

Maricopa County Manager's Office Report on

# substance use and public health concerns among arrestees





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## **AARIN Project Staff**

#### Charles M. Katz, Principal Investigator

Watts Family Director
Center for Violence Prevention & Community Safety
Arizona State University

#### David E. Choate, Co-Principal Investigator

Associate Director of Operations
Center for Violence Prevention & Community Safety
Arizona State University

#### **Marisol Cortez**

AARIN Project Manager
Center for Violence Prevention & Community Safety
Arizona State University

#### Michael D. White, Co-Principal Investigator

Associate Professor School of Criminology and Criminal Justice Arizona State University

#### Lidia Nuño, Research Analyst

AARIN Project Manager
Center for Violence Prevention & Community Safety
Arizona State University

#### **Jody Arganbright**

Business Operations Manager Center for Violence Prevention & Community Safety Arizona State University



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#### **Center for Violence Prevention and Community Safety**

500 N. 3<sup>rd</sup> Street, NHI-1, Suite 200 Phoenix, AZ 85069-7100 (602) 496-1470 Web site: http://cvpcs.asu.edu



ARIZONA STATE UNIVERSITY

## **Arizona Arrestee Reporting Information Network**

## 2012

Maricopa County Manager's Office Report on Substance Use and Public Health Concerns among Arrestees

> By David E. Choate September 2012

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## **AARIN Program Overview**

The Arizona Arrestee Reporting Information Network (AARIN) is a monitoring system that provides ongoing descriptive information about drug use, crime, victimization, and other characteristics of interest among individuals arrested in Maricopa County, Arizona. Funded by the Maricopa County Board of Supervisors beginning in 2007, AARIN is modeled after the former National Institute of Justice (NIJ) national-level Arrestee Drug Abuse Monitoring Program (ADAM). In three facilities throughout the county, professionally trained interviewers conduct voluntary and confidential interviews with recently booked adult arrestees and juvenile detainees. Questions focus on a range of topics including education, employment and other demographics, patterns of drug use (lifetime and recent), substance abuse and dependence risk, criminal activity, gang affiliation, victimization, mental health, interactions with police, public health concerns, incarceration and probation, citizenship, and treatment experiences. Each interviewee also provides a urine specimen that is tested for the presence of alcohol and/or drugs. Arrestees who have been in custody longer than 48 hours are ineligible for participation in AARIN, due to the 72-hour time limitation for valid testing of urine specimen.

The instruments used and the reporting mechanism underwent a substantial revision in 2011. While maintaining all of the data elements from the previous core set of questions, the baseline interview expanded by more than 60%. Additionally, with the change in the core questionnaire, the project shifted its reporting strategy to focus reports to each of six key Maricopa County criminal justice agencies: Maricopa County Manager's Office, Maricopa County Sheriff's Office, Maricopa County Attorney's Office, the Office of the Public Defender, Adult Probation Department, and the Juvenile Probation Department.

Overall, AARIN serves as a near-real time information source on the extent and nature of drug abuse and related activity in Maricopa County, AZ. This information helps to inform policy and practice among police, courts and correctional agencies to increase public safety and address the needs of individuals who find themselves in the criminal justice system.

For information using the most recent set of data, please see the following reports:

- Maricopa County Manager's Office Report detailing substance abuse and public health concerns among the Maricopa County arrestee population.
- Maricopa County Sheriff's Office Reports broad characteristics of the entire AARIN sample
  and a detailed comparison of arrestees' perception of police in general, and use of force by and
  against police, by arresting agency.
- Maricopa County Attorney's Office Detailed report covering street gangs using key core questionnaire elements and a comprehensive interpretation of the Gang Addendum.
- Office of the Public Defender Report comparing arrestees who are at-risk for a mental health problem, substance abuse/dependence problem, a co-occurring disorder (both substance abuse/dependence and mental health), or not at risk.

- Adult Probation Department Comprehensive summary of the core questionnaire comparing Maricopa County probationers to probationers from elsewhere and those arrestees who have not served probation.
- **Juvenile Probation Department** Comprehensive summary of the core juvenile questionnaire comparing Maricopa County juvenile probationers to those who have served probation elsewhere and those detainees who have not served probation.

For other reports and more information about the project, visit the AARIN page of the Center for Violence Prevention & Community Safety's website: <a href="http://cvpcs.asu.edu/">http://cvpcs.asu.edu/</a>.

## **Methodology: Sampling and Data Collection**

In order to ensure representative results for the entire population of arrestees in Maricopa County, the AARIN project employs a systematic sampling protocol that includes the collection of data with target quotas each day. Data are collected during three cycles each calendar year - with interviews conducted during a continuous two-week period at the Central Intake of Maricopa County's Fourth Avenue Jail each collection cycle. Dispersing data collection cycles across three different four-month blocks helps control for possible seasonal variations in crime and arrest patterns, and conducting collections covering all seven days of the week account for possible differences between weekdays and weekends, or other day-to-day variations. The periodic data collection cycles combined with the sampling protocols ensures a representative sample of all Maricopa County arrestees. The same procedures employed by AARIN were tested under ADAM (Maricopa County was one of the sites used in the evaluation) comparing the selected sample to comprehensive jail census data to assess the representativeness of the sample to the population on key characteristics. The National Opinion Research Center at the University of Chicago was the national data manager for ADAM at the time and concluded that the periodic data collection cycles, sampling protocols and daily quotas would result in a scientifically representative sample of study participants that could be generalized to the whole of arrestees for the particular jurisdiction (i.e. Maricopa County arrestees).

Daily collection quotas call for 23 males and 7 females to be interviewed, including the completion of the core instrument, any and all addenda, and to provide a urine specimen. Potential participants are selected using a standardized procedure (described below) to ensure both a sufficiently randomized and representative sample of arrestees. Some of the potential participants are either unavailable or otherwise ineligible for participation. Most commonly this applies to those arrestees who have already been released from custody or transferred to another facility, but also includes those whose behavior constitutes a safety risk to the jail and/or interview staff. Upon initial contact, arrestees are read an informed consent script (see inset), to which they voluntarily either decline or agree to participate; typically more than 90% agree to participate.

