

september 2012

aarin

arizona arrestee reporting information network

Maricopa County Office of the Public Defender Report on

co-occurring disorders among arrestees

ASU Center for Violence Prevention
and Community Safety

ARIZONA STATE UNIVERSITY

Acknowledgements

The AARIN Project staff thanks Peter Ozanne and Amy Rex for their establishment of the AARIN project and for all of their hard work and assistance on the project. We also thank the Maricopa County Manager and the Board of Supervisors for their continued support for AARIN. Additionally, we would like to thank the officers and command staff of the Maricopa County Sheriff's Office, without whose cooperation, we would not be able to conduct the project.

This project was funded by Maricopa County. Opinions contained herein are those of the author and do not represent the position of either Maricopa County or Arizona State University.

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

Michael D. White, Co-Principal Investigator

Associate Professor
School of Criminology and Criminal Justice
Arizona State University

Marisol Cortez

AARIN Project Manager
Center for Violence Prevention & Community Safety
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



In an effort to reduce our impact on the environment, we have chosen to distribute this report as a digital file.

© 2012 by the Arizona Board of Regents for and on behalf of Arizona State University and its Center for Violence Prevention and Community Safety. This document may be copied and transmitted freely. No deletions, additions, or alterations of contents are permitted without the expressed written consent of the Center for Violence Prevention and Community Safety.

Center for Violence Prevention and Community Safety

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

Arizona Arrestee Reporting Information Network

2012

**Maricopa County Office of the Public
Defender Report on Co-Occurring
Disorders among Arrestees**

**By
Michael D. White, Ph.D.
October 2012**

Suggested citation:

White, Michael D. (2012). *Arizona Arrestee Reporting Information Network: 2012 Maricopa County Office of the Public Defender Report on Co-Occurring Disorders among Arrestees*. Phoenix, AZ: Center for Violence Prevention & Community Safety, Arizona State University.

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: <http://cvpcs.asu.edu/>.

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.

Office of the Public Defender's Report

Background on Co-occurring Disorders

The prevalence of co-occurring substance use (or misuse) and psychiatric disorders, particularly among the arrestee population, has been well documented.¹ Research on co-occurring disorders indicates that the effect of being dually diagnosed can exacerbate either of the existing conditions or can manifest new ones.² Compared with other arrestees, the dual-diagnosed arrestee presents a complicated and expensive problem for the criminal justice system, demanding vital resources in a disproportional manner.³

Understanding the prevalence and particular characteristics of the dual-diagnosed arrestee population in Maricopa County is an important part of assessing demands on behavioral health and substance use treatment resources. Additionally, examining some of the current defining characteristics of this population relative to arrestees not dually diagnosed can serve as an indicator of future demand. The AARIN research platform, its core instrument and the Dual Diagnosis Addendum, is intended to inform practitioners and policy makers to this end.

Methodology used in the Present Study

In the present study, researchers used interview data obtained from 1,342 recently booked adult male and female arrestees at the Central Intake booking facilities in Maricopa County, Arizona as part of the Arizona Arrestee Reporting Information Network (AARIN). The Maricopa County Board of Supervisors sponsored research at Arizona State University and established AARIN in January 2007 to monitor drug use trends, treatment needs, and at-risk behavior among recently booked arrestees in Maricopa County. Three times each calendar year, professionally trained local staff conduct voluntary and anonymous interviews with adult males and females and juvenile boys and girls who had been arrested within the past 48 hours. Analysis for this report relied on our adult sample from October 2011 through May 2012.

Co-occurring disorder and *dual diagnosis* each can be loosely defined as a condition when an individual presents with both a mental illness and a substance abuse or substance dependence disorder. For the purposes of this report, we use the terms co-occurring disorder and dual diagnosis interchangeably. We do not use other commonly used mental health terms associated with mental illnesses and dual diagnosis; specifically, we do not use the term serious mental illness (SMI) to describe the sample due to the limitation of the survey instrument as a diagnostic tool.

