that it has reduced the amount laundered, and it is better judged a modest tool than a barrier.

Worked example — What $312 Billion Means, and Why the Cartels Changed Brokers

Inputs: $312 billion of suspicious transactions in 137,153 reports over the five years 2020 to 2024; one American case, announced in June 2024, in which a Chinese network laundered more than $50 million for the Sinaloa Cartel; and fees of 0.5% to 2% for the Chinese networks against 5% to 10% for older methods. Step 1, the yearly scale: $312 billion ÷ 5 = $62.4 billion a year, or about $171 million a day. Step 2, the size of a report: $312 billion ÷ 137,153 = about $2.3 million each. A caution belongs here. These are sums named in reports of suspicion. The same money can appear in more than one report, and some of it will have been lawful. Step 3, the fee on $50 million at the Chinese networks' rates: 0.5% is $250,000 and 2% is $1 million. Step 4, the fee at the older rates: 5% is $2.5 million and 10% is $5 million. Result: on a single $50 million account the cartel saves between $1.5 million and $4.75 million by changing brokers. The broker can afford it because he is paid a second time, by the Chinese customers who want the dollars. A laundering fee is a price like any other, and the supplier with the lowest cost took the market.

Module 14 Key Points

Dirty Money

• Laundering has three stages: placing cash in the financial system, layering it to hide the trail, and integrating it as lawful wealth.

• American financial institutions filed about 27.5 million reports in fiscal 2024 under a 1970 law that makes them informants on their customers.

• Chinese networks now dominate laundering for cartels by matching drug dollars with Chinese buyers who want money abroad.

• TD Bank pleaded guilty to a laundering conspiracy in October 2024 and agreed to pay about $3.1 billion.

• The United States exempted domestic companies from ownership reporting in 2025, and a court struck down its real estate rule in 2026.

• The course's reading: the rules raise criminals' costs and feed existing cases, but nothing shows they cut the amount laundered.

Module 14 Quiz

Check Your Understanding

1. What is a mirror transaction, as Chinese laundering networks use the term?

A) A cash deposit split into small sums
B) Dollars are handed over in one country and the equivalent is paid out in another, so nothing crosses a border
C) A loan repaid with casino chips
D) Two shell companies trading the same property back and forth

2. What must an American bank file when a customer's behavior suggests a crime?

A) A tax return
B) A subpoena to the customer's employer
C) A notice to the customer that the account is under review
D) A suspicious activity report

3. Why can Chinese networks charge the cartels so little?

A) They also earn from Chinese buyers of dollars
B) Mexican banks subsidize every transfer they make
C) They move only small sums, which escape reporting rules
D) The Chinese state covers their losses under a 2015 trade law

4. What became of the federal rule requiring reports on homes bought without financing by companies and trusts?

A) Congress repealed it
B) It took effect on March 1, 2026, and a federal judge struck it down nationwide on March 19
C) It was extended to all home sales
D) It has been in force since 2020 without challenge

5. What does the FATF's grey list name?

A) Banned banks
B) Banks that have pleaded guilty to laundering
C) Cryptocurrencies that exchanges may not list or trade
D) Countries under increased monitoring

Module 15 — Where Things Stand, and What to Watch

The Argument, the Contradictions, and the Dates Ahead

Recommended Reading / Reference

Book: Patrick Sharkey, *Uneasy Peace: The Great Crime Decline, the Renewal of City Life, and the Next War on Violence* (2018), on why violence fell in American cities from the 1990s and what the fall was worth to the people who lived there.

Reference: The FBI's Crime Data Explorer, the public database behind its yearly crime report, with counts and rates for the nation, each state, and most police agencies.

15a. The Argument on a Page

Fourteen modules reduce to six claims. Each is stated here once, with the modules that support it.

A ban changes the form of a market more reliably than it ends it. Prohibition cut drinking and made what was drunk stronger. Pressure on heroin helped produce fentanyl. Pressure on coca in one country moved it to the next (Modules 1 to 4).

Enforcement works as a tax, and the tax has a ceiling. Risk makes illegal drugs expensive, which holds their use below what an open market would produce. Past that point, more enforcement has bought little that shows up in prices or purity (Module 5).

Legal markets do their harm through commerce. Firms that sell a legal vice earn most from their heaviest customers and design their products accordingly: the parlay, the flavored vape, the cheap strong drink. The best results came where governments allowed the product and restrained the selling, as with tobacco (Modules 6 to 8).

Illegal markets do their harm through violence and contamination. Without courts, sellers settle disputes with guns, and buyers cannot know what they are buying. Where the state is weak, the sellers become the government (Modules 3, 4, and 11).

