

Changes in indicators of methamphetamine use and property crime rates in Oregon

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17 February 2004

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Abstract

Rates for both reported total and index crimes reached peaks in Oregon in 1995, and gradually decreased after that. Reported property crime rates displayed a transient decrease in 1996 followed by an increase in 1997, however. Several indicators of the use of methamphetamine in Oregon displayed a similar transient decrease in 1996, suggesting that changes in the illicit methamphetamine market were expressed in changes in property crime rates.

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Introduction

There has been considerable speculation about the magnitude of a link between the use of methamphetamine and the incidence of property crime in Oregon. While there is a large body of literature examining the “drug-crimes nexus,” most of the attention has been given to postulated links between violent crime and cocaine and “crack.” Methamphetamine, which has until recently been much more common on the West Coast of the United States than in other areas, has received less attention. Nevertheless, some members of the law enforcement community have speculated that “meth” use is a large contributor to the incidence of property crime. While there has been much anecdotal evidence, there is, as yet, little direct evidence of the extent to which this may be the case.

Brownstein and Goldstein (1990) summarized most of the hypotheses regarding the “drugs-crime nexus” according to one of three alternative models:

- Criminal offenses may be psychopharmacologically induced (e.g., responses to intoxication states after taking a drug)
- Criminal offenses may be economic-compulsive, i.e., induced by the need to obtain money to buy more drugs which is necessitated by drug dependency
- Criminal offenses may be “systemic,” a co-occurring association of criminal activity and drug use in the context of a social grouping (e.g., urban drug markets).

But as James C. Anthony (2002) emphasized, “There is no single drugs-crime relationship. Rather, there are drugs-crime relationships, most of which are complex rather than simple.” For various groups of people, any one or any combination of the three models may be occurring simultaneously.

Is methamphetamine use associated with any particular form of criminal activity? While it may be true that there is “no single drugs-crime relationship,” there is evidence that different kinds of crimes tend to be more associated with different drug-use patterns. One source of data relevant to this is the Arrestee Drug Abuse Monitoring program (ADAM) of the National Institute of Justice. This program combines standardized interviews and urinalysis for people arrested and held at participating law enforcement agencies around the country (Pennell et al., 1999). In the United States, meth use is most common in the West, with the highest levels reported from San Diego in the early years of the program (in 1990, nearly 30% of arrestees tested positive for methamphetamine), but its use spread rapidly north and east. In Portland, the percentage of arrestees testing positive for methamphetamine increased from 10% in 1990 to 20% in 1999.

Pennell et al. (1999) reported that for the years 1996 and 1997, 40% of arrestees who tested positive for meth had been arrested for a drug or alcohol violation. And comparing overall results for meth users to other arrestees, they found that meth users were “significantly less likely than other arrestees to be charged with a violent offense (16% versus 28%)” and meth users “were almost twice as likely as other arrestees to be charged with drug violations, either possession or sales (40% compared with 21%).” A similar pattern was found for arrestees at the Portland, Oregon, ADAM site.

Again comparing meth users to non-meth users among arrestees, meth users were more likely to be white and less likely to be Hispanic or black than were non-meth users. Furthermore, interview results indicated that meth users were “more likely to report having been arrested previously (45% versus 37%) as well as having served time or been incarcerated in the previous 12 months (39% versus 28%).” Meth users were also more likely to use multiple drugs, to have used the drug within three days before arrest, and less likely to have sought treatment. Among the five cities in the report, the proportion of arrestees who had sought treatment varied from 9% in Los Angeles to 34% in Portland.

The ADAM program has been replicated in other countries, and may provide interesting comparisons. In the program in Great Britain (now known as NEW-ADAM, New England and Wales Arrestee Drug Abuse Monitoring), testing did not distinguish between methamphetamine and other amphetamines (including ecstasy) and it is not known what the most common form is. Patterns of drug use in Britain varied by study site, and while patterns of use appear to be similar to patterns in the eastern states (Taylor and Bennett, 1999), they are likely very different from patterns found in Oregon and other western states where methamphetamine has become common. British results were first reported in 1998 by Bennett (1998), with additional results reported in 2000 (Bennett, 2000). In these studies, 61% of arrestees tested positive for at least one drug, including 11% who tested positive for amphetamines. Nearly half of those who reported taking drugs blamed their offending on drug use, and the “most frequent connection cited was the need for money to buy drugs.”