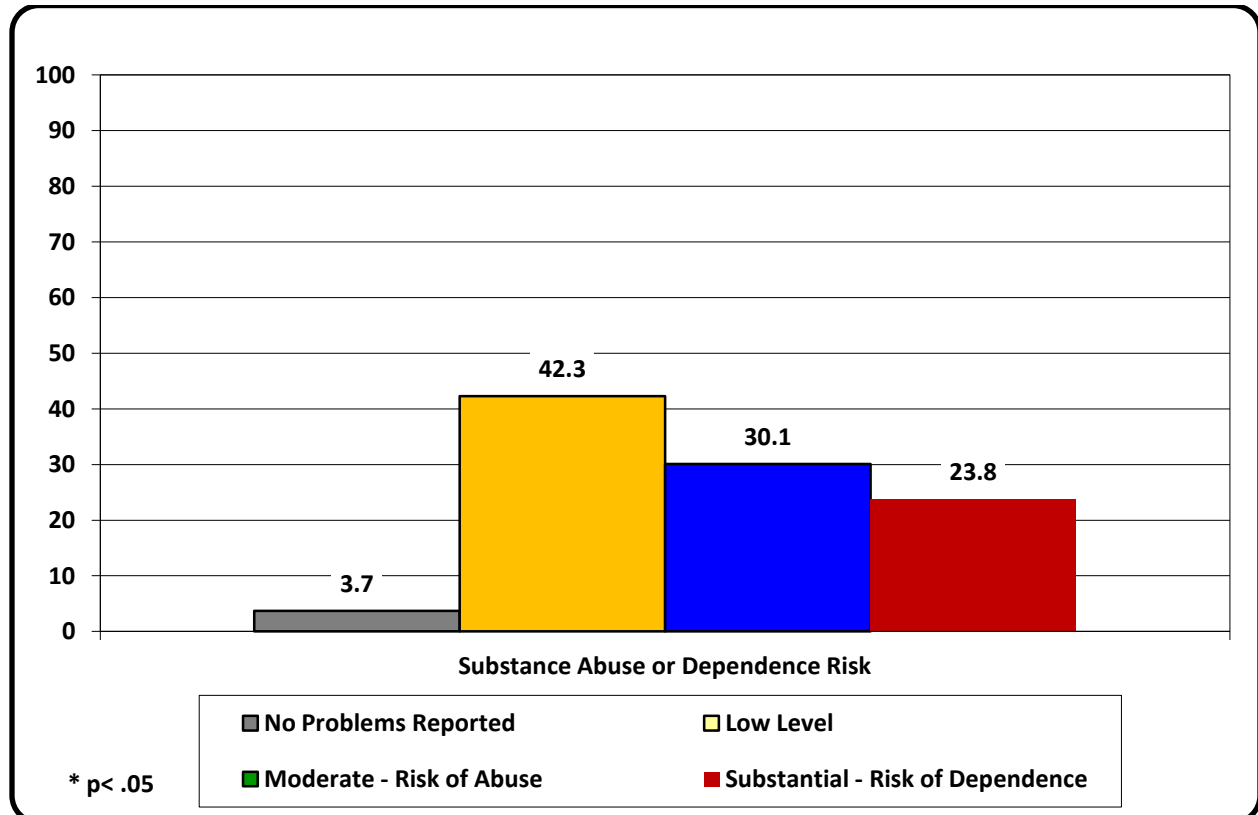
Results

Co-Occurring Disorders

Substance Abuse and Substance Dependence

Measuring a respondent's risk for substance abuse or dependence was achieved by integrating questions from the Drug Abuse Screening Test-10 (DAST-10)⁴ into the core interview instrument. The DAST-10 is a brief screening instrument derived from Skinner's (1982) original 28-item self-report tool. The DAST-10 has demonstrated significant discriminant and concurrent validity when examined, and particularly so with populations diagnosed with mental illness, making it an excellent screening tool for co-occurring disorders.⁵ Responses were scored according to DAST-10 criteria into one of four categories: 1) no problems reported; 2) low level; 3) moderate level, indicating a risk of abuse; and 4) substantial level, indicating a risk for dependence. Exhibit 1 shows respondent scores on the DAST-10. Only 3.7% of arrestees were classified as "no problems reported." Over 40% of arrestees were classified as have a low level of risk for substance abuse or dependence. Notably, more than 50% of arrestees were classified as having either moderate (30.1%) or substantial (23.8%) risk of substance abuse or dependence.