Private gatekeepers matter as much as the law. Card networks reshaped the pornography business in ten days. Banks decide which lawful vice firms may hold accounts, makers of phone software are becoming the age checkers, and issuers of stablecoins can freeze a criminal's funds (Modules 9 and 14).

Almost every number is an estimate. The size of each market in this course is inferred from seizures, surveys, wastewater, or one institute's arithmetic. The honest figures come with ranges, and the confident ones often come from someone with an interest (Modules 1, 9, and 12).

15b. Contradictions No Single Module States

The same government bans and licenses. In 2026 the United States struck boats suspected of carrying cocaine, moved medical marijuana to a lower schedule, and let adults in most states bet on sports from a phone. Each policy has its own history. No common principle explains which vices are fought and which are taxed.

Treasuries depend on the habits that health ministries discourage. States collect billions from gamblers' losses and smokers' taxes. Australia's tobacco excise shows what happens when the two aims collide: the tax rose for the sake of health until smokers left the taxed market.

The law is loosening and tightening at once. Gambling and cannabis have been opened to commerce in the same decade in which tobacco is being closed off by birth year and pornography placed behind age checks. The direction seems to depend less on measured harm than on which generation's habit is in question.

Violent crime is at a record low while fraud is at a record high. The American murder rate in 2025 was 4.1 per 100,000 people, matching 1955 and 1956 as the lowest since the FBI's national estimates began, and its preliminary figures show murders down a further 23% in the first half of 2026. Reported losses to fraud reached their highest level in the same year (Module 12). Crime has moved to where the police are not.

Washington calls cartels terrorists and loosens the rules against their money. The designations of 2025 and 2026 came as the Treasury exempted American shell companies from naming their owners and a court voided the reporting rule for homes bought without financing (Modules 5 and 14).

Deaths are falling while supply is rising. American overdose deaths have dropped by about 40% from their peak, even as cocaine output sets records and fentanyl stays cheap (Modules 3 and 4). What kills users and what enriches traffickers are no longer moving together.

15c. What to Watch

The dates below were set or expected as of November 11, 2026. Court dates in particular move.

Date	Event	Why it matters
November 18, 2026	Public comments close on the CFTC's proposal to add event contracts, sports bets among them, to its definition of a swap	The rule would fix federal control of prediction markets (Module 8)
December 7, 2026	Kalshi's answer to New Jersey's petition is due at the Supreme Court	The justices could decide early in 2027 whether to hear the case (Module 8)
December 11, 2026	The federal limit on THC in hemp products takes effect for most products, after a delay of one month	Would end most sales of intoxicating hemp drinks and candies, unless Congress delays it again (Module 6)
December 17, 2026	Hearing on pretrial motions in the case against Nicolás Maduro	The court takes up the claim that a head of state cannot be tried (Module 5)
December 2026	The FATF is due to publish its review of the United States	An outside grade for American rules against money laundering (Module 14)
December 31, 2026	Peru's register of informal miners is due to end, unless Congress extends it	A test of whether the state will act against illegal gold (Module 13)
January 1, 2027	Britain's ban on tobacco sales by birth year begins, and California's law on age signals from devices takes effect	Two new designs for limiting a legal vice (Modules 7 and 9)
February 28, 2027	General election in El Salvador	Nayib Bukele seeks a third term under the state of exception (Module 11)
March 8, 2027	Jury selection in the trial of Chauncey Billups and others over rigged poker games	The best-known defendant in the two basketball cases of October 2025 (Module 8)
March 31, 2027	The mandate of the foreign security force in Haiti expires unless renewed	The Security Council last renewed it for six months only (Module 11)

Date	Event	Why it matters
June 14, 2027	Maduro's trial is due to begin in New York	The first trial of a foreign leader seized by American forces since Manuel Noriega's (Module 5)
Late June 2027	UNODC's next World Drug Report	New counts of users, coca, and opium (Modules 2 and 3)
July 18, 2027	First round of Haiti's elections	The first national vote since 2016, if it is held (Module 11)
Every month	The CDC's provisional count of overdose deaths	Shows whether the fall continues (Module 4)
No date set	The DEA's decision on moving the rest of marijuana to Schedule III	Would end the tax penalty on shops selling to adult users (Module 6)
No date set	An appeals court rules on the reporting of cash purchases of homes	Decides whether the rule struck down in March 2026 returns (Module 14)

15d. A Last Word

No society in this course has abolished a vice, and none has made one harmless. What a government chooses is the form the market takes and who bears its costs: the user or the bystander, the taxpayer or the prisoner, a city in the country that buys or a village in the country that grows. The useful question about any proposal is therefore not whether it is tough or lenient. It is what market the rule will produce, who will run that market, and what it will cost.