#### Consent Script:

Hello, my name is \_\_. I am working on a research project run by Arizona State University. The purpose of the project is to understand issues and problems confronted by people and to help give advice on how to provide services to individuals who have been arrested. I would like to ask you a series of questions that will take 15-45 minutes to answer. There are no foreseeable risks for participating in this research, and there are no benefits to you individually. Jail personnel will not have access to the information that you provide us. The information you provide is confidential and anonymous, and it will not help or hurt your case. If, for any

reason, you become distressed or anxious during the interview, you can request to speak with the facility's medical personnel or psychological counselors.

I will not write down your name or any other identifying information the questionnaire. You can refuse to answer any question, and you may stop the interview at any time for any reason. At the end of the interview I will ask you to provide a urine sample. If you listen to my questions, I will give you a candy bar. Do you have any questions?

During the data collection period, interviews are conducted during an eight-hour period each day, with arrestees who are randomly selected based on their booking time that yields a stratified random sample. Consistent with the ADAM sampling strategy, a *stock* (i.e., arrested and booked during non-data collection hours) and *flow* (i.e., during data collection hours) process is employed to ensure a representative sample of arrestees across any given 24-hour period. The stock sample is selected by starting with a list of all bookings processed from the 16-hours that range from when collection ended the previous day through the start-time of the current collection day. Eligible bookings are counted and divided by ten, which gives the selection interval. A random start-point is selected, and each *n*th (e.g. the value equal to the selection interval) arrestee is selected as a potential participant. A "nearest-neighbor" procedure is used to replace members of the stock list that are either found to be ineligible or unavailable, or whom decline to participate, until the daily quota of 10 completed and provided interviews is met. The flow sample is more straight-forward. Potential participants are randomly selected as they are booked into the facility as needed. A minimum of 13 completed and provided interviews are expected to meet daily quota.

## **Survey Instrument**

The core AARIN survey instrument is modeled after the ADAM and Drug Use Forecasting (DUF) instruments, and was developed with input from Maricopa County officials. Starting with the third collection cycle of 2011, AARIN began using a new core instrument. The new instrument included the same elements of the previous version, but expanded by more than 60% following extensive input from Maricopa County officials representing six key agencies related to the criminal justice system and the arrestee population – the County Manager's Office, Sheriff's Office, County Attorney, Public Defender, Adult Probation, and Juvenile Probation.

The instrument is broken down into a variety of sections that include: demographics and background information (sex, race/ethnicity, age, citizenship, educational level, methods of income), current and past drug use (ever, past 12 months, 30 days and three days), drug dependency and treatment, medical marijuana and marijuana acquisition, criminal history (ever, past 12 months), gang involvement, firearms possession, victimization (past 12 months, 30 days), police interactions, mental health issues (ever and past 12 months), correctional health services and public health concerns, and incarceration and probation history (ever and past 12 months). Additionally, the AARIN platform includes addenda instruments to the core set of questions. Addenda are used to collect more detailed information regarding a particular topic and/or population. Recently, both a police contact and gang addenda were used, collecting information from arrestees about police in general, use of force by and against the police (Police Contact Addendum), reasons and methods for joining and leaving a gang, gang organizational structure and criminal activities, and the respondents' perceptions of cohesion and connectedness to their gang (Gang Addendum).

## **Urinalysis Testing**

Once an interview is completed, the arrestee then submits a urine sample. The urine specimens are tested for alcohol and four illicit drugs: cocaine, marijuana, methamphetamine, and opiates. The testing is done using the enzyme-multiplied immunoassay technique (EMIT), which has shown a high degree of accuracy with very few false-positive results (Reardon, 1993). As a reliability check, all specimens that test positive with the EMIT methods are then tested again using Gas Chromatography with Mass Spectrum Detection (GC/MS). The EMIT technique with GC/MS confirmation procedures are well-established and offer highly reliable results for the illicit drugs under study here – cocaine, marijuana, methamphetamine, and opiates – for up to 72 hours after use. Unfortunately, these procedures offer high reliability results for alcohol for only 12-24 hours after use. The adoption of more sensitive alcohol screening procedures was cost-prohibitive, however.

## Maricopa County Manager's Office Report

The analysis and report presented here is prepared specifically for the Maricopa County Manager's Office on behalf of the Maricopa County Board of Supervisors (BOS) and Maricopa County Manager as part of their support of the Arizona Arrestee Reporting Information Network (AARIN). The researchers at Arizona State University and its Center for Violence Prevention and Community Safety are the authors of this report and any errors, omissions and opinions are their own and do not necessarily reflect the other parties.

The Maricopa County Manager's Office Report 2012 examines a variety of public and correctional health concerns among the Maricopa County arrestee population. The selection of the report's focus serves to highlight details of the data collection that can be used for data driven decision making and examination of both medical and behavioral public health concerns relevant to Maricopa County Correctional Health Services, the Maricopa County Public Health Department, and others interested or involved in health-related services delivery. Substance abuse and treatment history and needs are a common issue for arrestees. This report describes substance use among arrestees, and provides self-reported detail, by drug, on whether respondents are currently receiving treatment, have received treatment in the past, feel they could use treatment, and if they feel they needed or were dependent on different drugs. Also examined are mental health assistance and risks, correctional health services concerns, and characteristics of the arrestee sample. Straightforward bivariate analyses comparing male and female arrestees are used throughout the report.

## **Key Findings**

The analyses for this report are principally derived from the 1,342 arrestees who completed the interview (with or without a testable urine sample). For some analyses (e.g. self-reported drug use and urinalyses results), a subset of 1,253 respondents was used. The 89 cases removed from this subset were those who had completed the questionnaire, but either did not provide a urine specimen or whose specimen was unsuitable to yield valid results.

Initially, 1,808 arrestees were selected for potential participation. Of those, 253 were ineligible or unavailable. Typically, these arrestees have either already been released from custody or transferred to another facility. Occasionally, a potential participant is unavailable for recruitment if they are in protective custody and pose a safety risk to facility and/or interview staff. Finally, some potential participants are ineligible because they have been in police custody for greater than 48 hours, which is a strict limitation due to the 72-hour window necessary for urine specimen testing. Of the 1,555 available and eligible potential participants, 1,405 (90.4%) agreed to participate, and of those 89.2% (n=1,253) completed the questionnaire and provided a valid urine specimen. See Exhibit 1.