Exhibit 1: Proportion of Arrestees at Risk for Substance Abuse or Dependence according to DAST-10 Responses

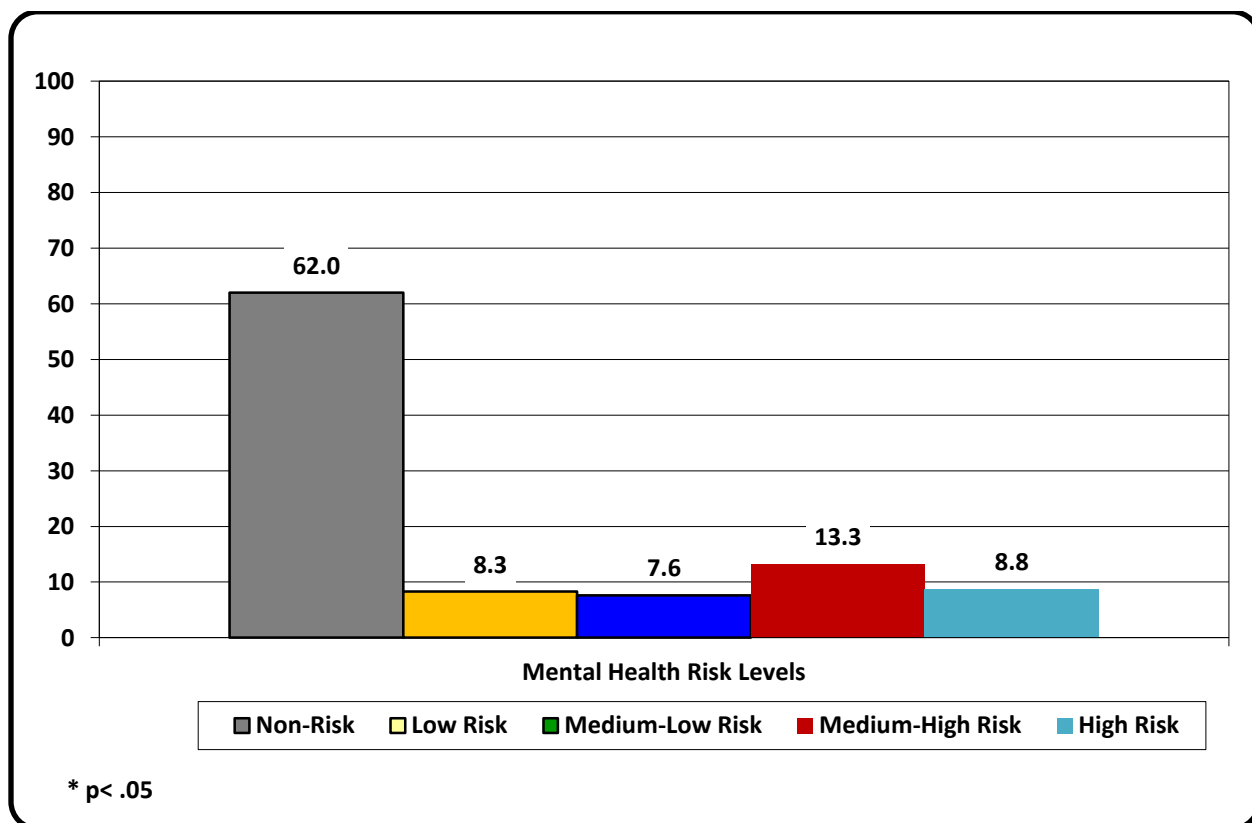


Mental Health Problems

The core instrument used for AARIN includes four items related to the respondent's history of professional mental health assistance, which were used to establish the respondent's risk for mental illness. The four items concerned the respondent's history of professional help, asking whether the respondent had ever been: a) diagnosed by a mental health professional with a mental illness or emotional problem; b) treated for a mental health problem; c) prescribed medication for a mental health, emotional, or psychiatric problem; and d) hospitalized for a mental health problem.

Based on their responses to these questions, arrestees were classified into one of five risk levels for mental health problems. Exhibit 2 shows that 62.0% of arrestees had no risk of having mental health problems. An additional 8.3% were classified as low risk. Approximately 21% were classified as either medium-low or medium-high risk, and 8.8% were identified as high risk of having mental health problems.

Exhibit 2: Proportion of Arrestees at Risk for Mental Health Problems



It must be noted that the AARIN instrument was not designed nor intended to be used as a diagnostic tool for mental illness. We emphasize that our assignment of a respondent to the group having a mental health problem was not a clinically based diagnosis; it was based on a likelihood of a mental health problem given a self-reported history of professional mental