The evidence gathered here supports modest conclusions. Treatment and rescue save lives under any law. Markets that are legal and restrained do less damage than markets that are banned or markets that are promoted. Enforcement aimed at violence and at money achieves more than enforcement aimed at volume. And every figure offered in support of a grander claim, in either direction, should be asked where it came from.

Worked example — What a Murder Rate of 4.1 Means

Inputs, from the FBI's report of August 2026: a murder rate of 4.1 per 100,000 people in 2025; a fall of 18.1% in the number of murders; and police agencies covering 328.9 million people, which the FBI says is 96.2% of the population. Step 1, the population: 328.9 million ÷ 0.962 = about 342 million. Step 2, the number of murders: 342 million ÷ 100,000 = 3,420, and 3,420 × 4.1 = about 14,000. Step 3, the year before. A fall of 18.1% leaves 81.9% of the earlier figure, so 14,000 ÷ 0.819 = about 17,100. Step 4, the difference: 17,100 − 14,000 = about 3,100 fewer people killed in one year. Step 5, a comparison. At Ecuador's rate of 50.9 (Module 3), the United States would have had 3,420 × 50.9 = about 174,000 murders. Result: a rate is a small number that stands for a large one. A change of one point in the American rate is about 3,400 lives, and the gap between the United States and Ecuador in 2025 was the difference between 14,000 deaths and 174,000 in a country of the same size.

Module 15 Key Points

Where Things Stand, and What to Watch

• A ban changes a vice market's form, toward stronger products, armed sellers, and higher prices, more reliably than it ends the market.

• Legal vice markets do their damage through promotion to heavy users; illegal ones through violence and contaminated supply.

• The American murder rate fell to 4.1 per 100,000 in 2025, a record low, while reported fraud losses reached a record high.

• Card networks, banks, and makers of phone software now regulate vice faster than legislatures do.

• Dates to watch: Maduro's hearing on December 17, 2026, Britain's tobacco ban on January 1, 2027, and Maduro's trial on June 14, 2027.

• The course's reading: the choice is never between vice and no vice, only among forms of the market, each with its own casualties.

Module 15 Quiz

Check Your Understanding

1. What does the course say a ban most reliably changes about a vice market?

A) Its form: stronger products, armed sellers, and higher prices
B) Its existence
C) The age of its customers
D) Only its tax revenue, while prices and quantities stay exactly as they were

2. What was the American murder rate in 2025, as reported by the FBI?

A) 6.6 per 100,000, a record
B) 9.7 per 100,000, as in 1933
C) 4.1 per 100,000
D) 50.9 per 100,000, like Ecuador

3. Which contradiction in American policy does the closing module point to?

A) High taxes and low prices
B) A ban on alcohol alongside legal heroin
C) Military strikes on drug boats alongside licensed cannabis and sports betting
D) Falling fraud alongside rising murder, which is the reverse of what the statistics from Europe show

4. What takes effect in Britain on January 1, 2027?

A) A 40% tax on online casinos
B) Legal sale of cannabis in pharmacies
C) Criminal penalties for paying for sex
D) The tobacco sales ban

5. Why does the course treat payment networks and banks as regulators of vice?

A) They write the criminal law
B) They can cut a business off from its customers' money within days, as Visa and Mastercard did to Pornhub in 2020
C) They own most casinos and sportsbooks
D) Governments appoint their boards and set their fees

Answer Sheet

Answers to every module's Check Your Understanding quiz.

Module	Answers
Module 1 Quiz	1. D 2. A 3. B 4. C 5. C
Module 2 Quiz	1. D 2. A 3. B 4. A 5. B
Module 3 Quiz	1. D 2. C 3. A 4. B 5. C
Module 4 Quiz	1. D 2. C 3. A 4. B 5. D
Module 5 Quiz	1. C 2. A 3. B 4. D 5. C
Module 6 Quiz	1. D 2. A 3. B 4. D 5. A
Module 7 Quiz	1. B 2. C 3. D 4. B 5. A
Module 8 Quiz	1. C 2. A 3. B 4. D 5. C
Module 9 Quiz	1. A 2. B 3. D 4. C 5. B
Module 10 Quiz	1. A 2. D 3. C 4. C 5. D
Module 11 Quiz	1. B 2. A 3. D 4. A 5. C
Module 12 Quiz	1. B 2. C 3. A 4. D 5. B
Module 13 Quiz	1. C 2. A 3. B 4. D 5. C
Module 14 Quiz	1. B 2. D 3. A 4. B 5. D
Module 15 Quiz	1. A 2. C 3. C 4. D 5. B