**Exhibit 1: Recruitment and Participation of Arrestees by Sex** 

|  | Sex  |       |        |     | Total |       |
|--|------|-------|--------|-----|-------|-------|
|  | Male |       | Female |     | TOLAI |       |
|  | %    | N     | %      | N   | %     | N     |
| Arrestees screened/selected for possible participation |      | 1,401 |        | 407 |       | 1,808 |
| Participation*   |      |       |        |     |       |       |
| Agreed   | 76.2 | 1,068 | 82.8   | 337 | 77.7  | 1,405 |
| Declined   | 8.7  | 122   | 6.9    | 28  | 8.3   | 150   |
| Not Available  | 15.1 | 211   | 10.3   | 42  | 14.0  | 253   |
| Available, Eligible and Agreed                         |      |       |        |     |       |       |
| Completed Interview w/out UA                           | 6.1  | 62    | 8.3    | 27  | 6.6   | 89    |
| Completed & Provided UA                                | 93.9 | 954   | 91.7   | 299 | 93.4  | 1,253 |
| Total  | 75.7 | 1,016 | 24.3   | 326 | 100.0 | 1,342 |

<sup>\*</sup> t test or Chi-square significant at p < .05

## **Characteristics of the Sample (Exhibit 2)**

The majority of arrestees (and the AARIN sample) were male (75.7%, n=1,016). Both male and female respondents were, on average, about 32 years old (mean age of 32.4 years for males and 31.8 for females). About one-third of arrestees were aged 36 or older (35.0% of male respondents and 31.3% of females), and about a fourth were between 21 and 25 years old (22.0% of male respondents and 27.3% of female respondents). Among male arrestees, those identifying themselves as white (34.6%, n=352) and Hispanic/Latino (33.5%, n=340) were most common, followed by Black/African-American (14.3%, n=145), "other" (11.3%, n=115) and Native American (6.3%, n=64). Female arrestees were distributed somewhat differently. Female respondents were more likely to identify themselves as white (41.7%, n=136), followed by Hispanic/Latina (26.4%, n=86), Black/African-American (14.4%, n=47), Native American (9.2%, n=30) and lastly, "other" (8.3%, n=27). The majority of respondents were U.S. Citizens (91.6%, n=1,226), but male respondents were more often legal and illegal immigrants (1.9% and 7.8% compared to 0.3% and 4.3%, respectively).

Educational attainment differed between male and female respondents, with females having higher overall attainment with 28.9% (n=94) not having completed high school, compared to 33.5% (n=337) of males and 39.7% (n=129) with at least some post-high school education, compared to 32.4% (n=326) of male respondents. In reporting their primary source of income in the past 30 days, male respondents were more likely than female respondents to be employed full-time (38.6% compared to 17.2%). Female respondents were significantly more likely to report income from legal sources other than employment (42.7%, n=134), and to report no income in the past 30 days (15.3% compared to 7.1%, respectively).

There were no significant differences between male and female arrestees related to their residential situation in the past 30 days. Most respondents lived in a private residence (89.2% of males and 92.0%)

of females) in the past 30 days. Half of female respondents reported living with children in the home (49.7%, n=162), which was significantly more often than male respondents (40.9%, n=415). Both males and females had similar rates of homelessness, 7.3% and 6.1%, respectively in the past 30 days. Chronic homelessness is defined by AARIN using the definition provided by the U.S. Department of Housing and Urban Development (HUD). A respondent is classified as having a chronic homelessness problem if they had no fixed residence or was residing/sleeping in a place not intended for human habitation and were either: 1) homeless for 12 continuous months; or 2) had experienced at least four (or more) episodes in the past three years. Chronic homelessness is a common problem among AARIN respondents, with 31.6% (n=321) of male arrestees and 31.0% (n=101) female arrestees reporting the problem.

Female respondents were more likely to report having medical insurance coverage of some kind (58.9%, n=192) than male arrestees (39.9%, n=405). State government funded insurance (Arizona Health Care Cost Containment System, or AHCCCS) was significantly the most common type of health insurance among all respondents, and females were significantly more likely to be covered by AHCCCS than male respondents (42.0% compared to 24.3%). Individually purchased (e.g. Blue Cross/Blue Shield, COBRA, etc.) and employer-funded health insurance were the next most common sources of coverage (4.2% and 4.4% for males and 5.5% and 4.6% for females, respectively). Family supported (e.g. parents or spouse) and other sources were similar between male and female respondents (3.7% and 2.9% for males and 2.8% and 3.1% for females, respectively). Retirement and disability benefits were rare for both male and female respondents (0.4% and 0.7% for males and 0.3% and 1.8% for females, respectively). The fact that the majority of respondents (55.4%, n=743) reported no health insurance coverage, and that the vast majority of those with healthcare reported AHCCCS (the indigent health care system for Arizona) as the source of their coverage (64.2%, n=383), indicates a critical burden for Maricopa County Correctional Health Services.

Exhibit 2: Characteristics of the Arrestee Population by Sex (N=1,342)

|  | S       | Sex     |         |
|--|---------|---------|---------|
|  | Male    | Female  | Total   |
|  | %       | %       | %       |
| Sex  |         |         |         |
| Male   | 100.0   | 0.0     | 75.7    |
| Female   | 0.0     | 100.0   | 24.3    |
| Age category   |         |         |         |
| 15-20  | 11.2    | 9.2     | 10.7    |
| 21-25  | 22.0    | 27.3    | 23.3    |
| 26-30  | 18.5    | 19.3    | 18.7    |
| 31-35  | 13.3    | 12.9    | 13.2    |
| 36 & older   | 35.0    | 31.3    | 34.1    |
|  | 32.4    | 31.8    | 32.3    |
| Mean Age (S.D.)  | (10.58) | (10.42) | (10.54) |
| Race/Ethnicity*  |         |         |         |
| White  | 34.6    | 41.7    | 36.4    |
| Black/African-American   | 14.3    | 14.4    | 14.3    |
| Hispanic/Latino  | 33.5    | 26.4    | 31.7    |
| Native American/American Indian  | 6.3     | 9.2     | 7.0     |
| Other (combines Asian/Pacific Islander, multiple and "other" categories) | 11.3    | 8.3     | 10.6    |
|  |         |         |         |
| Citizenship Status*  |         |         |         |
| Illegal Alien  | 7.8     | 4.3     | 6.9     |
| Legal Alien  | 1.9     | 0.3     | 1.5     |
| US Citizen   | 90.3    | 95.4    | 91.6    |
| Highest educational attainment*  |         |         |         |
| Did not graduate high school   | 33.5    | 28.9    | 32.4    |
| High school diploma or GED   | 34.2    | 31.4    | 33.5    |
| Post high school education   | 32.4    | 39.7    | 34.2    |
| Main source of income (past 30 days)*                                    |         |         |         |
| Working full time  | 38.6    | 17.2    | 33.4    |
| Working part time  | 17.1    | 15.0    | 16.6    |
| Other legal sources  | 24.9    | 42.7    | 29.3    |
| Illegal sources  | 12.3    | 9.9     | 11.7    |
| 5  | ="      |         |         |