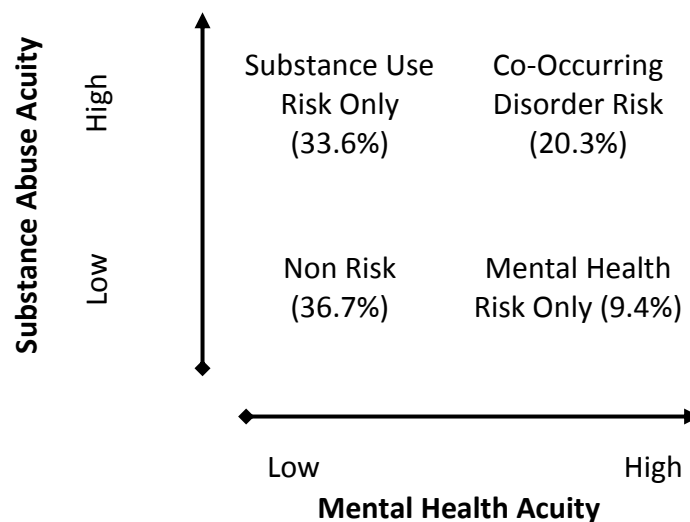
health diagnosis and/or treatment of a mental health, emotional or psychiatric problem.

Dual Diagnosis Criteria

Researchers used the two independent substance abuse/dependence and mental health problem classifications to determine eligibility for the possible presence of co-occurring disorders. Using the co-occurring matrix of mental and addiction disorders developed by Richard Ries,⁶ respondents were assigned to one of four quadrants based on their relative risk for substance abuse/dependence and mental health problems (see Exhibit 3).⁷

Just over one-third of arrestees (36.7%) were classified as not at risk for either substance abuse/dependence or a mental health problem (or both). Alternatively, 63.3% were classified as being at risk for substance abuse/dependence, mental health problems, or both. More specifically, arrestees who were categorized as at risk for either substance abuse/dependence (33.6%) or a mental health problem (9.4%), but not both, were assigned to the appropriate singular disorder risk quadrant. Notably, 20.3% of arrestees were classified as at risk for both substance abuse/dependence and mental health problems; that is, they are at risk of having dual diagnosis.

Exhibit 3. Co-occurring Quadrant



Comparing Arrestees across Co-Occurring Disorder Categories

This section compares arrestees with risk of dual diagnosis to those with no risk, as well as those with risk of a single disorder, either substance abuse/dependence or mental health problems alone. Arrestee groups are compared along demographic and background

characteristics, criminal involvement (e.g., criminal history), gang affiliation, gun ownership, victimization, and specific mental health and substance abuse issues.

Background and Demographics

Exhibit 4 shows that arrestees with co-occurring disorders were among the youngest arrestees, with a mean age of 31.6 years old. Arrestees with substance abuse/dependence risk were slightly younger (31.5 years old), but those with no risk and mental health risk only were substantially older (32.9 and 33.9, respectively).

There is also significant variation across the categories in terms of sex and race/ethnicity. Arrestees with risk of mental health problems and co-occurring disorders were more likely to be female (38.9% and 29.3%) and White (51.6% and 49.1%, respectively). Arrestees with no risk were more likely to be Hispanic/Latino (41.5%).

Arrestees at risk of co-occurring disorders were significantly more likely to have no fixed residence (e.g., homeless; 12.8%), and to have obtained income from illegal sources (21.0%). Arrestees in the dual diagnosis risk category were more likely to be veterans, as were those with only mental health risk (9.9% and 8.7%, respectively). Interestingly, arrestees at risk of co-occurring disorders were also more likely to have obtained post-high school education (42.2%) and to have medical insurance coverage (54.5% - though arrestees with mental health risk were even more likely to have medical insurance; 61.9%).

Exhibit 4: Demographic characteristics of arrestees by co-occurring disorder category

		Co-Occurring Category				
		No Risk	Substance Abuse	Mental Health	Co-Occurring	Total
Age *						
	<i>n</i> =	492	451	126	273	1,342
	Mean	32.9 years	31.5 years	33.9 years	31.6 years	32.3 years
	<i>SD</i>	10.96	10.15	11.90	9.63	10.54
Sex ***		%	%	%	%	%
	Male	78.0	80.3	61.1	70.7	75.7
	Female	22.0	19.7	38.9	29.3	24.3
Race ***						
	White	23.4	38.6	51.6	49.1	36.4
	African-American	18.7	10.9	15.1	11.7	14.3
	Hispanic / Latino	41.5	32.9	22.2	19.8	31.7
	Native American	6.5	9.8	1.6	5.9	7.1
	Other	10.0	9.8	9.5	13.6	10.6
Education **						
	Did Not Graduate HS	30.8	35.0	39.7	27.4	32.4
	HS Diploma or GED	35.7	35.6	23.8	30.4	33.5
	Post HS Education	33.5	29.4	36.5	42.2	34.2
Housing **						
	Private residence	93.7	89.8	87.3	84.2	89.9
	Public or group housing	0.8	1.3	1.6	2.6	1.4
	Hospital or care facility	0.0	0.7	0.0	0.0	0.2
	Incarcerated	0.6	0.4	1.6	0.4	0.6
	No fixed residence / Other	4.9	7.7	9.5	12.8	7.8
Main Source of Income ***						
	None	9.6	7.7	14.8	7.8	9.1
	Working - full or part-time	59.7	51.3	35.3	36.6	50.0
	Other Legal Source	26.2	24.9	45.1	34.6	29.3
	Illegal Source	4.4	16.1	4.9	21.0	11.7
Medical Insurance Coverage ***						
	Yes	39.6	38.8	61.9	54.6	44.5
Veteran *						
	Yes	5.1	5.3	8.7	9.9	6.5

