



K4 National, Regional, and Local Patterns of Methadone and Buprenorphine Seized by Law Enforcement and Analyzed by Crime Laboratories in the United States: 2003-2008

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After attending this presentation, attendees will better understand the trends and geographical variation of drug seizures that inform the U.S. Drug Enforcement Administration (DEA) of the trafficking and potential diversion of methadone and buprenorphine (generic names for two opioid analgesics).

The presentation will impact the forensic community by acknowledging the large contribution of crime laboratory forensic

scientists, as well as the importance of forensic laboratory data. The presentation will also contribute to a clearer understanding of varying dimensions and components of the trafficking, diversion, and abuse of methadone and buprenorphine.

The diversion and abuse of methadone is a key issue for United States drug control agencies, as is the expanding non-medical use of buprenorphine, an alternative to methadone treatment for heroin addiction. The heightened level of concern associated with these drugs is demonstrated in part by the frequency by which methadone and buprenorphine have been obtained by law enforcement agencies and analyzed by our Nation's crime laboratories over the past six years. Data from DEA's National Forensic Laboratory Information System (NFLIS) will be presented on methadone and buprenorphine, two synthetic opioid analgesics. NFLIS data represent instances where these drugs were seized by law enforcement and analyzed by forensic laboratories. From 2003 to 2008, the number of methadone and buprenorphine items reported by state and local laboratories increased significantly in the United States ($p < 0.05$). Methadone more than doubled from 4,967 items in 2003 to 10,459 items in 2008, while buprenorphine significantly increased from 25 items in 2003 to 5,627 items in 2008.

Table 1. National and Regional Estimates for Methadone and Buprenorphine, 2003-2008.
(Summed number of total analyzed methadone and buprenorphine items, 2003-2008)

	TOTAL	2003	2004	2005	2006	2007	2008
Methadone							
Northeast	49,300	4,967	6,297	7,302	9,022	10,761	10,459
West	7,066	646	662	1,024	1,380	1,611	1,753
Midwest	7,210	869	1,038	1,027	1,424	1,886	1,786
Northwest	12,200	1,626	1,586	1,847	2,400	3,241	2,510
South	22,079	2,036	2,558	3,346	4,431	4,880	4,942
Buprenorphine							
Northeast	11,071	25	252	640	1,008	2,100	5,627
West	420	*	*	*	*	163	264
Midwest	985	1	1	1	127	282	576
Northwest	6,323	21	244	457	1,254	1,746	2,627
South	3,612	2	17	31	700	917	2,100

*The estimate for this drug does not meet standards of precision and reliability.

Highlighted findings will include the prevalence of methadone and buprenorphine items reporting to NFLIS at national, state, and local levels from 2003 to 2008. State and county-level maps will be used to display levels of seized drugs identified in the United States. The exploration of geographically specific information provides timely information on drug trafficking and abuse spatial patterns. This level of understanding is vital as the diversion of methadone presents an increasing threat to public health. For example, methadone-related deaths in the United States increased nearly 600% from 1999 to 2006. As buprenorphine is prescribed more for opioid dependence therapy, impacts on the nation's health may also ensue.

Methadone, Buprenorphine, Prescription Drugs