<sup>\*</sup> t test or Chi-square significant at p < .05

Exhibit 2 (continued): Characteristics of the Arrestee Population by Sex (N=1,342)

|   | Sex  |        |       |  |
|---|------|--------|-------|--|
|   | Male | Female | Total |  |
|   | %    | %      | %     |  |
| Type of residence (past 30 days)                |      |        |       |  |
| Apartment, Private House, Mobile Home           | 89.2 | 92.0   | 89.9  |  |
| Public or Group Housing                         | 1.5  | 1.2    | 1.4   |  |
| Hospital or Care Facility                       | 0.3  | 0.0    | 0.2   |  |
| Incarcerated                                    | 0.7  | 0.3    | 0.6   |  |
| Shelter   | 0.6  | 0.0    | 0.4   |  |
| No fixed residence or on the street             | 7.3  | 6.1    | 7.0   |  |
| Other   | 0.5  | 0.3    | 0.4   |  |
| Transient, homeless, or no fixed residence      | 7.3  | 6.1    | 7.0   |  |
| Reported chronic homelessness                   | 31.6 | 31.0   | 31.4  |  |
| Children living in the home*                    |      |        |       |  |
| No  | 48.4 | 43.3   | 47.1  |  |
| Yes   | 40.9 | 49.7   | 43.0  |  |
| Not Applicable                                  | 10.7 | 7.1    | 9.8   |  |
| Currently pregnant (n=308)                      | -    | 5.2    | 5.2   |  |
| Medical Insurance Coverage*                     | 39.9 | 58.9   | 44.5  |  |
| Veteran of U.S. military service*               | 8.0  | 1.8    | 6.5   |  |
| Reported source of income (past 30 days)*       |      |        |       |  |
| Legal income only                               | 72.8 | 69.7   | 72.0  |  |
| Illegal income only                             | 7.2  | 4.8    | 6.6   |  |
| Both legal and illegal income                   | 13.1 | 10.3   | 12.4  |  |
| No income reported                              | 7.0  | 15.2   | 9.0   |  |
| Most severe offense                             |      |        |       |  |
| Violent   | 20.5 | 15.0   | 19.2  |  |
| Drug-related                                    | 28.1 | 26.1   | 27.6  |  |
| Property  | 20.9 | 22.7   | 21.3  |  |
| Miscellaneous                                   | 30.6 | 36.2   | 31.9  |  |
| Arrested in the past 12 months*                 | 49.8 | 43.2   | 48.2  |  |
| Served time in jail or prison (past 12 months)* | 33.1 | 25.5   | 31.2  |  |

<sup>\*</sup> t test or Chi-square significant at p < .05

## Drug Use by Sex (Exhibit 3)

Drug and alcohol use among the arrestees was common, both for lifetime and recent use. The use of marijuana, methamphetamine, and powder cocaine differed between male and female arrestees, while alcohol and other drugs had similar history of use patterns for both. Exhibit 3 uses a reduced sample size (n=1,253 compared to n=1,342) in order to consistently compare the self-reported drug use with available urinalysis results.

Lifetime alcohol use was most common, with 98.2% of males and 97.7% of females reporting use. More than two-thirds of respondents (69.6% of males, 66.9% of females, and 69.0% total) had used alcohol in the past 30 days, and almost half (47.2% of males, 42.1% of females, and 46.0% total) had used in the past 3 days. Male respondents reported, on average, their first use of alcohol at age 14, compared to female respondents at age 15.

Male respondents were more likely to report a history of marijuana use. Nine in ten (88.8%) male arrestees reported having used marijuana at some time in their life, 57.4% had used it in the past 12 months, 49.5% in the past 30 days, 37.3% in the past 3 days, and 38.5% tested positive for marijuana. For each category (lifetime, 12-month, 30-days, 3-days and positive urinalyses) males were significantly higher than female respondents at 83.6%, 46.8%, 37.8%, 22.4%, and 24.7%, respectively. Male respondents on average began using marijuana about six months younger than female respondents (13.8 years old for males compared to 14.3 years for females).

Female respondents were significantly more likely to have a methamphetamine use history than male respondents for lifetime and past 12 months, although there were no statistically significant differences between males and females for more recent use. Most female respondents (54.5%, n=163) had used meth at some time in their life, and more than a third (35.1%) had used it in the past 12 months, compared to 46.3% and 29.8% of male respondents, respectively. About one in five arrestees (18.3% males and 20.4% females) had used meth in the past 3 days, and both were, on average, about 20 years old (21.3 years old for males and 20.6 for females) the first time they had used meth.

There were no significant differences between male and female arrestees for crack cocaine use. Among both male and female respondents, 7.4% reported having used crack in the past 12 months, about 5 percent (4.9% of males and 5.7% of females) in the past 30 days, and about 3 percent (2.9% of males and 3.3% of females) in the past 3 days. Males were more likely to test positive for cocaine than females (10.7% compared to 7.0%), although the testing procedure cannot distinguish powder and crack cocaine metabolites in the urine specimen.

Male respondents reported statistically higher rates of lifetime and past 12 month powder cocaine use than female respondents. More than half of all male respondents (55.8%) reported having used powder cocaine in their life, compared to 49.5% of females, and 13.7% of males reported its sue in the past 12 months, compared to 9.4% of female respondents. Past 30-days and past 3-days use was similar for males and females (9.0% and 3.9% for males and 7.4% and 2.3% for females, respectively). As with other drugs, males first used powder cocaine at an average age younger than female arrestees, although the difference was not significant (18.3 years and 19.0 years, respectively).