Criminal Justice Involvement

Exhibit 5 shows prior criminal history for the different arrestee co-occurring categories, as well as their current charge information (e.g., the arrest that resulted in their incarceration and participation in the AARIN study). Arrestees classified as at risk of dual diagnosis have more extensive prior criminal involvement than other arrestees. For example, the mean number of prior arrests for arrestees at risk of co-occurring disorders was 1.96, compared to just 0.61 for

those with no risk and from 1.22 to 1.42 among those with risk of one problem (mental health and substance abuse, respectively). Their more extensive criminal history extends to incarceration, as just under one-quarter of arrestees at risk of co-occurring disorders have *not* been incarcerated in their lifetime (24.4%).

Arrestees at risk of co-occurring disorders were also more likely to have been on probation in Maricopa County, both in their lifetime (57.1%) and in the past 12 months (31.1%). Despite the overall greater criminal involvement among the arrestees at risk of co-occurring disorders, this group is not distinctive from the other arrestee categories in terms of current offense charge, or the seriousness of that charge (from 45-50% of all groups were arrested on felony charges).

Exhibit 5: Criminal Justice System Involvement by Co-Occurring Disorder Category

		Co-Occurring Category				
		No Risk	Substance Abuse	Mental Health	Co-Occurring	Total
	<i>n</i> =	492	451	126	273	1,342
		%	%	%	%	%
Arrested (past 12 months) ***						
	None	66.7	42.7	61.8	36.5	52.0
	1 to 2 times	26.2	40.4	29.3	42.4	34.6
	3 to 5 times	6.5	13.8	4.1	12.9	10.1
	6 or more times	0.6	3.1	4.9	8.1	3.4
	Mean # Arrests ***	0.61	1.42	1.22	1.96	1.21
	<i>SD</i>	1.27	2.49	3.19	3.26	2.46
Months Incarcerated (lifetime) ***						
	None	46.1	31.8	46.3	24.4	36.9
	Less than 6 months	25.7	25.8	22.0	30.6	26.4
	6 months to 1 year	8.4	11.1	9.8	11.1	10.0
	1 to 3 years	8.8	11.8	7.3	14.0	10.7
	3 to 5 years	5.1	9.6	5.7	5.9	6.8
	5 to 10 years	3.9	6.0	2.4	8.5	5.4
	More than 10 years	2.0	3.8	6.5	5.5	3.8
	Mean # Months	22.97	33.15	35.42	32.91	30.02
	<i>SD</i>	43.59	72.92	61.95	56.24	59.95
Maricopa County Adult Probation						
	Lifetime ***	41.9	54.3	46.8	57.1	49.6
	Past 12 months **	18.3	24.6	23.8	31.1	23.5
Current Offense **						
	Violent	19.3	18.0	19.8	20.5	19.2
	Drug-Related	24.8	32.7	19.0	28.2	27.6
	Property	18.5	24.0	21.4	22.0	21.3
	Miscellaneous	37.3	25.3	39.7	29.3	31.9
	Felony	44.8	50.2	49.2	46.5	47.4

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$; Chi-square or t-test where appropriate

NOTE: Percentages reported in columns. "Felony" is not mutually exclusive of offense categories.

Gangs, Guns and Victimization

Arrestees classified as at risk of dual diagnosis also showed greater levels of gang involvement, gun possession, and victimization (see Exhibit 6). For example, the co-occurring category of arrestees posted the highest rates of active gang membership (8.4%), former gang membership (8.7%), and having friends who are gang members (17.1%). These rates were all significantly higher than arrestees in the other categories. Arrestees in the at-risk of co-occurring disorder category were also more likely than other arrestees to possess a gun (30.9%), and to have used that gun during the commission of a crime. In fact, arrestees at risk of dual diagnosis were *six times more likely* to have used a gun in the commission of a crime, compared to arrestees with no risk and mental health risk only (and they were three times more likely to have committed a gun crime than arrestees with substance abuse risk only).