Those who tested positive for amphetamines were most likely to have been charged with a drug or alcohol violation, but twice as likely to have been charged with a property crime as a person crime (16%, 12%, and 6%, respectively). Patterns of criminal activity in relation to type of drug use were not so clear: while 31% of those arrested for theft of a motor vehicle tested

positive for amphetamine, 47% of those arrested for shoplifting were positive for opiates and 30% were positive for cocaine (including “crack” cocaine).

At one site, arrestees were asked how many times in the previous 12 months they had committed each of ten common “income generating” offenses (ranging from shoplifting and motor vehicle theft to robbery and drug trafficking). The average for all drugs was 88 offenses per person, but comparing amphetamine users to non-users, there was no significant difference. Those who were positive for opiates, however, reported committing more than twice as many offenses as non-opiate users, and cocaine users reported committing nearly four times as many offenses as non-cocaine users.

Comparing results of interviews of arrestees with an earlier general population survey, it was found that seven times more arrestees reported amphetamine use than did members of the general population (Bennett, 1998).

Another interesting result of the British report is a correlation between reported illegal income and drug use. While amphetamine users reported a somewhat higher illegal income than non-users, the difference was only significant for opiate and cocaine users, with the latter groups reporting more than twice as much illegal income as non-users. The author carries the analysis a bit further, and concludes that “if drug use caused [for whatever reason] all of the higher levels of illegal income, then the absence of use of these drugs [heroin and crack] would reduce the criminal activity of the sample as a whole by one-third.”

In comparing drug use in England and the eastern United States, Taylor and Bennett (1999) concluded that arrestees “who tested positive for amphetamines had the *lowest* illegal incomes of all drug-using groups ... and spent the *least* amount of money on illicit drugs.

Whether these results would hold in areas where methamphetamine is the predominant amphetamine used is not known.

Returning to the three models of the “drugs-crime nexus” stated above, while there is evidence to show that criminals are sometimes under the influence of drugs during the commission of a crime, there is little evidence to support a direct causality of that state to the crime. It is, therefore, unlikely that a significant proportion of crime is attributable to the “psychopharmacologically induced” model.

On the other hand, the economic-compulsive model would appear to be more characteristic of drugs which induce a high level of physical dependency coupled with a need to generate substantial amounts of money to purchase drugs. Primary among these drugs would be the opiates and cocaine.

In a study of arrestees in Ohio (Lo, 2002), where meth is not common, it was concluded that “cocaine-dependent and opiate-dependent respondents were significantly more likely than non-dependent respondents to claim that they had committed the current offense to obtain drugs for their own use.”

Where high cost coupled with high physical dependency is not the case, the third model, the “systemic” model, is likely to be more characteristic. Methamphetamine would appear to fall into that category. The results cited by Pennell et al. (1999) are consistent with a pattern of meth use characterized by frequent use of multiple drugs associated with “low-level” criminal activity. Unfortunately, most of the published literature is either derived from studies in areas where methamphetamine use is not prevalent, or uses summary data that does not allow for the analysis of data from arrestees testing positive for meth by specific crimes charged or other factors.

Methods and Results

A transient drop in reported crime rates in Oregon in 1996 coincided with a transient drop in several indicators of methamphetamine use. We compare those fluctuations and suggest a possible explanation of the results.