There were no significant differences between male and female respondents in use history for heroin. Male arrestees reported having ever used heroin 23.9% of the time, compared to 20.7% of females. Eleven percent of both males and females reported using heroin in the past 12 months, about 8 percent in the past 30 days (8.2% males, 8.4% females), and about 6 percent in the past 3 days (6.0% males, 6.4% females). The average reported age of first use for females was 20.4 years, compared to 22.8 years for males, although this difference was not statistically significant.

Respondents were also asked about their illicit misuse of prescription medication. The use of opioid-based prescription pain relievers such as oxycodone, hydrocodone and others were similar for male and female respondents and similar to heroin use rates. About 3 in 10 respondents (33.2% males, 29.8% females) had misused prescription pain killers in their lifetime. Among male arrestees, 17.2% had misused them in the past 12 months, compared to 12.7% of females. In the past 30 days, 11.0% of males and 10.4% of females reported using prescription pain medication to get high and about 5 percent of respondents had done so in the past 3 days. The misuse of other prescription drugs was common, but markedly lower than the misuse of pain medication, and there were no significant differences between male and female respondents.

Exhibit 3. Self-reported Drug Use and Urinalyses Results for Male and Female Arrestees (N=1,253)

|                  |      | 9     | Sex    |       |
|------------------|------|-------|--------|-------|
|                  |      | Male  | Female | Total |
|                  |      | %     | %      | %     |
| Alcohol          |      |       |        |       |
| Lifetime         |      | 98.2  | 97.7   | 98.1  |
| Past 12 month    |      | 79.9  | 75.3   | 78.8  |
| Past 30 days     |      | 69.6  | 66.9   | 69.0  |
| Past 3 days      |      | 47.2  | 42.1   | 46.0  |
| Positive UA      |      | 10.8  | 14.4   | 11.7  |
| Age of first use | Mean | 14.07 | 14.98  | 14.29 |
|                  | SD   | 3.90  | 4.65   | 4.11  |
| Marijuana        |      |       |        |       |
| Lifetime*        |      | 88.8  | 83.6   | 87.5  |
| Past 12 month*   |      | 57.4  | 46.8   | 54.9  |
| Past 30 days*    |      | 49.5  | 37.8   | 46.7  |
| Past 3 days*     |      | 37.3  | 22.4   | 33.8  |
| Positive UA*     |      | 38.5  | 24.7   | 35.2  |
| Age of first use | Mean | 13.80 | 14.33  | 13.92 |
|                  | SD   | 3.65  | 3.86   | 3.71  |
| Methamphetamine  |      |       |        |       |
| Lifetime*        |      | 46.3  | 54.5   | 48.3  |
| Past 12 month*   |      | 29.8  | 35.1   | 31.0  |
| Past 30 days     |      | 25.9  | 29.1   | 26.7  |
| Past 3 days      |      | 18.3  | 20.4   | 18.8  |
| Positive UA      |      | 31.0  | 35.5   | 32.1  |
| Age of first use | Mean | 21.28 | 20.59  | 21.09 |
|                  | SD   | 8.07  | 7.91   | 8.03  |
| Crack            |      |       |        |       |
| Lifetime         |      | 30.3  | 29.1   | 30.0  |
| Past 12 month    |      | 7.4   | 7.4    | 7.4   |
| Past 30 days     |      | 4.9   | 5.7    | 5.1   |
| Past 3 days      |      | 2.9   | 3.3    | 3.0   |
| Positive UA*     |      | 10.7  | 7.0    | 9.8   |
| Age of first use | Mean | 22.56 | 21.75  | 22.37 |
|                  | SD   | 7.96  | 7.65   | 7.89  |
| Powder Cocaine   |      |       |        |       |
| Lifetime*        |      | 55.8  | 49.5   | 54.3  |
| Past 12 month*   |      | 13.7  | 9.4    | 12.7  |
| Past 30 days     |      | 9.0   | 7.4    | 8.6   |
| Past 3 days      |      | 3.9   | 2.3    | 3.5   |
| Positive UA*     |      | 10.7  | 7.0    | 9.8   |
| Age of first use | Mean | 18.30 | 19.02  | 18.46 |
|                  | SD   | 4.91  | 5.62   | 5.08  |

<sup>\*</sup> t test or Chi-square significant at p < .05.

<sup>&</sup>lt;sup>†</sup> Urinalyses were not conducted for drugs other than alcohol, marijuana, cocaine, methamphetamine, and heroin/opiates.

Note: Age of first use (mean) values are based on smaller sample N (Males N=931, Females=292, Total N=1,223)

Exhibit 3. Self-reported Drug Use and Urinalyses Results for Male and Female Arrestees (N=1,253)

|                           |      | S     | Sex    |       |
|---------------------------|------|-------|--------|-------|
|                           |      | Male  | Female | Total |
|                           |      | %     | %      | %     |
| Heroin                    |      |       |        |       |
| Lifetime                  |      | 23.9  | 20.7   | 23.1  |
| Past 12 month             |      | 11.1  | 11.0   | 11.1  |
| Past 30 days              |      | 8.2   | 8.4    | 8.2   |
| Past 3 days               |      | 6.0   | 6.4    | 6.1   |
| Positive UA               |      | 11.1  | 10.7   | 11.0  |
| Age of first use          | Mean | 22.83 | 20.40  | 22.32 |
|                           | SD   | 6.52  | 7.18   | 6.72  |
| Prescription Pain Relieve | ers  |       |        |       |
| Lifetime                  |      | 33.2  | 29.8   | 32.4  |
| Past 12 month             |      | 17.2  | 12.7   | 16.1  |
| Past 30 days              |      | 11.0  | 10.4   | 10.9  |
| Past 3 days               |      | 5.0   | 4.7    | 4.9   |
| Positive UA †             |      | -     | -      | -     |
| Age of first use          | Mean | 20.23 | 19.77  | 20.13 |
|                           | SD   | 7.60  | 5.97   | 7.27  |
| Other Prescription Drugs  | 5    |       |        |       |
| Lifetime                  |      | 24.5  | 21.7   | 23.9  |
| Past 12 month             |      | 10.3  | 9.1    | 10.0  |
| Past 30 days              |      | 6.9   | 5.4    | 6.6   |
| Past 3 days               |      | 2.6   | 2.7    | 2.6   |
| Positive UA †             |      | -     | -      | -     |
| Age of first use          | Mean | 20.73 | 20.10  | 20.59 |
|                           | SD   | 7.83  | 7.35   | 7.72  |

<sup>\*</sup> t test or Chi-square significant at p < .05.