Perhaps as a result of their greater criminal, gang and gun involvement, arrestees at risk of co-occurring disorders were also substantially more likely to have been a victim of a crime in the last year. Nearly one-third of the arrestees in the co-occurring at-risk category have been threatened with a gun in the last year (31.9%) and 18.7%% have been shot or shot at. Nearly 40% of arrestees at risk of dual diagnosis have experienced some sort of victimization in the last year, and this victimization rate is more than twice as high as the victimization rates of arrestees with no co-occurring risk.

Exhibit 6: Gangs, Guns, and Victimization of Respondents by Co-Occurring Disorder Category

		Co-Occurring Category				
		No Risk	Substance Abuse	Mental Health	Co-Occurring	Total
<i>n</i> =		492	451	126	273	1,342
		%	%	%	%	%
Gang Membership Status ***						
	Current gang member	3.1	5.3	4.8	8.4	5.1
	Former gang member	4.9	8.0	7.3	8.7	7.0
	Friend of gang members	9.7	14.5	11.3	17.1	12.9
	No affiliation	82.3	72.2	76.6	65.8	75.1
Firearms (past 12 months)						
	Possessed gun ***	19.1	24.2	18.4	30.9	23.2
	Possessed gun during a crime ***	1.8	7.5	1.6	11.4	5.7
	Used gun to commit a crime ***	0.8	2.4	0.8	6.6	2.5
Victimized in past 12 months						
	Threatened with a gun ***	9.3	18.0	11.1	31.9	17.0
	Shot or Shot at ***	5.3	10.9	2.4	18.7	9.6
	Threatened with a weapon ***	8.5	19.5	14.3	32.6	17.7
	Injured with a weapon ***	4.3	9.5	5.6	17.6	8.9
	Assaulted w/o a weapon ***	13.8	21.7	19.8	40.3	22.4
	Any ***	15.0	25.3	20.6	37.4	23.5

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$; Chi-square or t-test where appropriate

NOTE: Percentages reported in columns. "Variety of Victimizations" ranges from 0=No Type of Victimization to 7=All seven types of victimization.

Nature and Scope of Mental Health and Substance Abuse Problems

The last two exhibits provide some additional insights in the specific mental health and substance abuse problems experienced by the arrestee groups. Exhibit 7 shows responses to a series of questions that probe the seriousness and extent of mental health problems, and not surprisingly, arrestees at risk of co-occurring disorders (as well as those with mental health risk alone) show significant problems. For example, 95.6% of arrestees at risk of co-occurring disorders have been told by a counselor, social worker or doctor that they have a mental health

problem. More than 80% of the arrestees in this category (83.9%) have been prescribed medication for a mental health problem, and nearly 40% have been hospitalized for a mental health problem. Notably, three-quarters of arrestees who were classified as at risk of dual diagnosis indicated that they “could use treatment, medication, or other help” for their mental health problems.

The rates of mental health problems are, of course, very similar among those arrestees who are classified as at risk for a mental health problem only. Alternatively, the mental health issues are, by definition, very low among the no risk and substance abuse only risk categories.

Exhibit 7: Mental Health Issues of Respondents by Co-Occurring Disorder Category

	Co-Occurring Category				
	No Risk	Substance Abuse	Mental Health	Co-Occurring	Total
Have you ever...	n=				
	492	451	126	273	1,342
	%	%	%	%	%
Been told by a counselor, social worker, or doctor that you have a mental health problem? ***	3.3	6.4	88.1	95.6	31.1
Been treated by a counselor, social worker or doctor for a mental health problem? ***	1.2	4.0	92.9	87.5	28.4
Been given or prescribed medication for a mental health, emotional, or psychiatric problem? ***	2.2	4.9	88.9	83.9	27.9
Been hospitalized for a mental health problem? ***	0.8	1.1	31.7	38.1	11.4
Been diagnosed with PTSD? ***	1.6	2.7	23.8	28.9	9.6
Been civilly committed for a mental health problem? ***	0.2	0.4	14.4	20.1	5.7
Felt that you could use treatment, medication or other help for a mental health problem? ***	8.8	22.2	48.4	75.1	30.5
Sought help for a mental health problem? ***	4.1	6.4	60.8	63.4	22.3

* p≤ .05, **p≤.01, ***p≤.001; Chi-square or t-test where appropriate

NOTE: Percentages reported in columns. Mental Health Acuity scale derived from the preceding nine items.