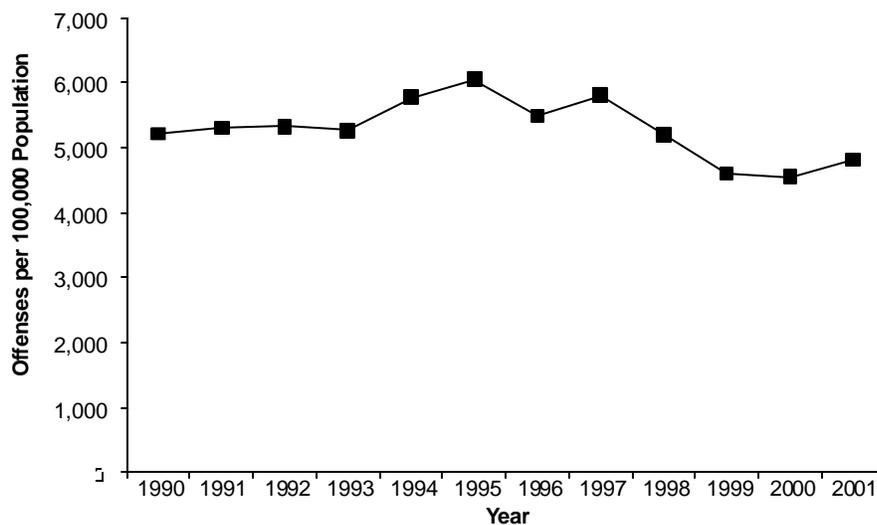


Figure 1. Rate of reported property index crimes ("offenses known to police") in Oregon per 100,000 population.

Figure 1 shows the rate of property index offenses reported in Oregon during the period 1990 to 2000 (Oregon Uniform Crime Reporting Program, Law Enforcement Data System). While reported property crime offense rates reached a peak in 1995, and generally declined thereafter, the drop in 1996 was followed by a resurgence in 1997 before continuing to decline in subsequent years.

The transient drop in 1996 was characteristic of many Oregon counties, suggesting that it was not the result of variations in reporting or data collection errors (data not shown). The transient drop was also limited largely to property crimes (as opposed to violent or behavior crimes, the former decreased steadily from a peak in 1995). This change in rates was especially true of the rates for burglary and larceny, the crimes that constitute the majority of index property offenses.

Coincidentally, there was a transient drop in 1996 in several indicators of methamphetamine use in Oregon. These include admissions to drug treatment programs where amphetamine was cited as the principal drug of addiction in the Treatment Episode Data Set,

“TEDS” (Figure 2, Department of Health and Human Services and Oregon Department of Human Services). Methamphetamine is reported to account for 95% of amphetamine admissions (Department of Health and Human

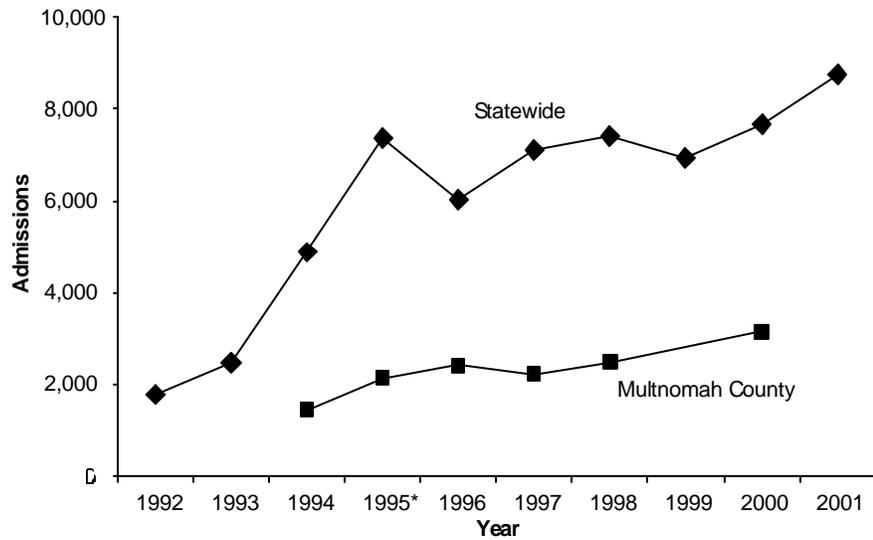


Figure 2. Admissions to substance abuse treatment programs in Oregon and Multnomah County, Oregon, where the primary substance of abuse is amphetamine (95% of amphetamine abuse is believed to be attributable to methamphetamine).