Note: Age of first use (mean) values are based on smaller sample N  $\,$  (Males N=931, Females=292, Total N=1,223)

<sup>†</sup> Urinalyses were not conducted for drugs other than alcohol, marijuana, cocaine, methamphetamine, and heroin/opiates.

## Drug Treatment History and Need by Sex (Exhibit 4)

For each drug respondents had ever reported using, they were asked a brief set of questions about their perceived dependence, their current and past drug treatment, and whether they believed they could use treatment for that particular substance. There were very few statistically significant differences between male and female respondents on these substance dependence and treatment questions. For alcohol, the only significant finding was that males were more likely than females to have received some form of treatment in the past (17.4% compared to 10.8%). Male respondents reported dependence on alcohol in the past 12 months 12.5% of the time, females 14.6%. Current treatment was rare, 3.1% of males and 1.6% of females, although a meaningful percentage believed they could use treatment for alcohol abuse (15.1% of males and 13.0% of females).

Although about 1 in 7 respondents (16.8% of males and 15.6% of females) reported that they needed or were dependent on marijuana in the past 12 months, only half as many (8.9% and 8.2%, respectively) reported that they could use treatment for it. Very few (1.4% of males and 1.5% of females) reported current treatment for marijuana, and only about 10 percent (10.8% males, 9.3% females) had received treatment for marijuana in the past. There were no significant differences for marijuana between male and female respondents.

A substantial number of respondents who had ever used methamphetamine felt that they needed or were dependent on the drug in the past 12 months (24.2% of males and 29.1% of females. Likewise, more than 1 in 4 arrestees who had ever used meth, felt they could use treatment for the drug due to dependence (27.2% of males, and 28.0% of females). Past treatment for methamphetamine was more common than any other substance (17.5% of males having received prior treatment and 21.1% of females). Female respondents were significantly more likely to be currently receiving treatment for methamphetamine (8.6% compared to 4.5%). There were no other significant differences for meth between males and females.

There were no significant differences between male and female respondents regarding crack cocaine, although 13.2% of females reported that they were dependent on crack in the past 12 months (7.7% of males reported dependence), but only 7.7% reported that they could use treatment for the drug (6.7% of males). About two percent of respondents were currently receiving treatment for crack, and more than ten percent (14.0% males, 12.1% females) had received treatment in the past.

Powder cocaine was rarely identified as a problem for either male or female respondents. Only 3.2% of male respondents who had ever used powder cocaine reported that they felt as though they needed or were dependent on it in the past 12 months, and just 0.6% of females reported dependence. No female respondents were currently receiving treatment (compared to 1.1% of males), and just 2.5% had received treatment in the past, which was significantly lower than the treatment history of male respondents (7.9%).

Heroin dependence and treatment history was significantly different for male and female respondents. Females who had ever used heroin were significantly more likely to report dependence in the past 12 months (40.0% compared to 28.3%), past treatment (36.9% compared to 24.9%) and the need for

treatment (35.4% compared to 24.1%). Only current treatment for heroin abuse was not significant between female and male arrestees (9.2% and 6.8%, respectively).

The rates for prescription pain medication were nearly identical for male and female respondents. Of those who had ever abused prescription pain medication, 15.1% of males and 15.8% of females felt they were dependent on them in the past 12 months. Although not significant, a higher proportion of males (12.1%) felt they could use treatment for the drugs than female respondents (7.4%). About 11 percent (10.9% males, 11.6% females) had received treatment in the past, and about 4 percent were currently receiving treatment (3.9% males, 4.2% females).

Reported dependence for other prescription drugs was low for both male and female respondents (8.3% and 6.9%, respectively). Very few had received treatment in the past (5.4% and 4.2%, respectively), or were currently receiving (2.1% males, 2.8% females). Respondents who felt dependent in the past 12 months also felt as though they could use treatment (6.6% males and 5.6% females). There were no significant gender differences for other prescription drugs.

Exhibit 4. Self-reported Drug Dependence, Treatment History and Treatment Need by Sex (n=1,342)

|                                    | S    | Sex    |       |
|------------------------------------|------|--------|-------|
|                                    | Male | Female | Total |
|                                    | %    | %      | %     |
| Alcohol (n=1,313)                  |      |        |       |
| Need or dependent (past 12 months) | 12.5 | 14.6   | 13.0  |
| Currently receiving treatment      | 3.1  | 1.6    | 2.7   |
| Received treatment in the past *   | 17.4 | 10.8   | 15.8  |
| Could you use treatment            | 15.1 | 13.0   | 14.6  |
| Marijuana (n=1,168)                |      |        |       |
| Need or dependent (past 12 months) | 16.8 | 15.6   | 16.5  |
| Currently receiving treatment      | 1.4  | 1.5    | 1.5   |
| Received treatment in the past     | 10.8 | 9.3    | 10.4  |
| Could you use treatment            | 8.9  | 8.2    | 8.7   |
| Methamphetamine (n=638)            |      |        |       |
| Need or dependent (past 12 months) | 24.2 | 29.1   | 25.5  |
| Currently receiving treatment *    | 4.5  | 8.6    | 5.6   |
| Received treatment in the past     | 17.5 | 21.1   | 18.5  |
| Could you use treatment            | 27.2 | 28.0   | 27.4  |
| Crack (n=391)                      |      |        |       |
| Need or dependent (past 12 months) | 7.7  | 13.2   | 9.0   |
| Currently receiving treatment      | 2.0  | 2.2    | 2.0   |
| Received treatment in the past     | 14.0 | 12.1   | 13.6  |
| Could you use treatment            | 6.7  | 7.7    | 6.9   |
| Powder Cocaine (n=725)             |      |        |       |
| Need or dependent (past 12 months) | 3.2  | 0.6    | 2.6   |
| Currently receiving treatment      | 1.1  | 0.0    | 0.8   |
| Received treatment in the past *   | 7.9  | 2.5    | 6.8   |
| Could you use treatment            | 4.9  | 2.5    | 4.4   |

<sup>\*</sup> Chi-square significant at p < .05.