Exhibit 8 provides additional detail related to the substance abuse/dependence of arrestees in the different categories (by definition, those at no risk and mental health problem risk only have very low rates of substance abuse problems). Arrestees at risk of co-occurring disorders show very high rates of problematic substance use (and its consequences). For example, only 57.9% of arrestees in the co-occurring risk category indicated that they are “always able to stop using drug and alcohol use when they want.” Similarly, 73.6% stated that they “continued to use drugs or alcohol despite problems caused by their use.” Nearly two-thirds (64.1%) stated that they “feel sick, shaky or depressed” when they stop using drugs and alcohol.

Almost half of arrestees in the dual diagnosis risk category have committed crimes to obtain drugs or alcohol (46.2%), and 59.8% admitted to poly-drug use. Nearly 60% acknowledged that they have “neglected important work, school, social or recreational activities or responsibilities” because of substance use.

Interestingly, arrestees in the co-occurring disorder risk category also expressed interest in stopping their substance abuse. More than 80% stated that they had tried to quit drinking or drug use in the past year (82.1%). Well over half of the arrestees in this risk category admitted to receiving treatment or detoxification services for substance abuse in the past year (56.4%), and 60.8% stated that they are in need of treatment for drugs and alcohol.

Exhibit 8: Substance Abuse Issues of Respondents by Co-Occurring Disorder Category

		Co-Occurring Category				
		No Risk	Substance Abuse	Mental Health	Co-Occurring	Total
	<i>n=</i>	492	451	126	273	1,342
Responding "yes" to the following:		%	%	%	%	%
Are you always able to stop using drugs or alcohol when you want? ***		84.1	65.6	81.7	57.9	72.4
Feel sick, shaky or depressed when you stop drinking or using drugs? ***		2.0	48.1	7.9	64.1	30.7
Family or friends complain about your involvement in drugs or alcohol? ***		6.5	66.7	7.1	69.6	39.7
Continued to use drugs or alcohol despite problems caused by their use? ***		10.6	64.5	10.3	73.6	41.5
Ever engaged in illegal activities in order to obtain drugs or alcohol? ***		1.0	33.0	0.8	46.2	20.9
Do you abuse more than one drug at a time? ***		3.5	47.5	5.6	59.8	29.9
Had blackouts or flashbacks as a result of drug or alcohol use? ***		2.0	31.9	1.6	45.6	20.9
Do you ever feel bad or guilty about your drinking or drug use? ***		10.6	75.8	12.7	82.7	47.4
Neglected your family because of your alcohol or drug use? ***		1.2	48.0	2.4	61.4	29.3
Have you had medical problems as a result of your alcohol or drug use? ***		0.6	20.6	1.6	33.9	14.2
Have you ever needed to increase the amount you drink or use more drugs to get the effect you want? ***		5.5	50.1	8.8	61.0	32.1
Neglected important work, school, social or recreational activities or responsibilities because of your drinking or drug use? ***		3.9	46.9	7.1	59.9	30.0
Have you tried to quit drinking or using drugs in the past 12 months? ***		49.0	82.5	41.3	82.1	66.2
Felt that you needed or were dependent on drugs or alcohol in the past 12 months? ***		10.6	62.5	21.4	71.8	41.5
Have you received treatment or detox for drugs or alcohol? ***		14.0	44.1	26.2	56.4	33.9
Do you feel you could use treatment for drugs or alcohol? ***		9.1	52.8	10.3	60.8	34.4

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$; Chi-square or t-test where appropriate

NOTE: Percentages reported in columns. Mental Health Acuity scale derived from the preceding nine items.

Conclusion

Results from 1,342 AARIN interviews conducted from October 2011 through May 2012 show that nearly two-thirds of arrestees were at risk of substance abuse/dependence, mental health problems, or both. One in five arrestees was at risk of suffering from co-occurring disorders. The severity of substance abuse and mental health issues was significant among the arrestee sample, though the majority has either sought help for their problems, or acknowledged that they need help. Moreover, arrestees at risk of dual diagnosis were distinctive from other arrestees in a number of important ways.

- They tended to be younger, and they were more likely to be White and female.
- They were more likely to be homeless, and to have served in the US military.
- They had more extensive prior criminal histories (including gun crimes).
- They were more likely to be gang-involved and to have been victimized.