Services). A similar result was observed for the number of arrestees testing positive for methamphetamine in the Arrestee Drug Abuse Monitoring program (Figure 3). This figure combines data from the

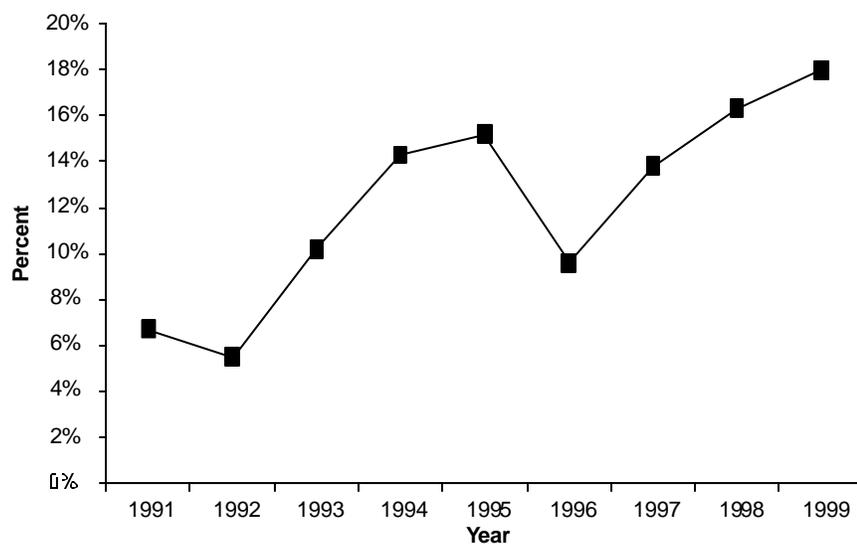


Figure 3. Percent of arrestees testing positive for methamphetamine in the Portland, Oregon, Arrestee Drug Abuse Monitoring Program (ADAM).

Portland, Oregon, site of the Drug Use Forecasting program and its successor, the Arrestee Drug Abuse Monitoring program (National Institute of Justice). It should be noted that the two programs did not produce exactly comparable data, and while the subjects sampled in the ADAM program may be considered representative of arrestees countywide, it does not represent a truly random sample of arrestees. Finally, the number of reported deaths statewide where

methamphetamine was found to be involved exhibited a similar pattern (Figure 4, Medical Examiners Office).

Further evidence that suggests that these observations are not just coincidental is provided by

an examination of age-related arrest statistics from the Oregon Uniform Crime Reporting program for the years around 1996. Statewide burglary and larceny arrest rates by age group are shown in Figures 5

and 6 (Law Enforcement

Data System). For comparison to the Multnomah County data on arrestees, the total property index crime rate (of which 78% are larceny arrests on average) by age group is shown in Figure 7 (Federal Bureau of Investigation). These data suggest that the observed “dip” in property crime offense rates may be due principally to those older than 25 years of age.

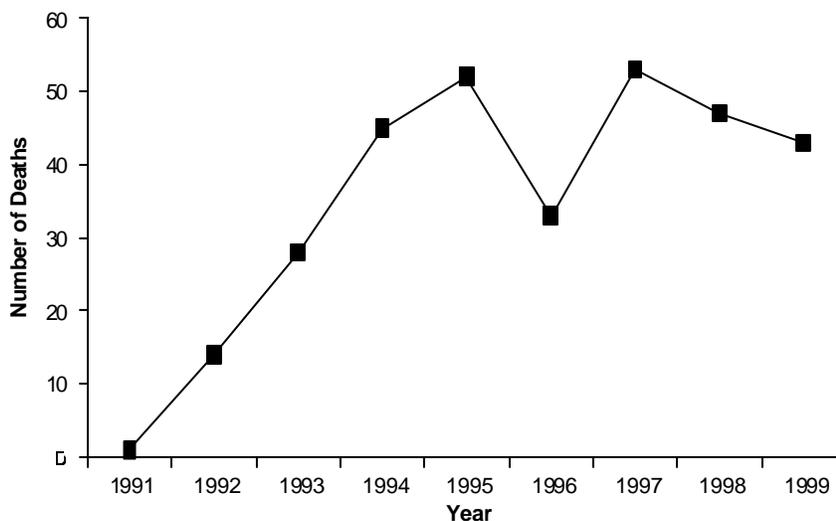


Figure 4. Number of deaths in the state of Oregon where methamphetamine was found in the blood of the deceased.