Exhibit 4. Self-reported Drug Dependence, Treatment History and Treatment Need by Sex (n=1,342)

|                                      | S    | ex     |       |
|--------------------------------------|------|--------|-------|
|                                      | Male | Female | Total |
|                                      | %    | %      | %     |
| leroin (n=302)                       |      |        |       |
| Need or dependent (past 12 months) * | 28.3 | 40.0   | 30.8  |
| Currently receiving treatment        | 6.8  | 9.2    | 7.3   |
| Received treatment in the past *     | 24.9 | 36.9   | 27.5  |
| Could you use treatment *            | 24.1 | 35.4   | 26.5  |
| Prescription Pain Relievers (n=426)  |      |        |       |
| Need or dependent (past 12 months)   | 15.1 | 15.8   | 15.3  |
| Currently receiving treatment        | 3.9  | 4.2    | 4.0   |
| Received treatment in the past       | 10.9 | 11.6   | 11.0  |
| Could you use treatment              | 12.1 | 7.4    | 11.0  |
| Other Prescription Drugs (n=314)     |      |        |       |
| Need or dependent (past 12 months)   | 8.3  | 6.9    | 8.0   |
| Currently receiving treatment        | 2.1  | 2.8    | 2.2   |
| Received treatment in the past       | 5.4  | 4.2    | 5.1   |
| Could you use treatment              | 6.6  | 5.6    | 6.4   |

<sup>\*</sup> Chi-square significant at p < .05.

## Mental Health History and Level of Risk by Sex (Exhibit 5)

Respondents were asked a series of mental health related questions focusing on mental health treatment history, diagnoses, and help-seeking behavior. Respondents were asked if they had ever (and if yes, then in the past 12 months): a) been told by a mental health professional that they have a mental, behavioral or emotional problem (i.e. diagnosed); b) been treated for a mental health problem; c) prescribed medication for a mental health, emotional, behavioral, or psychiatric problem; and d) hospitalized for a mental health problem. These items were used to construct a summative level of risk scale for mental health problems. In addition, respondents were asked if they had been civilly committed for a mental health problem, and if they had been diagnosed with Post-Traumatic Stress Syndrome (PTSD). Finally, respondents were asked if they felt whether they could use treatment or medication for a mental health problem, and whether they had sought help.

Male and female respondents significantly differed on a number of mental health measures. For both ever and past 12 month responses, females were significantly more likely to have been diagnosed, treated, and prescribed medication for a mental health problem, to have been diagnosed with PTSD, to have felt they could use mental health treatment, and to have sought help. There were no significant differences between male and female respondents for hospitalizations or civil commitments for mental health problems.

Examining the mental health problem level of risk scale, based on the four indicators of having received some combination of professional mental health assistance or treatment, nearly half of all female respondents (48.2%) reported to have at least a low risk of a mental health problem, and 1 in 4 (23.4%)

were at least at low-medium risk in the past 12 months. Respondents were classified as low-to-medium risk if they reported two of the four professional help indicators. Among female respondents, 15.4% reported at least three of the four indicators in the past 12 months, compared to 9.3% of males. One in three female respondents (33.0%) and 1 in 4 (24.5%) of male respondents reported that they felt as though they could use treatment, medication or other help for a mental health problem during the past 12 months. However, just 22.6% of females and 13.8% of males actually sought help in the past 12 months.

Exhibit 5: Mental Health History and Mental Health Problem Level of Risk by Gender (N=1,342)

|  | Ever |        | Past 12 Months |      |        |       |
|--|------|--------|----------------|------|--------|-------|
|  | Male | Female | Total          | Male | Female | Total |
|  | %    | %      | %              | %    | %      | %     |
| Told you have a mental illness or emotional problem * †                                      | 27.7 | 41.8   | 31.1           | 15.2 | 24.0   | 17.3  |
| Treated for a mental health problem * †  | 25.7 | 36.6   | 28.4           | 13.3 | 21.2   | 15.2  |
| Prescribed medication for a mental health, emotional, or psychiatric problem * †             | 24.8 | 37.5   | 27.9           | 13.3 | 20.9   | 15.1  |
| Hospitalized for a mental health problem   | 10.6 | 13.8   | 11.4           | 3.7  | 4.6    | 4.0   |
| Civilly committed for a mental health problem  | 5.9  | 4.9    | 5.7            | 1.9  | 2.5    | 2.0   |
| Diagnosed with Post Traumatic Stress Disorder (PTSD) * †                                     | 8.0  | 14.8   | 9.6            | 4.1  | 8.0    | 5.1   |
| Felt that you could use treatment, medication or other help for mental health problem $^*$ † | 28.3 | 37.7   | 30.5           | 24.5 | 33.0   | 26.6  |
| Sought help for a mental problem * †   | 19.3 | 31.6   | 22.3           | 13.8 | 22.6   | 15.9  |
| Mental Health Problem Level of Risk * †  |      |        |                |      |        |       |
| No Risk  | 65.3 | 51.8   | 62.0           | 79.8 | 71.4   | 77.8  |
| Low  | 8.2  | 8.6    | 8.3            | 6.4  | 5.2    | 6.1   |
| Low to Medium  | 7.3  | 8.6    | 7.6            | 4.5  | 8.0    | 5.4   |
| Medium to High   | 11.1 | 20.2   | 13.3           | 7.0  | 12.0   | 8.2   |
| High   | 8.2  | 10.7   | 8.8            | 2.3  | 3.4    | 2.5   |

<sup>\*</sup> Chi-square significant at p  $\leq$  .05 (Ever); † Chi-square significant at p $\leq$ .05 (Past 12 Months)

## **Correctional Health Services by Sex (Exhibit 6)**

Maricopa County Correctional Health Services (CHS) is responsible for the medical and behavioral healthcare of individuals in custody at Maricopa County Sheriff's Office (MCSO). A broad range of questions are asked as part of the standard core AARIN instrument targeting concerns particular to CHS, including the prevalence of medical needs among arrestees, concerns regarding public health issues, and the medical screening of arrestees conducted by CHS personnel during the booking process.