Endnotes

¹ Abram, Karen M. (1990, August), The problem of co-occurring disorders among jail detainees: Antisocial disorder, alcoholism, drug abuse, and depression," *Law and Human Behavior*, 14(4), 333-345; Abram, Karen M., and Teplin, Linda A. (1991, October), Co-occurring disorders among mentally ill jail detainees: Implications for public policy, *American Psychologist*, 46(10), 1036-1045; Cowell, Alexander J., Broner, Nahama, and Dupont, Randolph (2004, August), The cost-effectiveness of criminal justice diversion programs for people with serious mental illness co-occurring with substance abuse," *Journal of Contemporary Criminal Justice*, 20(3), 292-315; Hartwell, Stephanie (2004, March), Triple stigma: Persons with mental illness and substance abuse problems in the criminal justice system, *Criminal Justice Policy Review*, 15(1), 84-99; and Laudet, Alexandre B., Magura, Stephen, Vogel, Howard S., and Knight, Edward L. (2004), Perceived reasons for substance misuse among persons with a psychiatric disorder," *American Journal of Orthopsychiatry* 74(3), 365-375.

² Abram, Karen M. (1990, August), The problem of co-occurring disorders among jail detainees: Antisocial disorder, alcoholism, drug abuse, and depression," *Law and Human Behavior*, 14(4), 333-345; Abram, Karen M., and Teplin, Linda A. (1991, October), Co-occurring disorders among mentally ill jail detainees: Implications for public policy, *American Psychologist*, 46(10), 1036-1045; Belenko, Steven, Lang, Michelle A., and O'Connor, Lisa A. (2003, February), Self-reported psychiatric treatment needs among felony drug offenders, *Journal of Contemporary Criminal Justice* 19(1), 9-29; Borum, Randy, Swanson, Jeffrey, Swartz, Marvin, and Hiday, Virginia (1997, August), Substance abuse, violent behavior, and police encounters among persons with severe mental disorder, *Journal of Contemporary Criminal Justice* 13(3), 236-250; and Shafer, Michael S., Arthur, Brian, and Franczak, Michael J. (2004), An analysis of post-booking jail diversion programming for persons with co-occurring disorders, *Behavioral Sciences and the Law* 22, 771-785.

³ Cowell, Alexander J., Broner, Nahama, and Dupont, Randolph (2004, August), The cost-effectiveness of criminal justice diversion programs for people with serious mental illness co-occurring with substance abuse," *Journal of Contemporary Criminal Justice*, 20(3), 292-315; and Shafer, Michael S., Arthur, Brian, and Franczak, Michael J. (2004), An analysis of post-booking jail diversion programming for persons with co-occurring disorders, *Behavioral Sciences and the Law* 22, 771-785.

⁴ Skinner, H.A. (1982) The Drug abuse screening test. *Addictive Behaviors* 7, 363-371.

⁵ Gavin, D.R., Ross, H. and Skinner, H.A. (1989). Diagnostic validity of the Drug Abuse Screening Test in the assessment of DSM-III drug disorders. *British Journal of Addiction*, vol. 84, 3:301-307.; Maistro, S.A., Carey, M.P., Carey, K.B., Gordon, C.M., and Gleason, J.R. (2000). Use of the AUDIT and DAST-10 to identify alcohol and drug use disorders among adults with a severe and persistent mental illness. *Psychological Assessment*, vol.12, 2:186-192.

⁶ Ries, Richard K. (2004), *The co-occurring matrix for mental and addictions disorders*, Washington DC: National Institute on Drug Abuse, retrieved from <http://www.nida.nih.gov/whatsnew/meetings/ccc/plenary1.html>, updated February 2005; and Ries, Richard K. (1993), The dually diagnosed patient with psychotic symptoms, *Journal of Addictive Diseases* 12(3), 103-122.

⁷ For substance abuse, Respondents whose DAST-10 was scored as either no problems reported or a low level of drug or alcohol misuse were coded as not at risk (n=618) for substance abuse/dependence for our co-occurring disorder criteria. Those scoring as moderate or substantial were coded as at risk for substance abuse/dependence (n=724). For mental health problems, respondents who answered "no" to all four items (n=832), or yes to just one item (n=111) were classified as not having any mental health problem (943). Respondents answering yes to two or more of the four items (n=399) were classified as at risk for a mental health problem. Any respondent answering yes to one of the above questions was also asked whether he or she had experienced the problem within the past 12 months.

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>

