



## The temporal relationship between drug supply indicators: An audit of international government surveillance systems


ACCORDING TO a new study from the International Centre for Science in Drug Policy, prices of major illegal drugs have often markedly declined while their purity has increased in the past two decades, despite increased global efforts towards curtailing the illegal drug trade.

### STUDY OVERVIEW

Published in the British Medical Journal Open, the study, entitled *The temporal relationship between drug supply indicators: An audit of international government surveillance systems*, raises questions about the effectiveness of international law enforcement efforts to reduce illegal drug supply.

Researchers reviewed approximately two decades of global drug surveillance data culled from government databases of illegal drug supply, and found the supply of major illegal drugs has (with few exceptions) increased, as measured through a general decline in the inflation-adjusted price and an increase in the purity of illegal drugs. Specifically, researchers found that between 1990 and 2010:

- with the exception of powder cocaine, the purity and/or potency of illegal drugs in the U.S. generally increased;
- globally, the price of illegal drugs (with few exceptions) generally decreased; and
- these troubling trends occurred despite seizures of cannabis, cocaine, and opiates generally increasing in major drug production regions and major domestic markets.

 **IN THE UNITED STATES, cannabis seizures increased by 465% between 1990 and 2009. Despite this, the average inflation- and purity-adjusted prices of cannabis decreased by 86% over the same period, and the average potency of cannabis increased by 161%.**

### NEW INDICATORS OF DRUG CONTROL "SUCCESS" NEEDED

The study authors conclude that there is a need to re-examine metrics of drug strategy effectiveness, which currently place a disproportionate emphasis on seizures as a marker of reducing drug supply rather than reducing problematic drug use. For example, rather than using indicators of the quantity of drugs seized, which appear to be unrelated to actual supply, governments could assess the effectiveness of their drug policies by employing indicators of drug-related harm such as the number of overdoses, the rate of blood-borne disease transmission (e.g., HIV and hepatitis C) among people who use drugs, or emergency room mentions of drugs.

### REGIONAL TRENDS

Researchers reviewed government-generated indicators of drug supply in consumer markets such as the United States, Europe, and Australia, as well as patterns of drug seizures in drug-producing regions such as Latin America, Afghanistan, and Southeast Asia. Key findings include:

#### Latin America:

- Seizures of coca leaf in the Andean Region (Peru, Bolivia, Colombia) increased by close to 200% (188%) between 1990 and 2007.

#### Australia:

- The price of heroin and cannabis both decreased by approximately 50% between 2000 and 2010 in Australia, despite a heroin 'drought' in 2001.

#### North America:

- Between 1990 and 2007 in the United States, the price of heroin, cocaine, and cannabis decreased by 81%, 80%, and 86% respectively, whereas average purity increased by 60%, 11%, and 161% respectively.
- In North America (i.e. Canada, United States, and Mexico), seizures of cannabis increased by 288% from 1990 to 2007.

#### Europe:

- The price of opiates (including heroin) and cocaine in Europe declined by 74% and 51% respectively from 1990 to 2007.



### PRICE AND PURITY

Country/region	Drug	Price change	Purity change	Time period
Australia	Cannabis	−49%*		2000–2010
	Cocaine	−14%*	n/a	
	Heroin	−49%*		
Europe <sup>1</sup>	Cocaine	−51%*	n/a	1990–2009
	Opiates	−74%*		
United States	Cannabis <sup>2</sup>	−86%*	+161%*	1990–2007
	Cocaine	−80%*	+11%	
	Heroin	−81%*	+60%	

### SEIZURES: DOMESTIC MARKETS

Country/region	Drug	Seizure change	Time period
Europe <sup>3</sup>	Cannabis	+49%	1995–2009
	Cocaine	+137%*	
	Heroin	+380%*	
United States	Cannabis	+465%*	1990–2010
	Cocaine	−49%*	
	Heroin	+29%	

### SEIZURES: PRODUCING REGIONS

Country/region	Drug	Seizure change	Time period
Afghanistan	Opium	+12,000%	1990–2007
	Cannabis resin	+630%	1990–2006
Andean Region <sup>4</sup>	Cocaine	−81%*	1990–2007
	Coca leaf	+188%*	
Golden Triangle <sup>5</sup>	Heroin	−57%	1990–2010
	Opium	+178%	
North Africa	Cannabis	+208%*	1990–2007
North America	Cannabis	+288%*	1990–2007

\*statistically significant change at the  $p < 0.05$  level

<sup>1</sup> Includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Norway, Iceland, Portugal, Spain, Sweden, Switzerland, United Kingdom, and Ireland

<sup>2</sup> Unless otherwise indicated “cannabis” refers to cannabis herb

<sup>3</sup> Includes European Union countries as well as Croatia, Norway, and Turkey

<sup>4</sup> Includes Peru, Bolivia, and Colombia

<sup>5</sup> Includes parts of Thailand, Laos, Vietnam, and Myanmar