About one-quarter (23.5%) of all arrestees come into jail with a diagnosed chronic medical illness requiring regular medical care. Female arrestees are significantly more likely to have a chronic illness requiring regular care (28.2% compared to 21.9%), and to take medication on a regular basis (27.0% compared to 20.1%). Female respondents were also more likely to have visited a doctor both in the past year and in the past 6 months than male respondents (72.7% and 58.6% compared to 55.5% and 40.6%, respectively).

Few respondents expected to address medical needs while in custody that they could or would not have addressed out of jail, and there were no differences between male and female respondents (14.1% males, 11.0% females). A substantial proportion of both male and female arrestees reported medical needs during their booking (36.9% males, 43.6% females). Nearly half of all respondents (46.1%) stated that they would be interested in vaccinations while in custody if such services were made available, and was consistent across gender (46.4% of males and 45.1% of females).

Assessing respondents' perceptions of the medical screening process during booking revealed no statistically significant differences between male and female respondents. Additionally, the findings are supportive toward the honesty of the information gathered by CHS personnel during the screening. The majority of respondents knew that the medical screeners were health service staff and not law enforcement (81.6% males, 80.4% females, 81.3% total), and that they could answer the questions truthfully (94.9% males, 92.3% females, 94.3% total). When asked if the actually answered the screening questions truthfully, 94.2% said they had (94.5% of males and 93.3% of females). Of the respondents who said they had not answered truthfully (n=74), the most common reason given (by both male and female respondents) why they had not was that they did not feel comfortable sharing their personal health problems (31.5% of males and 45.0% of females). The second most common reason for both male and female respondents was that they did not believe they would get help anyway (24.1% of males and 30.0% of females). Twenty percent of female respondents and 11.1% of males stated that they were not honest because it wouldn't make a difference anyway. Thirteen percent of male respondents and 10.0% of females were dishonest because they expected to get released quickly, followed by their hoping to get released sooner if they did not report any problems (5.6% of males and 10.0% of females). Fifteen percent of female respondents stated they did not understand what was happening at the time, compared to 3.7% of males, and a few did not understand that health care services were available to them (3.7% of males and 5.0% of females).

Exhibit 6: Correctional Health Services Needs by Gender (N=1,342)

|   | Sex  |             | Total |
|---|------|-------------|-------|
| _   | Male | Male Female |       |
|   | %    | %           | %     |
| Diagnosed with a chronic medical illness, requiring regular care? *                                   | 21.9 | 28.2        | 23.5  |
| Any chronic illnesses for which you take medication on a regular basis? *                             | 20.1 | 27.0        | 21.8  |
| Visited a doctor  |      |             |       |
| Past 12 months *  | 55.5 | 72.7        | 59.7  |
| Past 6 months *   | 40.6 | 58.6        | 45.0  |
| Anticipate addressing healthcare needs while in jail that would/could not have addressed out of jail? | 14.1 | 11.0        | 13.3  |
| Interested in vaccinations being made available while in custody?                                     | 46.4 | 45.1        | 46.1  |
| Reported any medical needs during this booking?   | 36.9 | 43.6        | 38.5  |
| Knew that medical screeners were health service staff and not law enforcement                         | 81.6 | 80.4        | 81.3  |
| Felt like you could answer the health screening questions truthfully                                  | 94.9 | 92.3        | 94.3  |
| Did you answer the health screening questions truthfully?   | 94.5 | 93.3        | 94.2  |
| If you did not answer truthfully, what were some of the reasons why: (n=74)                           |      |             |       |
| I did not feel comfortable sharing my personal health problems.                                       | 31.5 | 45.0        | 35.1  |
| I did not believe I would get help anyway.  | 24.1 | 30.0        | 25.7  |
| I did not care, being honest would make no difference anyway.   | 11.1 | 20.0        | 13.5  |
| I expect to get released quickly.   | 13.0 | 10.0        | 12.2  |
| I was hoping to get released sooner if I did not report any problems.                                 | 5.6  | 10.0        | 6.8   |
| I did not really understand what was happening at the time.   | 3.7  | 15.0        | 6.8   |
| l did not understand that health care services were available.  | 3.7  | 5.0         | 4.1   |
|   |      |             |       |

<sup>\*</sup> Chi-square significant at p < .05

## **Conclusion**

Results from the 1,342 AARIN interviews conducted from October 2011 through May 2012 show that there are substantial areas of public health concern among the arrestee population. Examining issues ranging from medical care, mental illness, substance abuse and dependence treatment, and critical needs areas (e.g. homelessness, employment, insurance coverage, children in home, etc.), the demands of the arrestee population are not only on the criminal justice system, but on the support systems in Maricopa County, including, but not limited to Correctional Health Services, AHCCCS, the Human Services Campus, and other resources.

## **About the Center for Violence Prevention & Community Safety**

Arizona State University, in order to deepen its commitment to the communities of Arizona and to society as a whole, has set a new standard for research universities, as modeled by the New American University. Accordingly, ASU is measured not by whom we exclude, but by whom we include.

The University is pursuing research that considers the public good and is assuming a greater responsibility to our communities for economic, social, and cultural vitality. Social embeddedness – university-wide, interactive, and mutually-supportive partnerships with Arizona communities – is at the core of our development as a New American University.

Toward the goal of social embeddedness, in response to the growing need of our communities to improve the public's safety and well-being, in July 2005 ASU established the Center for Violence Prevention and Community Safety. The Center's mission is to generate, share, and apply quality research and knowledge to create "best practice" standards.

Specifically, the Center evaluates policies and programs; analyzes and evaluates patterns and causes of violence; develops strategies and programs; develops a clearinghouse of research reports and "best practice" models; educates, trains, and provides technical assistance; and facilitates the development and construction of databases.

For more information about the Center for Violence Prevention and Community Safety, please contact us using the information provided below.

## **MAILING ADDRESS**

Center for Violence Prevention and Community Safety
College of Public Programs
Arizona State University
Mail Code 3120
500 N. 3rd Street, Suite 200
Phoenix, Arizona 85004-2135

**PHONE** 

602.496.1470

**WEB SITE** 

http://cvpcs.asu.edu