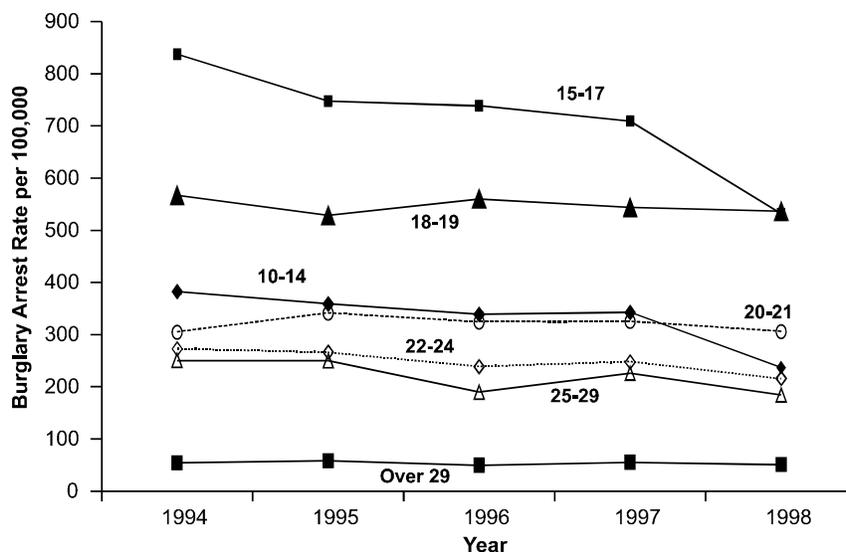


Figure 5. Statewide burglary arrest rates per 100,000 population of the respective age groups.

It is likely that arrest rates fluctuate with resources available to law enforcement agencies more than do the rates for reports of property offenses. Nevertheless, the age group showing the greatest decline in

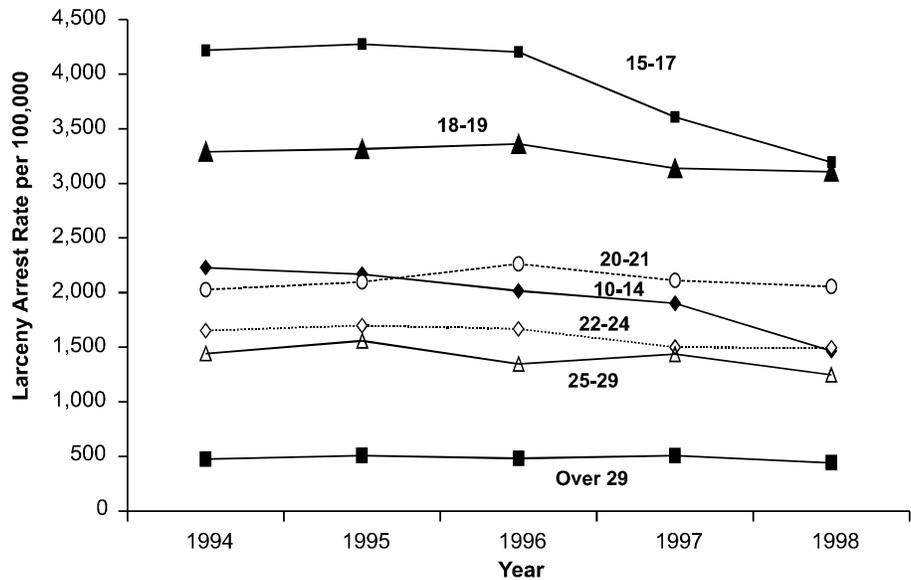


Figure 6. Statewide larceny arrest rates per 100,000 population of the respective age groups.

arrest rates in 1996 was the 25-29 year-old group, and for both burglary and larceny the statewide rate rebounded almost to the 1995 rate in 1997. That is also the five-year age group with the highest proportion of admissions (23.9% of all admissions) to drug treatment programs

in Oregon where an amphetamine was the drug of addiction. Pennell et al. (1999) reported that the mean age of arrestees testing positive for methamphetamine was 30.2 years.

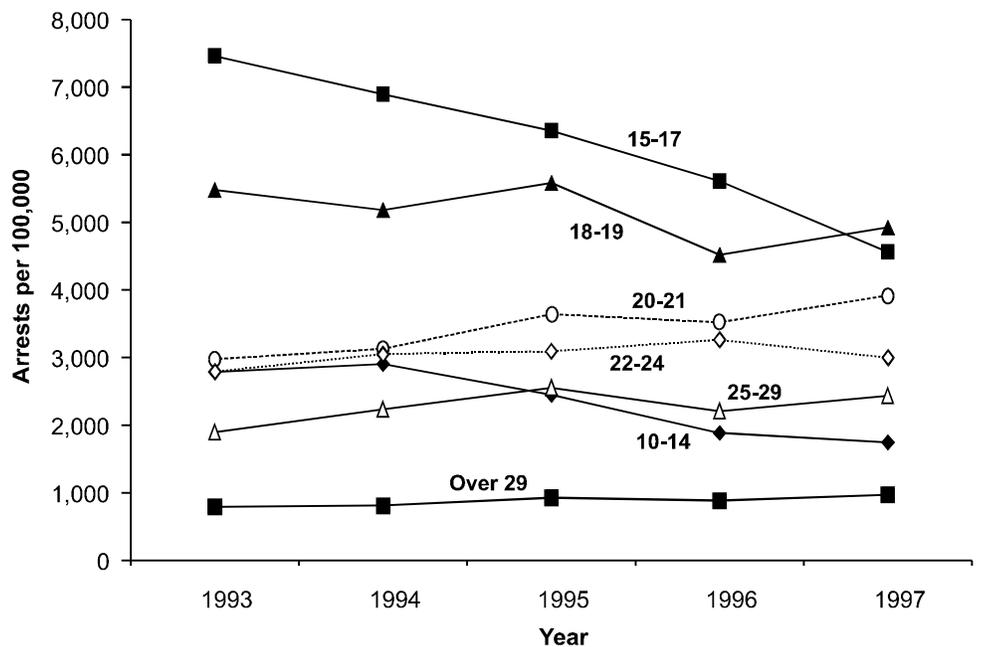


Figure 7. Property index crime arrest rates per 100,000 population of the respective age groups within Multnomah County.

Discussion

While these data are suggestive, they do not provide definitive evidence of a unique “methamphetamine-property crime nexus.” The transient drop in the percentage of arrestees testing positive for methamphetamine was also seen at other testing sites, but a corresponding drop in overall property index crime rates was not found. It is also worth noting that most of the drop in arrests for property crimes in the latter half of the 90’s is apparently attributable to a decline in the juvenile arrest rate. Since a corresponding decrease in adult rates is not seen, it would appear unlikely that crime rates will continue to decrease as the juvenile rate approaches the rates for adults. Differences in crime rate changes for adults and juveniles may also explain, at least in part, why overall property crime rates decreased from 1997 to 2000 (Figure 1) while the apparent use of methamphetamine (Figure 3) continued to increase.

We do not know why there may have been a transient drop in meth use in 1996, but the illicit methamphetamine market went through significant changes during the decade of the 1990’s. For example, it has been suggested that a decline in purity of methamphetamine in 1996 may have been “due to accelerated enforcement efforts in other states aimed at drug precursors,” suggesting an impact on supply (Western States Information Network, 1997). The same report later notes that “quality rebounded in 1997” at the same time that it noted an increase in small “stove-top” labs and the dissemination of recipes over the Internet. There may also have been an increase in methamphetamine supplies from other countries and new distribution networks.

Although it is not possible to attribute crime rates directly to the use of specific drugs, and even though meth does not appear to produce the same need for cash as the opiates, its regional prevalence may lead to a greater impact. It may also be that the psychopharmacological effects of extensive meth use may render the user less capable of generating cash through legitimate

pursuits. Further insight into the association between particular crime categories might be gleaned from a closer examination of the ADAM data.

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Note: Subsequent to the completion of this report, a series of articles in *The Oregonian* newspaper beginning on 3 October 2004, "Unnecessary Epidemic," provided compelling evidence that the effects noted here were due to a decline in the purity of illicit methamphetamine following federal restrictions on ephedrine in 1995, and subsequent enforcement actions by the Drug Enforcement Administration. Ephedrine was, at the time, the most common feedstock for the illicit production of methamphetamine.